UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): July 8, 2022

ADTRAN Holdings, Inc.

(Exact name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of Incorporation) 000-24612 (Commission File Number) 63-0918200 (IRS Employer Identification No.)

901 Explorer Boulevard Huntsville, Alabama (Address of Principal Executive Offices)

35806-2807 (Zip Code)

Registrant's Telephone Number, Including Area Code: (256) 963-8000

Acorn HoldCo, Inc. (Former Name or Former Address, if Changed Since Last Report)

	ck the appropriate box below if the Form 8-K filing is in owing provisions (see General Instructions A.2. below):	2 2	filing obligation of the registrant under any of the	
\boxtimes	Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)			
	Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)			
	Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))			
	Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))			
Seci	urities registered pursuant to Section 12(b) of the Act:			
	Title of each class	Trading Symbol	Name of exchange on which registered	
	Common Stock, Par Value \$0.01	ADTN	The NASDAQ Global Select Market	
Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).				
Eme	erging growth company			
If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \Box				

Explanatory Note

This Current Report on Form 8-K is being filed for the purpose of establishing ADTRAN Holdings, Inc. (f/k/a Acorn HoldCo, Inc.), a Delaware corporation (the "Company"), as the successor issuer to ADTRAN, Inc., a Delaware corporation ("ADTRAN"), pursuant to Rule 12g-3(a) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and to disclose events which are required to be disclosed on Form 8-K with respect to ADTRAN as of the Merger Closing Date (as defined below) and the Company.

Item 2.01 Completion of Acquisition or Disposition of Assets.

On July 8, 2022 (the "Merger Closing Date"), Acorn MergeCo, Inc., a Delaware corporation and wholly-owned direct subsidiary of the Company ("Merger Sub"), merged with and into ADTRAN, with ADTRAN surviving the merger as a wholly-owned direct subsidiary of the Company (the "Merger"), pursuant to the Business Combination Agreement (the "Business Combination Agreement"), dated as of August 30, 2021, by and among the Company, ADTRAN, ADVA Optical Networking SE, a company organized and existing under the laws of Germany ("ADVA"), and Merger Sub. Under the terms of the Business Combination Agreement, upon the consummation of the Exchange Offer (as defined below) ADTRAN will be combining its business with ADVA and ADVA will also become a subsidiary of the Company.

In the Merger, each share of common stock of ADTRAN, par value \$0.01 per share (the "ADTRAN Shares"), was converted into the right to receive one share of common stock, par value \$0.01 per share, of the Company (the "Company Shares").

The Company made a public offer to exchange each issued and outstanding no-par value bearer share of ADVA, pursuant to which each ADVA share tendered and accepted for exchange would be exchanged for 0.8244 shares of common stock of the Company (the "Exchange Offer"). The acceptance period for the Exchange Offer ended on February 14, 2022, and on July 6, 2022, the Company announced that all special offer conditions to consummation of the Exchange Offer have been satisfied. The Exchange Offer is expected to settle on or about July 15, 2022 (the "Exchange Offer Settlement Date").

The issuance of Company Shares in connection with the Merger and the Exchange Offer (collectively, the "Transaction") was registered under the Securities Act of 1933, as amended (the "Securities Act"), pursuant to a registration statement on Form S-4 (the "Registration Statement") (File No. 333-259251), which was declared effective by the U.S. Securities and Exchange Commission (the "SEC") on December 2, 2021, and which included a proxy statement of ADTRAN in connection with the special meeting of the stockholders of ADTRAN to consider and vote on a proposal to adopt the Business Combination Agreement that also constituted a prospectus for the Company (the "Proxy Statement/Prospectus").

ADTRAN's stockholders approved the Merger at ADTRAN's special meeting held on January 6, 2022, at which approximately 85% of the total issued and outstanding ADTRAN Shares were voted to approve the Transaction, representing approximately 99% of the total votes cast at the special meeting on this proposal. The tender period for the Exchange Offer expired on January 26, 2022. The additional acceptance period started on February 1, 2022 and ended on February 14, 2022, with a total of 33,957,538 ADVA Shares validly tendered from the start of the tender period through the end of the additional acceptance period, which corresponds to an acceptance rate of approximately 65.43% of the share capital of ADVA as of July 7, 2022.

The foregoing description of the Business Combination Agreement and the Transaction does not purport to be complete and is qualified in its entirety by reference to the full text of the Business Combination Agreement, which is attached as Exhibit 2.1 to this Form 8-K and incorporated herein by reference, and the disclosures regarding the Business Combination Agreement and the Transaction in the Proxy Statement/Prospectus.

Pursuant to Rule 12g-3(a) under the Exchange Act, the Company is the successor issuer to ADTRAN. The Company Shares are deemed to be registered under Section 12(b) of the Exchange Act, and the Company is subject to the informational requirements of the Exchange Act, and the rules and regulations promulgated thereunder. The Company hereby reports this succession in accordance with Rule 12g-3(f) under the Exchange Act.

The Company Shares were approved for listing on the Nasdaq Global Select Market ("Nasdaq") and will trade under the symbol "ADTN". The Company Shares are expected to be approved for listing on the regulated market segment (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) with simultaneous admission to the sub-segment thereof with additional post-admission obligations (Prime Standard) on or around July 13, 2022 and will trade there under the symbol "QH9".

Item 3.01 Notice of Delisting or Failure to Satisfy a Continued Listing Rule or Standard; Transfer of Listing

The information set forth in Item 2.01 of this Current Report on Form 8-K is incorporated by reference into this Item 3.01.

Prior to consummation of the Merger, ADTRAN Shares were registered pursuant to Section 12(b) of the Exchange Act and listed on Nasdaq. As a result of the consummation of the Merger, ADTRAN has requested that Nasdaq file a Form 25 to withdraw the ADTRAN Shares from listing on Nasdaq. The ADTRAN Shares are expected to be suspended from trading on Nasdaq as of the close of business (New York time) on the Merger Closing Date. ADTRAN expects to file a Form 15 with the SEC to terminate the registration of the ADTRAN Shares under the Exchange Act and suspend ADTRAN's reporting obligations under the Exchange Act.

Item 3.03 Material Modification to Rights of Security Holders

The information set forth in Items 2.01, 3.01 and 5.03 of this Form 8-K are incorporated by reference into this Item 3.03.

Item 5.01 Change in Control of Registrant

The information set forth in Item 2.01 and Item 5.02 of this Form 8-K is incorporated by reference into this Item 5.01.

Item 5.02 Departures of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers

Board of Directors of the Company

On the Merger Closing Date, Michael K. Foliano resigned from his position as director of the Company and H. Fenwick Huss, Gregory J. McCray, Balan Nair, Jacqueline H. Rice and Kathryn A. Walker were elected to the Board of Directors of the Company (the "Board") such that the Board is now comprised of these five individuals and Thomas R. Stanton. The Company anticipates that Brian Protiva, Nikos Theodosopoulos and Johanna Hey will be appointed to the Board upon consummation of the Exchange Offer.

The Board has determined that each of H. Fenwick Huss, Gregory J. McCray, Balan Nair, Jacqueline H. Rice, Kathryn A. Walker, Nikos Theodosopoulos and Johanna Hey is an "independent director" under the rules of Nasdaq. Thomas R. Stanton was appointed by the Board as the Chairman of the Board, and the Company anticipates that Brian Protiva will be appointed as Vice Chairman upon his appointment to the Board upon consummation of the Exchange Offer.

In addition, the Board formed an audit committee; a nomination and corporate governance committee; a compensation committee; and an environmental, social and governance committee, which are composed of the following directors:

Audit Committee: H. Fenwick Huss (Chair), Gregory J. McCray and Jacqueline H. Rice.

Nominating and Governance Committee: Jacqueline H. Rice (Chair), H. Fenwick Huss, and Kathryn A. Walker.

Compensation Committee: Kathryn Walker (Chair), H. Fenwick Huss, Gregory J. McCray, and Balan Nair.

Environmental, Social and Governance Committee: Kathryn Walker (Chair) and H. Fenwick Huss.

Executive Officers of the Company

Upon the consummation of the Merger, the following individuals were appointed as the executive officers of the Company:

<u>Name</u> <u>Position</u>

Thomas R. Stanton President and Chief Executive Officer and Chairman of the Board

Michael Foliano Senior Vice President of Finance, Chief Financial Officer, Treasurer and Secretary

James D. Wilson, Jr. Chief Revenue Officer

Certain biographical and other information of the foregoing individuals is below.

Thomas R. Stanton (Age - 57) was appointed Chief Executive Officer of ADTRAN in September 2005 and named Chairman of the ADTRAN board of directors in 2007. Mr. Stanton joined ADTRAN in 1995 as Vice President of Marketing for the Carrier Networks, or CN, Division. Since that time, he has held a number of senior management positions within the Company, including Senior Vice President and General Manager of the CN Division. Prior to joining ADTRAN, he served as Vice President of Marketing and Engineering at Transcrypt International and held several senior management positions with E. F. Johnson Company. Mr. Stanton has served on the board of directors of a number of technology companies and is a past chairman of the board for both the Federal Reserve Bank of Atlanta's Birmingham Branch and the Telecommunications Industry Association. He currently serves on the board of the Economic Development Partnership of Alabama and the Huntsville Chamber of Commerce and has served on the board of BancorpSouth Bank (NYSE: BXS) since October 2015. Mr. Stanton holds a Bachelor of Science degree in Computer Engineering from Auburn University. Mr. Stanton has been a member of the ADTRAN board of directors since September 2005. Mr. Stanton has extensive knowledge of all facets of ADTRAN and extensive experience in all aspects of its industry.

Michael Foliano (Age - 61) has served as ADTRAN's Senior Vice President of Finance, Chief Financial Officer and Corporate Secretary since 2019. Previously, Mr. Foliano served as ADTRAN's senior Vice President of Operations from 2006 through 2019. Mr. Foliano holds a Bachelor of Science degree in Industrial and Systems Engineering from Ohio University, a Master of Science degree in Industrial Engineering from Purdue University, and a Master of Science degree in Management from Stanford University.

James D. Wilson, Jr. (Age - 52) has served as ADTRAN's Chief Revenue Officer since August 2019. Mr. Wilson joined ADTRAN in 1998 and previously served as the Senior Vice President of Technology and Strategy, Senior Vice President and General Manager of the Carrier Networks Division, Vice President of Product Marketing, Director of Carrier Networks Product Management, Product Manager and Product Support Engineer. Mr. Wilson holds a Bachelor of Engineering in Electrical Engineering from Vanderbilt University.

ADTRAN

On the Merger Closing Date, H. Fenwick Huss, Gregory McCray, Balan Nair, Jacqueline H. Rice, Kathryn A. Walker, and Thomas Stanton resigned as Directors of ADTRAN. On the same date, Michael Foliano, Dana C. Crim, and James Wilson, Jr. were appointed as the members of ADTRAN's Board of Directors. Upon consummation of the Merger, Michael Foliano became President of ADTRAN and Dana C. Crim was appointed the Secretary and Treasurer of ADTRAN.

Compensatory Plans

On the Merger Closing Date, the Company assumed all of the obligations of ADTRAN under ADTRAN's current equity incentive plans, including all outstanding awards thereunder. This included (i) the ADTRAN, Inc. 2020 Employee Stock Incentive Plan, (ii) the ADTRAN, Inc. 2020 Directors Stock Plan, (iii) the ADTRAN, Inc. 2015 Employee Stock Incentive Plan, and (iv) the ADTRAN, Inc. 2006 Employee Stock Incentive Plan (items (i) through (iv), collectively, the "ADTRAN Equity Plans"). Consequently, each ADTRAN restricted stock award, restricted stock unit, performance share unit ("PSU"), and option to purchase shares of ADTRAN common stock outstanding immediately prior to the Merger converted on a one-for-one basis into equivalent rights to receive Company shares (except that the ADTRAN PSUs converted into restricted stock units of the Company at the target performance level, as a result of which the performance conditions were eliminated). The Company has also assumed all unsecured general obligations of ADTRAN to pay deferred compensation under the ADTRAN, Inc. Deferred Compensation Program for Employees and the ADTRAN, Inc. Deferred Compensation Program for Directors.

In addition, the Company agreed to offer holders of ADVA stock options the opportunity to convert such ADVA stock options into the right to acquire a certain number of shares in the Company following the consummation of the Exchange Offer.

Item 5.03 Amendments to Articles of Incorporation or Bylaws; Change in Fiscal Year

On the Merger Closing Date, the Company amended and restated its certificate of incorporation and bylaws, including to change the corporate name set forth therein from "Acorn HoldCo, Inc." to "ADTRAN Holdings, Inc." A description of the material terms of the amended and restated certificate of incorporation and the amended and restated bylaws and the Company Shares can be found in the section titled "Description of Acorn Holdco Common Stock" in the Proxy Statement/Prospectus, which was filed by the Company and ADTRAN with the SEC on December 2, 2021 and which section is incorporated by reference into this Item 5.03. The description of the amended and restated certificate of incorporation and the amended and restated bylaws and the Company Shares does not purport to be complete and is qualified in its entirety by reference to the full text of the amended and restated certificate of incorporation and the amended and restated bylaws, which are attached as Exhibits 3.1 and 3.2 hereto and incorporated herein by reference.

Item 7.01. Regulation FD Disclosure

On July 7, 2022 in connection with the envisaged listing of the Company Shares on the Frankfurt Stock Exchange, the Company published a European Listing Prospectus (the "European Listing Prospectus"). The European Listing Prospectus is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

The information in this Item 7.01, including Exhibit 99.1, shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing or this Current Report on Form 8-K.

Forward-Looking Statements

This Current Report on Form 8-K contains forward-looking statements within the meaning of Section 27A of the U.S. Securities Act of 1933, as amended, and Section 21E of the United States Securities Exchange Act of 1934, as amended. You can generally identify forward-looking statements by the use of forward-looking terminology such as "anticipate," "believe," "continue," "could," "estimate," "expect," "explore," "evaluate," "intend," "may," "might," "plan," "potential," "predict," "seek," "should," or "will," or the negative thereof or other variations thereon or comparable terminology. These forward-looking statements are only predictions and involve known and unknown risks and uncertainties, many of which are beyond ADTRAN and ADVA's control.

These forward-looking statements include, but are not limited to, statements regarding benefits of the proposed business combination, integration plans and expected synergies, and anticipated future growth, financial and operating performance and results. Forward-looking statements involve risks and uncertainties that may cause actual results to be materially different from the results predicted or expected. No assurance can be given that these

forward-looking statements will prove accurate and correct, or that projected or anticipated future results will be achieved. Factors that could cause actual results to differ materially from those indicated in any forward looking statement include, but are not limited to: the expected timing and likelihood of the completion of the contemplated business combination, including the occurrence of any event, change or other circumstances that could give rise to the termination of the business combination agreement; the ability to successfully complete the proposed business combination; regulatory or other limitations imposed following the closing of the proposed business combination: the success of the business following the proposed business combination: the ability to successfully integrate the ADTRAN and ADVA businesses; risks related to disruption of management time from ongoing business operations due to the proposed business combination; the risk that the publicity surrounding or consummation of the proposed business combination could have adverse effects on the market price of ADTRAN's common stock or ADVA's common shares or the ability of ADTRAN and ADVA to retain customers, retain or hire key personnel, maintain relationships with their respective suppliers and customers, and on their operating results and businesses generally; the risk that the Company may be unable to achieve expected synergies or that it may take longer or be more costly than expected to achieve those synergies; the risk of fluctuations in revenue due to lengthy sales and approval process required by major and other service providers for new products; the risk posed by potential breaches of information systems and cyber-attacks; the risks that ADTRAN, ADVA or the post-combination company may not be able to effectively compete, including through product improvements and development; and such other factors as are set forth in ADVA's annual and interim financial reports made publicly available and ADTRAN's and the Company's public filings made with the SEC from time to time, including but not limited to those described under the headings "Risk Factors" and "Forward-Looking Statements" in ADTRAN's Form 10-K for the fiscal year ended December 31, 2021 and ADTRAN's Form 10-Q for the quarterly period ended March 31, 2022, which are available via the SEC's website at https://www.sec.gov.

The foregoing list of risk factors is not exhaustive. These risks, as well as other risks associated with the contemplated business combination, are more fully discussed in the proxy statement/prospectus and the offering prospectus that are included in the Registration Statement on Form S-4 that has been filed by the Company with the SEC and in the Offer Document that has been filed by the Company with BaFin and that has been published in connection with the contemplated business combination, as well as in any prospectuses or supplements. In light of these risks, uncertainties and assumptions, the events described in the forward-looking statements might not occur or might occur to a different extent or at a different time than ADTRAN, ADVA or the Company has described. All such factors are difficult to predict and beyond our control. All forward-looking statements included in this document are based upon information available to ADTRAN, ADVA and the Company on the date hereof, and each of ADTRAN, ADVA and the Company disclaims and does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

No.	Description of Document
2.1	Business Combination Agreement, dated August 30, 2021, by and among ADTRAN, Inc., ADTRAN Holdings, Inc. (formerly named Acorn HoldCo, Inc.), Acorn MergeCo, Inc. and ADVA Optical Networking SE (incorporated by reference to Exhibit 2.1 to ADTRAN's Current Report on Form 8-K filed on August 30, 2021)
3.1	Amended and Restated Certificate of Incorporation of ADTRAN Holdings, Inc.
3.2	Amended and Restated Bylaws of ADTRAN Holdings, Inc.
99.1	European Listing Prospectus
104	Cover Page Interactive Data File - the cover page iXBRL tags are embedded within the Inline XBRL document

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: July 8, 2022 ADTRAN HOLDINGS, INC.

By: /s/ Michael Foliano

Name: Michael Foliano

Title: Senior Vice President of Finance, Chief Financial Officer,

Treasurer and Secretary

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

OF

ACORN HOLDCO, INC.

July 7, 2022

Acorn HoldCo, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), hereby certifies as follows:

FIRST: The name of the Corporation is Acorn HoldCo, Inc. and the Corporation was originally incorporated pursuant to the General Corporation Law of the State of Delaware (the "<u>DGCL</u>") on August 10, 2021.

SECOND: The board of directors of the Corporation duly adopted a resolution proposing to amend and restate the Certificate of Incorporation of this Corporation, declaring said amendment and restatement in the form attached hereto as Exhibit A (the "Restated Certificate") to be advisable and in the best interests of the Corporation and its stockholders, and authorizing the appropriate officers of this Corporation to solicit the consent of the stockholders of the Corporation to the Restated Certificate in accordance with the DGCL.

THIRD: The Restated Certificate was approved by the holders of the requisite number of shares of this Corporation in accordance with Section 228 of the DGCL.

FOURTH: The Restated Certificate, which restates in its entirety the provisions of this Corporation's Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the DGCL.

IN WITNESS WHEREOF, the undersigned, for the purpose of restating and integrating and further amending the Certificate of Incorporation pursuant to the DGCL, does hereby declare and certify that this is the act and deed of the Corporation and the facts stated herein are true, and accordingly has hereunto signed this Certificate of the Corporation's Amended and Restated Certificate of Incorporation this 7th day of July, 2022.

ACORN HOLDCO, INC.

By: /s/ Michael Foliano Name: Michael Foliano Title: Chief Financial Officer

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF ADTRAN HOLDINGS, INC.

ARTICLE I

Section 1.1 Name. The name of the Corporation is ADTRAN Holdings, Inc. (the "Corporation").

ARTICLE II

Section 2.1 <u>Address</u>. The address of its registered office of the Corporation in the State of Delaware is Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

ARTICLE III

Section 3.1 <u>Purpose</u>. The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware (the "<u>DGCL</u>").

ARTICLE IV

Section 4.1 <u>Authorized Capital</u>. The total number of shares of stock which the Corporation shall have the authority to issue is Two Hundred Million (200,000,000) shares of common stock, par value \$0.01 per share ("Common Stock"), and Fifty Million (50,000,000) shares of preferred stock, par value \$0.01 per share ("Preferred Stock").

Section 4.2 Common Stock.

- (a) <u>Voting Rights</u>. Except as otherwise provided in this Certificate of Incorporation or otherwise required by applicable law, each holder of Common Stock shall be entitled to one vote for each share of Common Stock held as of the applicable record date on any matter that is submitted to a vote or for the consent of the stockholders of the Corporation.
- (b) <u>Dividends</u>. Subject to the preferences applicable to any series of Preferred Stock, if any, outstanding at any time, the holders of Common Stock shall be entitled to share equally, on a per share basis, in such dividends and other distributions of cash, property or shares of stock of the Corporation as may be declared by the Board of Directors of Directors of the Corporation (the "<u>Board of Directors</u>") from time to time with respect to the Common Stock out of assets or funds of the Corporation legally available therefor.

(c) <u>Liquidation</u>. Subject to the preferences applicable to any series of Preferred Stock, if any, outstanding at any time, in the event of the voluntary or involuntary liquidation, dissolution, distribution of assets or winding up of the Corporation, all assets of the Corporation of whatever kind available for distribution to the holders of Common Stock shall be divided among and paid ratably to the holders of Common Stock.

Section 4.3 Preferred Stock.

- (a) Preferred Stock may be issued from time to time by the Corporation for such consideration as may be fixed by the Board of Directors. The Board of Directors is hereby expressly authorized, by resolution or resolutions, to provide, out of the unissued shares of Preferred Stock, for one or more series of Preferred Stock and, with respect to each such series, to fix, without further stockholder approval, the designation of such series, the powers (including voting powers), preferences and relative, participating, optional and other special rights, and the qualifications, limitations or restrictions thereof, of such series of Preferred Stock and the number of shares of such series, and as may be permitted by the DGCL. The powers, preferences and relative, participating, optional and other special rights of, and the qualifications, limitations or restrictions thereof, each series of Preferred Stock, if any, may differ from those of any and all other series at any time outstanding.
- (b) Except as otherwise required by law, holders of Common Stock shall not be entitled to vote on any amendment to this Certificate of Incorporation (including any certificate of designation relating to any series of Preferred Stock) that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to this Certificate of Incorporation (including any certificate of designation relating to any series of Preferred Stock) or pursuant to the DGCL.
- (c) Except as otherwise required by law, holders of any series of Preferred Stock shall be entitled to only such voting rights, if any, as shall expressly be granted thereto by this Certificate of Incorporation (including any certificate of designation relating to such series of Preferred Stock).

ARTICLE V

Section 5.1 Board of Directors.

- (a) Except as otherwise provided in this Certificate of Incorporation or the DGCL, the business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors.
- (b) Notwithstanding any other provision of this Article V, and except as otherwise required by law, whenever the holders of one or more series of Preferred Stock shall have the right, voting separately by class or series, to elect one or more directors, the term of office, the filling of vacancies, the removal from office and other features of such directorships shall be governed by the terms of such series of Preferred Stock as set forth in this Certificate of Incorporation (including any preferred stock designation).
 - (c) In furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized:
 - (1) To make, amend, alter, change, add to or repeal, in whole or in part, the Bylaws of the Corporation (the "Bylaws") without the assent or vote of the stockholders in any manner not inconsistent with the laws of the State of Delaware or this Certificate of Incorporation.
 - (2) To authorize and cause to be executed mortgages and liens upon the real and personal property of the Corporation.

- (3) To set apart out of any of the funds of the Corporation available for dividends a reserve or reserves for any proper purpose and to abolish any such reserve in the manner in which it was created.
- (4) By a majority of the whole Board of Directors, to designate one or more committees, each committee to consist of two or more of the directors of the Corporation. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. Any such committee, to the extent provided in the resolution or in the by-laws of the Corporation, shall have and may exercise the powers of the Board of Directors in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers which may require it; provided, however, the by-laws may provide that in the absence or disqualification of any member of such committee or committees, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member.
- (5) When and as authorized by the affirmative vote of the holders of a majority of the stock issued and outstanding having voting power given at a stockholders' meeting duly called upon such notice as is required by statute, or when authorized by the written consent of the holders of a majority of the voting stock issued and outstanding, to sell, lease or exchange all or substantially all of the property and assets of the Corporation, including its good will and its corporate franchises, upon such terms and conditions and for such consideration, which may consist in whole or in part of money or property including shares of stock in, and/or other securities of, any other corporation or corporations, as its Board of Directors shall deem expedient and for the best interests of the Corporation.
- (d) Preferred Stock—Directors. Notwithstanding any other provision of this <u>Article V</u>, and except as otherwise required by law, whenever the holders of one or more series of Preferred Stock shall have the right, voting separately by class or series, to elect one or more directors, the term of office, the filling of vacancies, the removal from office and other features of such directorships shall be governed by the terms of such series of Preferred Stock as set forth in this Certificate of Incorporation (including any preferred stock designation).

ARTICLE VI

Section 6.1 <u>Meetings of Stockholders</u>. Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws may provide. The books of the Corporation may be kept (subject to applicable law) outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation. Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

Section 6.2 <u>Action by Written Consent</u>. Any corporate action upon which a vote of stockholders is required or permitted may be taken with the written consent of stockholders having not less than a majority of all of the stock entitled to vote upon the action if a meeting were held; provided that in no case shall the written consent be by holders having less than the minimum percentage of the vote required by statute for the proposed corporate action and provided that prompt notice be given to all stockholders of the taking of corporate action without a meeting and by less than unanimous written consent.

ARTICLE VII

Section 7.1 <u>Limitation of Liability</u>. (a) No person shall be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director; provided, however, that the foregoing shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL or (iv) for any transaction from which the director derived an improper personal benefit. If the DGCL is subsequently amended to further eliminate or limit the liability of a director,

then a director of the Corporation, in addition to the circumstances in which a director is not personally liable as set forth in the preceding sentence, shall not be liable to the fullest extent permitted by the amended DGCL. For purposes of this Article VII, "fiduciary duty as a director" also shall include any fiduciary duty arising out of serving at the Corporation's request as a director of another corporation, partnership, joint venture or other enterprise, and "personal liability to the Corporation or its stockholders" also shall include any liability to such other corporation, partnership, joint venture, trust or other enterprise, and any liability to the Corporation in its capacity as a security holder, joint venturer, partner, beneficiary, creditor or investor of or in any such other corporation, partnership, joint venture, trust or other enterprise.

Any repeal or modification of Section 7.1 of this Article VII by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of such repeal or modification.

ARTICLE VIII

Section 8.1 Indemnification. Each person who was or is made a party or is threatened to be made a party to or is involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (hereinafter a "proceeding"), by reason of the fact that he or she, or a person of whom he or she is the legal representative, is or was a director or officer of the Corporation or is or was serving at the request of the Corporation as a director or officer of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, whether the basis of such proceeding is alleged action in an official capacity as a director or officer or in any other capacity while serving as a director or officer shall be indemnified and held harmless by the Corporation to the fullest extent authorized by the DGCL, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than said law permitted the Corporation to provide prior to such amendment), against all expense, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties and amounts to be paid in settlement) reasonably incurred or suffered by such person in connection therewith, and such indemnification shall continue as to a person who has ceased to be a director or officer and shall inure to the benefit of his or her heirs, executors and administrators; provided, however, that except as provided in this Section 8.1 with respect to proceedings seeking to enforce rights to indemnification, the Corporation shall indemnify any such person seeking indemnification in connection with a proceeding (or part thereof) initiated by such person only if such proceeding (or part thereof) was authorized by the Board of Directors of the Corporation. Further, the Corporation also may indemnify and hold harmless employees and agents of the Corporation to the fullest extent authorized by the DGCL, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent such amendment permits the Corporation to provide broader indemnification rights than said law permitted the Corporation to provide prior to such amendment), and such discretionary authority to indemnify employees and agents of the Corporation shall be vested in, and may be exercised by, the Board of Directors of the Corporation; provided, however, that the Board of Directors of the Corporation shall have no discretionary authority relative to the indemnification of an employee or agent of the Corporation where the DGCL specifically provides that indemnification is mandatory. The right to indemnification conferred in this Article relative to directors and officers of the Corporation shall be a contract right and shall include the right to be paid by the Corporation the expenses incurred in defending any such proceeding in advance of its final disposition; provided, however, that, if the DGCL requires, the payment of such expenses incurred by a director or officer in his or her capacity as a director or officer (and not in any other capacity in which service was or is rendered by such person while a director or officer, including, without limitation, service to an employee benefit plan) in advance of the final disposition of a proceeding shall be made only upon delivery to the Corporation of an undertaking, by or on behalf of such director or officer, to repay all amounts so advanced if it shall ultimately be determined that such director or officer is not entitled to be indemnified under this Article VIII or otherwise.

Section 8.2 <u>Payment of Mandatorily Indemnified Claims</u>. If a claim relative to which a director, officer, employee or agent is entitled to be mandatorily indemnified under Section 8.1 is not paid in full by the Corporation within ninety days after a written claim has been received by the Corporation, the claimant may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim and, if successful in whole or in part, the claimant also shall be entitled to be paid the expense of prosecuting such claim. It shall be a defense to any such action (other than an action brought to enforce a claim for expenses incurred in defending any proceeding in advance of its final disposition where the required undertaking, if any is required, has been tendered to the Corporation) that the

claimant has not met the standards of conduct which make it permissible under the DGCL for the Corporation to indemnify the claimant for the amount claimed, but the burden of proving such defense shall be on the Corporation. Neither the failure of the Corporation (including its Board of Directors, independent legal counsel or stockholders) to have made a determination prior to the commencement of such action that indemnification of the claimant is proper in the circumstances because he or she has met the applicable standard of conduct set forth in the DGCL, nor an actual determination by the Corporation (including its Board of Directors, independent legal counsel or stockholders) that the claimant has not met such applicable standard of conduct shall be a defense to the action or create a presumption that the claimant has not met the applicable standard of conduct.

Section 8.3 Non-Exclusivity. The right to indemnification and the payment of expenses incurred in defending a proceeding in advance of its final disposition conferred in this Article VIII shall not be exclusive of any other right which any person may have or hereafter acquire under any statute, provision of the Certificate of Incorporation, bylaws, agreement, vote of stockholders or disinterested directors or otherwise.

Section 8.4 <u>Insurance</u>. The Corporation may maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or loss, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the DGCL.

ARTICLE IX

Section 9.1 <u>Severability</u>. If any provision or provisions of this Certificate of Incorporation shall be held to be invalid, illegal or unenforceable as applied to any circumstance for any reason whatsoever: (i) the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Certificate of Incorporation (including, without limitation, each portion of any paragraph of this Certificate of Incorporation containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) shall not, to the fullest extent permitted by applicable law, in any way be affected or impaired thereby and (ii) to the fullest extent permitted by applicable law, the provisions of this Certificate of Incorporation (including, without limitation, each such portion of any paragraph of this Certificate of Incorporation containing any such provision held to be invalid, illegal or unenforceable) shall be construed so as to permit the Corporation to protect its directors, officers, employees and agents from personal liability in respect of their good faith service to or for the benefit of the Corporation to the fullest extent permitted by law.

ARTICLE X

Section 10.1 Forum: Court of Chancery. Unless the Corporation selects or consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if and only if the Court of Chancery does not have subject matter jurisdiction, another state court sitting in the State of Delaware or, if and only if neither the Court of Chancery nor any state court sitting in the State of Delaware has subject matter jurisdiction, then the federal district court for the District of Delaware) shall, to the fullest extent permitted by law, be the sole and exclusive forum for (1) any derivative action or proceeding brought on behalf of the Corporation, (2) any action asserting a claim of breach of a fiduciary duty owed by any director, officer, or other employee or stockholder of the Corporation to the Corporation or the Corporation's stockholders, creditors or other constituents, or a claim of aiding and abetting any such breach of fiduciary duty, (3) any action asserting a claim against the Corporation or any director or officer of the Corporation arising pursuant to any provision of the DGCL or this Certificate of Incorporation or the Bylaws (as either may be amended and/or restated from time to time) or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware, (4) any action to interpret, apply, enforce or determine the validity of this Certificate of Incorporation or the Bylaws, (5) any action asserting a claim against the Corporation or any director or officer of the Corporation governed by the internal affairs doctrine or (6) any other action asserting an "internal corporate claim" as that term is defined in Section 115 of the DGCL.

Section 10.2 <u>Forum: Federal District Courts</u>. Unless the Corporation selects or consents in writing to the selection of an alternative forum, the federal district courts of the United States shall be the sole and exclusive forum for the resolution of any complaint asserting a cause of action arising under federal securities laws against the Corporation or any director or officer of the Corporation.

Section 10.3 <u>Consent to Forum</u>. To the fullest extent permitted by law, any person or entity purchasing or otherwise acquiring or holding any interest in shares of capital stock of the Corporation shall be deemed to have notice of and consented to the provisions of this Article X and personal jurisdiction and venue in any state or federal court located in the State of Delaware for any action or proceeding set forth in above clauses 1 to 6 of Section 10.1 and any complaint set forth in Section 10.2.

ARTICLE XI

Section 11.1 <u>Amendments</u>. The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, and other provisions authorized by the laws of the State of Delaware at the time in force may be added or inserted, in the manner now or hereafter prescribed by the laws of the State of Delaware, and all rights, preferences and privileges of whatsoever nature conferred upon stockholders, directors or any other person whomsoever by and pursuant to this Certificate of Incorporation in its present form or as hereafter amended are granted subject to this reservation.

* * *

This Amended and Restated Certificate of Incorporation shall be effective on July 8, 2022 at 6:59 a.m. Eastern Time.

AMENDED AND RESTATED
BYLAWS
OF
ADTRAN HOLDINGS, INC.
ARTICLE I
OFFICES

Section 1.1 <u>Location</u>. The address of the registered office of the Corporation in the State of Delaware and the name of the registered agent at such address shall be as specified in the Certificate of Incorporation or, if subsequently changed, as specified in the most recent Certificate of Change filed pursuant to law. The Corporation may also have other offices at such places within or without the State of Delaware as the Board of Directors may from time to time designate or the business of the Corporation may require.

Section 1.2 <u>Change of Location</u>. In the manner permitted by law, the Board of Directors or the registered agent may change the address of the Corporation's registered office in the State of Delaware and the Board of Directors may make, revoke or change the designation of the registered agent.

ARTICLE II MEETINGS OF STOCKHOLDERS

Section 2.1 <u>Annual Meeting</u>. The annual meeting of the stockholders of the Corporation for the election of Directors and for the transaction of such other business as may properly come before the meeting shall be held at such place, if any, either within or without the State of Delaware, or by means of remote communication, and on such date and at such time as the Board of Directors may fix by resolution and as set forth in the notice of the meeting.

Section 2.2 Special Meetings. Special meetings of stockholders, unless otherwise prescribed by law, may be called at any time by the Chairman of the Board, by the Chief Executive Officer, by the President or by order of the Board of Directors. Special meetings of stockholders prescribed by law for the election of Directors shall be called by the Board of Directors, the Chairman of the Board, the Chief Executive Officer, the President, or the Secretary whenever required to do so pursuant to applicable law. Special meetings of stockholders shall be held on such date and at such time and at such place, if any, either within or without the State of Delaware, as shall be designated in the notice of meeting or by means of remote communication. Except as otherwise provided in Section 3.4 with respect to the nomination of Directors, only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting pursuant to the Corporation's notice of meeting.

Section 2.3 <u>List of Stockholders Entitled to Vote</u>. The officer who has charge of the stock ledger of the Corporation shall prepare and make, or cause to be prepared and made, at least ten days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting based upon the record date for such meeting determined pursuant to Section 5.8 (provided, however, if the record date for determining the stockholders entitled to vote is less than ten days before the date of the meeting, the list shall reflect the stockholders entitled to vote as of the tenth day before the meeting date), arranged in alphabetical order, and showing the address of each stockholder and the number of shares of capital stock of the Corporation registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, for a period of at least ten days prior to the meeting: (a) on a reasonably accessible electronic network, provided that the information required to gain access to such list was provided with the notice of the meeting; or (b) during ordinary business hours, at the principal place of business of the Corporation. If the meeting is to be held at a

place, the list shall also be produced and kept at the time and place of the meeting the whole time thereof and may be inspected by any stockholder who is present. If the meeting is held solely by means of remote communication, the list shall also be open for inspection by any stockholder during the whole time of the meeting as provided by applicable law.

Except as provided by applicable law, the stock ledger shall be the only evidence as to who are the stockholders entitled to examine the stock ledger and the list of stockholders entitled to vote at any meeting of stockholders or to vote in person or by proxy at any such meeting.

Section 2.4 Notice of Meeting. Except as otherwise prescribed by law, a notice of each meeting of stockholders, in the form of a writing or electronic transmission, shall be given by the Corporation, not more than sixty (60) nor less than ten (10) days before the date of such meeting, to each stockholder entitled to vote thereat, which notice shall state the place, if any, date and time of the meeting, the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, the record date for determining the stockholders entitled to vote at the meeting, if such date is different from the record date for determining stockholders entitled to notice of the meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called. If mailed, such notice shall be deemed given when deposited in the United States mail, postage prepaid, directed to such stockholder at his or her address as the same appears on the records of the Corporation. Without limiting the manner by which notices of meetings otherwise may be given effectively to stockholders, any such notice may be given by electronic transmission in the manner provided in Section 232 of the Delaware General Corporation Law.

Notice of any meeting need not be given to any stockholder who shall, either before or after the meeting, submit a waiver of notice or who shall attend such meeting, except when the stockholder attends for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Any stockholder so waiving notice of the meeting shall be bound by the proceedings of the meeting in all respects as if due notice thereof had been given.

An affidavit of the Secretary, an Assistant Secretary or the transfer agent or other agent of the Corporation that notice has been duly given shall be evidence of the facts stated therein.

Section 2.5 <u>Adjourned Meetings and Notice Thereof.</u> Any meeting of stockholders may be adjourned to another time or place, and the Corporation may transact at any adjourned meeting any business which might have been transacted at the original meeting. Notice need not be given of the adjourned meeting if the time, place, if any, thereof, and the means of remote communication, if any, are announced at the meeting at which the adjournment is taken, unless (a) any adjournment or series of adjournments cause the original meeting to be adjourned for more than thirty days after the date originally fixed therefor, or (b) a new record date is fixed for stockholders entitled to vote at the adjourned meeting. If notice of an adjourned meeting is given, such notice shall be given to each stockholder of record entitled to vote at the adjourned meeting in the manner prescribed in Section 2.4 for the giving of notice of meetings.

Section 2.6 <u>Quorum</u>. At any meeting of stockholders, except as otherwise expressly required by law or by the Certificate of Incorporation, the holders of record of at least a majority of the outstanding shares of capital stock entitled to vote or act at such meeting shall be present in person or represented by proxy in order to constitute a quorum for the transaction of any business. If, however, such quorum shall not be present in person or represented at any meeting of stockholders, the chair of the meeting or the stockholders entitled to vote thereat, present in person or represented by proxy, shall have the power, by the affirmative vote of a majority in voting power thereof, to adjourn the meeting from time to time, in the manner provided in Section 2.5, until a quorum shall be present or represented. At any such adjourned

meeting at which there is a quorum present, any business may be transacted that might have been transacted at the meeting originally called. When a quorum is once present to organize a meeting, the quorum cannot be destroyed by the subsequent withdrawal or revocation of the proxy of any stockholder. Shares of capital stock owned by the Corporation or by another corporation, if a majority of the shares of such other corporation entitled to vote in the election of Directors is held by the Corporation, shall not be counted for quorum purposes or entitled to vote.

Section 2.7 Voting.

- (a) General. At any meeting of stockholders, each stockholder holding, as of the record date, shares of capital stock entitled to be voted on any matter at such meeting shall have one vote on each such matter submitted to vote at such meeting for each such share of capital stock held by such stockholder, as of the record date, as shown by the list of stockholders entitled to vote at the meeting, unless the Certificate of Incorporation provides for more or less than one vote for any share, on any matter, in which case every reference in these Bylaws to a majority or other proportion of stock shall refer to such majority or other proportion of the votes of such stock.
- (b) *Proxies*. Each stockholder entitled to vote at a meeting of stockholders or to express consent or dissent to corporate action in writing without a meeting may authorize another person or persons to act for him or her by proxy, provided that no proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. Such authorization may be in a writing executed by the stockholder or his or her authorized officer, director, employee, or agent. To the extent permitted by law, a stockholder may authorize another person or persons to act for him or her as proxy by transmitting or authorizing the transmission of an electronic transmission to the person who will be the holder of the proxy or to a proxy solicitation firm, proxy support service organization, or like agent duly authorized by the person who will be the holder of the proxy to receive such transmission, provided that the electronic transmission either sets forth or is submitted with information from which it can be determined that the electronic transmission was authorized by the stockholder. A copy, facsimile transmission, or other reliable reproduction of the proxy authorized by this Section 2.7(b) may be substituted for or used in lieu of the original writing or electronic transmission for any and all purposes for which the original writing or electronic transmission could be used, provided that such copy, facsimile transmission, or other reproduction shall be a complete reproduction of the entire original writing or electronic transmission. A duly executed proxy shall be irrevocable if it states that it is irrevocable and if, and only so long as, it is coupled with an interest, whether in the stock itself or in the Corporation generally, sufficient in law to support an irrevocable power. A stockholder may revoke any proxy bearing a later date.
- (c) *Inspector*. The Board of Directors, the Chairman of the Board, the Vice Chairman, the Chief Executive Officer, the President, or the person presiding at a meeting of stockholders may appoint one or more persons to act as inspectors of voting at any meeting with respect to any matter to be submitted to a vote of stockholders at such meeting, with such powers and duties, not inconsistent with applicable law, as may be appropriate. Unless otherwise required by applicable law, inspectors may be officers, employees or agents of the Corporation. Each inspector, before entering upon the discharge of the duties of inspector, shall take and sign an oath to execute faithfully the duties of inspector with strict impartiality and according to the best of such inspector's ability.

Section 2.8 Action by Consent of Stockholders.

- (a) Unless otherwise provided in the Certificate of Incorporation, whenever any action by the stockholders at a meeting thereof is required or permitted by law, the Certificate of Incorporation or these Bylaws, such action may be taken without a meeting, without prior notice and without a vote, if a consent or consents in writing, setting forth the action so taken and bearing the dates of signature of the stockholders who signed the consent, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted and is delivered to the Corporation by delivery to its registered office in the State of Delaware, the Corporation's principal place of business, or any officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Such delivery shall be by hand or by certified or registered mail, return receipt requested. Prompt notice of the taking of such action without a meeting and by less than unanimous written consent shall be given to those stockholders who have not consented in writing.
- (b) No written consent shall be effective to take the corporate action referred to therein unless, within 60 days of the earliest dated written consent received in accordance with this Section 2.8, a written consent or consents signed by a sufficient number of holders to take such action are delivered to the Corporation in the manner prescribed by this Section 2.8.
- (c) Any stockholder of record seeking to have the stockholders authorize or take action by written consent shall, by written notice to the Secretary of the Corporation, request the Board of Directors to fix a record date, as provided for in Section 5.8(b).

Section 2.9 Nature of Business at Annual Meetings of Stockholders.

(a) At any annual meeting of stockholders, only such business shall be conducted as shall have been properly brought before such meeting. To be properly brought before an annual meeting, business must be (i) specified in the notice of meeting or proxy materials accompanying such notice (or any supplement thereto) given by or at the direction of the Board of Directors, (ii) otherwise properly brought before the meeting by or at the direction of the Board of Directors or any committee thereof, or (iii) otherwise properly brought before the meeting by a stockholder of record at the time of the delivery of the notice required by this Section 2.9 (the "Record Stockholder"). For the avoidance of doubt, the foregoing clause (iii) shall be the exclusive means for a stockholder to propose business (other than business included in the Corporation's proxy materials pursuant to Rule 14a-8 under the Securities Exchange Act of 1934, as amended (as so amended, and inclusive of rules and regulations adopted thereunder, the "Exchange Act") or nominations properly made in accordance with Section 3.4 of these Bylaws) at an annual meeting of stockholders.

For business to be properly brought before an annual meeting by a Record Stockholder pursuant to clause (iii) in the preceding paragraph of this Section 2.9(a), (i) the Record Stockholder must have given timely notice thereof in writing to the Secretary of the Corporation in compliance with the notice procedures set forth in this Section 2.9, must be a stockholder of record of the Corporation at the time of the delivery of said notice and at the time of the meeting and must be entitled to vote at the meeting, (ii) any such business must be a proper matter for stockholder action under Delaware law, and (iii) the Record Stockholder and any Stockholder Associated Person (as defined in Section 2.9(d) below) must have acted in accordance with the representations set forth in the Solicitation Statement required by these Bylaws. To be timely, a

Record Stockholder's notice must be delivered to and received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the ninetieth (90th) day, nor earlier than the close of business on the one hundred twentieth (120th) day, prior to the first anniversary of the preceding year's annual meeting; *provided*, *however*, that subject to the immediately following sentence, in the event that the annual meeting is convened more than thirty (30) days before or more than seventy (70) days after such anniversary date, or if no annual meeting was held in the preceding year, notice by the Record Stockholder must be so received not earlier than the close of business on the one hundred twentieth (120th) day prior to such annual meeting and not later than the close of business on the later of the ninetieth (90th) day prior to such annual meeting or the tenth (10th) day following the day on which public announcement of the date of such meeting is first made by the Corporation. In no event shall the adjournment or postponement of an annual meeting commence a new time period (or extend any time period) for the giving of a Record Stockholder's notice as described above. A Record Stockholder's notice to the Secretary shall set forth or include, as the case may be, as to each matter the Record Stockholder proposes to bring before the meeting:

- (i) a brief description of the business desired to be brought before the meeting, including the complete text of any resolutions to be presented at the meeting with respect to such business (and in the event that such business includes a proposal to amend these Bylaws, the language of the proposed amendment), and the reasons for conducting such business at the meeting;
 - (ii) the name and address of record of the Record Stockholder and any Stockholder Associated Person;
- (iii) the class, series and number of shares of the Corporation which are owned beneficially or of record, directly or indirectly, by the Record Stockholder or any Stockholder Associated Person (and such notice shall include documentary evidence of such person's record and/or beneficial ownership of such stock);
- (iv) any material interest including, but not limited to, any direct or indirect financial interest, of the Record Stockholder or any Stockholder Associated Person in such proposed business;
- (v) a reasonably detailed description of any agreement, arrangement or understanding (whether written or oral) that the Record Stockholder or any Stockholder Associated Person has with one another or with any other person in connection with such proposed business:
- (vi) a reasonably detailed description of any proxy, contract, arrangement, understanding or relationship (whether written or oral) pursuant to which the Record Stockholder or any Stockholder Associated Person has a right to vote, directly or indirectly, any stock of the Corporation or pursuant to which any other person has the right to vote, directly or indirectly, any stock owned by the Record Stockholder or any Stockholder Associated Person;
- (vii) a reasonably detailed description of any derivative positions, hedged positions, synthetic or temporary ownership techniques, swaps, securities loans, timed purchases and other economic and voting interests or similar positions held or beneficially held by the Record Stockholder or any Stockholder Associated Person or to which the Record Stockholder or any Stockholder Associated Person is a party with

respect to any stock of the Corporation, and whether and the extent to which any other transaction or series of transactions has been entered into by or on behalf of, or any other agreement, arrangement or understanding (including any short positions or any borrowing or lending of stock) has been made, the effect or intent of which is to mitigate loss to or manage risk of stock price changes for, or to increase the voting power of, such Record Stockholder or any Stockholder Associated Person with respect to any stock of the Corporation;

- (viii) a representation that the Record Stockholder is a holder of record of shares of the Corporation entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to propose such business; and
- (ix) a representation whether the Record Stockholder or any Stockholder Associated Person intends, or is part of a group which intends, to deliver a proxy statement and/or form of proxy to holders of at least the percentage of the voting power of the Corporation's outstanding capital stock reasonably believed by the Record Stockholder or Nominating Stockholder Associated Person to be sufficient to approve or adopt the proposal (such representation in this clause (ix), a "Solicitation Statement").

A Record Stockholder providing notice of business proposed to be brought before an annual meeting shall further update and supplement such notice, if necessary, so that the information provided or required to be provided in such notice pursuant to this Section 2.9(a) shall be true and correct as of the record date for the meeting, and such update and supplement shall be delivered to and received by the Secretary at the principal executive offices of the Corporation not later than ten (10) days after the record date for determining the stockholders entitled to vote at the meeting; *provided*, that if such date is after the date of the meeting, not later than the day prior to the meeting.

- (b) Notwithstanding anything in these Bylaws to the contrary, no business (except for the election of Directors in accordance with the procedures set forth in Section 3.4 of these Bylaws) shall be conducted at an annual meeting except in accordance with the procedures set forth in this Section 2.9. The chairperson of an annual meeting shall have the power to determine and declare to the meeting whether or not business was properly brought before the meeting in accordance with these provisions, and if he or she should determine that business was not properly brought before the meeting, to declare that such business shall not be transacted. Notwithstanding the foregoing provisions of this Section 2.9, unless otherwise required by law or determined by the Board of Directors in its sole discretion, if the Record Stockholder (or a qualified representative of the stockholder) does not appear at the annual meeting of stockholders of the Corporation to present proposed business, such proposed business shall not be transacted, notwithstanding that proxies in respect of such vote may have been received by the Corporation. For purposes of this Section 2.9, to be considered a qualified representative of the stockholder, a person must be a duly authorized officer, manager or partner of such stockholder or must be authorized by a writing executed by such stockholder or an electronic transmission delivered by such stockholder to act for such stockholder as proxy at the meeting of stockholders and such person must produce such writing or electronic transmission, or a reliable reproduction of the writing or electronic transmission, at the meeting of stockholders.
- (c) This Section 2.9 is expressly intended to apply to any business proposed to be brought before an annual meeting of stockholders other than any proposal brought properly under and in compliance with Rule 14a-8 under the Exchange Act or any nomination of any person for election to the Board of Directors (which such nomination shall be governed by Section 3.4 of

these Bylaws). In addition to the requirements of this Section 2.9 with respect to any business proposed to be brought before an annual meeting, a stockholder shall comply with all applicable requirements of the Exchange Act with respect to any such business. Nothing in this Section 2.9 shall be deemed to affect the rights of stockholders to request inclusion in the Corporation's proxy statement of proposals pursuant to Rule 14a-8 under the Exchange Act.

(d) For purposes of these Bylaws, the term "Stockholder Associated Person" shall include each of the following persons: (i) any beneficial owner or beneficial owners, if different than the Record Stockholder, on whose behalf the notice of business in this Section 2.9 is made, (ii) any person controlling, directly or indirectly, or acting in concert with the Record Stockholder or such beneficial owner, (iii) any associate (within the meaning of Rule 12b-2 under the Exchange Act for purposes of these Bylaws) of such Record Stockholder, beneficial owner or person and (iv) any other participant in such solicitation (as described in paragraphs (a)(ii)-(vi) of Instruction 3 to Item 4 of Schedule 14A under the Exchange Act).

ARTICLE III BOARD OF DIRECTORS

Section 3.1 <u>General Powers.</u> The property, business and affairs of the Corporation shall be managed by or under the direction of a Board of Directors. The Board of Directors may exercise all such powers of the Corporation and have such authority and do all such lawful acts and things as are permitted by law, the Certificate of Incorporation or these Bylaws.

Section 3.2 <u>Number of Directors</u>. The Board of Directors of the Corporation shall consist of one or more members. The exact number of Directors which shall constitute the whole Board of Directors shall be fixed from time to time by resolution adopted by a majority of the whole Board of Directors.

Section 3.3 Election. Except as otherwise provided by law, the Certificate of Incorporation or these Bylaws, after the first meeting of the Corporation at which Directors are elected, Directors of the Corporation shall be elected each year at the annual meeting of stockholders, or at a special meeting in lieu of the annual meeting called for such purpose, by a majority of votes cast at any meeting for the election of Directors at which a quorum is present; *provided*, *however*, that, Directors shall be elected by a plurality of the votes cast at any meeting of stockholders for which (i) the Secretary of the Corporation received a notice that a stockholder has nominated a person for election to the Board of Directors in compliance with the advance notice requirements for stockholder nominees for Director set forth in Section 3.4(a) of these Bylaws and (ii) such nomination has not been withdrawn by such stockholder on or prior to the tenth (10th) day preceding the date the Corporation first mails its notice of meeting for such meeting to the stockholders. For purposes of this Section 3.3, a majority of votes cast shall mean that the number of shares voted "for" a nominee's election exceeded the number of shares voted "against" such nominee's election. The voting on Directors at any such meeting shall be by written ballot unless otherwise provided in the Certificate of Incorporation.

Section 3.4 Nominations for Election to the Board of Directors.

(a) Only persons who are nominated in accordance with the following procedures shall be eligible for election as Directors. Nominations of persons for election to the Board of Directors may be made at any meeting of stockholders called for the election of Directors by (i) the Board of Directors or any committee designated by the Board of Directors or (ii) any stockholder of the Corporation entitled to vote for the election of Directors at such meeting (a "Nominating Record Stockholder") if the nomination by such stockholder is made in accordance with the procedures established by this Section 3.4.

For nominations to be properly brought before a meeting by a Nominating Record Stockholder, (a) the Nominating Record Stockholder must have given timely notice thereof in writing to the Secretary of the Corporation in compliance with the notice procedures set forth in this Section 3.4(a), must be a stockholder of the Corporation of record at the time of the delivery of said notice and at the time of the meeting and must be entitled to vote at the meeting for the election of Directors, and (b) the Nominating Record Stockholder and any Nominating Stockholder Associated Person (as defined in Section 3.4(c) below) must have acted in accordance with the representations set forth in the Nominating Solicitation Statement required by these Bylaws. For the avoidance of doubt, the foregoing sentence shall be the exclusive means for a stockholder to propose nominations at a meeting of stockholders. To be timely with respect to an annual meeting, a stockholder's notice shall be delivered to and received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the ninetieth (90th) day, nor earlier than the close of business on the one hundred twentieth (120th) day, prior to the first anniversary of the preceding year's annual meeting; provided, however, that subject to the next two sentences, in the event that the annual meeting is convened more than thirty (30) days before or more than seventy (70) days after such anniversary date, or if no annual meeting was held in the preceding year, notice by the Nominating Record Stockholder must be so received not earlier than the close of business on the one hundred twentieth (120th) day prior to such annual meeting and not later than the close of business on the later of the ninetieth (90th) day prior to such annual meeting or the tenth (10th) day following the day on which public announcement of the date of such meeting is first made by the Corporation. Notwithstanding anything in the preceding sentence to the contrary, in the event that the number of Directors to be elected to the Board of Directors is increased and there has been no public announcement naming all of the nominees for Director or indicating the increase in the size of the Board of Directors made by the Corporation at least ten (10) days before the last day that a Nominating Record Stockholder may deliver a notice of nomination in accordance with the preceding sentence, a Nominating Record Stockholder's notice required by this Section 3.4(a) shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be received by the Secretary not later than the close of business on the tenth (10th) day following the day on which such public announcement is first made by the Corporation. In no event shall the adjournment or postponement of an annual meeting commence a new time period (or extend any time period) for the giving of a Nominating Record Stockholder's notice as described above.

A Nominating Record Stockholder's notice to the Secretary shall set forth or include, as the case may be:

(A) as to each person whom the Nominating Record Stockholder proposes to nominate for election or re-election as a Director (a "nominee"), (i) the name of such nominee, (ii) the age, business address and residence address of such nominee, (iii) the principal occupation or employment of such nominee, (iv) the class, series and number of shares of the Corporation which are beneficially owned or owned of record, directly or indirectly, by such nominee, (v) a reasonably detailed description of all arrangements, understandings or relationships with respect to the nomination (whether written or oral) between or among the nominee, the Nominating Record Stockholder and any Nominating Stockholder Associated Person, any of their respective affiliates, and any other person or persons (naming such person or persons) pursuant to which the nomination is to be made by the Nominating Record Stockholder, including information on compensation by third parties related to the nomination, (vi) a notarized affidavit executed by such nominee to the effect that, if elected as a member of the Board of Directors, he or she currently intends to serve as a Director for the entire term for which such nominee is standing for

election, that he or she is eligible for election as a member of the Board of Directors, and that, if he or she will be named in the Corporation's proxy statement as a nominee, he or she consents to being named in the proxy statement as a nominee, (vii) a statement whether such nominee, if elected, intends to tender, promptly following such nominee's election, an irrevocable resignation effective upon such nominee's failure to receive the required vote for re-election at the next meeting at which such nominee would face reelection and upon acceptance of such resignation by the Board of Directors, in accordance with the Corporation's Director Resignation Policy, (viii) a completed questionnaire executed by the nominee, in a form that has been prepared by the Corporation (including those questionnaires required of all Director candidates pursuant to Section 3.5 and any other questionnaire the Corporation determines is necessary or advisable to assess whether a nominee will satisfy any qualifications or requirements imposed by the Certificate of Incorporation, these Bylaws, any law, rule, regulation or national securities exchange listing standard that may be applicable to the Corporation, and the Corporation's corporate governance policies and guidelines), which shall be supplemented promptly upon request by the Corporation, (viii) a reasonably detailed description of any proxy, contract, arrangement, understanding or relationship (whether written or oral) pursuant to which the nominee has a right to vote, directly or indirectly, any stock of the Corporation or pursuant to which any other person has the right to vote, directly or indirectly, any stock owned by such nomineee, (ix) a reasonably detailed description of any Voting Commitments (as defined in Section 3.5) and/or any other arrangements or obligations by which the nominee is or will be bound as a Director, and (x) all other information relating to the nominee that is required to be disclosed in a proxy statement on Schedule 14A for solicitation of proxies for election of Directors under the Exchange Act and pursuant to any other applicable laws or rules or regulations of any governmental authority or of any national securities exchange or similar body overseeing any trading market on which shares of the Corporation are traded; and

(B) as to the Nominating Record Stockholder and any Nominating Stockholder Associated Person, (i) the name and address of record of the Nominating Record Stockholder and any Nominating Stockholder Associated Person, (ii) the class, series and number of shares of the Corporation which are owned beneficially or of record, directly or indirectly, by the Nominating Record Stockholder or any Nominating Stockholder Associated Person (and such notice shall include documentary evidence of each such person's record and/or beneficial ownership of such stock), (iii) a list of all stockholder proposals and director nominations made by the Nominating Record Stockholder or any Nominating Stockholder Associated Person during the prior ten (10) years, (iv) a list of all litigation filed against the Nominating Record Stockholder or any Nominating Stockholder Associated Person during the prior ten (10) years asserting a breach of fiduciary duty or a breach of loyalty, (v) a representation that the Nominating Record Stockholder is a holder of record of shares of the Corporation entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice, (vi) a reasonably detailed description of any proxy, contract, arrangement, understanding or relationship (whether written or oral) pursuant to which the Nominating Record Stockholder or any Nominating Stockholder Associated Person has a right to vote, directly or indirectly, any stock owned by the Record Stockholder or any Stockholder Associated Person, (vii) a reasonably detailed description of any derivative positions, hedged positions, synthetic or temporary ownership techniques, swaps, securities loans, timed purchases and other economic and voting interests or similar positions held or beneficially held by the

Nominating Record Stockholder or any Nominating Stockholder Associated Person or to which the Nominating Record Stockholder or any Nominating Stockholder Associated Person is a party with respect to any stock of the Corporation, and whether and the extent to which any other transaction or series of transactions has been entered into by or on behalf of, or any other agreement, arrangement or understanding (including any short positions or any borrowing or lending of shares of stock) has been made, the effect or intent of which is to mitigate loss to or manage risk of stock price changes for, or to increase the voting power of, such Nominating Record Stockholder or any Nominating Stockholder Associated Person with respect to any stock of the Corporation, and (viii) a representation whether the Nominating Record Stockholder or any Nominating Stockholder Associated Person intends or is part of a group which intends to deliver a proxy statement and/or form of proxy to holders of the voting power of at least the percentage of the Corporation's outstanding capital stock reasonably believed by the Nominating Record Stockholder or Nominating Stockholder Associated Person to be sufficient to elect the nominee or nominees proposed to be nominated by the Nominating Record Stockholder (such representation in this clause (viii), a "Nominating Solicitation Statement").

In the event a special meeting of stockholders is called pursuant to Section 2.2 for the purpose of electing one or more Directors to the Board of Directors, any such stockholder entitled to vote in the election of such Directors may nominate a person or persons (as the case may be) for election to such position(s) as specified in the Corporation's notice of meeting, if the stockholder's notice required by this Section 3.4(a) shall be received by the Secretary at the principal executive offices of the Corporation not earlier than the close of business on the one hundred twentieth (120th) day prior to such special meeting and not later than the close of business on the later of the ninetieth (90th) day prior to such special meeting or the tenth (10th) day following the day on which public announcement is first made of the date of the special meeting and of the nominees proposed by the Board of Directors to be elected at such meeting. In no event shall the adjournment or postponement of a special meeting commence a new time period (or extend any time period) for the giving of a stockholder's notice as described above.

A Nominating Record Stockholder providing notice of a nomination pursuant to this Section 3.4(a) shall further update and supplement such notice, if necessary, so that the information provided or required to be provided in such notice pursuant to this Section 3.4(a) shall be true and correct as of the record date for the meeting, and such update and supplement shall be delivered to and received by the Secretary at the principal executive offices of the Corporation not later than ten (10) days after the record date for determining the stockholders entitled to vote at the meeting; *provided*, that if such date is after the date of the meeting, not later than the day prior to the meeting.

(b) Notwithstanding the foregoing provisions of this Section 3.4, unless otherwise required by law or determined by the Board of Directors in its sole discretion, if the Nominating Record Stockholder (or a qualified representative of such stockholder) does not appear at the annual or special meeting of stockholders of the Corporation to present a nomination, such nomination shall not be presented for election, notwithstanding that proxies in respect of such vote may have been received by the Corporation. For purposes of this Section 3.4, to be considered a qualified representative of the stockholder, a person must be a duly authorized officer, manager or partner of such stockholder or must be authorized by a writing executed by such stockholder or an electronic transmission delivered by such stockholder to act for such stockholder as proxy at the meeting of stockholders and such person must produce such writing or electronic transmission, at the meeting of stockholders.

- (c) For purposes of these Bylaws, the term "Nominating Stockholder Associated Person" shall include each of the following persons: (i) any beneficial owner or beneficial owners, if different than the Nominating Record Stockholder, on whose behalf the notice of nomination in this Section 3.4 is made, (ii) any person controlling, directly or indirectly, or acting in concert with the Nominating Record Stockholder or such a beneficial owner, (iii) any associate (within the meaning of Rule 12b-2 under the Exchange Act for purposes of these Bylaws) of such Nominating Record Stockholder, beneficial owner or person and (iv) any other participant in such solicitation (as described in paragraphs (a)(ii)-(vi) of Instruction 3 to Item 4 of Schedule 14A under the Exchange Act).
- (d) Notwithstanding the foregoing provisions of this Section 3.4, a Nominating Record Stockholder shall also comply with all applicable requirements of the Exchange Act, and the rules and regulations thereunder with respect to the matters set forth in this Section 3.4.

Section 3.5 Eligibility to be a Candidate for Election as a Director and to be Seated as a Director.

(a) To be eligible to be a candidate for election as a Director of the Corporation at an annual or special meeting of stockholders, a candidate must be nominated in the manner prescribed in Section 3.4 and the candidate for nomination, whether nominated by the Board of Directors or a Nominating Record Stockholder, must have previously delivered (not later than the applicable deadline prescribed for delivery of notice under Section 3.4 or in accordance with the time period specified in a notice to such candidate given by or on behalf of the Board of Directors), to the Secretary at the principal executive offices of the Corporation, (i) a completed written questionnaire (in a form provided by the Corporation) with respect to the background, qualifications, stock ownership and independence of such proposed nominee and, if applicable, the background of any other person on whose behalf the nomination is being made, and (ii) a written representation and agreement (in a form provided by the Corporation) that such candidate for nomination (A) is not and, if elected as a Director during his or her term of office, will not become a party to (1) any agreement, arrangement or understanding with, and has not given and will not give any commitment or assurance to, any person or entity as to how such proposed nominee, if elected as a Director of the Corporation, will act or vote on any issue or question (a "Voting Commitment") that has not been disclosed therein or (2) any Voting Commitment that could limit or interfere with such proposed nominee's ability to comply, if elected as a Director of the Corporation, with such proposed nominee's fiduciary duties under applicable law, (B) is not and will not become a party to any agreement, arrangement or understanding with any person or entity other than the Corporation with respect to any direct or indirect compensation, reimbursement or indemnification in connection with his or her service or action as a Director that has not been disclosed therein and (C) in such person's individual capacity and on behalf of any person on whose behalf the nomination is being made, would be in compliance, if elected or re-elected as a Director, and will comply, with all applicable corporate governance, conflict of interest, confidentiality and other policies and guidelines of the Corporation applicable to Directors and in effect during such person's term in office as a Director (and, if requested by any candidate for nomination, the Secretary of the Corporation shall provide to such candidate for nomination all such policies and guidelines then in effect). The Board of Directors may also require any proposed candidate for nomination as a Director to furnish such other information as may reasonably be requested by the Board of Directors in writing prior to the meeting of stockholders at which such candidate's nomination is to be acted upon in order for the Board of Directors to determine the eligibility of such candidate for nomination and to determine the independence of such candidate to be an independent Director of the Corporation in accordance with the Exchange Act, applicable national securities exchange rules and the Corporation's Corporate Governance Principles.

- (b) No candidate shall be eligible for nomination as a Director of the Corporation unless the nomination of such candidate has complied with Section 3.4 and the candidate has complied with this Section 3.5. The chairperson at the meeting of stockholders shall, if the facts warrant, determine that a nomination was not properly made in accordance with Section 3.4 and this Section 3.5, and if he or she should so determine, he or she shall so declare such determination to the meeting, the defective nomination shall be disregarded and any ballots cast for the candidate in question (but in the case of any form of ballot listing other qualified nominees, only the ballots cast for the nominee in question) shall be void and of no force or effect.
- (c) Notwithstanding anything in these Bylaws to the contrary, no candidate for nomination shall be eligible to be seated as a Director of the Corporation unless nominated and elected in accordance with Section 3.4 and this Section 3.5.
- Section 3.6 <u>Term</u>. Each Director shall hold office until his or her successor is duly elected and qualified, except in the event of the earlier termination of his or her term of office by reason of death, resignation, removal or other reason.
- Section 3.7 <u>Resignation and Removal</u>. Any Director may resign at any time upon written notice to the Board of Directors, the Chairman of the Board, the Vice Chairman, the Chief Executive Officer, the President or the Secretary. The resignation of any Director shall take effect upon receipt of notice thereof or at such later time as shall be specified in such notice, and unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

Any Director or the entire Board of Directors may be removed, with or without cause, by the holders of a majority of the shares of capital stock then entitled to vote in an election of Directors, except as otherwise provided by applicable law.

Section 3.8 <u>Vacancies</u>. Vacancies in the Board of Directors and newly created Directorships resulting from any increase in the authorized number of Directors shall be filled by a majority of the Directors then in office, though less than a quorum, or by a sole remaining Director. If one or more Directors shall resign from the Board of Directors effective at a future date, a majority of the Directors then in office, including those who have so resigned at a future date, shall have the power to fill such vacancy or vacancies, the vote thereon to take effect and the vacancy to be filled when such resignation or resignations shall become effective, and each Director so chosen shall hold office as provided in this Section 3.8.

Each Director chosen to fill a vacancy on the Board of Directors shall hold office until the next annual election of Directors and until his or her successor shall be elected and qualified.

Section 3.9 Quorum and Voting. Unless the Certificate of Incorporation provides otherwise, at all meetings of the Board of Directors, a majority of the whole Board of Directors shall be present to constitute a quorum for the transaction of business. A Director interested in a contract or transaction may be counted in determining the presence of a quorum at a meeting of the Board of Directors which authorizes the contract or transaction. In the absence of a quorum, a majority of the Directors present may adjourn the meeting until a quorum shall be present.

Unless the Certificate of Incorporation provides otherwise, members of the Board of Directors or any committee designated by the Board of Directors may participate in a meeting of the Board of Directors or such committee by means of a conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and participation in such a meeting shall constitute presence in person at such meeting.

The affirmative vote of the majority of the Directors present at a meeting at which a quorum is present shall be the act of the Board of Directors unless the Certificate of Incorporation or these Bylaws shall require a vote of a greater number.

Section 3.10 <u>Regulations</u>. The Board of Directors may adopt such rules and regulations for the conduct of the business and management of the Corporation, not inconsistent with law or the Certificate of Incorporation or these Bylaws, as the Board of Directors may deem proper. The Board of Directors may hold its meetings and cause the books and records of the Corporation to be kept at such place or places within or without the State of Delaware as the Board of Directors may from time to time determine. A member of the Board of Directors, or a member of any committee designated by the Board of Directors, shall, in the performance of his or her duties, be fully protected in relying in good faith upon the books of account or reports made to the Corporation by any of its officers, by an independent certified public accountant, or by an appraiser selected with reasonable care by the Board of Directors or any committee of the Board of Directors or in relying in good faith upon other records of the Corporation.

Section 3.11 <u>Annual Meeting of Board of Directors</u>. An annual meeting of the Board of Directors shall be called and held for the purposes the election of officers and the transaction of any other business. If such meeting is held promptly after and at the place specified for the annual meeting of stockholders, no notice of the annual meeting of the Board of Directors need be given. Otherwise, such annual meeting shall be held at such time (not more than thirty days after the annual meeting of stockholders) and place, if any, as may be specified in a notice of the meeting.

Section 3.12 <u>Regular Meetings</u>. Regular meetings of the Board of Directors shall be held at the time and place, if any, within or without the State of Delaware, as shall from time to time be determined by the Board of Directors. After there has been such determination and notice thereof has been given to each member of the Board of Directors, no further notice shall be required for any such regular meeting. Except as otherwise provided by law, any business may be transacted at any regular meeting.

Section 3.13 <u>Special Meetings</u>. Special meetings of the Board of Directors may, unless otherwise prescribed by law, be called from time to time by the Chairman of the Board, the Chief Executive Officer or the President, and shall be called by the Chairman of the Board, the Chief Executive Officer, the President or the Secretary upon the written request of a majority of the whole Board of Directors directed to the Chairman of the Board, the Chief Executive Officer, the President or the Secretary. Except as provided below, notice of any special meeting of the Board of Directors, stating the time, place, if any, and purpose of such special meeting, shall be given to each Director.

Section 3.14 Notice of Meetings; Waiver of Notice. Notice of any meeting of the Board of Directors shall be deemed to be duly given to a Director (i) if mailed to such Director addressed to him or her at his or her address as the same appears on the records of the Corporation, or at the address last made known in writing to the Corporation by such Director as the address to which such notices are to be sent, at least five days before the day on which such meeting is to be held, or (ii) if sent to him or her at such address by telegraph, cable, radio or wireless not later than the day before the day on which such meeting is to be held, or (iii) if sent by facsimile transmission or electronic mail, when transmitted to a facsimile number or electronic mail address provided by the director for the purpose of receiving notice not later than the day before the day on which such meeting is to be held, or (iv) if delivered to him or her personally or orally, by telephone or otherwise, not later than the day before the day on which such meeting is to be held. Each such notice shall state the time and place, if any, of the meeting and the purposes thereof.

Notice of any meeting of the Board of Directors need not be given to any Director if waived by him or her in writing, including by facsimile transmission or electronic mail (or by telegram, cable, radio, or wireless and confirmed in writing), whether before or after the holding of such meeting, or if such Director is present at such meeting. Any meeting of the Board of Directors shall be a duly constituted meeting without any notice thereof having been given if all Directors then in office shall be present thereat.

Section 3.15 <u>Committees of Directors</u>. The Board of Directors may, by resolution or resolutions adopted by a majority of the whole Board of Directors, designate one or more committees, each committee to consist of one or more of the Directors of the Corporation.

Except as herein provided, vacancies in membership of any committee shall be filled by the vote of a majority of the whole Board of Directors. The Board of Directors may designate one or more Directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of any member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or she or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member. Members of a committee shall hold office for such period as may be fixed by a resolution adopted by a majority of the whole Board of Directors, subject, however, to removal at any time by the vote of a majority of the whole Board of Directors.

Section 3.16 Powers and Duties of Committees; Quorum and Voting. Any committee, to the extent provided in the resolution or resolutions creating such committee, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers which may require it. No such committee shall have the power or authority with regard to amending the Certificate of Incorporation, adopting an agreement of merger or consolidation, recommending to the stockholders the sale, lease or exchange of all or substantially all of the Corporation's property and assets, recommending to the stockholders a dissolution of the Corporation or a revocation of a dissolution, or amending these Bylaws. The Board of Directors may, in the resolution creating a committee, grant to such committee the power and authority to declare a dividend or authorize the issuance of stock.

Unless the Certificate of Incorporation or these Bylaws provide otherwise, at all meetings of a committee of the Board of Directors, a majority of the members of such committee shall be present to constitute a quorum for the transaction of business. The affirmative vote of the majority of the members of the committee present at a meeting of such committee at which a quorum is present shall be the act of such committee unless the Certificate of Incorporation, these Bylaws or the Board of Directors shall require a vote of a greater number.

Each committee may adopt its own rules of procedure and may meet at stated times or on such notice as such committee may determine. Except as otherwise permitted by these Bylaws, each committee shall keep regular minutes of its proceedings and report the same to the Board of Directors when required.

Section 3.17 <u>Compensation of Directors</u>. Each Director shall be entitled to receive for his or her service as a Director such compensation as is fixed by the Board and in connection therewith shall be reimbursed by the Corporation for travel expenses. The fees to such Directors may be fixed in unequal amounts among them, taking into account their respective relationship to the Corporation in another capacity. These provisions shall not be construed to preclude any Director from receiving compensation for serving the Corporation in any other capacity.

Section 3.18 <u>Action Without Meeting</u>. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting if all Directors or members of such committee, as the case may be, consent thereto in writing or by electronic transmission, and the writing or electronic transmission is filed with the minutes of proceedings of the Board of Directors or such committee in accordance with applicable law.

ARTICLE IV OFFICERS

Section 4.1 <u>Principal Officers</u>. The principal officers of the Corporation shall be elected by the Board of Directors and shall include a Chairman of the Board, a Chief Executive Officer, a President, a Secretary and a Treasurer and may, at the discretion of the Board of Directors, also include a Vice Chairman of the Board, one or more Vice Presidents, and a Chief Financial Officer. Except as otherwise provided in the Certificate of Incorporation or these Bylaws, one person may hold the offices and perform the duties of any two or more of said principal offices except the offices and duties of President and Vice President or of Chairman of the Board or President and Secretary. None of the principal officers need be Directors of the Corporation.

Section 4.2 <u>Election of Principal Officers; Term of Office</u>. The principal officers of the Corporation shall be elected annually by the Board of Directors at such annual meeting of the Board of Directors. Failure to elect any principal officer annually shall not dissolve the Corporation.

If the Board of Directors shall fail to fill any principal office at an annual meeting, or if any vacancy in any principal office shall occur, or if any principal office shall be newly created, such principal office may be filled at any regular or special meeting of the Board of Directors.

Each principal officer shall hold office until his or her successor is duly elected and qualified, or until his or her earlier death, resignation or removal.

Section 4.3 <u>Subordinate Officers, Agents and Employees</u>. In addition to the principal officers, the Corporation may have one or more Assistant Treasurers, Assistant Secretaries, Vice Presidents who are not principal officers pursuant to Section 4.1 and such other subordinate officers, agents and employees as the Board of Directors may deem advisable, each of whom shall hold office for such period and have such authority and perform such duties as the Board of Directors, the Chairman of the Board, the Chief Executive Officer, the President, or any officer designated by the Board of Directors, may from time to time determine. The Board of Directors at any time may appoint and remove, or may delegate to any principal officer the power to appoint and to remove, any subordinate officer, agent or employee of the Corporation.

Section 4.4 <u>Delegation of Duties of Officers</u>. The Board of Directors may delegate the duties and powers of any officer of the Corporation to any other officer or to any Director for a specified period of time for any reason that the Board of Directors may deem sufficient.

Section 4.5 <u>Removal of Officers</u>. Any officer of the Corporation may be removed, with or without cause, by resolution adopted by a majority of the Directors then in office at any regular or special meeting of the Board of Directors or by a written consent signed by all of the Directors then in office.

Section 4.6 <u>Resignations</u>. Any officer may resign at any time by giving written notice of resignation to the Board of Directors, to the Chairman of the Board, to the Vice Chairman, to the Chief Executive Officer, to the President or to the Secretary. Any such resignation shall take effect upon receipt of such notice or at any later time specified therein. Unless otherwise specified in the notice, the acceptance of a resignation shall not be necessary to make the resignation effective.

Section 4.7 <u>Chairman of the Board and Vice Chairman</u>. The Chairman of the Board shall preside at all meetings of stockholders and of the Board of Directors at which he or she is present. The Chairman of the Board shall have such other powers and perform such other duties as may be assigned to him or her from time to time by the Board of Directors. Unless otherwise provided by the Board of Directors, in the absence of the Chairman of the Board, the Vice Chairman of the Board, if one is elected, shall preside, when present, at all meetings of the stockholders and the Board of Directors. The Vice Chairman of the Board shall have such other powers and shall perform such duties as the Board of Directors may from time to time designate.

Section 4.8 <u>Chief Executive Officer</u>. The Chief Executive Officer shall, in the absence of the Chairman of the Board, preside at all meetings of the stockholders and of the Board of Directors at which he or she is present. The Chief Executive Officer of the Corporation shall be responsible for the administration of the Corporation, including general supervision of the policies of the Corporation and general and active management of the financial affairs of the Corporation. The Chief Executive Officer also shall have such powers and perform such duties as are specifically imposed on him or her by law and as may be assigned to him or her by the Board of Directors.

Section 4.9 <u>President</u>. The President shall, in the absence of the Chairman of the Board, Vice Chairman and of the Chief Executive Officer, preside at all meetings of the stockholders and of the Board of Directors at which he or she is present. The President shall have all powers and duties usually incident to the office of the President, except as specifically limited by a resolution of the Board of Directors. The President shall have such other powers and perform such other duties as may be assigned to him or her from time to time by the Board of Directors. The President, in the absence or disability of the Chief Executive Officer and upon the direction of the Board of Directors, shall perform the duties and exercise the powers of the Chief Executive Officer.

Section 4.10 <u>Vice President</u>. Each Vice President, if any, shall have such powers and perform such duties as may be assigned to him or her from time to time by the Board of Directors, the Chief Executive Officer or the President. Any Vice President may have such additional designation in his or her title as the Board of Directors may determine.

Section 4.11 <u>Secretary</u>. The Secretary shall act as Secretary of all meetings of stockholders and of the Board of Directors at which he or she is present, shall record all the proceedings of all such meetings in a book to be kept for that purpose, shall have supervision over the giving and service of notices of the Corporation, and shall have supervision over the care and custody of the records and seal of the Corporation. The Secretary shall be empowered to affix the corporate seal to documents, the execution of which on behalf of the Corporation under its seal is duly authorized, and when so affixed may attest the same. The Secretary shall have all powers and duties usually incident to the office of Secretary, except as specifically limited by a resolution of the Board of Directors. The Secretary shall have such other powers and perform such other duties as may be assigned to him or her from time to time by the Board of Directors, the Chief Executive Officer or the President.

Section 4.12 <u>Treasurer</u>. The Treasurer shall have general supervision over the care and custody of the funds and over the receipts and disbursements of the Corporation and shall cause the funds of the Corporation to be deposited in the name of the Corporation in such banks or other depositaries as the Board of Directors may designate. The Treasurer shall have supervision over the care and safekeeping of the securities of the Corporation. The Treasurer shall have all powers and duties usually incident to the office of Treasurer, except as specifically limited by a resolution of the Board of Directors. The Treasurer shall have such other powers and perform such other duties as may be assigned to him or her from time to time by the Board of Directors, the Chief Executive Officer or the President.

Section 4.13 <u>Chief Financial Officer</u>. The Chief Financial Officer shall be the chief accounting officer of the Corporation, unless all or a portion of such duties and responsibilities are assigned to another officer by the Board of Directors, and shall have supervision over the maintenance and custody of the accounting operations of the Corporation, including the keeping of accurate accounts of all receipts and disbursements and all other financial transactions. The Chief Financial Officer shall have all powers and duties usually incident to the office of Chief Financial Officer, except as specifically limited by a resolution of the Board of Directors. The Chief Financial Officer shall have such other powers and perform such other duties as may be assigned to him or her from time to time by the Board of Directors, the Chief Executive Officer or the President.

Section 4.14 <u>Bond</u>. The Board of Directors shall have power, to the extent permitted by law, to require any officer, agent or employee of the Corporation to give bond for the faithful discharge of his or her duties in such form and with such surety or sureties as the Board of Directors may determine.

ARTICLE V CAPITAL STOCK

Section 5.1 <u>Stock Certificates; Uncertificated Shares</u>. The shares of capital stock in the Corporation shall be represented by certificates, provided that the Board of Directors of the Corporation may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares that may be evidenced by a book-entry system maintained by the registrar of such stock. Any such resolution shall not apply to any such shares represented by a certificate theretofore issued until such certificate is surrendered to the Corporation or its transfer agent or reported lost, stolen or destroyed pursuant to Section 5.7 hereof.

Within a reasonable time after the issuance or transfer of uncertificated shares of any class or series of stock, the Corporation shall send to the registered owner thereof a written notice containing the information required by law to be set forth or stated on certificates representing shares of such class or series or a statement that the Corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

Section 5.2 <u>Signatures on Stock Certificates</u>. Certificates for shares of capital stock of the Corporation shall be signed by, or in the name of, the Corporation by any two authorized officers of the Corporation. Any of or all the signatures on the certificates may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, such certificate may nevertheless be issued by the Corporation with the same effect as if such signer were such officer, transfer agent or registrar at the date of issue.

Section 5.3 <u>Stock Ledger</u>. A record of all shares of capital stock issued by the Corporation shall be kept by the Secretary or any other officer or employee of the Corporation designated by the Secretary or by any transfer clerk or transfer agent appointed pursuant to Section 5.4 hereof. Such record shall show the name and address of the stockholder in which the shares of capital stock are registered; the number of shares held by such stockholder; the numbers of the certificates covering such shares, if certificated; the date of each such certificate; and in case of certificates which have been cancelled, the dates of cancellation thereof.

The Corporation shall be entitled to treat the holder of record of shares of capital stock as shown on the stock ledger as the owner thereof and as the person entitled to receive dividends thereon, to vote such shares and to receive notice of meetings, and for all other purposes. The Corporation shall not be bound to recognize any equitable or other claim to or interest in any share of capital stock on the part of any other person whether or not the Corporation shall have express or other notice thereof.

Section 5.4 <u>Regulations Relating to Transfer</u>. The Board of Directors may make such rules and regulations as it may deem expedient and not inconsistent with law, the Certificate of Incorporation or these Bylaws concerning the issuance, transfer and registration of shares of capital stock of the Corporation. The Board of Directors may appoint, or authorize any principal officer to appoint, one or more transfer clerks, transfer agents or registrars and may require all certificates for capital stock to bear the signature or signatures of any of them.

Section 5.5 <u>Transfers</u>. Upon surrender to the Corporation or the transfer agent of the Corporation of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer, the Corporation shall issue a new certificate or evidence of the issuance of uncertificated shares to the person entitled thereto, cancel the old certificate and record the transaction upon the Corporation's books. Upon the receipt of proper transfer instructions from the registered owners of uncertificated shares, such uncertificated shares shall be cancelled, issuance of new equivalent uncertificated or certificated shares shall be made to the person entitled thereto and the transaction shall be recorded upon the books of the Corporation.

Section 5.6 <u>Cancellation</u>. Each certificate for capital stock surrendered to the Corporation for exchange or transfer shall be cancelled and no new certificate or certificates shall be issued in exchange for any existing certificate (other than pursuant to Section 5.7) until such existing certificate shall have been cancelled.

Section 5.7 <u>Lost, Destroyed, Stolen and Mutilated Certificates</u>. In the event that any certificate for shares of capital stock of the Corporation shall be mutilated, the Corporation shall issue a new certificate or uncertificated shares in place of such mutilated certificate. In case any such certificate shall be lost, stolen or destroyed, the Corporation may, in the discretion of the Board of Directors or a committee designated thereby with power so to act, issue a new certificate for capital stock or uncertificated shares in the place of any such lost, stolen or destroyed certificate. The applicant for any substituted certificate or certificates or uncertificated shares shall surrender any mutilated certificate or, in the case of any lost, stolen or destroyed certificate, furnish satisfactory proof of such loss, theft or destruction of such certificate and of the ownership thereof. The Board of Directors or such committee may, in its discretion, require the owner of a lost, stolen or destroyed certificate, or his or her representatives, to furnish to the Corporation a bond with an acceptable surety or sureties and in such sum as will be sufficient to indemnify the Corporation against any claim that may be made against it on account of the lost, stolen or destroyed certificate or the issuance of such new certificate or uncertificated shares. A new certificate or uncertificated shares may be issued without requiring a bond when, in the judgment of the Board of Directors, it is proper to do so.

Section 5.8 Fixing of Record Dates.

- (a) Stockholder Meetings; Adjournments. In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than sixty (60) nor less than ten (10) days before the date of such meeting. If the Board of Directors so fixes a date, such date shall also be the record date for determining the stockholders entitled to vote at such meeting unless the Board of Directors determines, at the time it fixes such record date, that a later date on or before the date of the meeting shall be the date for making such determination. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the determination of stockholders entitled to vote at the adjourned meeting and in such case shall also fix as the record date for stockholders entitled to notice of such adjourned meeting the same or an earlier date as that fixed for the determination of stockholders entitled to vote therewith at the adjourned meeting.
- (b) Stockholder Action by Consent. In order that the Corporation may determine the stockholders entitled to consent to action in writing without a meeting, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which date shall not be more than ten (10) days after the date upon which the resolution fixing the record date is adopted by the Board of Directors. Any stockholder of record seeking to have the stockholders authorize or take action by written consent shall, by written notice to the Secretary of the Corporation, request the Board of Directors to fix a record date. The Board of Directors shall promptly, but in all events within ten (10) days after the date on which such a request is received, adopt a resolution fixing the record date (unless a record date has previously been fixed by the Board of Directors pursuant to the first sentence of this Section 5.8(b)). If no record date has been fixed by the Board of Directors within ten (10) days of the date on which such a request is received, the record date for determining stockholders entitled to consent to action in writing without a meeting, when no prior action by the Board of Directors is required by applicable law, shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the Corporation by delivery to its registered office in the State of Delaware, its principal place of business, or any officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to the Corporation's registered office shall be by hand or by certified or registered mail, return receipt requested. If no record date has been fixed by the Board of Directors and prior action by the Board of Directors is required by applicable law, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting shall be at the close of business on the date on which the Board of Directors adopts the resolution taking such prior action.
- (c) Distributions, Allotment of Rights, Exercise of Rights, and Other Purposes. In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion, or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than 60 days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

ARTICLE VI INDEMNIFICATION

Section 6.1 <u>Indemnification</u>. The Corporation shall indemnify and advance expenses to any officer, Director, employee or agent to the full extent permitted by its Certificate of Incorporation, these Bylaws or law.

ARTICLE VII MISCELLANEOUS PROVISIONS

- Section 7.1 <u>Corporate Seal</u>. The seal of the Corporation shall be circular in form with the name of the Corporation in the circumference and the words "Corporate Seal, Delaware" in the center. The seal may be used by causing it to be affixed or impressed, or a facsimile thereof may be reproduced or otherwise used in such manner as the Board of Directors may determine.
- Section 7.2 <u>Fiscal Year</u>. The fiscal year of the Corporation shall be from the 1st day of January through the 31st day of December, inclusive, in each year, or such other twelve consecutive months as the Board of Directors may designate.
- Section 7.3 <u>Waiver of Notice</u>. Whenever any notice is required to be given under any provision of law, the Certificate of Incorporation or these Bylaws, a written waiver thereof, signed by the person or persons entitled to such notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders, Directors, or members of a committee of Directors need be specified in any written waiver of notice unless so required by the Certificate of Incorporation.

Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

Section 7.4 Execution of Instruments, Contracts, Etc.

- (a) All checks, drafts, bills of exchange, notes or other obligations or orders for the payment of money shall be signed in the name of the Corporation by the President or such other officer or officers or person or persons, as the Board of Directors may from time to time designate.
- (b) Except as otherwise provided by law, the Board of Directors, any committee given specific authority in the premises by the Board of Directors, or any committee given authority to exercise generally the powers of the Board of Directors during the intervals between meetings of the Board of Directors, may authorize any officer, employee or agent, in the name of and on behalf of the Corporation, to enter into or execute and deliver deeds, bonds, mortgages, contracts and other obligations or instruments, and such authority may be general or confined to specific instances.
- (c) All applications, written instruments and papers required by or filed with any department of the United States Government or any state, county, municipal or other governmental official or authority, may, if permitted by applicable law, be executed in the name of the Corporation by any principal officer or subordinate officer of the Corporation, or, to the extent designated for such purpose from time to time by the Board of Directors, by an employee or agent of the Corporation. Such designation may contain the power to substitute, in the discretion of the person named, one or more other persons.

Section 7.5 <u>Conflict with Applicable Law or Certificate of Incorporation</u>. These Bylaws are adopted subject to any applicable law and the Certificate of Incorporation. Whenever these Bylaws may conflict with any applicable law or the Certificate of Incorporation, such conflict shall be resolved in favor of such law or the Certificate of Incorporation.

ARTICLE VIII AMENDMENTS

Section 8.1 <u>By Stockholders</u>. These Bylaws may be amended, altered or repealed, or new Bylaws may be adopted, at any meeting of stockholders by the vote of the holders of not less than a majority of the outstanding shares of stock entitled to vote thereat, provided that, in the case of a special meeting, notice that an amendment is to be considered and acted upon shall be inserted in the notice or waiver of notice of said meeting.

Section 8.2 <u>By Directors</u>. To the extent permitted by the Certificate of Incorporation, these Bylaws may be amended, altered or repealed, or new Bylaws may be adopted, at any regular or special meeting of the Board of Directors by the affirmative vote of a majority of the whole Board of Directors

AS AMENDED BY THE BOARD OF DIRECTORS ON JULY 8, 2022.



Prospectus

for the admission to trading on the regulated market (regulierter Markt) of the Frankfurt Stock Exchange (Frankfurter Wertpapierbörse) with simultaneous admission to the sub-segment of the regulated market with additional post-admission obligations (Prime Standard) of the Frankfurt Stock Exchange (Frankfurter Wertpapierbörse)

of

77,316,803 shares of common stock,

and

up to 9,842,032 shares of common stock from the authorized and unissued share capital of the Company reserved for issuance under assumed stock option plans pursuant to a resolution by the board of directors of the Company expected to be adopted on or around July 7, 2022

- each representing a par value of \$0.01 per share of common stock and carrying full dividend rights from the date of their issuance -

of

Acorn HoldCo, Inc.

Wilmington, Delaware, United States

- International Securities Identification Number (ISIN): US00486H1059 -

- German Securities Identification Number (Wertpapierkennnummer) (WKN): A3C7M6 -

- Ticker Symbols: "ADTN" (Nasdaq) and "QH9" (Frankfurt Stock Exchange) -

Listing Agent

ODDO BHF

The date of this prospectus is July 7, 2022

The validity of this prospectus will expire with the commencement of trading of the shares on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) which is expected to occur on July 15, 2022. The obligation to supplement this prospectus in the event of significant new factors, material mistakes or material inaccuracies does not apply when this prospectus is no longer valid.

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SUMMARY OF THE PROSPECTUS

A. INTRODUCTION AND WARNINGS

This prospectus (the "**Prospectus**") relates to the admission to the regulated market (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) with simultaneous admission to the sub-segment thereof with additional post-admission obligations (Prime Standard) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) of up to 87,158,835 shares of common stock, consisting of (i) the entire outstanding share capital of the Company (as defined below) upon settlement of the Offer (as defined under section "3 *Why is this Prospectus being produced?*" in this summary), i.e. 77,316,803 shares of common stock (the "**Transaction Shares**"), and (ii) up to 9,842,032 shares of common stock from the authorized but unissued share capital of the Company reserved for issuance by a resolution of the Company's board of directors, expected to be adopted on or around July 7, 2022, in connection with stock options exercisable under stock option programs of ADTRAN, Inc. ("ADTRAN") and ADVA Optical Networking SE ("ADVA") (the "**Employee Shares**", and together with the Transaction Shares, the "**Shares**"), each such share having the International Securities Identification Number ("**ISIN**") US00486H1059, of Acorn HoldCo, Inc., Legal Entity Identifier ("**LEI**") 549300VV36J86CRRWF77, with business address at 901 Explorer Boulevard, Huntsville, Alabama, 35806, United States of America ("**United States**") (telephone: +1 (256) 963 8000) ("**Acorn HoldCo**", the "**Company**" or the "**Issuer**", and, together with its direct and indirect subsidiaries, the "**Acorn HoldCo Group**" or the "**Group**").

The Company and ODDO BHF Aktiengesellschaft, Bockenheimer Landstraße 10, 60323 Frankfurt am Main, Germany, LEI: 529900XLAZ15LYK8XK27 (telephone: +49 (0)69 718 0) (the "**Listing Agent**"), will apply to admit the Shares to trading on the regulated market (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and, simultaneously, to the sub-segment thereof with additional post-admission obligations (Prime Standard) (trading in euros).

On July 7, 2022, the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*, "**BaFin**"), Marie-Curie-Straße 24-28, 60439 Frankfurt am Main, Germany (telephone: +49 (0)228 4108 0; website: https://www.bafin.de), approved this Prospectus as competent authority under Regulation (EU) 2017/1129 of the European Parliament and of the Council of June 14, 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market and repealing Directive 2003/71/EC, as amended (the "**Prospectus Regulation**").

This summary should be read as an introduction to this Prospectus. Any decision to invest in the securities should be based on a consideration of this Prospectus as a whole by the investor. Investors who invest in the shares of the Company could lose all or part of their invested capital. Where a claim relating to the information contained in this Prospectus is brought before a court, the plaintiff investor might, under the national law, have to bear the costs of translating this Prospectus before legal proceedings are initiated. Civil liability attaches only to those persons who have tabled the summary including any translation thereof, but only where the summary is misleading, inaccurate or inconsistent, when read together with the other parts of this Prospectus, or where it does not provide, when read together with the other parts of this Prospectus, key information in order to aid investors when considering whether to invest in the shares of the Company.

B. KEY INFORMATION ON THE ISSUER

1. Who is the issuer of the securities?

Issuer Information

The Issuer's legal name is Acorn HoldCo, Inc. (to be renamed ADTRAN Holdings, Inc. immediately prior to the Merger (as defined under section "3 Why is this Prospectus being produced?" in this summary). The Issuer has its registered office at Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle County, Delaware 19801, United States, and is a corporation, incorporated under and governed by the laws of Delaware, United States. The Issuer is registered with the division of corporations of the state of Delaware, United States, under registration number 6141966. The Issuer's LEI is 549300VV36J86CRRWF77.

Principal Activities

The Issuer was incorporated as a corporation under the laws of Delaware, United States, on August 10, 2021. As of the date of this Prospectus, the Issuer has not conducted any material activities other than those incidental to its formation and the matters contemplated by a business combination agreement dated August 30, 2021 entered into among Acorn HoldCo, ADTRAN and ADVA (the "Business Combination Agreement"), such as the formation of Acorn MergeCo, Inc. (a wholly-owned subsidiary of the Issuer) and the implementation of the Offer (as defined under section "3 Why is this Prospectus being produced?" in this summary). According to the terms of the Business Combination Agreement, upon settlement of the Offer the businesses of ADTRAN and ADVA will be combined under the Issuer (the "Business Combination"). See section "3 Why is this Prospectus being produced?" in this summary for more information regarding the Business Combination. Upon settlement of the Offer, the Issuer will be the parent company of both ADTRAN and ADVA, and, therefore, the business and operations of ADTRAN and ADVA as stated below should be considered in understanding the principal activities of the Issuer and the Acorn HoldCo Group following the settlement of the Offer (the "Combined Group").

ADTRAN considers itself to be a leading global provider of networking and communications platforms, software, and services focused on the broadband access market. ADTRAN's products and services are utilized by a diverse global customer base of network operators that range from those having regional or national reach and operating as telephone or cable television network operators to alternative network providers such as municipalities or utilities, as well as, managed service providers who serve small- and medium-sized businesses and distributed enterprises. ADTRAN operates under two reportable segments:

(i) Network Solutions, which includes hardware and software products, and (ii) Services & Support, which includes a portfolio of network implementation services, support services and cloud-hosted software as a service (SaaS) application that complement ADTRAN's product portfolio and can be utilized to support other platforms as well. These two segments span across three revenue categories: (a) Access & Aggregation, (b) Subscriber Solutions & Experience and (c) Traditional & Other Products. These revenue categories are distinguished by the types of products and services offered. The revenue category Access & Aggregation is focused on solutions that are used by service providers to connect their network infrastructure to subscribers. The category Subscriber Solutions & Experience is concentrated on subscriber solutions that terminate broadband access in households and/or businesses. The category Traditional & Other Products encompasses prior-generation technologies, products and services and certain other offerings.

ADVA develops and provides networking solutions to network operators (private enterprises, communication services providers and internet content providers), focusing on solutions for cloud access, cloud interconnection and network synchronization. ADVA's networking solutions enable its customers to deliver high-speed, secure cloud and mobile services. Its technologies and products are based on three core areas of expertise: (i) fiber-optic transmission technology, (ii) cloud access technology for rapid creation of innovative services and (iii) precise synchronization of networks. All three technology areas are unified by intelligent software for network management.

Major and controlling Shareholders

As of the date of this Prospectus, ADTRAN, a publicly traded corporation under the laws of Delaware, United States, is the sole shareholder of, and therefore controls the Company.

The Company is not aware that upon settlement of the Offer it will be directly or indirectly controlled.

Based on the circumstance that immediately following the settlement of the Offer 77,316,803 Shares will be outstanding⁽¹⁾⁽ⁱⁱⁱ⁾, ^{(1)(iv)} and the assumptions that (i) the publicly filed holdings of shareholders of ADTRAN and ADVA remained unchanged since June 30, 2022 (the "Latest Practicable Date") and (ii) all shares of ADVA held by such shareholders of ADVA were tendered in the course of the Offer, it is expected that the following persons will directly or indirectly own 3% or more of the Company's share capital and voting rights immediately following settlement of the Offer:

	Anticipated number of Shares	Anticipated ownership percentage ⁽¹⁾
BlackRock, Inc.	8,140,068(2)	10.53%
EGORA Holding GmbH	6,147,343(3)	7.95%
The Vanguard Group	5,424,685(4)	7.02%
Dimensional Holdings Inc.	4,105,790(5)	5.31%
The Bank of New York Mellon Corp.	3,222,495(6)	4.17%
The Goldman Sachs Group, Inc.	$2,749,198^{(7)}$	3.56%
JPMorgan Chase & Co.	2,344,757(8)	3.03%

- (1) Based on (i) the respective anticipated holdings in the Company by the ADTRAN shareholders listed in the above table considering the merger consideration of one Share for each outstanding ADTRAN share (other than excluded ADTRAN shares, which will be cancelled for no consideration) (the "Merger Exchange Ratio"), (ii) the respective anticipated holdings in the Company by the ADVA shareholders listed in the above table considering the exchange ratio of 0.8244 Shares for one ADVA share (the "Exchange Ratio"), (iii) the number of the Shares to settle the Offer determined by multiplying the total number of the tendered ADVA shares as published by the Company on February 17, 2022 and the Exchange Ratio (i.e. 27,994,595 Shares), and (iv) the number of the Shares to settle the Merger (as defined below) by multiplying the total outstanding ADTRAN shares to be converted into the Shares in the course of the Merger (as defined below) and the Merger Exchange Ratio (i.e. 49,322,208 Shares) (aggregate amount of (iii) and (iv) being the total number of the outstanding Shares immediately following settlement of the Offer).
- (2) Calculated by multiplying the Merger Exchange Ratio and the holdings in ADTRAN as of December 31, 2021, as reported in the U.S. Securities and Exchange Commission ("SEC") Schedule 13G filed by BlackRock, Inc. on February 7, 2022. According to its Schedule 13G, BlackRock, Inc. and certain of its subsidiaries beneficially owned 8,140,068 ADTRAN shares.
- (3) Calculated by multiplying the Exchange Ratio and the holdings in ADVA as of the Latest Practicable Date. Based on a shareholding notification dated December 8, 2017, EGORA Holding GmbH holds 7,456,749 ADVA shares. It is assumed that all 7,456,749 ADVA shares have been tendered in the course of the Offer.
- (4) Calculated by multiplying the Merger Exchange Ratio and the holdings in ADTRAN as of December 31, 2021, as reported in the SEC Schedule 13G filed by The Vanguard Group on February 92022. According to its Schedule 13G, The Vanguard Group and certain of its subsidiaries beneficially owned 5,424,685 ADTRAN shares.
- (5) Based on (i) the anticipated indirect holdings of Dimensional Holdings Inc. calculated by multiplying the Merger Exchange Ratio and the holdings of Dimensional Fund Advisors L.P. in ADTRAN as of December 31, 2021, as reported in the SEC Schedule 13G filed by Dimensional Fund Advisors L.P. on February 8, 2022, and (ii) the anticipated holdings of Dimensional Holdings Inc. calculated by multiplying the Exchange Ratio and the holdings in ADVA beneficially owned by Dimensional Holdings Inc. According to its Schedule 13G, Dimensional Fund Advisors L.P. and certain of its subsidiaries beneficially owned 2,271,552 ADTRAN shares. Pursuant to its voting rights notification dated February 4, 2022, Dimensional Holdings Inc. beneficially owned 2,224,938 voting rights in ADVA.
- (6) Calculated by multiplying the Merger Exchange Ratio and the holdings in ADTRAN as of December 31, 2021, as reported in the SEC Schedule 13G filed by The Bank of New York Mellon Corp. on February 2, 2022. According to its Schedule 13G, The Bank of New York Mellon Corp. and certain of its subsidiaries beneficially owned 3,222,495 ADTRAN shares.

- (7) Calculated by multiplying the Exchange Ratio and the 3,334,787 voting rights and equity-based instruments in ADVA beneficially owned by the Goldman Sachs Group, Inc. pursuant to its voting rights notification dated March 3, 2022.
- (8) Calculated by multiplying the Exchange Ratio and the 2,844,198 voting rights and equity-based instruments in ADVA beneficially owned by JPMorgan Chase & Co. pursuant to its voting rights notification dated June 24, 2022.

Board of Directors

As of the date of the Prospectus, the Company is managed by a board of directors, which consists of two members: Thomas R. Stanton and Michael K. Foliano. Immediately prior to the settlement of the Offer, it is intended to expand the size of the board of directors of the Company to a total of six members comprising: Thomas R. Stanton (chairman), H. Fenwick Huss, Gregory McCray, Balan Nair, Jacqueline H. Rice, and Kathryn A. Walker. Immediately after settlement of the Offer, the board of directors of the Company will be expanded to a total of nine members by appointing three additional members to the board of directors: Brian Protiva, Nikos Theodosopoulos and Johanna Hey.

After settlement of the Offer, the operational management of the Company shall consist of the following persons: Thomas R. Stanton (Chief Executive Officer), Michael K. Foliano (Chief Financial Officer), and James D. Wilson (Chief Revenue Officer).

Statutory Auditor

PricewaterhouseCoopers LLP, 300 Madison Avenue, New York, United States ("PwC"), an independent registered public accounting firm, has been appointed as statutory auditor of the Company for the period from August 10, 2021 (inception) through December 31, 2021.

2. What is the key financial information regarding the issuer?

Selected Consolidated Financial Information of Acorn HoldCo, Inc.

The financial information contained in the following tables has been taken from the Company's audited financial statements as of December 31, 2021 and for the period from August 10, 2021 (inception) through December 31, 2021, prepared in accordance with the United States Generally Accepted Accounting Principles ("U.S. GAAP") (the "Financial Statements"). PwC audited the Financial Statements and issued an unqualified independent auditor's report thereon on February 28, 2022.

Summary statement of profit or loss data

	i ci iou ii oili
	August 10, 2021
	through
	December 31, 2021
(in USD)	(audited)
Revenue	0
Operating income	0
Net income and comprehensive income	0

Period from

Summary statement of financial position data

	2021
(in USD)	(audited)
Total assets	10
Total stockholder's equity	10

Summary statement of cash flow statement

(in USD)	Period from August 10, 2021 through December 31, 2021 (audited)
Cash flow from operating activities	0
Cash flow from investing activities	0
Cash flow from financing activities	10

Selected Data from the Condensed Combined Pro Forma Financial Information

The pro forma condensed combined financial information (the "**Pro Forma Financial Information**") has been prepared for informational purposes only and is not necessarily indicative of the financial position or results of operations that would have been realized, if the Business Combination had been completed as of the dates presented, nor is it indicative of future results or financial position of the Combined Group. Actual results and valuations may differ materially from the assumptions within the accompanying Pro Forma Financial Information. The selected pro forma condensed combined financial information below

has been derived from the Pro Forma Financial Information, prepared in accordance with IDW Accounting Practice Statement: Preparation of Pro Forma Financial Information (IDW AcPS AAB 1.004) (IDW Rechnungslegungshinweis: Erstellung von Pro forma-Finanzinformationen (IDW RH HFA 1.004)), as promulgated by the Institute of Public Auditors in Germany (IDW, Institut der Wirtschaftsprüfer in Deutschland e. V.).

Selected Information Pro Forma Condensed Combined Statement of Financial Position as of December 31, 2021

	Acorn HoldCo	ADTRAN	ADVA	
(in thousands of USD)	(U.S. GAAP)	(U.S. GAAP)	(IFRS)*	Pro Forma Combined
Total assets	_	569,017	682,248	1,826,422
Total stockholders' equity	_	357,102	385,528	881,551

Selected Information Pro Forma Condensed Combined Statement of Income for the financial year ended December 31, 2021

(in thousands of USD, except per share amounts)	Acorn HoldCo (U.S. GAAP)	ADTRAN (U.S. GAAP)	ADVA (IFRS)*	Pro Forma Combined
Total revenue	_	563,004	715,025	1,278,029
Operating income (loss)	_	(14,700)	49,268	(188,631)
Net income (loss)	_	(8,635)	70,183	(104,657)
Earnings (loss) per common share (in USD)	_	(0.18)	_	(0.98)

^{*} Certain reclassifications were made to align ADVA's financial statement presentation with that of ADTRAN based on information available to date.

3. What are the key risks that are specific to the Issuer?

- ADTRAN and ADVA have incurred and the Combined Group expects to incur significant transaction fees and costs in connection with the
 Business Combination. Failure to offset these transaction- and combination-related costs by realizing the synergies and cost reductions and
 other efficiencies related to the business integration could have a material adverse effect on ADTRAN's, ADVA's and the Combined Group's
 profit and cash flows.
- Uncertainty about the effect of the Business Combination could have an adverse effect on ADTRAN's, ADVA's and the Combined Group's business operations and cash flows. Further, the market value of Acorn HoldCo's shares following the settlement of the Offer may decrease, if certain changes in the business of ADTRAN and ADVA in the period prior to the settlement of the Offer occur which are adverse to ADTRAN and ADVA but the Business Combination is still required to be completed.
- Following the settlement of the Offer, Acorn HoldCo may enter into a domination agreement or a domination and profit-and-loss-transfer agreement with ADVA, which may result in a continuing obligation for Acorn HoldCo to pay an adequate fixed or variable annual guaranteed dividend or annual recurring compensation to the remaining ADVA shareholders that could be higher than dividends to be otherwise distributed to Acorn HoldCo's minority shareholders, which could result in a substantial financial obligation of Acorn HoldCo.
- The Combined Group may fail to realize the anticipated strategic and financial benefits sought from the Business Combination.
- Following the settlement of the Offer, ADVA will be in majority ownership of Acorn HoldCo. While Acorn HoldCo may enter into a
 domination agreement or a domination and profit-and-loss-transfer agreement with ADVA, the effectiveness of such agreement may be
 delayed as a result of litigation or otherwise or may not occur, which may have an adverse effect on the ability to realize synergies and cost
 reductions and the market value of the Shares.
- If the Combined Group fails to successfully retain and motivate the employees of ADTRAN and/or ADVA, relevant capabilities and expertise may be lost which may have an adverse effect on the cash flows and results of operations and the successful business operations of the Combined Group, ADTRAN and ADVA in general.
- Any loss of business or the inability to win new customers could limit the Combined Group's ability to achieve the anticipated benefits of the Business Combination.
- Acorn HoldCo had to obtain certain governmental and regulatory approvals or clearances to consummate the Offer. The clearance by the
 German Federal Ministry for Economics and Climate Action is subject to restrictions and other requirements, which may adversely impact
 the business, financial condition or results of operations of the Combined Group.
- ADTRAN competes in markets that have become increasingly competitive, which may result in reduced gross profit margins and market share of ADTRAN and the Combined Group.
- ADTRAN's dependence on a limited number of suppliers for certain raw materials, key components and original design manufacturer (ODM) products, combined with supply shortages, has prevented and may continue to prevent it from delivering its products on a timely basis, which has had and may continue to have a material adverse effect on ADTRAN's

operating results and could negatively affect the operating results of the Combined Group. Furthermore, delays in product delivery and related product price increases could have a material adverse effect on customer relations of ADTRAN and the Combined Group.

- Supply shortages of materials for product components of ADVA could impact the quality, reduce the availability or increase the cost of materials, which could harm the revenues, profitability and customer relations of ADVA and the Combined Group.
- If the Combined Group fails to maintain proper and effective internal controls, its ability to produce accurate financial statements on a timely basis could be impaired.

C. KEY INFORMATION ON THE SECURITIES

1. What are the main features of the securities?

Type, Class, ISIN

The Shares are shares of the Company's common stock; ISIN: US00486H1059; German Securities Code (WKN): A3C7M6, Ticker Symbols: ADTN (Nasdaq) and QH9 (Frankfurt Stock Exchange).

Nominal Value, Number of Securities

This Prospectus relates to the admission to trading on the regulated market (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) with simultaneous admission to the sub-segment thereof with additional post-admission obligations (Prime Standard) of up to 87,158,835 Shares, consisting of (i) 77,316,803 Transaction Shares and (ii) up to 9,842,032 Employee Shares, each Share with a notional par value of USD 0.01 per Share and with full dividend rights from the date of their respective issuance. The holders of the Shares are entitled to receive such dividends, as the Company's board of directors may from time to time declare out of funds legally available, if they hold the Shares at the relevant record date for such dividends. Upon their respective issuance, all Shares are fully paid in.

Currency

The Shares are denominated in USD.

Rights Attached to the Shares, Relative Seniority and Transferability

Each Share carries one vote at the annual meeting of stockholders of the Company. There are no restrictions on voting rights. All Shares carry the same voting rights.

The Shares are non-repayable. Any claim for payment of shareholders is subordinated to all other securities and claims in case of an insolvency of the Company.

The Shares are freely transferable in accordance with applicable law.

Dividend Policy

The Company has not yet determined whether it will pay annual dividends or quarterly dividends (as ADTRAN currently does) following the settlement of the Offer. However, it is most probable that subject to any restrictions under the General Corporation Law of the State of Delaware, the Company will pay quarterly dividends to its stockholders.

2. Where will the securities be traded?

The Company together with the Listing Agent will apply to admit the Shares to trading on the regulated market (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and, simultaneously, to the sub-segment thereof with additional post-admission obligations (Prime Standard) (trading in euros).

In addition, the Company has applied to admit the Shares to trading on the Nasdaq Global Select Stock Market, New York, United States (trading in USD).

3. What are the key risks that are specific to the securities?

- There has been no prior public market for the Shares, and the market price of the Shares may be volatile.
- The market price and trading volume of the Shares could fluctuate considerably, also between Nasdaq and the Frankfurt Stock Exchange, which may result in substantial losses for investors. Differences in market price, trading volume, settlement and clearing systems, trading currencies and transaction costs between Nasdaq and the Frankfurt Stock Exchange may hinder the transferability of the Shares between Nasdaq and the Frankfurt Stock Exchange.
- Any dividend paid in respect of the Shares is subject to a number of factors, including the distributions of earnings to Acorn HoldCo by its subsidiaries and the financial condition and results of operations of the Combined Group.

D. KEY INFORMATION ON THE ADMISSION TO TRADING ON A REGULATED MARKET

1. Under which conditions and timetable can I invest in this security?

Offer Conditions

Not applicable. There is no offer of the Shares. This Prospectus does not constitute an offer or invitation to any persons to subscribe for or purchase any shares in the Company.

Admission to Trading

The application for admission to trading of the Shares on the regulated market (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and on the sub-segment thereof with additional post-admission obligations (Prime Standard) is expected to be filed on or around July 7, 2022. The admission to trading of the Shares is expected to become effective on or around July 13, 2022.

Dilution

Through the issuance of Employee Shares, which is not expected to occur on or immediately after the settlement of the Offer, the shareholding percentage of holders of the common stock of the Company that do not hold any stock options eligible for issuance of Employee Shares will decline and their voting rights will be diluted.

Based on the number of 77,316,803 outstanding Shares immediately after settlement of the Offer and subject to future capital measures, issuance of all Employee Shares will lead to a dilution of 11.29% for shareholders not holding any stock options eligible for issuance of Employee Shares.

Estimated Expenses

The expenses related to the listing are estimated at approximately USD 0.1 million.

Estimated Expenses Charged to Investors by the Issuer

Not applicable. No expenses will be charged to investors.

2. Who is the person asking for admission to trading?

The Company expects to apply for admission of the Shares to trading on the regulated market (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and on the sub-segment thereof with additional post-admission obligations (Prime Standard) on or around July 7, 2022

The application for approval of admission to trading will be made together with the Listing Agent, acting in connection with the application for admission to trading on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*).

3. Why is this Prospectus being produced?

Reasons for the Admission to Trading

ADTRAN and ADVA have agreed to combine their businesses under the Company, at the date of the Prospectus a direct wholly-owned subsidiary of ADTRAN. Upon settlement of the Offer, the Company will be the parent company of both ADTRAN and ADVA by way of (i) the merger of Acorn MergeCo, Inc., a wholly-owned direct subsidiary of the Company, with and into ADTRAN, with ADTRAN surviving the merger (the "Merger") and (ii) settlement of the public voluntary exchange offer by the Company to all shareholders of ADVA (the "Offer").

At the time the Merger becomes effective, which will be the case prior to the settlement of the Offer, each ADTRAN share will be converted into the right to receive one share of the Company and the respective amount of Shares will be transferred to the then existing ADTRAN shareholders.

Under the terms of the Offer, the Company offered to acquire one ADVA share each in exchange for 0.8244 Shares. The acceptance period, including the additional acceptance period of the Offer expired on February 14, 2022. At the end of the acceptance period, including the additional acceptance period, the Offer has been accepted for a total of 33,957,538 ADVA shares, corresponding to approximately 66.01% of all outstanding ADVA shares and voting rights attached thereto as well as of the share capital of ADVA as at November 30, 2021. As a result, as of the settlement of the Offer, which is expected to commence on or around July 15, 2022, the Company will transfer 27,994,595 Shares to the shareholders of ADVA that have accepted the Offer. The ADVA shareholders that accepted the Offer will consequently become shareholders of the Company.

In addition, according to the Business Combination Agreement, the Company has agreed to assume, at the effective time of the Merger, the rights and obligations of ADTRAN under its stock option plans and the agreements evidencing the granting of stock options. The Business Combination Agreement also provides that, at the option of the holder thereof, each ADVA stock option that is outstanding and unexercised immediately prior to the settlement of the Offer can be converted at or after the settlement of the Offer into a stock option of the Company. On or around July 7, 2022, the Company's board of directors is expected to adopt a resolution to reserve, as of the effective time of the Merger, a portion of the remaining part of the authorized share capital of the Company to enable the issuance of Shares under the stock option plans assumed by the Company (i.e. the Employee Shares). These Employee Shares are expected to be registered with the SEC by filing a Form S-8 in respect of each of the (i) up to 7,574,471 Employee Shares issuable under the ADTRAN stock option programs and (ii) up to 2,267,561 Employee Shares issuable under the ADVA stock option programs.

This Prospectus has been prepared for the admission of the Shares (including the maximum amount of Employee Shares issuable) to trading on the regulated market (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and on the sub-segment thereof with additional post-admission obligations (Prime Standard).

Total Net Proceeds

The Prospectus does not relate to an offering of shares. Accordingly, neither the Issuer nor any shareholder of the Issuer will receive any proceeds from the listing.

Interests material to the issue, including conflicting interests

The Company, ADTRAN and ADVA have an interest in the Business Combination, because they believe that the Business Combination will provide multiple benefits to both ADTRAN and ADVA. In this respect, the Company, ADTRAN and ADVA have an interest in the settlement of the Offer, toward which the admission to trading of the Shares is a necessary step.

BofA Securities, Inc. ("**BofA Securities**") and Jefferies LLC ("**Jefferies**") act as financial advisors to ADTRAN and ADVA in connection with the Business Combination and will receive fees for such services. A portion of the fees of BofA Securities and Jefferies are contingent upon the settlement of the Offer, towards which the listing of the Shares is a necessary step.

Certain of the ADTRAN directors, executive officers and designees to the board of directors of the Company and certain of the management board members and supervisory board members of ADVA may have interests in the Business Combination that may be different from, or in addition to, the interests of ADTRAN and ADVA shareholders, respectively. In the case of ADTRAN executive officers and the board of directors of the Company, these interests include the continued service of all directors and executive officers following the settlement of the Offer, the treatment of restricted stock units, performance stock units, stock options and other equity-based awards in connection with the Business Combination, and the indemnification of ADTRAN executive officers and the board of directors of the Company by the Company. In the case of certain supervisory board (*Aufsichtsrat*) members and management board (*Vorstand*) members of ADVA, these interests include continued positions as directors and executive officers of the Company following the settlement of the Offer, the treatment of ADVA's stock options and replacement of unvested options by an incentive plan provided by the Company, and severance benefits available to certain executive officers of ADVA. Members of the ADVA's management board (*Vorstand*) have agreed, pursuant to separate agreements with the Company, to convert their respective ADVA stock options into stock options of the Company on the terms set forth in the Business Combination Agreement, with the exception of vested ADVA stock options that are exercised prior to the settlement of the Offer in accordance with past practice.

ODDO BHF Corporates & Markets AG, a subsidiary of the Listing Agent, is expected to assume the function of a designated sponsor in XETRA of the Frankfurt Stock Exchange starting on the first day of trading, for which a listing is a necessary step.

The Listing Agent is in a contractual relationship with the Company. Upon successful implementation of the admission to trading of the Shares, the Company has undertaken to pay the Listing Agent a commission.

ZUSAMMENFASSUNG DES PROSPEKTS

A. EINLEITUNG MIT WARNHINWEISEN

Dieser Prospekt (der "Prospekt") bezieht sich auf die Zulassung zum regulierten Markt an der Frankfurter Wertpapierbörse mit gleichzeitiger Zulassung zum Teilbereich des regulierten Marktes mit weiteren Zulassungsfolgepflichten (Prime Standard) an der Frankfurter Wertpapierbörse von bis zu 87.158.835 Stammaktien, bestehend aus (i) dem gesamten zur Abwicklung des Angebots (wie unter Abschnitt "3 Weshalb wird dieser Prospekt erstellt?" in dieser Zusammenfassung definiert) ausstehenden Aktienkapital der Gesellschaft (wie unterstehend definiert), i.e. 77.316.803 Stammaktien (die "Transaktionsaktien"), und (ii) bis zu 9.842.032 Stammaktien aus dem autorisierten und nicht ausgegebenen Kapital der Gesellschaft, welche aufgrund eines Beschlusses des Verwaltungsrates (board of directors) der Gesellschaft, der voraussichtlich am oder um den 7. Juli 2022 gefasst werden wird, zum Zweck der Ausgabe im Zusammenhang mit ausübbaren Aktienoptionen unter den Aktienoptionsprogrammen von ADTRAN, Inc. ("ADTRAN") und ADVA Optical Networking SE ("ADVA") reserviert wurden (die "Mitarbeiteraktien", und zusammen mit den Transaktionsaktien, die "Aktien"), mit der internationalen Wertpapierkennnummer (International Securities Identification Number - "ISIN") US00486H1059 der Acorn HoldCo, Inc., Legal Entity Identifier ("LEI") 549300VV36J86CRRWF77, mit der Geschäftsadresse 901 Explorer Boulevard, Huntsville, Alabama, 35806, Vereinigte Staaten von Amerika ("Vereinigte Staaten") (Telefon: +1 (256) 963 8000) ("Acorn HoldCo", die "Gesellschaft" oder die "Emittentin", und, zusammen mit ihren direkten und indirekten Tochtergesellschaften, die "Acorn HoldCo Gruppe" oder die "Gruppe").

Die Gesellschaft und ODDO BHF Aktiengesellschaft, Bockenheimer Landstraße 10, 60323 Frankfurt am Main, Deutschland, LEI: 529900XLAZ15LYK8XK27 (Telefon: +49 (0)69 718 0) (der "Listing Agent") werden die Zulassung der Aktien zum Handel am regulierten Markt der Frankfurter Wertpapierbörse und gleichzeitig zum Teilbereich des regulierten Marktes mit weiteren Zulassungsfolgepflichten (Prime Standard) (Handel in Euro) beantragen.

Die Bundesanstalt für Finanzdienstleistungsaufsicht ("**BaFin**"), Marie-Curie-Straße 24-28, 60439 Frankfurt am Main, Deutschland (Telefon: +49 (0)228 4108 0; Website: https://www.bafin.de), hat am 7. Juli 2022 diesen Prospekt als zuständige Behörde gemäß der Verordnung (EU) 2017/1129 des Europäischen Parlaments und des Rates vom 14. Juni 2017 betreffend den Prospekt, der beim öffentlichen Angebot von Wertpapieren oder bei deren Zulassung zum Handel an einem geregelten Markt zu veröffentlichen ist, und zur Aufhebung der Richtlinie 2003/71/EG in der jeweils geltenden Fassung (die "**Prospektverordnung**") gebilligt.

Diese Zusammenfassung sollte als Einleitung zu diesem Prospekt gelesen werden. Anleger sollten sich bei jeder Entscheidung, in die Wertpapiere zu investieren, auf diesen Prospekt als Ganzes stützen. Anleger, die in die Aktien der Gesellschaft investieren, könnten ihr angelegtes Kapital ganz oder teilweise verlieren. Werden vor einem Gericht Ansprüche aufgrund der in diesem Prospekt enthaltenen Informationen geltend gemacht, so könnte der als Kläger auftretende Anleger nach nationalem Recht die Kosten für die Übersetzung dieses Prospekts vor Prozessbeginn zu tragen haben. Zivilrechtlich haften nur diejenigen Personen, welche die Zusammenfassung einschließlich einer etwaigen Übersetzung vorgelegt und übermittelt haben, und dies auch nur für den Fall, dass diese Zusammenfassung, wenn sie zusammen mit den anderen Teilen dieses Prospekts gelesen wird, irreführend, unrichtig oder widersprüchlich ist oder dass sie, wenn sie zusammen mit den anderen Teilen dieses Prospekts gelesen wird, nicht die Basisinformationen vermittelt, die in Bezug auf Anlageentscheidungen in die Aktien eine Entscheidungshilfe für Anleger darstellen würden.

B. BASISINFORMATIONEN ÜBER DIE EMITTENTIN

1. Wer ist die Emittentin der Wertpapiere?

Angabe zur Emittentin

Der rechtliche Name der Emittentin ist Acorn HoldCo, Inc. (unmittelbar vor der Verschmelzung (wie unter Abschnitt "3 Weshalb wird dieser Prospekt erstellt?" in dieser Zusammenfassung definiert) in ADTRAN Holdings, Inc. zu umfirmieren). Die Emittentin hat ihren eingetragenen Sitz im Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle County, Delaware 19801, Vereinigte Staaten, und ist eine nach dem Recht von Delaware, Vereinigte Staaten, gegründete und verwaltete Gesellschaft. Die Emittentin ist bei der Division of Corporations des Bundesstaates Delaware, Vereinigte Staaten, unter der Registrierungsnummer 6141966 eingetragen. Die LEI der Emittentin lautet 549300VV36J86CRRWF77.

Haupttätigkeiten

Die Emittentin wurde am 10. August 2021 als eine Gesellschaft nach dem Recht von Delaware, Vereinigte Staaten, gegründet. Zum Datum dieses Prospekts hat die Emittentin keine anderen wesentlichen Aktivitäten durchgeführt als diejenigen, die im Zusammenhang mit ihrer Gründung und den in einem Vertrag über einen Unternehmenszusammenschluss vom 30. August 2021 zwischen Acorn HoldCo, ADTRAN und ADVA (das "Business Combination Agreement") stehen, wie die Gründung von Acorn MergeCo, Inc. (eine hundertprozentige Tochtergesellschaft der Emittentin) und die Umsetzung des Angebots (wie unter Abschnitt "3 Weshalb wird dieser Prospekt erstellt?" in dieser Zusammenfassung definiert). Gemäß den Bedingungen des Business Combination Agreement werden mit Abwicklung des Angebots die Geschäftstätigkeiten von ADTRAN und ADVA unter der Emittentin zusammengeführt (der "Unternehmenszusammenschluss"). Siehe Abschnitt "3 Weshalb wird dieser Prospekt erstellt?" in dieser Zusammenfassung für weitere Informationen über den Unternehmenszusammenschluss. Mit der Abwicklung des Angebots wird die Emittentin zur Muttergesellschaft von ADTRAN und ADVA, wodurch die Geschäfte und Tätigkeiten von ADTRAN und ADVA, wie unten angegeben, berücksichtigt werden müssen, zum Verständnis der Hauptaktivitäten der Emittentin und der Acorn HoldCo Gruppe nach Abwicklung des Angebots (die "Kombinierte Gruppe").

ADTRAN betrachtet sich als weltweit führenden Anbieter von Netzwerk- und Kommunikationsplattformen, Software und Dienstleistungen mit Schwerpunkt auf dem Markt für Breitbandzugang. Die Produkte und Dienstleistungen von ADTRAN werden von einem breit gefächerten globalen Kundenstamm von Netzbetreibern genutzt, der von solchen mit regionaler oder nationaler Reichweite, die als Telefon- oder Kabelfernsehnetzbetreiber tätig sind, bis hin zu alternativen Netzanbietern wie Gemeinden oder Versorgungsunternehmen sowie den Anbietern von sog. Managed Service reicht, die kleine und mittelständische Unternehmen und verteilte Unternehmen bedienen. ADTRAN ist in zwei berichtspflichtigen Segmenten tätig: (i) Netzwerklösungen (*Network Solutions*), das Hardware- und Softwareprodukte umfasst, und (ii) Dienstleistungen & Support (*Services & Support*), wozu ein Portfolio von Netzwerkimplementierungsdienstleistungen, Supportleistung und cloud-basierten Applikationen von Software as a Service (SaaS) gehört, die das Produktportfolio von ADTRAN ergänzen und auch zur Unterstützung anderer Plattformen genutzt werden können. Diese beiden Segmente erstrecken sich über drei Umsatzkategorien: (a) Zugang & Aggregation (*Access & Aggregation*), (b) Abonnementlösungen & -erfahrungen (*Subscriber Solutions & Experience*) und (c) Traditionelle & Sonstige Produkte (*Traditional & Other Products*). Diese Umsatzkategorien unterscheiden sich durch die Art der angebotenen Produkte und Dienstleistungen. Access & Aggregation konzentriert sich auf Lösungen, die von Service-Providern verwendet werden, um ihre Netzinfrastruktur mit Teilnehmern zu verbinden. Subscriber Solutions & Experience konzentriert sich auf Teilnehmerlösungen, die den Breitbandzugang in Privathaushalten und/oder Unternehmen abschließen. Traditional & Other Products umfasst Technologien, Produkte und Dienste der vorherigen Generationen sowie bestimmte andere Angebote.

ADVA entwickelt und liefert Netzwerklösungen für den Netzwerkbetreiber (Privatunternehmen, Anbieter von Kommunikationsdiensten und Anbieter von Internetinhalten) und konzentriert sich dabei auf Lösungen für Cloud-Zugang, Cloud-Zugammenschaltung und Netzwerksynchronisierung. Die Netzwerklösungen von ADVA ermöglichen es seinen Kunden, schnelle und sichere Cloud- und mobile Dienste anzubieten. Die Technologien und Produkte des Unternehmens basieren auf drei Kernkompetenzen: (i) Glasfaserübertragungstechnologie, (ii) Cloud-Zugangstechnologie für die schnelle Erstellung innovativer Dienste und (iii) präzise Synchronisierung von Netzwerken. Alle drei Technologiebereiche werden durch intelligente Software für das Netzwerkmanagement vereint.

Beherrschende Anteilseigner

Zum Datum dieses Prospekts ist ADTRAN, eine börsennotierte Gesellschaft nach dem Recht von Delaware, Vereinigte Staaten, die einzige Aktionärin der Gesellschaft und kontrolliert diese somit.

Der Gesellschaft ist nicht bekannt, dass sie nach Abwicklung des Angebots direkt oder indirekt kontrolliert wird.

Ausgehend von dem Umstand, dass unmittelbar nach Abwicklung des Angebots 77.316.803 Aktien im Umlauf sein werden(1)(iii), (1)(iv), und ausgehend von den Annahmen, dass (i) die veröffentlichten Beteiligungen der Aktionäre von ADTRAN und ADVA seit dem 30. Juni 2022 (das "Letztmögliche Praktikable Datum") unverändert geblieben sind, und (ii) alle von diesen ADVA-Aktionären gehaltenen ADVA-Aktien im Rahmen des Angebots angedient wurden, werden die folgenden Personen voraussichtlich direkt oder indirekt 3 % oder mehr des Aktienkapitals und der Stimmrechte der Gesellschaft unmittelbar nach Abwicklung des Angebots halten:

	Voraussichtliche Anzahl der Aktien	Voraussichtlicher Anteilsbesitz ⁽¹⁾
BlackRock, Inc.	8.140.068(2)	10,53%
EGORA Holding GmbH	6.147.343(3)	7,95%
The Vanguard Group	5.424.685(4)	7,02%
Dimensional Holdings Inc.	4.105.790(5)	5,31%
The Bank of New York Mellon Corp.	3.222.495(6)	4,17%
The Goldman Sachs Group, Inc.	$2.749.198^{(7)}$	3,56%
JPMorgan Chase & Co.	2.344.757(8)	3,03%

- (1) Basierend auf (i) der jeweiligen voraussichtlichen Beteiligungen der oben in der Tabelle aufgeführten ADTRAN-Aktionäre in der Gesellschaft unter Berücksichtigung der Verschmelzungsgegenleistung von einer Aktie für jede ausstehende ADTRAN-Aktie (mit Ausnahme der ausgeschlossenen ADTRAN-Aktien, die ohne Gegenleistung annulliert werden) (das "Umtauschverhältnis der Verschmelzung"), (ii) der jeweiligen voraussichtlichen Beteiligungen der oben in der Tabelle aufgeführten ADVA-Aktionäre in der Gesellschaft unter Berücksichtigung des Umtauschverhältnisses von 0,8244 Aktien für eine ADVA-Aktie (das "Umtauschverhältnis"), (iii) der Anzahl der Aktien zur Abwicklung des Angebots, die sich durch Multiplikation der von der Gesellschaft am 17. Februar 2022 veröffentlichten Gesamtzahl der angedienten ADVA-Aktien mit dem Austauschverhältnis bestimmt (i.e. 27.994.595 Aktien), und (iv) der Anzahl der Aktien zur Abwicklung der Verschmelzung (wie nachstehend definiert), die sich durch Multiplikation der Anzahl der ADTRAN-Aktien, die im Rahmen der Verschmelzung (wie nachstehend definiert) in die Aktien umzuwandeln sind, mit dem Umtauschverhältnis der Verschmelzung bestimmt (i.e. 49,322,208 Aktien) (Gesamtsumme von (iii) und (iv) als die Gesamtanzahl der ausstehenden Aktien unmittelbar nach Abwicklung des Angebots).
- (2) Berechnet durch Multiplikation des Umtauschverhältnisses der Verschmelzung mit den Beteiligungen an ADTRAN zum 31. Dezember 2021, wie in dem von BlackRock, Inc. am 7. Februar 2022 bei der U.S. Securities and Exchange Commission ("SEC") eingereichten Schedule 13G angegeben. Laut ihres Schedule 13G hielt BlackRock, Inc. und einige ihrer Tochtergesellschaften ultimativ 8.140.068 ADTRAN-Aktien.

- (3) Berechnet durch Multiplikation des Umtauschverhältnisses mit der Beteiligung an ADVA zum Letztmöglichen Praktikablen Datum. Gemäß einer Stimmrechtsmitteilung vom 8. Dezember 2017 hält die EGORA Holding GmbH 7.456.749 ADVA-Aktien. Es wird angenommen, dass alle 7.456.749 ADVA-Aktien im Rahmen des Angebots angedient wurden.
- (4) Berechnet durch Multiplikation des Umtauschverhältnisses der Verschmelzung mit den Beteiligungen an ADTRAN zum 31. Dezember 2021, wie in dem von The Vanguard Group am 9. Februar 2022 bei der SEC eingereichten Schedule 13G angegeben. Laut ihres Schedule 13G hielt The Vanguard Group und einige ihrer Tochtergesellschaften ultimativ 5.424.685 ADTRAN-Aktien.
- (5) Basierend auf (i) den voraussichtlichen indirekten Beteiligungen durch Dimensional Holdings Inc., die durch Multiplikation des Umtauschverhältnisses der Verschmelzung mit den Beteiligungen von Dimensional Fund Advisors L.P. an ADTRAN zum 31. Dezember 2021, wie in dem von Dimensional Fund Advisors L.P. am 8. Februar 2022 bei der SEC eingereichten Schedule 13G angegeben, zu berechnen sind, und (ii) den voraussichtlichen Beteiligungen durch Dimensional Holdings Inc., die durch Multiplikation des Umtauschverhältnisses mit den der Dimensional Holdings Inc. zuzurechnenden Beteiligungen an ADVA zu berechnen sind. Laut ihres Schedule 13G hielt Dimensional Fund Advisors L.P. und bestimmte ihrer Tochtergesellschaften ultimativ 2.271.552 ADTRAN-Aktien. Gemäß ihrer Stimmrechtsmitteilung am 4. Februar 2022 hielt Dimensional Holdings Inc. ultimativ 2.224.938 Stimmrechte an ADVA.
- (6) Berechnet durch Multiplikation des Umtauschverhältnisses der Verschmelzung mit den Beteiligungen an ADTRAN zum 31. Dezember 2021, wie in dem von The Bank of New York Mellon Corp. am 2. Februar 2022 bei der SEC eingereichten Schedule 13G angegeben. Laut ihres Schedule 13G hielten The Bank of New York Mellon Corp. und einige ihrer Tochtergesellschaften ultimativ 3.222.495 ADTRAN-Aktien.
- (7) Berechnet durch Multiplikation des Umtauschverhältnisses mit den 3.334.787 von Goldman Sachs Group, Inc. ultimativ gehaltenen Stimmrechten und aktienbasierten Instrumenten gemäß ihrer Stimmrechtsmitteilung am 3. März 2022.
- (8) Berechnet durch Multiplikation des Umtauschverhältnisses mit den 2.844.198 von JPMorgan Chase & Co. ultimativ gehaltenen Stimmrechten und aktienbasierten Instrumenten in ADVA gemäß ihrer Stimmrechtsmitteilung am 24. Juni 2022.

Board of Directors

Zum Datum des Prospekts wird die Gesellschaft von einem Verwaltungsrat (board of directors) geleitet, der aus zwei Mitgliedern besteht: Thomas R. Stanton und Michael K. Foliano. Unmittelbar vor der Abwicklung des Angebots soll der Verwaltungsrat der Gesellschaft auf insgesamt sechs Mitglieder erweitert werden: Thomas R. Stanton (Vorsitzender), H. Fenwick Huss, Gregory McCray, Balan Nair, Jacqueline H. Rice, und Kathryn A. Walker. Unmittelbar nach der Abwicklung des Angebots wird der Verwaltungsrat der Gesellschaft durch die Ernennung von drei zusätzlichen Mitgliedern auf insgesamt neun Mitglieder erweitert: Brian Protiva, Nikos Theodosopoulos und Johanna Hey.

Nach der Abwicklung des Angebots wird die operative Leitung der Gesellschaft aus den folgenden Personen bestehen: Thomas R. Stanton (Chief Executive Officer), Michael K. Foliano (Chief Financial Officer), und James D. Wilson (Chief Revenue Officer).

Gesetzlicher Wirtschaftsprüfer

PricewaterhouseCoopers LLP, 300 Madison Avenue, New York, Vereinigte Staaten ("PwC"), eine unabhängige registrierte Wirtschaftsprüfungsgesellschaft, wurde als gesetzlicher Wirtschaftsprüfer der Gesellschaft für die Periode vom 10. August 2021 (Gründung) bis zum 31. Dezember 2021 bestellt.

2. Welche sind die wesentlichen Finanzinformationen über die Emittentin?

Ausgewählte Konzernfinanzinformationen der Acorn HoldCo, Inc.

Die in den folgenden Tabellen enthaltenen Finanzinformationen sind dem geprüften Konzernabschluss der Gesellschaft zum 31. Dezember 2021 und für die Periode vom 10. August 2021 (Gründung) bis zum 31. Dezember 2021 entnommen, die nach den United States Generally Accepted Accounting Principles ("U.S. GAAP") erstellt wurden (der "Konzernabschluss"). PwC hat den Konzernabschluss geprüft und einen uneingeschränkten Bestätigungsvermerk am 28. Februar 2022 erteilt.

Zusammenfassende Darstellung zur Gewinn- und Verlustrechnung

	Periode vom 10. August 2021	
	bis zum 31. Dezember 2021	
(in USD)	(geprüft)	
Erträge	0	
Betriebsergebnis	0	
Nettoergebnis und Gesamtergebnis	0	

Zusammenfassende Darstellung zu den Bilanzdaten

	Zum 31. Dezember 2021
(in USD)	(geprüft)
Gesamtbetrag Vermögenswerte	10
Gesamtbetrag Eigenkapital	10

	bis zum 31. Dezember 2021		
(in USD)	(geprüft)		
Nettomittelzufluss aus betrieblicher Tätigkeit	0		
Nettomittelzufluss aus Investitionstätigkeit	0		
Cashflow aus der Finanzierungstätigkeit	10		

Ausgewählte Angaben der Verkürzten Kombinierten Pro-Forma- Finanzinformationen

Die verkürzten kombinierten Pro-Forma-Finanzinformationen (die "Pro-Forma-Finanzinformationen") wurden ausschließlich zu Informationszwecken erstellt und sind nicht notwendigerweise ein Hinweis auf die Finanzlage oder die Betriebsergebnisse, die erzielt worden wären, wenn der Unternehmenszusammenschluss zu den dargestellten Zeitpunkten vollzogen worden wäre, noch sind sie ein Hinweis auf zukünftige Ergebnisse oder die Finanzlage der Kombinierten Gruppe. Die tatsächlichen Ergebnisse und Bewertungen können erheblich von den Annahmen in den beigefügten Pro-Forma-Finanzinformationen abweichen. Die nachstehenden ausgewählten verkürzten kombinierten Pro-Forma-Finanzinformationen wurden aus den Pro-Forma-Finanzinformationen abgeleitet, die in Übereinstimmung mit IDW Rechnungslegungshinweis: Erstellung von Pro-forma-Finanzinformationen (IDW RH HFA 1.004), wie er vom Institut der Wirtschaftsprüfer in Deutschland e. V. (IDW) herausgegeben wurde, erstellt wurden.

Ausgewählte Informationen der Verkürzten Kombinierten Pro-Forma-Bilanz zum 31. Dezember 2021

	Acorn HoldCo	ADTRAN	ADVA	
(in Tausend USD)	(U.S. GAAP)	(U.S. GAAP)	(IFRS)*	Pro Forma
Gesamtbetrag Aktiva	_	569.017	682.248	1.826.422
Gesamtbetrag Eigenkapital	_	357.102	385.528	881.551

Ausgewählte Informationen der Verkürzten Kombinierten Pro-Forma-Gewinn- und Verlustrechnung für das Jahr endend am 31. Dezember 2021

(in Tausend USD, außer Betrag je Aktie)	Acorn HoldCo (U.S. GAAP)	ADTRAN (U.S. GAAP)	ADVA (IFRS)*	Pro Forma
Gesamtumsatzerlöse	_	563.004	715.025	1.278.029
Betriebsergebnis	_	(14.700)	49.268	(188.631)
Nettogewinn (Verlust)	_	(8.635)	70.183	(104.657)
Gewinn (Verlust) je Stammaktie (in USD)	_	(0,18)	_	(0,98)

^{*} Bestimmte Umgliederungen wurden vorgenommen, um die Darstellung der Finanzinformationen von ADVA an die von ADTRAN auf der Grundlage der bisher verfügbaren Informationen anzugleichen.

3. Welche sind die zentralen Risiken, die für die Emittentin spezifisch sind?

- ADTRAN und ADVA sind im Zusammenhang mit dem Unternehmenszusammenschluss erhebliche Transaktionsgebühren und Kosten
 entstanden. Es wird erwartet, dass der Kombinierten Gruppe im Zusammenhang mit dem Unternehmenszusammenschluss erhebliche
 Transaktionsgebühren und Kosten entstehen werden. Falls es nicht gelingt, diese transaktions- und zusammenschlussbedingten Kosten durch
 die Synergien, Kostensenkungen und anderen Effizienzgewinne auszugleichen, könnte dies erhebliche negative Auswirkungen auf die
 Gewinne und Cashflows von ADTRAN, ADVA und der Kombinierten Gruppe haben.
- Die Ungewissheit über die Auswirkungen des Unternehmenszusammenschlusses könnte sich nachteilig auf die Geschäftstätigkeit und den Cashflow von ADTRAN, ADVA und der Kombinierten Gruppe auswirken. Darüber hinaus könnte der Marktwert der Aktien der Acorn HoldCo nach Abwicklung des Angebots sinken, wenn bestimmte für ADTRAN und ADVA negative Änderungen in dem Zeitraum vor der Abwicklung des Angebots eintreten und der Unternehmenszusammenschluss trotzdem vollzogen werden muss.
- Nach Abwicklung des Angebots könnte Acorn HoldCo einen Beherrschungsvertrag oder einen Beherrschungs- und Gewinnabführungsvertrag mit ADVA abschließen, was zu einer fortlaufenden Verpflichtung der Acorn HoldCo an die verbleibenden ADVA Aktionäre zur Zahlung einer angemessenen festen oder variablen jährlichen Garantiedividende oder eines jährlich wiederkehrenden Ausgleichs führen könnte, die höher sein könnte als die ansonsten an die Minderheitsaktionäre auszuschüttenden Dividenden
- Die Kombinierte Gruppe k\u00f6nnte die erwarteten strategischen und finanziellen Vorteile des Unternehmenszusammenschlusses nicht realisieren.
- Nach Abwicklung des Angebots wird Acorn HoldCo eine Mehrheitsbeteiligung an ADVA haben. Acorn HoldCo kann zwar einen Beherrschungsvertrag oder einen Beherrschungs- und Gewinnabführungsvertrag mit ADVA abschließen, die Wirksamkeit eines solchen Vertrages kann sich jedoch aufgrund von Rechtsstreitigkeiten oder anderweitig verzögern oder nicht eintreten, was sich nachteilig auf die Fähigkeit zur Realisierung von Synergien und Kostensenkungen und den Marktwert der Aktien auswirken kann.

- Sollte es der Kombinierten Gruppe nicht gelingen, die Mitarbeiter von ADTRAN und/oder ADVA erfolgreich zu halten und zu motivieren, könnten relevante Fähigkeiten und Kompetenzen verloren gehen, was sich nachteilig auf den Cashflow und das Betriebsergebnis sowie auf die erfolgreiche Geschäftstätigkeit der Kombinierten Gruppe, ADTRANs und ADVAs im Allgemeinen auswirken könnte.
- Ein Geschäftsverlust oder das Ausbleiben von Neukunden könnte die Chancen der Kombinierten Gruppe schmälern, die erwarteten Vorteile des Unternehmenszusammenschlusses zu realisieren.
- Acorn HoldCo musste bestimmte staatliche und behördliche Genehmigungen oder Freigaben einholen, um das Angebot vollziehen zu können. Die Genehmigung des Bundesministeriums für Wirtschaft und Klimaschutz unterliegen Beschränkungen und anderen Anforderungen, was sich nachteilig auf die Geschäftstätigkeit, die Finanzlage oder das Betriebsergebnis der Kombinierten Gruppe auswirken kann.
- ADTRAN konkurriert auf Märkten, die zunehmend wettbewerbsintensiver geworden sind, was zu geringeren Bruttogewinnmargen und Marktanteilen von ADTRAN und der Kombinierten Gruppe führen kann.
- ADTRANs Abhängigkeit von einer begrenzten Anzahl von Lieferanten für bestimmte Rohstoffe, Schlüsselkomponenten und Original Design Manufacturer (ODM)-Produkte in Verbindung mit Lieferengpässen hat das Unternehmen daran gehindert und könnte es auch weiterhin daran hindern, seine Produkte rechtzeitig zu liefern, was sich bereits erheblich nachteilig auf die Betriebsergebnisse von ADTRAN ausgewirkt hat und weiterhin auswirken kann und die Betriebsergebnisse der Kombinierten Gruppe beeinträchtigen könnte. Darüber hinaus könnten Verzögerungen in der Produktlieferung und damit verbundene Preiserhöhungen der Produkte wesentliche nachteilige Auswirkungen auf die Kundenbeziehungen von ADTRAN und der Kombinierten Gruppe haben.
- Lieferengpässe bei Materialien für Produktkomponenten von ADVA könnten die Qualität beeinträchtigen, die Verfügbarkeit verringern oder die Materialkosten erhöhen, was sich nachteilig auf den Umsatz, die Rentabilität und die Kundenbeziehungen von ADVA und der Kombinierten Gruppe auswirken könnte.
- Wenn die Kombinierte Gruppe keine ordnungsgemäßen und wirksamen internen Kontrollen aufrechterhält, könnte ihre Fähigkeit zur rechtzeitigen Erstellung zutreffender Abschlüsse beeinträchtigt werden.

C. BASISINFORMATIONEN ÜBER DIE WERTPAPIERE

1. Welche sind die wichtigsten Merkmale der Wertpapiere?

Typen, Klasse, ISIN

Die Aktien sind Stammaktien der Gesellschaft; ISIN: US00486H1059; Wertpapierkennnummer (WKN): A3C7M6, Ticker-Symbole: ADTN (Nasdaq) und QH9 (Frankfurter Wertpapierbörse).

Nennwert, Anzahl der Wertpapiere

Dieser Prospekt bezieht sich auf die Zulassung von bis zu 87.158.835 Aktien zum Handel am regulierten Markt der Frankfurter Wertpapierbörse und gleichzeitig zum Teilbereich des regulierten Marktes mit weiteren Zulassungsfolgepflichten (Prime Standard), bestehend aus (i) 77.316.803 Transaktionsaktien und (ii) bis zu 9.842.032 Mitarbeiteraktien, wobei jede Aktie einen Nennwert von USD 0,01 pro Aktie hat und ab dem Datum ihrer Ausgabe voll dividendenberechtigt ist. Die Inhaber der Aktien haben Anspruch auf Dividenden, die der Verwaltungsrat (*board of directors*) der Gesellschaft von Zeit zu Zeit aus den gesetzlich verfügbaren Mitteln beschließen kann, soweit sie zum jeweiligen Stichtag für solche Dividenden Inhaber der Aktien sind. Bei ihrer jeweiligen Ausgabe sind alle Aktien voll eingezahlt.

Währung

Die Aktien lauten auf USD.

Mit den Aktien verbundene Rechte, relative Seniorität und Übertragbarkeit

Jede Aktie berechtigt zu einer Stimme bei der Hauptversammlung der Aktionäre der Gesellschaft. Es gibt keine Beschränkungen der Stimmrechte. Alle Aktien haben das gleiche Stimmrecht.

Die Aktien sind nicht rückzahlbar. Jeder Zahlungsanspruch der Aktionäre ist im Falle einer Insolvenz der Gesellschaft gegenüber allen anderen Wertpapieren und Forderungen nachrangig.

Die Aktien sind gemäß den geltenden Gesetzen frei übertragbar.

Dividendenpolitik

Die Gesellschaft hat zurzeit noch nicht ermittelt, nach der Abwicklung des Angebots jährliche oder vierteljährliche Dividenden zu zahlen (wie es ADTRAN derzeit tut). Es ist jedoch sehr wahrscheinlich, dass die Gesellschaft vorbehaltlich etwaiger Beschränkungen nach dem General Corporation Law des Staates Delaware vierteljährliche Dividenden an ihre Aktionäre zahlen wird.

2. Wo werden die Wertpapiere gehandelt?

Die Gesellschaft gemeinsam mit dem Listing Agent wird die Zulassung der Aktien zum Handel am regulierten Markt der Frankfurter Wertpapierbörse und gleichzeitig zum Teilbereich des regulierten Marktes mit weiteren Zulassungsfolgepflichten (Prime Standard) (Handel in Euro) beantragen.

Die Gesellschaft hat zudem die Zulassung der Aktien zum Handel am Nasdaq Global Select Stock Market, New York, Vereinigte Staaten, beantragt (Handel in USD).

3. Welche sind die zentralen Risiken, die für die Wertpapiere spezifisch sind?

- Es gab bisher keinen öffentlichen Markt für die Aktien, und der Marktpreis der Aktien kann volatil sein.
- Der Marktpreis und die Handelsvolumen der Aktien k\u00f6nnten erheblich schwanken, auch zwischen Nasdaq und der Frankfurter
 Wertpapierb\u00f6rse, was zu erheblichen Verlusten bei Anlegern f\u00fchren k\u00f6nnte. Unterschiede in Marktpreis, Handelsvolumen, Abwicklungs- und
 Clearingsystemen, Handelsw\u00e4hrungen und Transaktionskosten zwischen Nasdaq und der Frankfurter Wertpapierb\u00f6rse k\u00f6nnten die
 \u00dcbertragbarkeit der Aktien zwischen der Nasdaq und der Frankfurter Wertpapierb\u00f6rse behindern.
- Eine auf die Aktien ausgeschüttete Dividende hängt von mehreren Faktoren ab, etwa von der Ausschüttung von Gewinnen der Tochtergesellschaften an Acorn HoldCo sowie von der Finanzlage und den Betriebsergebnissen der Kombinierten Gruppe.

D. BASISINFORMATIONEN ÜBER DIE ZULASSUNG ZUM HANDEL

1. Zu welchen Konditionen und nach welchem Zeitplan kann ich in dieses Wertpapier investieren?

Angebotsbedingungen

Nicht anwendbar. Es gibt kein Angebot von Aktien. Dieser Prospekt stellt weder ein Angebot noch eine Aufforderung an Personen zur Zeichnung oder zum Kauf von Anteilen der Gesellschaft dar.

Börsenzulassung

Der Antrag auf Zulassung zum Handel der Aktien im regulierten Markt an der Frankfurter Wertpapierbörse und im Teilbereich des regulierten Marktes mit weiteren Zulassungsfolgepflichten (Prime Standard) wird voraussichtlich am oder um den 7. Juli 2022 gestellt werden. Die Zulassung zum Handel der Aktien wird voraussichtlich am oder um den 13. Juli 2022 wirksam werden.

Verwässerung

Durch die Ausgabe von Mitarbeiteraktien, die während oder unmittelbar nach Abwicklung des Angebots nicht erwartet wird, wird der prozentuale Anteil am Stammkapital der Gesellschaft der Aktionäre, die keine zur Ausgabe der Mitarbeiteraktien berechtigten Aktienoptionen halten, sinken und deren Stimmrechte werden verwässert werden.

Basierend auf der Anzahl der unmittelbar nach Abwicklung des Angebots ausstehenden Aktien und vorbehaltlich zukünftiger Kapitalmaßnahmen wird die Ausgabe aller Mitarbeiteraktien zu einer Verwässerung von 11,29 % für die Aktionäre, die keine zur Ausgabe der Mitarbeiteraktien berechtigten Aktienoptionen halten, führen.

Erwartete Gesamtkosten

Die Kosten im Zusammenhang mit der Börsenzulassung werden auf etwa 0,1 Million USD geschätzt.

Erwartete Kosten, die Anlegern in Rechnung gestellt werden

Nicht anwendbar. Den Anlegern werden keine Kosten in Rechnung gestellt.

2. Wer ist die die Zulassung zum Handel beantragende Person?

Die Gesellschaft wird die Zulassung der Aktien zum Handel im regulierten Markt an der Frankfurter Wertpapierbörse und im Teilbereich des regulierten Marktes mit weiteren Zulassungsfolgepflichten (Prime Standard) am oder um den 7. Juli 2022 beantragen.

Der Antrag auf Zulassung zum Handel wird zusammen mit dem Listing Agent gestellt werden, der im Zusammenhang mit dem Antrag auf Zulassung zum Handel an der Frankfurter Wertpapierbörse tätig ist.

3. Weshalb wird dieser Prospekt erstellt?

Gründe für die Zulassung zum Handel

ADTRAN und ADVA haben vereinbart, ihre Geschäfte unter der Gesellschaft zusammenzuschließen, die zum Datum des Prospekts eine direkte hundertprozentige Tochtergesellschaft von ADTRAN ist. Mit Abwicklung des Angebots wird die Gesellschaft durch (i) die Verschmelzung von Acorn MergeCo, Inc., einer hundertprozentigen direkten Tochtergesellschaft der Gesellschaft, mit und auf ADTRAN, wobei ADTRAN nach der Verschmelzung fortbesteht (die "Verschmelzung"), und (ii) die Abwicklung des freiwilligen öffentlichen Umtauschangebots der Gesellschaft an alle Aktionäre von ADVA (das "Angebot") zur Muttergesellschaft von ADTRAN und ADVA.

Zum Zeitpunkt des Wirksamwerdens der Verschmelzung, was vor der Abwicklung des Angebots der Fall sein wird, wird jede ADTRAN-Aktie in das Recht umgewandelt, eine Aktie der Gesellschaft zu erhalten, und die entsprechende Anzahl von Aktien wird an die dann bestehenden ADTRAN-Aktionäre übertragen.

Gemäß den Bedingungen des Angebots hatte die Gesellschaft angeboten, jede ADVA-Aktie im Tausch gegen 0,8244 Aktien der Gesellschaft zu erwerben. Die Annahmefrist, einschließlich der weiteren Annahmefrist des Angebots, endete am 14. Februar 2022. Zum Ende der Annahmefrist, einschließlich der weiteren Annahmefrist, wurde das Angebot für insgesamt 33.957.538 ADVA-Aktien angenommen, was etwa 66,01% aller ausstehenden ADVA-Aktien und der damit verbundenen Stimmrechte sowie des Grundkapitals von ADVA zum 30. November 2021 entspricht. Infolgedessen wird die Gesellschaft mit der Abwicklung des Angebots, die voraussichtlich am oder um den 15. Juli 2022 beginnen wird, 27.994.595 Aktien der Gesellschaft an die ADVA-Aktionäre, die das Angebot angenommen haben. Die ADVA-Aktionäre, die das Angebot angenommen haben, werden damit zu Aktionären der Gesellschaft.

Außerdem hat sich die Gesellschaft nach dem Business Combination Agreement verpflichtet, zum Wirksamwerden der Verschmelzung die Rechte und Pflichten von ADTRAN aus ihren Aktienoptionsplänen und den Vereinbarungen, die die Gewährung von Aktienoptionen dokumentieren, zu übernehmen. Das Business Combination Agreement sieht ferner vor, dass jede ADVA-Aktienoption, die unmittelbar vor der Abwicklung des Angebots aussteht und nicht ausgeübt wird, nach Wahl des Inhabers während oder nach Abwicklung des Angebots in eine Aktienoption der Gesellschaft umgewandelt wird. Der Verwaltungsrat (*board of directors*) der Gesellschaft wird aufgrund eines Beschlusses, der voraussichtlich am oder um den 7. Juli 2022 gefasst werden wird, zum Wirksamwerden der Verschmelzung einen Teil des nicht ausgegebenen autorisierten Kapitals der Gesellschaft reservieren (i.e. die Mitarbeiteraktien), um die Ausgabe der Aktien unter den durch die Gesellschaft übernommenen Aktienoptionsplänen zu ermöglichen. Diese Mitarbeiteraktien werden durch Einreichung eines Formular S-8 jeweils hinsichtlich (i) der bis zu 7.574.471 Mitarbeiteraktien, die unter den Aktienoptionsprogrammen von ADTRAN auszugebenden sind, und (ii) der bis zu 2.267.561 Mitarbeiteraktien, die unten den Aktienoptionsprogrammen von ADVA auszugeben sind, bei der SEC registriert.

Dieser Prospekt wurde für die Zulassung der Aktien (einschließlich der maximalen Anzahl der auszugebenden Mitarbeiteraktien) zum Handel im regulierten Markt an der Frankfurter Wertpapierbörse und im Teilbereich des regulierten Marktes mit weiteren Zulassungsfolgepflichten (Prime Standard) erstellt.

Nettoerlöse

Dieser Prospekt bezieht sich nicht auf ein Angebot von Aktien. Dementsprechend werden weder die Emittentin noch ein Aktionär der Emittentin einen Erlös aus der Börsenzulassung erhalten.

Wesentliche Interessenkonflikte

Die Gesellschaft, ADTRAN und ADVA haben ein Interesse an dem Unternehmenszusammenschluss, aufgrund der Annahme, dass der Unternehmenszusammenschluss sowohl ADTRAN als auch ADVA zahlreiche Vorteile bringen wird. In dieser Hinsicht haben die Gesellschaft, ADTRAN und ADVA ein Interesse an der Abwicklung des Angebots, für welches die Zulassung der Aktien zum Handel ein notwendiger Schritt ist.

BofA Securities, Inc. ("**BofA Securities**") und Jefferies LLC ("**Jefferies**") agieren als Finanzberater von ADTRAN und ADVA im Zusammenhang mit dem Unternehmenszusammenschluss und erhalten eine entsprechende Vergütung für ihre Dienstleistungen. Ein Teil der Vergütung an BofA Securities und Jefferies wird mit Abwicklung des Angebots ausbezahlt, wofür die Börsenzulassung der Aktien eine notwendige Voraussetzung ist.

Bestimmte ADTRAN-Direktoren, Führungskräfte und Entsandte im Verwaltungsrat der Gesellschaft sowie bestimmte Mitglieder des Vorstands und des Aufsichtsrats von ADVA können Interessen an dem Unternehmenszusammenschluss haben, die sich von den Interessen der ADTRAN-bzw. ADVA-Aktionäre unterscheiden oder zu diesen hinzukommen können. Im Falle der ADTRAN-Führungskräfte und des Verwaltungsrats der Gesellschaft umfassen diese Interessen die Fortsetzung der Anstellung aller Direktoren und Führungskräfte nach Abwicklung des Angebots, die Behandlung von Restricted Stock Units, Performance Stock Units, Aktienoptionen und anderen aktienbasierten Vergütungen in Zusammenhang mit dem Unternehmenszusammenschluss sowie die Freistellung von ADTRAN-Führungskräften und von dem Verwaltungsrat der Gesellschaft durch die Gesellschaft. Im Falle bestimmter Mitglieder des Aufsichtsrats und des Vorstands von ADVA umfassen diese Interessen die Fortführung der Positionen als Direktoren und Führungskräfte der Gesellschaft nach Abwicklung des Angebots, die Behandlung von ADVA-Aktienoptionen und die Ersetzung nicht ausgeübter Optionen durch einen der Gesellschaft bereitgestellten Incentive-Plan, und Abfindungsleistungen für bestimmte Führungskräfte von ADVA. Die Mitglieder des ADVA-Vorstands haben sich gemäß separaten Vereinbarungen mit der Gesellschaft bereit erklärt, ihre jeweiligen ADVA-Aktienoptionen in Aktienoptionen der Gesellschaft zu den im Business Combination Agreement festgelegten Bedingungen umzuwandeln, mit Ausnahme von unverfallbaren ADVA-Aktienoptionen, die vor der Abwicklung des Angebots in Übereinstimmung mit der bisherigen Praxis ausgeübt werden.

ODDO BHF Corporates & Markets AG, eine Tochtergesellschaft des Listing Agent, wird voraussichtlich ab dem ersten Handelstag die Funktion eines Designated Sponsor im XETRA der Frankfurter Wertpapierbörse übernehmen, wofür die Börsenzulassung der Aktien eine notwendige Voraussetzung ist.

Der Listing Agent steht in einem Vertragsverhältnis mit der Gesellschaft. Bei erfolgreicher Durchführung der Zulassung der Aktien zum Handel hat sich die Gesellschaft verpflichtet, dem Listing Agent eine Provision zu zahlen.

1. RISK FACTORS

Investors should carefully consider the following risk factors set out below prior to making any investment in the shares of common stock (the "Shares") of Acorn HoldCo, Inc., Wilmington, New Castle County, Delaware, United States of America (the "United States") (hereinafter also "Acorn HoldCo", the "Issuer" or the "Company", and together with its subsidiary, the "Acorn HoldCo Group", "Group" or "we", "our", "us" and Acorn HoldCo together with its subsidiaries following the Business Combination (as defined below), the "Combined Group").

The occurrence of one or more of the events or circumstances described in these risk factors alone or in combination with other events or circumstances may have a material adverse effect on the business and cash flows, financial condition and results of operations of ADTRAN and ADVA (both as defined below) and, upon completion of the Business Combination (as defined below), on the business and cash flows, financial condition and results of operations of the Combined Group in which Acorn HoldCo will serve as the holding company. The Business Combination (as defined below) comprises (i) a voluntary public exchange offer, which was published by Acorn HoldCo on November 12, 2021, to acquire each outstanding share in ADVA Optical Networking SE ("ADVA" and, together with its consolidated subsidiaries, the "ADVA Group") in exchange for 0.8244 Shares per ADVA share (the "Offer") and (ii) the merger of Acorn MergeCo, Inc. ("Merger Sub"), a direct wholly-owned subsidiary of ADTRAN, Inc., Wilmington, New Castle County, United States ("ADTRAN" and, together with its consolidated subsidiaries, the "ADTRAN Group") with and into ADTRAN, as a result of which ADTRAN will become a wholly-owned direct subsidiary of Acorn HoldCo (the "Merger" and, together with the Offer, the "Business Combination"). While there is no assurance that the Business Combination will be completed, certain of the risks discussed below are presented assuming the Business Combination will be completed and the Combined Group exists.

The risk factors described below in this prospectus (the "**Prospectus**"), represent only those risks which are material and specific to the Combined Group and/or Acorn HoldCo's shares. They are categorized into subcategories based on their respective nature. Within each subcategory, the order of the risk factors is based on Acorn HoldCo's current assessment with respect to the probability of their occurrence and the expected magnitude of their negative impact. We consider the two risk factors mentioned at the beginning of each subcategory to be the most material (i.e. those we believe are most likely to have a material adverse impact) of the risk factors contained in the relevant category. The following risks are therefore only those risks that are specific to the Combined Group and the shares of Acorn HoldCo and that are necessary for investors to make an informed investment decision, based on a current assessment by Acorn HoldCo. The risks mentioned may materialize individually or cumulatively.

1.1 Risks Relating to the Implementation of the Business Combination

1.1.1 ADTRAN and ADVA have incurred and the Combined Group will continue to incur significant transaction fees and costs in connection with the Business Combination.

ADTRAN and ADVA have incurred and the Combined Group expects to incur a number of significant non-recurring implementation and restructuring costs associated with combining the operations of the two companies. In addition, ADTRAN and ADVA have incurred and the Combined Group will incur significant banking, legal, accounting and other transaction fees and costs related to the Business Combination.

Additional costs substantially in excess of currently anticipated costs may also be incurred in connection with the integration of the businesses of ADTRAN and ADVA. ADTRAN and ADVA estimate that an aggregate of approximately \$44 million (approximately €38 million) of auditors', banking, legal and other professional fees and costs related to the Business Combination will be incurred from the initiation of the Business Combination through its completion, of which approximately 53% is expected to be incurred by ADTRAN and approximately 47% to be incurred by ADVA. Additional costs substantially in excess of currently anticipated costs may be incurred in connection with the integration of the businesses of ADTRAN and ADVA.

Any cost savings or other efficiencies related to the integration of the businesses that could offset these transaction- and combination-related costs over time may not be achieved in the near term, or at all. In addition, the timeline in which cost savings are expected to be realized is lengthy and may not be achieved. Failure to offset these transaction- and combination-related costs by realizing the synergies and cost reductions and other efficiencies in a timely manner or at all could have a material adverse effect on ADTRAN's, ADVA's and the Combined Group's respective profit and cash flows.

1.1.2 Uncertainty about the effect of the Business Combination could have an adverse effect on ADTRAN's ADVA's and the Combined Group's business operations and cash flows and the market value of the Company's shares following the settlement of the Offer.

Uncertainty about the effect of the Business Combination may have an adverse effect on ADTRAN and ADVA. These uncertainties could cause suppliers, vendors, partners, customers and others that deal with ADTRAN or ADVA to defer entering into contracts with, or making other decisions concerning ADTRAN or ADVA or to seek to change or cancel existing business relationships with the companies. This might have an adverse effect on the revenues and cash flows of ADTRAN and ADVA. In addition, due to this, ADTRAN's and ADVA's employees may experience uncertainty regarding their activity after the settlement of the Offer. Employees may depart because of uncertainty and issues relating to the difficulty of coordination or because of a desire not to remain following the settlement of the Offer. Therefore, the uncertainty about the effect of the Business Combination may adversely affect ADTRAN's and ADVA's ability to retain, recruit and motivate key personnel. Additionally, the attention of ADTRAN's and ADVA's management may be directed towards the settlement of the Offer and the completion of the Business Combination, including initiating post-completion integration measures, and may be diverted from the day-to-day business operations of ADTRAN and ADVA. Matters related to the Business Combination may require commitments of time and resources that could otherwise have been devoted to other opportunities that might have been beneficial to ADTRAN and ADVA. Further, the Business Combination may give rise to potential liabilities, including those that may result from pending and future stockholder lawsuits relating to the Business Combination or a potential post-completion reorganization. Any circumstances as described above could also result in material adverse effect on the business operation, revenues and cash flows of the Combined Group following the settlement of the Offer.

Further, certain adverse changes in the business of ADVA or ADTRAN in the period prior to the closing of the Business Combination may occur that would not result in ADTRAN, ADVA or Acorn HoldCo having the right to terminate the Business Combination Agreement or the Offer. If changes occur which are adverse to ADTRAN and ADVA but the Business Combination is still required to be completed, the market value of Acorn HoldCo's shares may decrease.

1.1.3 The continuing payment obligations for Acorn HoldCo that arise from a domination and profit-and-loss-transfer agreement that may be entered into with ADVA following the settlement of the Offer could be disadvantageous to Acorn HoldCo shareholders.

As of July 6, 2022, Acorn HoldCo and ADVA agreed to enter into negotiations regarding the conclusion of a domination agreement or a domination and profit-and-loss-transfer agreement ("**DPLTA**") within the meaning of Section 291(1) of the German Stock Corporation Act (*Aktiengesetz* - "**AktG**") between ADVA as the dominated entity and Acorn HoldCo (or a subsidiary of Acorn HoldCo yet to be established) as dominating entity. Pursuant to Sections 302 *et seq.* AktG, under a DPLTA, Acorn HoldCo would be obligated to compensate any annual net loss of ADVA. Each ADVA shareholder who did not tender in the Offer would be offered to elect either (1) to remain an ADVA shareholder and receive, in the case of a domination agreement, an adequate fixed or variable annual guaranteed dividend (*Garantiedividende*) or, in the case of a profit and loss transfer agreement, receive annual recurring compensation (*Ausgleich*) pursuant to Section 304 AktG, or (2) to receive adequate compensation in exchange for its ADVA shares pursuant to Section 305(2) AktG. ADVA shareholders electing the first option may later elect the second option for as long as the offer for the compensation is open. Acorn HoldCo's obligation to pay an adequate fixed or variable annual guaranteed dividend or annual recurring compensation would lead to a continuing payment obligation for Acorn HoldCo which could be higher than dividends to be otherwise distributed to its minority shareholders. This could result in a substantial financial obligation of Acorn HoldCo.

1.1.4 The liquidity and market value of ADVA shares could be negatively affected in case of a delisting or segment change.

The liquidity of ADVA shares could be negatively affected if, following settlement of the Offer, Acorn HoldCo were to agree with ADVA to effect a delisting, i.e., a removal from the admission to trading on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and all other German stock exchanges on which ADVA shares are listed on regulated market segments. In the event of a segment change (i.e., removal of the ADVA shares from the sub-segment of the regulated market of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) with additional post-admission obligations (Prime Standard) while maintaining the listing on the regulated market (General Standard)), or of a delisting, ADVA's reporting obligations would be reduced or cancelled completely, depending on the circumstances. Because a delisting would negatively affect the liquidity of ADVA shares, The

Company may be unable to realize the value represented in ADVA shares it is expected to hold following the settlement of the Offer, or may only be able to do so with significant limitations and/or at a significant loss, following such an event.

1.1.5 Negative publicity related to the Business Combination, including post-closing integration measures, may adversely affect ADTRAN, ADVA and the Combined Group.

Political and public sentiment in connection with the Business Combination and associated integration measures may result in a significant amount of adverse press coverage and other adverse public statements affecting the parties to the Business Combination. Adverse press coverage and public statements, whether or not driven by political or popular sentiment, may also result in legal claims or in investigations by regulators, legislators and law enforcement officials. Responding to these investigations and lawsuits, regardless of the ultimate outcome of the proceedings, can divert the time and effort of senior management from operating their businesses. Addressing any adverse publicity, governmental scrutiny or enforcement or other legal proceedings could be time-consuming and expensive and, regardless of the factual basis for the assertions being made, could have a negative impact on the reputation of Acorn HoldCo, ADTRAN and ADVA, on the morale and performance of their employees and on their relationships with regulators, suppliers and customers. It may also have a negative impact on their ability to take timely advantage of various business and market opportunities. The direct and indirect effects of negative publicity, and the demands of responding to and addressing it, may have a material adverse effect on the revenue and profit of ADTRAN, ADVA and the Combined Group following the settlement of the Offer.

1.2 Risks Relating to the Business of Acorn HoldCo and the Combined Group

1.2.1 The Combined Group may fail to realize the anticipated strategic and financial benefits sought from the Business Combination.

The Combined Group may not realize any or all of the anticipated benefits of the Business Combination. The success of the Business Combination will depend on, among other things, Acorn HoldCo's ability to combine ADTRAN's business with ADVA's business in a manner that facilitates growth and realizes anticipated cost savings.

However, Acorn HoldCo must successfully combine the businesses of ADTRAN and ADVA in a manner that permits these anticipated benefits to be realized. In addition, Acorn HoldCo must achieve the anticipated growth and cost savings without adversely affecting current revenues and investments in future growth.

In addition, the actual integration of ADTRAN and ADVA will involve complex operational, technological and personnel-related challenges. This process will be time-consuming and expensive, and it may be disruptive to the combined businesses. Acorn HoldCo may not realize all of the anticipated benefits of the Business Combination. Difficulties in the integration of the businesses, which may result in significant costs and delays, include:

- managing a significantly larger Combined Group;
- aligning and executing the strategy of the Combined Group;
- integrating and unifying the offerings and services available to customers and coordinating distribution and marketing efforts in geographically separate organizations;
- coordinating corporate and administrative infrastructures and aligning insurance coverage;
- · coordinating accounting, reporting, information technology, communications, administration and other systems;
- addressing possible differences in corporate cultures and management philosophies;
- coordinating the compliance program and creating uniform standards, controls, procedures and policies;
- the implementation, ultimate impact and outcome of potential post-completion reorganization transactions, which may be delayed or not take effect as a result of litigation or otherwise;
- unforeseen and unexpected liabilities related to the Business Combination or Acorn HoldCo's business after the Business Combination;
- managing tax costs or inefficiencies associated with integrating the operations of the Combined Group;

- identifying and eliminating redundant and underperforming functions and assets;
- effecting actions that may be required in connection with obtaining regulatory approvals;
- a deterioration of credit ratings; and
- dual stock market regulatory reporting requirements.

These and other factors could result in increased costs and diversion of management's time and energy, as well as decreases in the amount of expected revenue and earnings of the Combined Group. The integration process and other disruptions resulting from the Business Combination may also adversely affect Acorn HoldCo's relationships with employees, suppliers, customers, distributors, licensors and others with whom ADTRAN and ADVA have business or other dealings, and difficulties in integrating the businesses of ADTRAN and ADVA could harm the reputation of the Combined Group.

If the Combined Group is not able to successfully combine the businesses of ADTRAN and ADVA in an efficient, cost-effective and timely manner, the anticipated benefits and cost savings of the Business Combination may not be realized fully, or at all, or may take longer to realize than expected

1.2.2 Following the settlement of the Offer, ADVA will be in majority ownership of Acorn HoldCo. While Acorn HoldCo may enter into a domination agreement with ADVA, the effectiveness of such agreement may be delayed as a result of litigation or otherwise or may not occur, which may have an adverse effect on the ability to realize synergies and cost reductions and the market value of the Shares.

Following the settlement of the Offer, ADVA will be directly majority-owned by Acorn HoldCo and, thus, become a dependent company of Acorn HoldCo within the meaning of Section 17 AktG. The legal framework for this dependency between Acorn HoldCo and ADVA is, subject to other applicable law, set forth in Sections 311 *et seq.* AktG, which may prevent or impede the realization of synergies and cost reductions absent a DPLTA. As of July 6, 2022, Acorn HoldCo and ADVA agreed to enter into negotiations regarding the conclusion of a DPLTA with ADVA. Under German law, the conclusion of a DPLTA requires the approval by an extraordinary shareholders' meeting of ADVA with a majority of at least 75% of the votes cast. If such approval is contested or the effectiveness of such agreement is delayed as a result of litigation or otherwise or does not occur, Acorn HoldCo may be unable to initiate any transactions or measures that are disadvantageous to ADVA, unless Acorn HoldCo provides adequate compensation to ADVA. If the disadvantage caused by any transaction or other measure cannot be assessed or compensated, Acorn HoldCo will be unable to initiate such transaction or measure, which may preclude Acorn HoldCo from implementing certain transactions related to the integration of ADVA into the Combined Group, including realizing synergies. The failure to realize synergies may lead to a decline of the value of the Shares. At the same time, any disadvantageous corporate actions under a DPLTA may result in a decline in the business and earnings power of ADVA, and could also adversely affect the market value of the remaining ADVA shares.

1.2.3 The Combined Group may be unable to retain and motivate ADTRAN and/or ADVA personnel successfully.

The success of the Business Combination will depend, in part, on the Combined Group's ability to retain the talents and dedication of key employees, including key decision-makers, currently employed by ADTRAN and ADVA. Such employees may decide not to remain with ADTRAN and ADVA, as applicable, while the Business Combination is pending or with the Combined Group after the Business Combination is completed. If key employees terminate their employment, or if an insufficient number of employees are retained to maintain effective operations, the Combined Group's business activities may be adversely affected and management's attention may be diverted from successfully integrating ADTRAN and ADVA to hiring suitable replacements, all of which may cause Acorn HoldCo's business to deteriorate. ADTRAN and ADVA may not be able to locate suitable replacements for any key employees who leave either company, or offer employment to potential replacements on reasonable terms. In addition, Acorn HoldCo, ADTRAN and ADVA may not be able to motivate certain key employees following the Business Combination, due to organizational changes, reassignments of responsibilities, the perceived lack of appropriate opportunities for advancement or other reasons. If the Combined Group fails to successfully retain and motivate the employees of ADTRAN and/or ADVA, relevant capabilities and expertise may be lost which may have an adverse effect on the cash flows and results of operations and the successful business operations of the Combined Group, ADTRAN and ADVA in general.

1.2.4 The Combined Group may experience a loss of customers or may fail to win new customers in certain countries.

Following the settlement of the Offer, third parties with whom ADTRAN or ADVA currently have relationships with may terminate or otherwise reduce the scope of their relationship with either party. In addition, the Combined Group may face difficulties to acquire new customers in certain countries. Any such loss of business or the inability to win new customers could limit the Combined Group's ability to achieve the anticipated benefits of the Business Combination. Such risks could also be exacerbated by a delay in the settlement of the Offer.

1.2.5 Acorn HoldCo had to obtain certain governmental and regulatory approvals or clearances to consummate the Offer. The clearance by the German Federal Ministry for Economics and Climate Action is subject to restrictions and other requirements, which may adversely impact the business, financial condition or results of operations of the Combined Group.

The settlement of the Offer (and thus, completion of the Business Combination) was conditioned upon, among other things, either receipt of approvals or clearances from the relevant antitrust authority or expiration or termination of any statutory waiting period (including any extension thereof) under merger control or competition law regimes in any jurisdictions where the parties to a business combination agreement concluded between Acorn HoldCo, ADTRAN, Merger Sub and ADVA on August 30, 2021 (the "Business Combination Agreement") have mutually determined merger control or competition law filings and/or notices to be necessary (i.e., in the United States, Germany and the United Kingdom), as well as clearances from relevant authorities under foreign trade law regimes in any jurisdictions where the parties to the Business Combination Agreement have mutually determined foreign trade law filings and/or notices to be necessary (i.e., Germany, the United States, the United Kingdom, Australia, Spain). As a condition to their approval of the transactions contemplated by the Business Combination Agreement, the German Federal Ministry for Economics and Climate Action (Bundesministerium für Wirtschaft und Klimaschutz) ("BMWK") has imposed restrictions and requirements on Acorn HoldCo, ADTRAN and ADVA.

Such restrictions, in particular, include the obligations set forth in an agreement with the government of the Federal Republic of Germany (the "Consent Agreement"), pursuant to which Acorn HoldCo, ADTRAN and ADVA shall (i) avoid risks to the supply of ADVA's products to public-sector entities as well as certain security-relevant products for customers from the critical infrastructure area and (ii) avoid risks that may result from the leakage of security-relevant know-how and technology.

Such Consent Agreement may have significant adverse effects on the anticipated benefits of the Business Combination, in particular the expected targeted annual synergies and cost efficiencies of the Combined Group and the implementation of the envisaged business strategy in the field of security-relevant products.

1.3 Risks Relating to the Business of ADTRAN

1.3.1 ADTRAN competes in markets that have become increasingly competitive, which may result in reduced gross profit margins and market share.

The markets for ADTRAN's products are intensely competitive. Additional manufacturers have entered the markets in recent years to offer products in competition with ADTRAN. Additionally, certain companies have, in recent years, developed the ability to deliver competing products using coaxial cable and cellular transmission, especially in high-density metropolitan areas. Competition will further increase if new companies enter the market or existing competitors expand their product lines. Some of these potential competitors may have greater financial, technological, manufacturing, sales and marketing, and personnel resources than ADTRAN has. As a result, these competitors may be able to respond more rapidly or effectively to new or emerging technologies and changes in customer requirements, withstand significant price decreases, or devote greater resources to the development, promotion and sale of their products than ADTRAN can.

In addition, ADTRAN's present and future competitors may be able to enter its existing or future markets with products or technologies comparable or superior to those that ADTRAN offers. An increase in competition could cause ADTRAN to reduce prices, decrease its market share, require increased spending by it on product development and sales and marketing, or cause delays or cancellations in customer orders, any one of which could reduce its gross profit margins and adversely affect its market share.

1.3.2 ADTRAN's dependence on a limited number of suppliers for certain raw materials, key components and original design manufacturing (ODM) products, combined with supply shortages, have prevented and may continue to prevent it from delivering its products on a timely basis, which has had and may continue to have a materially adverse effect on ADTRAN's operating results and could have a material adverse effect on customer relations.

Certain raw materials and key components used in ADTRAN's products are currently available from only one source, and others are available from only a limited number of sources. The availability of these raw materials and supplies may be subject to market forces beyond its control, such as inflation, merger and acquisition activity of its suppliers and consolidation in some segments of its supplier base. ADTRAN has experienced and expects to continue to experience increased inflationary pressures on input costs, such as, raw materials, supplies, labor and distribution costs to increase. ADTRAN's attempts to offset these cost pressures, through increases in the selling prices of some of its products, may not be successful and could negatively affect its operating results. In addition, from time to time, there may not be sufficient quantities of raw materials and supplies in the marketplace to meet customer demand. For example, wafer foundries that support chipmakers have not invested enough in recent years to increase capacities to the levels needed to support demand from all of their customers and wafers have a long lead time for production, in some cases up to 30 weeks, which has led to a recent shortage in chip supplies. Many companies utilize the same raw materials and supplies that ADTRAN does in the production of their products. Companies with more resources than ADTRAN may have a competitive advantage in obtaining raw materials and supplies due to greater buying power. These factors have resulted in reduced supply, higher prices of raw materials and delays in the receipt of certain of ADTRAN's key components, which in turn has generated increased costs, lower margins and delays in product delivery, with a corresponding adverse effect on revenue. Delays in product deliveries and corresponding product price increases may have an adverse effect on customer relationships. ADTRAN cannot assure that delays in or failures of deliveries of key components, either to itself or to its contract manufacturers, and consequent delays in product deliveries, will not continue to occur again in the future. For a discussion of the impact of the ongoing pandemic caused by the SARS-Cov-2 coronavirus ("COVID-19 pandemic") on ADTRAN's supply chain, see section "1.3.21 The ongoing COVID-19 pandemic has impacted and may continue to impact ADTRAN's business, results of operations and financial condition, particularly its supply chain and workforce.".

1.3.3 ADTRAN engages in research and development activities to develop new, innovative solutions and to improve the application of developed technologies; and as a consequence, may miss certain market opportunities enjoyed by larger companies with substantially greater research and development efforts and which may focus on more leading-edge development.

A portion of ADTRAN's research and development activities are focused on the continued innovation of currently accepted access technologies in order to deliver faster internet speeds, more capacity, better quality of service and operational efficiency. These research and development efforts result in improved applications of technologies for which demand already exists or is latent. ADTRAN also focuses its research and development efforts on developing software, solutions and platforms that enable service providers to increase revenue-generating service velocity, reducing operational costs, increasing scale and providing service agility. ADTRAN rarely engages in research projects that represent a vast departure from the current business practices of its key customers. While ADTRAN believes that its strategy provides a higher likelihood of producing nearer term or more sustainable revenue streams, this strategy could result in lost revenue opportunities and higher operating expenses should a new technology achieve rapid and widespread market acceptance. When ADTRAN engages in research and development activities for new, leading-edge technologies and market approaches, there is no guarantee that those technologies or market approaches will be successful or that they will be adopted and purchased by ADTRAN's customers.

1.3.4 Failure by ADTRAN to continue to update and improve its products and develop new products to compete and to keep pace with improvements in communications technology could materially affect its ability to competitively market its products.

The markets for ADTRAN's products are characterized by rapidly changing technology, evolving industry standards and continuing improvements in the communications service offerings of service providers. If technologies or standards applicable to ADTRAN's products, or service provider offerings based on its products, become obsolete or fail to gain widespread commercial acceptance, its existing products or products under development may become obsolete or unmarketable. Moreover, the introduction of products embodying new technologies, the emergence of new industry standards, or changes in service provider offerings could adversely affect its ability to sell its products.

ADTRAN's revenue and profitability in the past have, to a significant extent, resulted from its ability to anticipate changes in technology, industry standards and service provider offerings, and to develop and introduce new and enhanced products. ADTRAN's continued ability to adapt will be a significant factor in maintaining or improving its competitive position and its prospects for growth. ADTRAN cannot assure that it will be able to respond effectively to changes in technology, industry standards, service provider offerings or new product announcements by its competitors. ADTRAN also cannot assure that it will be able to successfully develop and market new products or product enhancements, or that these products or enhancements will achieve market acceptance. Any failure by ADTRAN to continue to anticipate or respond in a cost-effective and timely manner to changes in technology, industry standards, service provider offerings or new product announcements by its competitors, or any significant delays in product development or introduction, could have a material adverse effect on its ability to competitively market its products and on its revenues, its profit and cash flows.

1.3.5 If ADTRAN's products do not interoperate with its customers' networks, installations may be delayed or cancelled, which could harm its business

ADTRAN's products must interface with existing networks, each of which may have different specifications, utilize multiple protocol standards and incorporate products from other vendors. Many of its customers' networks contain multiple generations of products that have been added over time as these networks have grown and evolved. ADTRAN's products may be required to interoperate with many or all of the products within these networks, as well as future products to meet its customers' requirements. If ADTRAN finds errors in the existing software or defects in the hardware used in its customers' networks, ADTRAN may have to modify its software or hardware to fix or overcome these errors so that its products will interoperate with the existing software and hardware. Implementation of product corrections involving interoperability issues could increase ADTRAN's costs and adversely affect its results of operations. Such issues may affect its ability to obtain product acceptance from other customers.

1.3.6 Breaches of information systems and cyber-attacks could compromise ADTRAN's intellectual property and cause significant damage to its business and reputation.

ADTRAN maintains sensitive data on its information systems and the networks of third-party providers, including intellectual property, financial data and proprietary or confidential business information relating to its business, customers, suppliers and business partners. ADTRAN also produces networking equipment solutions and software used by network operators to ensure security and reliability in their management and transmission of data. ADTRAN's customers, particularly those in regulated industries, are increasingly focused on the security features of its technology solutions. Maintaining the security of information sensitive to ADTRAN and its business partners is critical to its business and reputation. ADTRAN relies upon several internal business processes and information systems to support key operations and financial functions, and the efficient operation of these processes and systems is critical. Companies are increasingly subjected to cyber-attacks and other attempts to gain unauthorized access. Despite prevention measures, ADTRAN's network and storage applications and those systems and storage applications maintained by its third-party providers may be targeted by cyber-attacks or breached due to operator error, fraudulent activity or other system disruptions. For example, although no indicators of compromise were identified by ADTRAN in response to the Log4j2.x vulnerability, it cannot assure that future vulnerabilities or malware attack will not be successful in breaching ADTRAN's system and in turn, have a material impact on ADTRAN. Additionally, unauthorized access or disclosure of ADTRAN's information could compromise ADTRAN's intellectual property and expose sensitive business information. ADTRAN's information systems are designed to appropriate industry standards to reduce downtime in the event of power outages, weather or climate events and cybersecurity issues. These risks, as well as the number and frequency of cybersecurity events globally, may also be heightened during times of geopolitical tension or instability between countries, including, for example, the ongoing military conflict in Ukraine, from which a number of recent cybersecurity events have been alleged to have originated. A significant failure of ADTRAN's information systems due to these issues could result in significant remediation costs, disrupt business operations and divert management attention, which could adversely affect ADTRAN's business reputation, operating results, financial condition and cash flow.

1.3.7 If ADTRAN is unable to integrate future acquisitions successfully, it could adversely affect its operating results, financial condition and cash flows.

ADTRAN may make acquisitions to improve or expand its product offerings, customer base, talent or intellectual property. ADTRAN's current and future acquisition strategy will depend on its ability to identify, negotiate, complete and integrate acquisitions. Acquisitions involve numerous risks, including, but not limited to:

- difficulties integrating and managing the operations, technologies and products of the companies ADTRAN acquires;
- · its inability to maintain the key business relationships and the brand equity of businesses ADTRAN acquires;
- its inability to retain key personnel of the acquired business; and
- its responsibility for the liabilities of the businesses ADTRAN acquires, some of which it may not anticipate, including costs of third-party advisors to resolve disputes.

1.3.8 ADTRAN's success depends on attracting and retaining key personnel.

ADTRAN's business has grown significantly since its inception. ADTRAN's success is dependent in large part on the continued employment of its executive officers, including Thomas R. Stanton, its chief executive officer ("CEO"), and other key management personnel. The unplanned departure of one or more of these individuals could adversely affect its business. In addition, for ADTRAN to continue as a successful entity it must also be able to attract and retain key engineers and software developers and architects whose expertise helps it maintain competitive advantages. ADTRAN believes that its future success will depend, in large part, upon its ability to continue to attract, retain, train and motivate highly-skilled employees who are in great demand. Stock awards are designed to reward employees for their long-term contributions and to provide incentives for them to remain with ADTRAN. Changes to its overall compensation program, including its stock incentive program, may adversely affect its ability to retain key employees. Properly managing its continued growth, avoiding the problems often resulting from such growth and expansion and continuing to operate in the manner which has proven successful to ADTRAN to date will be critical to the future success of its business.

1.3.9 ADTRAN is currently in the process of implementing a new enterprise resource planning software solution. If ADTRAN does not effectively implement this project, or any future associated updates, its operations could be significantly disrupted.

ADTRAN is currently in the process of implementing a new enterprise resource planning ("ERP") software solution. This project requires ADTRAN to migrate and reconfigure all of its current system processes, transactions, data and controls to a new cloud-based platform and is expected to have a significant impact on its business processes, financial reporting, information systems and internal controls. This has required, and will continue to require, significant change management, meaningful investment in capital and personnel resources and coordination of numerous software and system providers and internal business teams. ADTRAN may experience difficulties, including delays and higher than anticipated costs related to personnel and capital resources, as it manages these changes and transition to this new ERP solution, including loss or corruption of data, delayed shipments, delayed financial reporting, decreases in productivity as its personnel implement and become familiar with the new systems and processes, unanticipated expenses (including increased costs of implementation, costs of conducting business or the potential impairment of previously capitalized ERP implementation costs) and lost revenue. Once implemented, ADTRAN will have cloud driven quarterly updates. Although it will conduct design validations and user testing, these may cause delays in transacting its business due to system challenges, limitations in functionality, inadequate change management or process deficiencies in the production and use of the system. Difficulties in implementing this new ERP solution or the related quarterly updates could disrupt ADTRAN's operations and divert management's attention from key strategic initiatives.

1.3.10 Managing ADTRAN's inventory is complex and may include write-downs of excess or obsolete inventory.

Managing ADTRAN's inventory of components and finished products is complicated by a number of factors, including the need to maintain a significant inventory of certain components that are in short supply, that have been discontinued by the component manufacturer, that must be purchased in bulk to obtain favorable pricing or that require long lead times. These issues may result in its purchasing and maintaining significant amounts of inventory, which if not used or expected to be used based on anticipated production requirements, may become excess or obsolete. Any excess or obsolete inventory could also result in sales price reductions and/or inventory write-downs, which could adversely affect ADTRAN's business and results of operations.

1.3.11 ADTRAN depends heavily on sales to certain customers; the loss of any of these customers would significantly reduce ADTRAN's revenues and net income.

Historically, a large percentage of ADTRAN's sales have been made to major service providers and larger independent communications companies. In 2021, these customers continued to comprise over half of ADTRAN's revenue. As long as the major and larger independent communications companies represent such a substantial percentage of ADTRAN's total revenue, ADTRAN's future success will significantly depend upon certain factors which are not within its control, including:

- the timing and size of future purchase orders, if any, from these customers;
- changes in strategic plans and capital budgets of these customers;
- the product requirements of these customers;
- the subscriber take rate, including subscriber loss or churn, of these customers;
- the financial and operational success of these customers;
- the impact of legislative and regulatory changes on these customers;
- consolidation, acquisition of, or corporate reorganization among these customers;
- the success of these customers' services deployed using ADTRAN's products; and
- the impact of work stoppages at these customers.

In the past, sales to ADTRAN's large customers have fluctuated, and may fluctuate in the future, significantly from quarter to quarter and year to year. The loss of, or a significant reduction or delay in, sales to any such customer or the occurrence of sales fluctuations could have a material adverse effect on ADTRAN's business and results of operations. Further, any attempt by a major or other service provider to seek out additional or alternative suppliers or to undertake, as permitted under applicable regulations, the production of these products internally, could have a material adverse effect on ADTRAN's operating results.

There has been a trend toward industry consolidation in the network-connectivity market for several years. ADTRAN expects this trend to continue as companies attempt to strengthen or hold their market positions or are unable to continue operations. This could lead to variability in ADTRAN's operating results. In addition, particularly in the service provider market, rapid consolidation will lead to fewer customers, with the effect that a loss of a major customer could have a material impact on ADTRAN's results that it would not have anticipated in a marketplace composed of more numerous participants.

1.3.12 ADTRAN's revenue for a particular period can be difficult to predict, and a shortfall in revenue may harm its operating results.

ADTRAN's revenue for a particular quarter is difficult to predict and will fluctuate from quarter to quarter. Typically, ADTRAN's customers request product delivery within a short period following receipt of an order. Consequently, ADTRAN does not typically carry a significant order backlog and is dependent upon obtaining orders and completing delivery in accordance with shipping terms that are predominantly within each quarter to achieve its targeted revenues. The supply of semiconductor chips and other components for ADTRAN's products has been limited, resulting in longer lead times. Transportation shortages, including shortages in air freight and surface transportation and labor shortages in transportation sector, have put a strain on the timing and costs of raw material and production supply. As a result, ADTRAN's gross margin percentage declined in the first quarter of 2022. Continued supply chain and transportation shortages could cause net revenue and gross profit of ADTRAN to decline or grow at a slower rate than in previous quarters. ADTRAN's deployment/installation cycle can also vary depending on the customer's schedule, site readiness, network size and complexity and other factors, which can cause ADTRAN's revenue to fluctuate from period to period. ADTRAN's ability to meet financial expectations could also be affected if the variable revenue patterns seen in prior quarters recur in future quarters. ADTRAN has experienced periods of time during which manufacturing issues have delayed shipments, leading to variable shipping patterns. In addition, to the extent that manufacturing issues and any related component shortages continue to result in delayed shipments in the future, and particularly in quarters in which ADTRAN

and its subcontractors are operating at higher levels of capacity, it is possible that revenue for a quarter could be adversely affected, and ADTRAN may not be able to remediate these conditions within the same quarter. Currently, ADTRAN's revenue growth and profitability in the near-term are being impacted by supply chain constraint issues. While ADTRAN is working closely with its suppliers and customers to address the near-term supply chain challenges facing the industry and believes these challenges are peaking, there can be no assurance this will be the case.

In the past, under certain market conditions, long manufacturing lead times have caused ADTRAN's customers to place the same order multiple times. When multiple ordering occurs, along with other factors, it may cause difficulty in predicting ADTRAN's sales and, as a result, could impair its ability to manage inventory effectively.

ADTRAN plans its operating expense levels based primarily on forecasted revenue levels. These expenses and the impact of long-term commitments are relatively fixed in the short term. A shortfall in revenue could lead to operating results being below expectations because ADTRAN may not be able to quickly reduce these fixed expenses in response to short-term business changes.

1.3.13 If ADTRAN is unable to successfully develop and maintain relationships with system integrators, service providers and enterprise value-added resellers, ADTRAN's sales may be negatively affected.

As part of ADTRAN's sales strategy, ADTRAN is targeting system integrators ("SI"), service providers and enterprise value-added resellers ("VAR"). In addition to specialized technical expertise, SIs, service providers and VARs typically offer sophisticated service capabilities that are frequently desired by enterprise customers. To expand ADTRAN's distribution channel to include resellers with such capabilities, ADTRAN must be able to provide effective support to these resellers. If its sales, marketing or service capabilities are not sufficient to provide effective support to such SIs, service providers and VARs, ADTRAN's sales may be negatively affected, and current SIs, service providers and VAR partners may terminate their relationships with ADTRAN, which would adversely impact its sales and overall results of operations.

1.3.14 ADTRAN expects gross margins to vary over time, and its levels of product and services gross margins may not be sustainable.

ADTRAN's level of gross margins may not be sustainable and may be adversely affected by numerous factors, including:

- changes in customer, geographic or product or services mix, including software and the mix of configurations and professional services revenue within each product segment;
- mix of domestic versus international revenue;
- introduction of new products by competitors, including products with price-performance advantages;
- the ability to reduce product cost;
- · increases in labor or material cost, including increases in material costs resulting from inflation or tariffs;
- foreign currency exchange rate movements;
- expediting costs incurred to meet customer delivery requirements;
- · excess inventory and inventory holding charges;
- excess and obsolescence charges;
- · changes in shipment volume;
- the ability to absorb fixed manufacturing costs during short-term fluctuations in customer demand;
- loss of cost savings due to changes in component pricing or charges incurred due to inventory holding periods if parts ordering does not correctly
 anticipate product demand;
- lower than expected benefits from value engineering;
- increased price competition, including competitors from Asia, specifically China;
- changes in distribution channels;

- increased warranty cost;
- liquidated damages costs relating to customer contractual terms;
- the ability to manage the impact of foreign currency exchange rate fluctuations relating to ADTRAN's revenue or cost of revenue; and
- slowdowns, recessions, economic instability, political unrest, armed conflicts (such as the invasion of Ukraine in March 2022), or outbreaks of disease, such as the COVID-19 pandemic, around the world.

For example, since the third quarter of 2021 and continuing into 2022, ADTRAN has incurred supply chain constraint expenses, including price inflation for certain electronic components, semiconductor chips and transportation related costs, which have lowered ADTRAN's gross margins and decreased its profitability.

1.3.15 ADTRAN's exposure to the credit risks of its customers and distributors may make it difficult to collect accounts receivable.

Most of ADTRAN's revenue is made on an open credit basis, generally with payment terms of 30 days in the U.S. and typically longer in many geographic markets outside the U.S. As ADTRAN's international revenue grows, its total accounts receivable balance will likely increase. ADTRAN's days sales outstanding ("DSOs") could also increase as a result of a greater mix of international revenue. Additionally, international laws may not provide the same degree of protection against defaults on accounts receivable as provided under U.S. laws governing domestic transactions; therefore, as ADTRAN's international business grows, it may be subject to higher bad debt expense compared to historical trends. In the course of ADTRAN'S sales to customers and distributors, it may encounter difficulty collecting accounts receivable and could be exposed to risks associated with uncollectible accounts receivable due to various reasons, including potential declining operating cash flows or bankruptcy filings. There are no assurances ADTRAN can avoid write-downs and/or write-offs of accounts receivable as a result of declining financial conditions for its customers, including bankruptcy. Such write-downs or write-offs could negatively affect ADTRAN's operating results for the period in which they occur and could potentially have a material adverse effect on its results of operations, financial condition and cash flows.

1.3.16 The continuing growth of ADTRAN's international operations could expose it to additional risks, increase its costs and adversely affect its operating results, financial condition and cash flows.

ADTRAN is expanding its presence in international markets, which represented approximately 35.9% and 32.2% of its consolidated net revenue for the three months ended March 31, 2022 and 2021, respectively (for the financial year ended December 31, 2021: 33.5%; 2020: 30.5%; and 2019: 43.2%), and as a result, it anticipates increased revenue and operating costs in these markets. This international expansion has increased and may continue to increase its operational risks and impact its results of operations, including:

- exposure to unfavorable commercial terms in certain countries;
- the time and cost to staff and manage foreign operations, including the time and cost to maintain good relationships with employee associations and works councils;
- exposure to unfavorable commercial terms in certain countries;
- the time and cost to ensure adequate business interruption controls, processes and facilities;
- the time and cost to manage and evolve financial reporting systems, maintain effective financial disclosure controls and procedures, and comply with corporate governance requirements in multiple jurisdictions;
- the cost to collect accounts receivable and extension of collection periods;
- the cost and potential disruption of facilities transitions required in some business acquisitions;
- risks as a result of less regulation of patents or other safeguards of intellectual property in certain countries;
- the potential impact of adverse tax, customs regulations and transfer-pricing issues;
- exposure to increased price competition from additional competitors in some countries;
- exposure to global social, political and economic instability, changes in economic conditions and foreign currency exchange rate movements;

- potential exposure to liability or damage of reputation resulting from a higher incidence of corruption or unethical business practices in some countries;
- potential regulations on data protection, regarding the collection, use, disclosure and security of data;
- potential trade protection measures, export compliance issues, domestic preference procurement requirements, qualification to transact business and additional regulatory requirements;
- potential exposure to natural disasters, epidemics and pandemics (and government regulations in response thereto) and acts of war or terrorism; and
- potential exposure to escalating tensions along the Russia-Ukraine border. The U.S. and certain other countries imposed sanctions on Russia and could impose further sanctions against it, which could damage or disrupt international commerce and the global economy. Other potential consequences include, but are not limited to, growth in the number of popular uprisings in the region, increased political discontent, especially in the regions most affected by the conflict or economic sanctions, displacement of persons to regions close to the areas of conflict and an increase in the number of refugees, among other unforeseen social and humanitarian effects which could impact its business, customers, and suppliers.

If ADTRAN were unable to successfully address the potential risks associated with its overall international expansion, its operating results, financial condition and cashflows may be negatively impacted.

1.3.17 Changes in trade policy in the U.S. and other countries, specifically the United Kingdom and China, including the imposition of additional tariffs and the resulting consequences, may adversely impact ADTRAN's gross profits, gross margins, results of operations and financial condition.

In recent years, international market conditions and the international regulatory environment have been increasingly affected by competition among countries and geopolitical frictions. In particular, the U.S. administration has advocated for and taken steps toward restricting trade in certain goods, particularly from China. From 2018 to late 2019, the United States announced several tariff increases that applied to products imported from China, totaling over \$550 billion. By the end of 2019, the two countries had reached a phase one trade deal to roll back tariffs and suspend certain tariff increases by the United States that were scheduled to take effect from December 2019, and in January 2020, the two sides entered into a formal phase one agreement on trade. The progress of trade talks between China and the United States is subject to uncertainties, and there can be no assurance as to whether the United States will maintain or reduce tariffs or impose additional tariffs on Chinese products in the near future. Furthermore, in August 2019, the U.S. Treasury Department labelled China as a currency manipulator, which label was officially dropped by the U.S. Treasury Department in January 2020. However, it is uncertain whether the U.S. government may issue any similar announcement in the future. China and other countries have retaliated and may further retaliate in response to new trade policies, treaties and tariffs implemented by the United States. Any potential changes in trade policies in the U.S. and the potential actions by other countries in which ADTRAN does business could adversely impact its financial performance.

In June 2016, the United Kingdom ("UK") held a referendum, commonly referred to as "Brexit", in which the majority of voters elected to withdraw from the EU. The UK formally departed from the EU on January 31, 2020. The UK and the EU have signed an EU-UK Trade and Cooperation Agreement, which became provisionally applicable on January 1, 2021 and went into force permanently on May 1, 2021, following formal approval by the UK and the EU. The agreement is limited in its scope primarily to the trade of goods, transport, energy links and fishing, and uncertainties remain relating to certain aspects of the UK's future economic, trading and legal relationships with the EU and with other countries. The actual or potential consequences of Brexit, and the associated uncertainty, could adversely affect economic and market conditions in the UK, the EU and its member states, and elsewhere, and could contribute to instability in global financial markets. The past two years have been challenging for the credit markets due to a shift from a time of quantitative easing to a time of quantitative tightening by central banks around the world. If global economic and market conditions, or economic conditions in key markets, remain uncertain or further deteriorate, this might have a material adverse effect on the demand for ADTRAN's products and put pressure on the prices ADTRAN charges for its products or the costs it occurs and as a result, ADTRAN may experience material impacts on its business and operating results.

1.3.18 ADTRAN's strategy of outsourcing a portion of its manufacturing requirements to subcontractors located in various international regions may result in ADTRAN not meeting its cost, quality or performance standards.

ADTRAN is heavily dependent on subcontractors for the assembly and testing of certain printed circuit board assemblies, subassemblies, chassis, enclosures and equipment shelves, and the purchase of some raw materials used in such assemblies. This reliance involves several risks, including the unavailability of, or interruptions in, access to certain process technologies and reduced control over product quality, delivery schedules, transportation, manufacturing yields and costs. ADTRAN may not be able to provide product order volumes to its subcontractors that are high enough to achieve sufficient cost savings. If shipments fall below forecasted levels, ADTRAN may incur increased costs or be required to take ownership of excess inventory. Changes in international tariff structures could adversely impact its product costs. ADTRAN has also experienced and expects to continue to experience increased inflationary pressures on input costs, such as raw materials, labor and distribution costs. ADTRAN's attempts to offset these cost pressures, such as through increases in the selling prices of some of its products and services, may not be successful and could negatively affect its operating results. In addition, a significant component of maintaining cost competitiveness is the ability of its subcontractors to adjust their costs to compensate for possible adverse exchange rate movements. To the extent that the subcontractors are unable to do so, and ADTRAN is unable to procure alternative product supplies, then ADTRAN's competitiveness and results of operations could be adversely impaired. These risks may be exacerbated by economic, regulatory or political changes or uncertainties, terrorist actions, acts of war, the effects of climate change, natural disasters or pandemics in the foreign countries in which ADTRAN's subcontractors are located. ADTRAN does not utilize contract manufacturing for its products in China, though ADTRAN does source some original design manufacturer (ODM) products from China which are, or may b

It cannot be assured that delays in product deliveries will not occur in the future because of shortages resulting from this limited number of subcontractors or from the financial or other difficulties of these parties. ADTRAN's inability to develop alternative subcontractors if and as required in the future, or the need to undertake required retraining and other activities related to establishing and developing a new subcontractor relationship, could result in delays or reductions in product shipments which, in turn, could have a negative effect on its customer relationships and operating results.

1.3.19 ADTRAN's use of open source software could impose limitations on its ability to commercialize its products.

Several of ADTRAN's solutions utilize elements of open source or publicly available software. Although ADTRAN closely monitors its use of open source software, the terms of many open source software licenses have not been interpreted by the courts, and there is a risk that such licenses could be construed in a manner that could impose unanticipated conditions or restrictions on its ability to sell its products. In such event, ADTRAN could be required to make its proprietary software generally available to third parties, including competitors, at no cost, to seek licenses from third parties in order to continue offering its products, to re-engineer its products or to discontinue the sale of its products in the event re-engineering cannot be accomplished on a timely basis or at all, any of which could adversely affect ADTRAN's revenues and operating expenses.

1.3.20 If ADTRAN fails to maintain proper and effective internal controls over its financial reporting ADTRAN could have a material weakness in those internal controls, which if not remediated, could materially adversely affect ADTRAN.

Section 404 of the United States Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act"), requires ADTRAN to include in its annual reports on Form 10-K an assessment by its management of the effectiveness of its internal control over financial reporting, as well as a report from its independent registered public accounting firm on the effectiveness of its internal control over financial reporting. ADTRAN must perform system and process evaluation and testing of its internal control over financial reporting to allow management and its independent registered public accounting firm to report on the effectiveness of its internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. ADTRAN's compliance with Section 404 of the Sarbanes-Oxley Act may require that ADTRAN incurs substantial accounting expense and expend significant management efforts. In addition, if management or ADTRAN's independent registered public accounting firm were unable to conclude that ADTRAN's internal control over financial reporting is effective, ADTRAN could lose investor confidence in the accuracy and completeness of its financial statements, which could have an adverse effect on its business or lead to litigation claims.

1.3.21 The ongoing COVID-19 pandemic has impacted and may continue to impact ADTRAN's business, results of operations and financial condition, particularly its supply chain and workforce.

The global spread of COVID-19 created significant volatility, uncertainty and economic disruption. The restrictions imposed to prevent the spread of COVID-19 disrupted economic activity, resulting in reduced commercial and consumer confidence and spending, increased unemployment, closure or restricted operating conditions for businesses, volatility in the global capital markets, instability in the credit and financial markets, labor shortages, regulatory relief for impacted consumers and disruption in supply chains. While the rollout of COVID-19 vaccines throughout 2021 mitigated mortality risk, new COVID-19 variants proved to remain a threat. The lifting of lockdowns in certain areas started a slow economic recovery. The resulting increase in consumer demand has created significant challenges for supply chains as a result of labor and raw material shortages, which could lead to continued reduced earnings for many industries.

In addition, ADTRAN has experienced disruption and delays in its supply chain and significant price increases from certain of its manufacturing partners due to the ongoing COVID-19 pandemic and the global shortage of semiconductor chips, and such disruption, delays and price increases may continue. For example, in the first quarter of 2022, ADTRAN's results of operations were negatively impacted by increased expenses resulting from supply chain disruptions. There are also restrictions and delays on logistics, such as air cargo carriers, as well as increased logistics costs due to limited capacity and high demands for freight forwarders. Although ADTRAN continues to work with its supply chain and dual source partners to take the necessary steps to resolve these disruptions, there can be no assurance that the ongoing disruptions due to COVID-19 and the related global semiconductor chip shortage, price increases or other supply chain constraints will be resolved in the near term, which could continue to result in longer lead times, inventory supply challenges and further increased costs, all of which could adversely affect its business, financial condition, and results of operations.

Although vaccines have been approved and are being distributed, it cannot be predicted how long it will take before market conditions return to normal and there can be no assurance that the economic recovery will occur or offset the uncertainty and instability triggered by the pandemic. Because vaccines are widely available, ADTRAN cannot predict what travel restrictions may be enforced if vaccination is mandatory. New and potentially more contagious variants of the COVID-19 virus are developing in several countries, including regions in which ADTRAN has significant operations. The COVID-19 variants could further amplify the impact of the pandemic.

To support the health and well-being of ADTRAN's employees, customers, partners and communities, many of its employees are currently working remotely. However, there is risk that a number of ADTRAN's employees could be infected with COVID-19, including its key personnel. In addition, actions that have been taken and that may be taken by ADTRAN, its customers, suppliers and counterparties in response to the pandemic, including the implementation of alternative work arrangements for certain employees, as well as the impacts to ADTRAN's supply chain, including delays in supply chain deliveries and the related global semiconductor chip shortage, have delayed and may continue to delay the timing of some orders and expected deliveries. The disruptions to ADTRAN's operations caused by COVID-19, the related global semiconductor chip shortage and actions by other parties have resulted in and may continue to result in inefficiencies and additional costs in its product development, sales, marketing and customer service efforts that ADTRAN cannot fully mitigate.

1.3.22 ADTRAN might fail to manage its exposure to worldwide financial and securities markets.

ADTRAN is exposed to financial market risks, including changes in interest rates and prices of marketable equity and fixed-income securities. The global macroeconomic environment has been challenging and inconsistent due to uncertainty in the global central bank monetary policy and uncertainty in global credit markets and the geopolitical environment in many areas of the world. The primary objective of the majority of its investment activities is to preserve principal while at the same time achieving appropriate yields without significantly increasing risk. To achieve this objective, a majority of its marketable securities are investment grade corporate and municipal fixed-rate bonds, U.S. government bonds and municipal money market instruments denominated in U.S. dollars. ADTRAN also invests a portion of its investment portfolio in equities, which are subject to market risks, including the loss of principal.

ADTRAN has significant investments in corporate bonds, municipal fixed-rate bonds, asset-backed bonds, mortgage/agency-backed bonds, U.S. government bonds and foreign government bonds. As of the date of this Prospectus, ADTRAN has not been required to impair any of these investments; however, it may experience a reduction in value or loss of liquidity in these investments, which may have an adverse effect on its financial condition. Fixed-rate interest securities may have their fair value adversely impacted due to a rise in interest rates,

while variable-rate securities may produce less income than expected if interest rates fall. ADTRAN's investments are subject to general credit, liquidity, market and interest rate risks, which may increase because of conditions in the financial markets and related credit liquidity issues. Consequently, ADTRAN's future investment income may fall short of expectations due to changes in interest rates, or it may suffer losses in principal if it is forced to sell securities that decline in fair value due to changes in interest rates.

1.3.23 ADTRAN's estimates regarding future warranty obligations may change due to product failure rates, installation and shipment volumes, field service repair obligations and other rework costs incurred in correcting product failures. If its estimates change, its liability for warranty obligations may increase or decrease, impacting future cost of revenue.

ADTRAN's products are highly complex, and ADTRAN cannot ensure that its extensive product development, manufacturing and integration testing will be adequate to detect all defects, errors, failures and quality issues. Quality or performance problems for products covered under warranty could adversely impact its reputation and negatively affect its operating results, financial position and cash flows. The development and production of new products with high complexity often involves problems with software, components and manufacturing methods. If significant warranty obligations arise due to reliability or quality issues arising from defects in software, faulty components or manufacturing methods, its operating results, financial position and cash flows could be negatively impacted by:

- · costs associated with fixing software or hardware defects;
- costs associated with internal or third-party installation errors;
- high service and warranty expenses;
- costs associated with recalling and replacing products with software or hardware defects, including costs from writing-off defective products recalled;
- high inventory obsolescence expense;
- delays in collecting accounts receivable;
- payment of liquidated damages for performance failures;
- extended performance bond expenses; and
- a decline in sales to existing customers.

1.3.24 The lengthy sales and approval process required by major and other service providers for new products could result in fluctuations in ADTRAN's revenue.

In the industry in which ADTRAN competes, sales and approval cycles are often lengthy. Selling efforts often involve a significant commitment of time and resources by ADTRAN and its customers that may include extensive product testing, laboratory or network certification, or region-specific product certification and homologation requirements for deployment in networks. Additionally, a supplier must first obtain product approval from a major or other service provider to sell ADTRAN's products to these service providers. This process can last from six to eighteen months, or longer, depending on the technology, the service provider and the demand for the product from the service provider's subscribers. Consequently, ADTRAN is involved in a constant process of submitting for approval succeeding generations of products, as well as products that deploy new technology or respond to new technology demands from a major or other service provider. ADTRAN cannot be certain that it will obtain these approvals in the future or that sales of these products will continue to occur. Any attempt by a major or other service provider to seek out additional or alternative suppliers, or to undertake, as permitted under applicable regulations, the production of these products internally, could have a material adverse effect on ADTRAN's operating results. Furthermore, the delay in sales until the completion of the approval process, the length of which is difficult to predict, could result in fluctuations of revenue and uneven operating results from quarter to quarter or year to year. Further, once customer approval or certifications are met, ADTRAN's supply chain customers typically do not guarantee a minimum, or any, volume of sales.

1.3.25 ADTRAN's failure to maintain rights to intellectual property used in its business could adversely affect the development, functionality and commercial value of its products.

ADTRAN's future success depends in part upon its proprietary technology. Although ADTRAN attempts to protect its proprietary technology by contract, trademark, copyright and patent registration and internal security, including trade secret protection, these protections may not be adequate. Furthermore, ADTRAN's competitors can develop similar technology independently without violating its proprietary rights. From time to time, ADTRAN receives and may continue to receive notices of claims alleging that ADTRAN is infringing upon patents or other intellectual property. Any of these claims, whether with or without merit, could result in significant legal fees, divert ADTRAN management's time, attention and resources, delay its product shipments or require ADTRAN to enter into royalty or licensing agreements. ADTRAN cannot predict whether it will prevail in any claims or litigation over alleged infringements, or whether it will be able to license any valid and infringed patents, or other intellectual property, on commercially reasonable terms. If a claim of intellectual property infringement against ADTRAN is successful and ADTRAN fails to obtain a license or develop or license non-infringing technology, it may be obliged to temporarily or permanently terminate the development, marketing and/or distribution of the respective products, which could result in significant costs and a loss in revenue.

1.3.26 Software under license from third parties for use in certain of ADTRAN's products may not continue to be available to ADTRAN on commercially reasonable terms.

ADTRAN integrates third-party software into certain of its products. Licenses for this technology may not be available or continue to be available to ADTRAN on commercially reasonable terms. Difficulties with third-party technology licensors could result in the termination of such licenses, which may result in increased costs or require ADTRAN to purchase or develop a substitute technology. Difficulty obtaining and maintaining third-party technology licenses may disrupt the development of ADTRAN's products and increase its costs, which could harm its business.

1.3.27 ADTRAN may incur liabilities or become subject to litigation.

In the ordinary course of business, ADTRAN accepts purchase orders, and enters into sales and other related contracts, for the marketing, sale, manufacture, distribution or use of its products and services. ADTRAN may incur liabilities relating to its performance under such agreements, or which result from damage claims arising from certain events as outlined within the particular contract. While ADTRAN attempts to include limitations of liability and other protective measures to all agreements, such agreements may not always contain, or be subject to, maximum loss clauses and liabilities arising from them may result in significant costs to ADTRAN.

In the ordinary course of business, ADTRAN may be subject to various legal proceedings and claims, including employment disputes, patent claims, disputes over contract agreements and other commercial disputes. In some cases, claimants seek monetary recovery, or other relief, including damages such as royalty payments related to patents, lost profits or injunctive relief, which, if granted, could require significant expenditures. Any such disputes may be resolved before trial, or if tried, may be resolved in ADTRAN's favor; however, the cost of claims sustained in litigation, and costs associated with the litigation process, may not be covered by its insurance. Such costs, and the demands on management time during such an event, could harm ADTRAN's business and also negatively affect its reputation.

1.3.28 The elimination of LIBOR after June 2023 may affect ADTRAN's financial results.

All London Inter-Bank Offered Rate ("LIBOR") tenors, which are relevant to ADTRAN, will cease to be published or will no longer be representative after June 30, 2023, and therefore, any of ADTRAN's LIBOR-based borrowings that extend beyond June 30, 2023 will need to be converted to a replacement rate. U.S. bank regulators advised banks to cease writing, subject to certain limited exceptions, new U.S. Dollar LIBOR contracts by the end of 2021 and the U.S. Alternative Reference Rates Committee (the "ARRC") has recommended Secured Overnight Financing Rate ("SOFR") plus a recommended spread adjustment as LIBOR's replacement. There are significant differences between LIBOR and SOFR, such as LIBOR being an unsecured lending rate while SOFR is a secured lending rate, and SOFR is an overnight rate while LIBOR reflects term rates at different maturities. If ADTRAN's LIBOR-based borrowings are converted to SOFR, the differences between LIBOR and SOFR, plus the recommended spread adjustment, could result in interest costs that are higher than if LIBOR remained available, which could have a material adverse effect on ADTRAN's operating results. Although SOFR is the ARRC's recommended replacement rate, it is also possible that lenders may instead choose alternative replacement rates that may differ from LIBOR in ways similar to SOFR or in other ways that would result in higher interest costs for ADTRAN.

1.3.29 ADTRAN is subject to risks associated with its revolving credit agreements and future indebtedness.

As of the date of this Prospectus, ADTRAN has two revolving credit agreements that provide secured credit facilities in an aggregate amount of \$35.0 million. ADTRAN's ability to satisfy debt obligations and renew its credit agreement is primarily dependent upon ADTRAN's future performance. ADTRAN may not be able to generate sufficient cash flow to satisfy any indebtedness that could be incurred under this credit agreement. In the event of a breach of certain contractual obligations, e.g. the non-fulfillment of a repayment obligation, and ADTRAN is unable to obtain a waiver from the creditors, a default could result under the relevant debt instrument, which then could be to an acceleration of payment obligations.

1.4 Risks Relating to the Business of ADVA

1.4.1 Supply shortages for product components could impact the quality, reduce the availability or increase the cost of materials, which could harm ADVA's revenues, profitability and customer relations.

A supply shortage of the required materials for ADVA's product components could be caused by a variety of factors, such as natural disasters (which are expected to occur in higher frequency and at larger scales due to the climate change), pandemics, political and military conflicts (e.g. the Russian invasion of Ukraine), or the specific problems of a supplier. In particular, semi-conductors are an important component for many of ADVA's products and subject to highly variable demand cycles, which results in a supply that fluctuates between shortages and surpluses. In 2021 and the first quarter of 2022, the semiconductor market experienced a significant shortage in capacities due to surging demands across the globe. Starting at the end of 2020 and into 2021 as well as the first quarter of 2022 increased demands in consumer goods, electric vehicles and a global economic recovery have triggered a significant supply shortfall across all semiconductor commodities. It is unclear how long this supply shortage will last, and to what extent ADVA will be impacted going forward.

ADVA's revenues, profitability and customer relations could be harmed by continued fluctuations in the availability of materials, a stoppage or delay of supply, a substitution of more expensive or less reliable parts, the receipt of defective parts or contaminated materials, an increase in the price of supplies, or an inability to obtain reductions in price from ADVA's suppliers in response to competitive pressures.

1.4.2 ADVA depends heavily on sales to certain key customers; the loss of any of these key customers could significantly reduce ADVA's revenue.

Historically, a large percentage of ADVA's sales have been made to a small number of ADVA's key customers. In 2021, for example, two key customers each exceeded a revenue share of 10% of the ADVA Group's total revenue. ADVA's revenue is significantly dependent on the demand of these key customers for its technologies and products. As long as these key customers represent a substantial percentage of ADVA's total revenue, ADVA's future success will depend upon certain factors not within its control, including:

- the impact of the announcement and pendency of the Business Combination with ADTRAN may have on one or more key customers, such as some government related businesses that may seek to change or cancel existing business relationships with the combined company;
- the timing and size of future purchase orders, if any, from these key customers;
- changes in strategic plans and capital budgets of these key customers;
- the product requirements of these key customers;
- the subscriber take rate, including subscriber loss or churn, of its key customers;
- the financial and operational success of these key customers;
- the impact of legislative and regulatory changes on these key customers;
- consolidation, acquisition of, or corporate reorganization among these key customers;

- the success of these key customers' services deployed using its products; and
- the impact of work stoppages at these key customers.

In the past, sales to ADVA's key customers have fluctuated, and may fluctuate in the future, significantly from quarter to quarter and year to year. The loss of, or a significant reduction or delay in, sales to any such customer or the occurrence of sales fluctuations could have a material adverse effect on ADVA's business and results of operations. Further, any attempt by a key customer to seek out additional or alternative suppliers or to undertake the production of these products internally, could have a material adverse effect on ADVA's operating results.

There has been a trend toward industry consolidation in the network connectivity market for several years. ADVA expects this trend to continue as companies attempt to strengthen or hold their market positions or are unable to continue operations. This could lead to variability in ADVA's operating results. In addition, particularly in the service provider market, rapid consolidation will lead to fewer customers, with the effect that a loss of a key customer could have a material impact on ADVA's results that it would not have anticipated in a marketplace composed of more numerous participants.

1.4.3 ADVA must continually improve and increase its product portfolio offerings to compete and keep pace with developments in the networking industry. Supporting the market introduction of new products and technologies requires significant resources.

The markets for ADVA's products are characterized by rapidly changing technology, evolving industry standards and continuing improvements in network communications offerings. In order to keep pace with technological developments, meet customer requirements and evolving industry standards and remain competitive in the market, ADVA has increased its product portfolio over the last several years and must continue to develop new products. The success of any such newly developed products is in part dependent on ADVA's ability to accurately anticipate changes in technologies applicable to its products and solutions. If technologies or standards applicable to ADVA's products become obsolete or fail to gain widespread commercial acceptance, its existing products or products under development may become obsolete or unmarketable. Moreover, the introduction of products embodying new technologies, the emergence of new industry standards, or changes in network communications offerings could adversely affect ADVA's ability to sell its products.

Furthermore, supporting the market introduction of new and enhanced products requires significant investments in resources, tools and procedures. If ADVA is unable to allocate the resources required to develop adequate go-to-market support for its new products, there may be delays in sales, which could have an adverse impact on ADVA's ability to achieve its growth and profitability targets.

1.4.4 As the strategic importance of networking solutions increases on the national and global levels, ADVA may not have the perceived scale or innovation capability to be competitive with larger companies in the industry.

The strategic importance of networks is growing, as industries and consumers increasingly rely on networks for their daily business operations. As a result, ADVA's customers have been seeking out networking companies who have the perceived financial ability to offer leading innovation and engagement models over the long-term. ADVA is one of the smaller companies in the network equipment industry and as such, customers may have doubts about ADVA's ability to innovate and to execute on its product strategy, which would result in reduced market share for ADVA and have an adverse impact on ADVA's business and revenue.

1.4.5 ADVA is subject to pricing pressure from customers for long-term projects that may impact ADVA's business, financial condition and operating results.

ADVA's customers are increasingly focused on cost-saving initiatives, particularly for product purchases relating to multi-year projects, which are often conditioned on gradual price decreases over time. Significant cost increases in association with the inflation, increasing transportation costs due to higher energy costs, and global silicon shortage, including component price increases, broker premiums and freight premiums, are causing ADVA to have to contemplate raising prices to its customers. Price increases could result in a loss or a failure to win new multi-year projects and consequently negatively affect ADVA's revenue and profit.

1.4.6 ADVA's business and operations would be adversely impacted in the event of a failure of ADVA's information technology infrastructure and/or cybersecurity attacks.

The integrity, confidentiality and availability of ADVA's information systems and data are key for the functioning of ADVA's business processes and consequently for ADVA's success as a business. Cybersecurity attacks on businesses and organizations are increasing worldwide in both, quantity and quality, and cybersecurity attackers are also increasingly targeting midsize companies such as ADVA. Cyber-crimes are committed by a wide range of perpetrators ranging from single hackers to professional organizations. Prevention and mitigation of cybersecurity threats is an ongoing challenge requiring resource expenditure by ADVA, including the continuous monitoring of the information security risk landscape, making staff aware of cybersecurity threats through adequate training, fast patch management, restrictive access right management, a centralized information technology function, regular review of the information technology disaster recovery plan and incident management as well as network, system and application monitoring. There is no guarantee that such information security measures will prevent cybersecurity attacks on ADVA and any system failure, accident or security breach could result in disruptions to ADVA's operations. To the extent that any disruption, cyber-attack or other security breach results in a loss or damage to ADVA's data or inappropriate disclosure of confidential information, ADVA's business could be harmed. In addition, ADVA may be required to incur significant costs to protect against damage caused by these disruptions or security breaches in the future.

1.4.7 ADVA is exposed to risks in connection with changes in currency exchange rates and ADVA's hedging efforts may not be successful.

The ADVA Group operates worldwide and its substantial cash flows are denominated in EUR, USD and GBP. In addition, ADVA runs development and operating sites in non-EUR countries which lead to significant cash outflows in local (non-EUR) currencies. Currency exchange fluctuations could cause losses if assets denominated in currencies with a falling exchange rate lose value and/or liabilities denominated in currencies with a rising exchange rate appreciate. Furthermore, as many economies are currently confronted with high inflation rates, several major central banks (e.g. the U.S. central bank and the Bank of England) have intervened in money markets by increasing prime rates, and the European Central Bank is likely to rate interest rates back to zero by end of 2022 if inflation does not ease within the next months. These interventions are likely to result in a high volatility of foreign exchange rates.

While ADVA enters into hedging transactions to minimize the effects of certain changes in exchange rates, ADVA cannot assure that such measures will be successful or that its hedging strategy will be effective. If these measures are unsuccessful or ADVA's hedging strategy is ineffective, this could reduce the sales or disrupt the operations of the ADVA Group, with possible material adverse effects on ADVA's business, financial condition and results of operations.

1.4.8 Compliance violations by intermediaries may be attributed to ADVA.

ADVA markets its products and solutions through a variety of distribution partners to achieve economies of scale as well as pursuant to local legal requirements and in order to benefit from existing contractual and personal relationships and post-sale support organizations and capabilities. ADVA's ability to control its partners' activities is limited and compliance violations by intermediaries may, under specific circumstances, be attributed to ADVA, resulting in lawsuits, delays in deliveries to customers and reputational harm.

1.4.9 If ADVA is unable to optimize product designs to be scalable, its products may not be able to be priced competitively, which would negatively impact ADVA's ability to attract new customers.

ADVA achieves cost advantages through the optimization of product design to be scalable. If ADVA's product designs are not scalable, it would result in the loss of competitive product cost, which would drastically reduce ADVA's success in attracting new customers and have a negative effect on ADVA's gross and operating margins.

1.4.10 If ADVA is unable to develop new products and solutions at the projected time, it may lose competitiveness, which would negatively impact its ability to attract new business opportunities.

High competition and rapid technological change are the decisive characteristics of the market for innovative connectivity solutions for cloud and mobile services. Continuous success not only requires the identification of innovative solutions for future network and customer requirements by maintaining cost leadership, but to also release such innovations at the projected time as delays may undermine their competitiveness. Not meeting time targets for product developments may result in missing new business opportunities.

1.4.11 ADVA might fail to attract additional skilled employees or retain key personnel.

ADVA's future success depends significantly upon its ability to attract additional skilled employees and retain its current key personnel. There is currently a shortage of skilled workers within the technology industry and the competition for talent has intensified globally. As a result, ADVA may not be able to attract and hire the necessary skilled employees it needs, and it may not be able to retain existing employees that have the knowledge, skills and relationships required to develop, sell and maintain ADVA's products and solutions. ADVA's future also depends on the continued contributions of ADVA's management team and other key management and technical personnel, each of whom would be difficult to replace. The loss of any of its executive officers or key personnel or the inability to continue to attract qualified personnel could harm its business operations.

1.4.12 If the products ADVA's suppliers and manufacturers produce contain defects, ADVA could incur significant correction costs, demand for its services may decline and ADVA may be exposed to product liability and product warranty claims.

The quality of ADVA's products depends significantly on its suppliers of product components and contract manufacturers. A production error or design weakness of a singular part could cause an entire system product to malfunction, which could lead to delays in installation, the return of products or cancellation of orders, and expose ADVA to penalties and lawsuits, contract termination and product liability and warranty claims.

1.5 Risks Relating to the Regulatory Environment and Legal Risks

1.5.1 If the Combined Group fails to maintain proper and effective internal controls, its ability to produce accurate financial statements on a timely basis could be impaired.

The Combined Group will be subject to the reporting requirements of the U.S. Securities and Exchange Act of 1934, as amended (the "Exchange Act"), the Sarbanes-Oxley Act of 2002, the rules and regulations of the Nasdaq Global Select Stock Market, New York, United States ("Nasdaq"), the European Regulation (EU) 2014/596 on market abuse (the "Market Abuse Regulation"), the German Securities Trading Act (Wertpapierhandelsgesetz, "WpHG") and the exchange rules (Börsenordnung) of the Frankfurt Stock Exchange. The Sarbanes-Oxley Act requires, among other things, that the Combined Group maintain effective disclosure controls and procedures and internal control over financial reporting. The Combined Group must perform system and process evaluation and testing of its internal control over financial reporting to allow management to report on the effectiveness of its internal controls over financial reporting in its annual report on Form 10-K filing for that year, as required by Section 404 of the Sarbanes-Oxley Act. The integration of the Company's, ADTRAN's and ADVA's accounting and finance functions may cause the Combined Group to incur internal costs and may divert the attention of management. The Combined Group may experience difficulty in meeting these reporting requirements in a timely manner.

The Combined Group may discover weaknesses in its system of internal financial and accounting controls and procedures that could result in a material misstatement of its financial statements. The Combined Group's internal control over financial reporting might not prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

If the Combined Group is not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act, or if it is unable to maintain proper and effective internal controls, the Combined Group may not be able to produce timely and accurate financial statements. If that were to happen, the market price of the Shares could decline and it could be subject to sanctions or investigations by Nasdaq, the U.S. Securities and Exchange Commission ("SEC"), the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*, "BaFin"), the Frankfurt Stock Exchange, or other regulatory authorities.

1.5.2 As an operator of a security sensitive business, ADVA is subject to specific national security regulation that may directly affect the business of ADVA following the settlement of the Offer as well as foreign investment in ADVA.

As ADVA provides security sensitive products and services to a large number of governmental customers as well as customers that are considered to operate critical infrastructure in Germany, ADVA is considered an operator of a security sensitive business in Germany.

ADVA's activity in Germany makes it subject to specific national security regulation that may also directly affect foreign investment in ADVA. In particular, under Section 55 para. 1 sentence 2 no. 1, para 4 sentence 1, and Section 60 para. 1, para. 3 of the German Foreign Trade Regulation (*Außenwirtschaftsverordnung*, "Foreign Trade Regulation"), the direct or indirect acquisition of at least 10% of the voting rights by a non-European investor in ADVA must be notified to the BMWK. It is thus possible that, following the required notification, a potential acquisition of a company such as ADVA will be examined in detail. During the period of review, the transaction is considered invalid and the seller is prohibited from enabling the purchaser to exercise certain shareholder rights and from sharing certain company-related information until the BMWK clears the transaction. Violations of this prohibition are considered a criminal offence punishable by up to five years of imprisonment. Consequently, there exists a general risk that such an investment may eventually be prohibited or – through specific conditions imposed by the BMWK or agreed with the BMWK by way of a public-law contract – restricted by the BMWK. In addition, the BMWK has published a guidance on its administrative practice in which it states that the provisions of the Foreign Trade Regulation are also applicable to measures that substitute or anticipate an acquisition (including, among others, transfers for security purposes or pledges). An amendment to the Foreign Trade Regulation published in 2021 broadened the scope of foreign investment control further, in particular by introducing a legal basis for assessing "atypical" means of acquiring control irrespective of the share of equity or voting rights acquired, and by expressly stating that any additional acquisition of shares by a foreign investor above the 10% threshold also has to be notified if the target company operates in one of the sectors that are defined by the Foreign Trade Regulation.

As a result of the above mentioned jurisdiction of the BMWK, the Business Combination has been notified to the BMWK in accordance with the applicable provisions of the German Foreign Trade Regulation and Acorn HoldCo, ADTRAN and ADVA entered into the Consent Agreement with the government of the Federal Republic of Germany. The commitments under the Consent Agreement might restrict ADTRAN and ADVA in pursuing certain business strategies envisaged as part of the Business Combination.

1.5.3 ADTRAN and ADVA are, and Acorn HoldCo is expected to be, subject to a variety of international government regulations. Changes in these regulations could have an adverse impact on the business, financial position and results of operations.

ADTRAN and ADVA are, and Acorn HoldCo is expected to be, subject to regulations in the following areas, among others:

- environmental protection including climate change;
- domestic and international tax laws and currency controls;
- safety;
- securities laws applicable in the United States, the European Union, Germany, and other jurisdictions;
- trade and import/export restrictions, as well as economic sanctions laws;
- · antitrust matters; and
- global anti-bribery laws, including the U.S. Foreign Corrupt Practices Act.

Changes in these or other regulatory areas may impact ADTRAN's and ADVA's profitability, may require ADTRAN and ADVA to spend additional resources to comply with the regulations, or may restrict their ability to compete effectively in the marketplace. Noncompliance with such laws and regulations could result in penalties or sanctions that could have an adverse impact on ADTRAN's and ADVA's financial results and/or reputation.

ADTRAN and ADVA are subject to various environmental and occupational health and safety laws and regulations, including those governing the discharge of pollutants into the air or water, the storage, handling and disposal of chemicals, hazardous substances and wastes, the remediation of contamination, the regulation of greenhouse gas emissions, and other potential climate change initiatives. Violations of these laws could result in substantial penalties, third-party claims for property damage or personal injury, or sanctions.

1.5.4 ADTRAN and ADVA are subject to anti-corruption laws in the jurisdictions in which they operate, as well as trade compliance and economic sanctions laws and regulations. A failure to comply with these laws and regulations may subject the companies to civil and criminal penalties, harm their reputation and adversely impact their respective businesses or results of operations.

Doing business globally requires ADTRAN and ADVA to comply with the laws and regulations of numerous jurisdictions, placing restrictions on operations and business practices. Certain laws and regulations, such as those related to anti-corruption, trade and compliance and economic sanctions, require ADTRAN and ADVA to implement policies and procedures designed to ensure that ADTRAN and ADVA, their employees and other intermediaries comply with the applicable restrictions. These restrictions include prohibitions on the sale or supply of certain products, services and any other economic resources to embargoed or sanctioned countries, governments, persons and entities. Furthermore, as a result of the Business Combination and the transaction structure, ADTRAN and ADVA may become subject to additional laws and regulations that, among other things, may place further restrictions on the companies' operations and business practices, and may lead to Acorn HoldCo losing existing business or limiting its ability to generate new business, which could have an adverse effect on their respective operations in these or other countries, and may result in certain categories of investors divesting Acorn HoldCo securities, which could in turn have an adverse effect on the prices of Acorn HoldCo's securities. Violations of anti-corruption laws, export control laws and regulations, and economic sanctions laws and regulations are punishable by civil penalties, including fines and debarment from government contracts, as well as criminal fines and imprisonment. If ADTRAN or ADVA fails to comply with laws governing the conduct of international operations, ADTRAN or ADVA may be subject to criminal and civil penalties and other remedial measures, which could adversely affect its reputation, business and results of operations.

1.5.5 The outcome of litigation or governmental investigations may adversely impact ADTRAN's, ADVA's or the Combined Group's business or results of operations.

With their international operations, ADVA and ADTRAN are and the Combined Group will be exposed to numerous legal risks. These may include, in particular, risks relating to claims or governmental investigation relating to product liability, competition and antitrust law, export control, customs regulations, labor law, data protection, supply contracts, engineering projects, patent law, environmental protection, among others. ADTRAN and certain of its subsidiaries are party to lawsuits and governmental investigations that have arose out of or from the ordinary course of business. For ADVA and certain of its subsidiaries, legal disputes may arise in ADVA's ordinary course of business, for instance, with regard to product supplied and services rendered, product liability, product defects, quality issues, or the infringement of property rights and ordinary course termination related employee disputes. Adverse outcomes in some or all of the pending claims or future legal disputes may result in significant monetary damages or injunctive relief that could adversely affect ADTRAN's and ADVA's ability to conduct business. Legal or regulatory judgments or agreed settlements might give rise to expenses which are not covered, or are not fully covered, by insurance benefits and may also lead to negative publicity and reputational damage. An unfavorable outcome or determination could cause a material adverse impact on ADTRAN's, ADVA's or the Combined Group's results of operations.

1.5.6 ADTRAN or its contract manufacturers might fail to comply with applicable environmental regulations in relation to hazardous materials.

The manufacture, assembly and testing of ADTRAN's products may require the use of hazardous materials that are subject to environmental, health and safety regulations. ADTRAN's failure or the failure of its contract manufacturers to comply with any of these applicable requirements could result in regulatory penalties, legal claims or disruption of production. In addition, its failure or the failure of its contract manufacturers to properly manage the use, transportation, emission, discharge, storage, recycling or disposal of hazardous materials could subject ADTRAN to increased costs or liabilities. Existing and future environmental regulations may restrict its use of certain materials to manufacture, assemble and test products. Any of these consequences could adversely impact its results of operations by increasing its expenses and/or requiring ADTRAN to alter its manufacturing processes.

1.6 Risks Relating to Tax Matters

1.6.1 The Merger may not qualify as a "reorganization" under Section 368 of the Code or the Merger, taken together with the Offer, may not qualify as an "exchange" under Section 351(a) of the Code.

The Merger is intended to qualify as a "reorganization" under Section 368 of the Code of Laws of the United States of America (the "Code"), and the Merger, taken together with the Offer, is intended to qualify as an "exchange" under Section 351(a) of the Code. If the Merger and Business Combination so qualify, U.S. holders of ADTRAN shares generally would not recognize any gain or loss for U.S. federal income tax purposes on the exchange of ADTRAN shares for the Shares in the Merger. However, the requirements for such qualifications are complex and subject to legal and factual uncertainties.

It is not a condition to the closing of the Business Combination in the Business Combination Agreement that the Merger qualify as a "reorganization" under Section 368 of the Code or that the Merger, taken together with the Offer, qualify as an "exchange" described in Section 351(a) of the Code, and none of Acorn HoldCo, ADVA or ADTRAN intends to request a ruling from the United States Internal Revenue Service (the "IRS") regarding the U.S. federal income tax consequences of the Merger or the Offer. Consequently, there is no guarantee that the IRS will agree that the Merger or the Offer so qualify. If the IRS successfully challenges the treatment of the Merger or the Offer, the tax consequences to U.S. holders may differ from those described above.

1.6.2 Changes in tax laws and policy could adversely impact ADTRAN's, ADVA's and the Combined Group's financial position or results of operations.

ADTRAN and ADVA are subject to the tax rules and regulations in the United States, Germany and other countries in which ADTRAN and ADVA and their affiliates operate. Such tax rules and regulations are subject to change on a prospective or retroactive basis.

In the current environment, the U.S. Congress, the Organization for Economic Co-operation and Development and other government agencies in jurisdictions where ADTRAN, ADVA and their affiliates do business have had an extended focus on issues related to the taxation of multinational corporations. One area of focus has been "base erosion and profit shifting", including situations where payments are made between affiliates from a jurisdiction with high tax rates to a jurisdiction with lower tax rates.

In addition, the U.S. government may enact significant changes to the taxation of business entities including, among others, an increase in the corporate income tax rate, an increase in the tax rate applicable to the global intangible low-taxed income and elimination of certain exemptions with respect thereto, and the imposition of minimum taxes or surtaxes on certain types of income. The likelihood of these changes (or any other changes to U.S. tax law) being enacted or implemented is unclear. Any such changes, among other possible changes in applicable tax rules and regulations, could significantly affect the treatment of the Business Combination and following the Business Combination, the business of the Combined Group.

1.7 Risks Relating to the Shares

1.7.1 There has been no prior public market for the Shares and the market price of the Shares may be volatile.

Acorn HoldCo has applied to list the Shares on Nasdaq (trading in U.S. dollars). The application for admission of the Shares to listing and trading on the regulated market segment (*regulierter Markt*) of the Frankfurt Stock Exchange and the sub-segment thereof with additional post-admission obligations (Prime Standard) (trading in euros) is expected to be filed on or around July 7, 2022. However, so far, the Shares have no trading history on a public market. It cannot entirely be excluded that an active public market for the Shares may not develop or be sustained after the settlement of the Offer. Acorn HoldCo cannot predict the extent to which a trading market will develop or how liquid that market might become.

The market price of the Shares may be volatile. Broad general economic, political, market and industry factors may adversely affect the market price of the Shares, regardless of Acorn HoldCo's actual operating performance. Factors that could cause fluctuations in the price of the Shares may include, among other things:

- actual or anticipated variations in operating results and the results of competitors;
- changes in financial estimates by the Company or by any securities analysts that might cover the Shares;

- conditions or trends in the industry, including regulatory changes;
- announcements by the Company or its competitors of significant acquisitions, strategic partnerships or divestitures;
- announcements of investigations or regulatory scrutiny of the Combined Group's operations or lawsuits filed against it;
- additions or departures of key personnel; and
- · issues or sales of Shares, including sales of shares by its directors and officers or its strategic investors.

Stockholders of Acorn HoldCo may lose parts of or their entire investment, if the market price of the Shares falls due to one or several of the described factors

1.7.2 The market price and trading volume of the Shares could fluctuate considerably, also between Nasdaq and the Frankfurt Stock Exchange, which may result in substantial losses for investors. Differences in market price, trading volume, settlement and clearing systems, trading currencies and transaction costs between Nasdaq and the Frankfurt Stock Exchange may hinder the transferability of the Shares between Nasdaq and the Frankfurt Stock Exchange.

As a result of the dual-listing of the Shares on Nasdaq and the Frankfurt Stock Exchange, following the day of first trading on the Frankfurt Stock Exchange, the trading volume and price of the Shares may at any time be different on either of the two exchanges. In addition, Shares are quoted and traded in USD on Nasdaq and are quoted and traded in EUR on the Frankfurt Stock Exchange. Therefore, the price of the Shares on those exchanges may also differ due to exchange rate fluctuations. The Shares traded on Nasdaq are settled and cleared through the clearing and settlement system of the Depository Trust & Clearing Corporation in USD in accordance with local rules. The Shares traded on the Frankfurt Stock Exchange are settled and cleared in EUR within the clearing and settlement system of Clearstream Banking AG.

Differences that occur in settlement and clearing systems, trading currencies, transaction costs and other factors may hinder the transferability of the Shares between the Nasdaq and Frankfurt Stock Exchange markets. Any or all of these factors could negatively affect the liquidity and the market value of the Shares.

1.7.3 Any dividend paid in respect of the Shares is subject to a number of factors, including the distributions of earnings to Acorn HoldCo by its subsidiaries and the financial condition and results of operations of the Combined Group.

The dividend policy for the Combined Group will be determined following the settlement of the Offer. Any dividend paid or changes to dividend policy are within the discretion of the future board of directors of the Company after the Business Combination and will depend upon many factors, including distributions of earnings to Acorn HoldCo by its subsidiaries, the financial condition and results of operations of the Combined Group, legal requirements, restrictions in any debt agreements that limit its ability to pay dividends to stockholders and other factors the board of directors deems relevant. As a holding company, Acorn HoldCo will conduct substantially all of its operations through its subsidiaries, such entities will generate substantially all of its operating income and cash flow. Acorn HoldCo's ability to pay dividends in the future is affected by a number of factors, principally on its ability to receive sufficient dividends from its subsidiaries. The ability of such entities to make dividend payments to Acorn HoldCo depends largely on their financial condition and ability to generate profits. In addition, because Acorn HoldCo's subsidiaries are separate and distinct legal entities, they will have no obligation to pay any dividends or to lend or advance to Acorn HoldCo funds and may be restricted from doing so by contract, including other financing arrangements, charter provisions, other stockholders or the applicable laws and regulations of the various countries in which they operate. Additionally, claims of the creditors of Acorn HoldCo's subsidiaries have priority over any claims that Acorn HoldCo may have with respect to the assets of its subsidiaries. Further, the ability of Acorn HoldCo. Any delay in implementing the post-completion reorganization could adversely impact the payment of dividends from ADVA to Acorn HoldCo.

1.7.4 The rights and responsibilities of the shareholders of Acorn HoldCo will be governed by Delaware law and the Acorn HoldCo's amended and restated certificate of incorporation and bylaws, which will differ in material respects from the rights and responsibilities of shareholders under German law.

Acorn HoldCo's corporate affairs will be governed by the Acorn HoldCo's amended and restated certificate of incorporation and bylaws and the laws governing companies incorporated in Delaware. The rights of Acorn HoldCo shareholders and the responsibilities of members of the Acorn HoldCo board of directors under the laws of Delaware will differ from the rights of shareholders and the responsibilities of a company's supervisory board and executive board of a company under German law.

Material differences in the rights of Acorn HoldCo shareholders under the laws governing companies incorporated in Delaware on the one hand, and the rights of shareholders under German law, on the other hand, will include, among others, the following:

- Shareholders of Acorn HoldCo will be represented by a single board of directors, not by a supervisory board (*Aufsichtsrat*) who will elect the members of the management board (*Vorstand*). The members of the Acorn HoldCo board of directors will be elected annually by majority vote of stockholders except that directors will be elected by a plurality of votes cast if a stockholder has nominated a person for election to the board, subject to certain conditions;
- Shareholders of Acorn HoldCo may propose and have business conducted at an annual meeting by providing a proposal solicitation notice, a proxy statement and form of proxy to stockholders holding at least the percentage of shares required to approve the proposed business. In contrast, under German law, shareholders whose aggregate holdings are equal to or exceed either five percent of the issued share capital of a company or the nominal amount of EUR 500,000 may request that that an item be placed on the agenda of the annual shareholders meeting. The request must be in writing, addressed to the management board, and must state the purpose of and the reasons for inclusion of the agenda item;
- Approval of extraordinary actions, including any merger, consolidation or sale of substantially all of the assets of a corporation, will require a majority of the voting power of Acorn HoldCo in order to be effective. Under German law, certain resolutions of fundamental importance, including certain reorganization measures, entering into a DPLTA, and certain significant asset disposals, require a majority of at least 75% of the votes cast and/or the share capital represented in the meeting of shareholders;
- Acorn HoldCo's stockholders may amend Acorn HoldCo's bylaws by the affirmative vote of a majority of the outstanding shares entitled to vote
 thereon, whereas under German law, shareholders may amend a stock corporation's articles of association by a resolution passed by 75% of the
 share capital present at the relevant shareholders' meeting. Under German law, the supervisory board is authorized to make amendments to the
 articles of association restricted only to wording; and
- Acorn HoldCo stockholders have no pre-emptive rights to purchase or have offered to them for purchase any shares or other securities of Acorn HoldCo. Under German law, a shareholder, by contrast, has certain pre-emptive rights pursuant to the German Stock Corporation Act. A shareholder has a preferential right to subscribe for issues of new shares in proportion to the number of shares such shareholder holds a stock corporation's existing share capital. The German Stock Corporation Act allows corporations to exclude this right in limited circumstances and only if provided in the same shareholder resolution that authorizes the accompanying offering. A majority of at least 75% of the share capital represented at the meeting must authorize the exclusion of this right.
- 1.7.5 The provision of Acorn HoldCo's amended and restated certificate of incorporation requiring exclusive forum in certain courts in the State of Delaware or the federal district courts of the United States for certain types of lawsuits may have the effect of discouraging lawsuits against Acorn HoldCo's directors and officers.

Upon settlement of the Offer, Acorn HoldCo's amended and restated certificate of incorporation will provide that, unless it consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will, to the fullest extent permitted by law, be the sole and exclusive forum for: (i) any derivative action or proceeding brought on Acorn HoldCo's behalf; (ii) any action asserting a breach of fiduciary duty owed by any of Acorn HoldCo's directors, officers, other employees or stockholders to it or its stockholders, creditors or other constituents, or a claim of aiding and abetting any such breach of fiduciary duties; (iii) any action asserting a

claim against Acorn HoldCo or its directors or officers arising pursuant to any provision of the Delaware General Corporation Law (the "**DGCL**") or Acorn HoldCo's certificate of incorporation or the bylaws (as either may be amended and/or restated from time to time) or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware; (iv) any action to interpret, apply, enforce or determine the validity of Acorn HoldCo's certificate of incorporation or bylaws (as either may be amended and/or restated from time to time); (v) any action asserting a claim against Acorn HoldCo or its directors or officers that is governed by the internal affairs doctrine; or (vi) any action asserting an "internal corporate claim" as that term is defined in Section 115 of the DGCL; provided, however, that, in the event that the Court of Chancery of the State of Delaware lacks subject matter jurisdiction over any such action or proceeding, any other state court of the State of Delaware, or if no state court of the State of Delaware has subject matter jurisdiction, the federal district court for the District of Delaware, will be the forum.

To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, Acorn HoldCo's certificate of incorporation will provide that, unless it consents in writing to the selection of an alternative forum, the federal district courts of the U.S. will, to the fullest extent permitted by law, be the sole and exclusive forum for the resolution of any complaint asserting a cause of action arising under the federal securities laws.

Any person or entity that acquires Shares shall be deemed to have notice of and to have consented to the forum provisions in the certificate of incorporation. These exclusive forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with Acorn HoldCo or any of its directors, officers or stockholders, which may discourage lawsuits with respect to such claims. Further, in the event a court finds either exclusive forum provision contained in Acorn HoldCo's certificate of incorporation to be unenforceable or inapplicable in an action, it may incur additional costs associated with resolving such action in other jurisdictions, which could harm its business, financial condition and results of operations.

2. GENERAL INFORMATION

2.1 Responsibility for the Content of this Prospectus

Acorn HoldCo, Inc. (also referred to as the "Issuer", the "Company" or "Acorn HoldCo" and, together with its fully consolidated subsidiary, Acorn MergeCo, Inc. ("Merger Sub"), the "Acorn HoldCo Group", the "Group", "we", "us", "our" or "ourselves" and Acorn HoldCo together with its subsidiaries following the settlement of the Offer, the "Combined Group"), with its registered offices at Corporation Trust Center, 1209 N. Orange Street, Wilmington, New Castle County, Delaware, 19801, United States of America ("United States"), legal entity identifier ("LEI") 549300VV36J86CRRWF77 and registered with the division of corporations of the state of Delaware, United States, under register number 6141966, together with ODDO BHF Aktiengesellschaft, Bockenheimer Landstraße 10, 60323 Frankfurt am Main, Germany, LEI: 529900XLAZ15LYK8XK27 (telephone: +49 (0)69 718 0) (the "Listing Agent"), assume responsibility for the contents of this prospectus (the "Prospectus") pursuant to Section 8 of the German Securities Prospectus Act (*Wertpapierprospektgesetz*) and Article 11 of the Regulation (EU) 2017/1129 of the European Parliament and of the Council of June 14, 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market and repealing Directive 2003/71/EC, as amended (the "Prospectus Regulation") and hereby declare that the information contained in this Prospectus is, to the best of their knowledge, in accordance with the facts, and that this Prospectus makes no omission likely to affect its import.

2.2 General Disclaimers

If any claims are asserted before a court of law based on the information contained in this Prospectus, the investor appearing as plaintiff may have to bear the costs of translating this Prospectus prior to the commencement of the court proceedings pursuant to the national legislation of the member states of the European Economic Area (the "EEA").

The information contained in this Prospectus will not be supplemented subsequent to the date hereof, except for any significant new factor, material mistake or material inaccuracy relating to the information included in this Prospectus which may affect the assessment of the Shares (as defined below under "3.1 Purpose of this Prospectus") and which arises or is noted between the time when this Prospectus is approved and the time when trading of the Shares on the regulated market (regulierter Markt) of the Frankfurt Stock Exchange (Frankfurter Wertpapierbörse) and, simultaneously, on the sub-segment of the regulated market with additional post-admission obligations (Prime Standard) of the Frankfurt Stock Exchange (Frankfurter Wertpapierbörse) commences, which will be disclosed in a supplement to this Prospectus pursuant to Article 23 of the Prospectus Regulation without undue delay.

The obligation to supplement this Prospectus pursuant to Article 23 of the Prospectus Regulation will no longer apply following the expiration of the validity of this Prospectus at the end of the first day of trading in the Shares on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*), currently expected to occur on July 15, 2022.

2.3 Regulatory Statements

The Prospectus constitutes a prospectus for the purposes of Article 3 of the Prospectus Regulation and has been approved by the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*, "**BaFin**"), Marie-Curie-Straße 24-28, 60439 Frankfurt am Main, Germany (telephone: +49 (0)228 4108 0; website: https://www.bafin.de), as competent authority under the Prospectus Regulation.

BaFin has only approved this Prospectus as meeting the standards of completeness, comprehensibility and consistency imposed by the Prospectus Regulation and such approval should not be considered as an endorsement of the Issuer or of the quality of the Shares. Investors should make their own assessment as to the suitability of investing in the Issuer's securities.

2.4 Forward Looking Statements

Certain statements and assumptions in this Prospectus contain or are based on "forward-looking" information. Forward-looking statements are based on ADTRAN's, ADVA's (as defined below) or Acorn HoldCo's (as defined below) beliefs and assumptions on the basis of factors currently known to them. These forward-looking statements include terms and phrases such as: "anticipate", "expect", "continue", "should", "could", "may", "plan", "project", "predict", "will", "potential", "forecast", and similar expressions. These forward-looking

statements include statements regarding benefits of the proposed Business Combination (as defined under "2.11 Potential interests"), integration plans and expected synergies and cost reductions, anticipated future growth, and financial and operating performance and results. Forward-looking statements involve significant uncertainties that may cause actual results to be materially different from the results predicted or expected. No assurance can be given that these forward-looking statements will prove accurate and correct, or that projected or anticipated future results will be achieved. All forward-looking statements included in this Prospectus are based upon information available to ADTRAN, ADVA and Acorn HoldCo on the date hereof, and each of ADTRAN, ADVA and Acorn HoldCo disclaims and does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

Accordingly, investors are strongly advised to read this Prospectus, including the sections entitled:"1 Risk Factors", "10 Business of Acorn HoldCo", "11 Business of ADTRAN", "8 Management's Discussion and Analysis of Financial Condition and Results of Operations of ADTRAN", "12 Business of ADVA" and "9 Management's Discussion and Analysis of Financial Condition and Results of Operations of ADVA". These sections include more detailed descriptions of factors that might have an impact on the business of the Combined Group, ADTRAN and ADVA and the market in which they operate.

2.5 Sources of Industry and Market Data

The information contained in this Prospectus on the market environment, market developments, growth rates, market trends and competition in the market in which Acorn HoldCo, ADTRAN, Inc. ("ADTRAN" and, together with its consolidated subsidiaries, the "ADTRAN Group") and ADVA Optical Networking SE ("ADVA" and, together with its consolidated subsidiaries, the "ADVA Group") operate is based on Acorn HoldCo's, ADTRAN's and ADVA's own proprietary information, insights, opinions or estimates, and not on any third party independent source. These statements contain words such as "believes", "expects" and "is of the opinion", and as such do not purport to cite, refer to or summarize any third-party or independent source and should not be so read.

2.6 Presentation of Financial Information

- This Prospectus includes Acorn HoldCo's audited financial statements as of December 31, 2021 and for the period from August 10, 2021 (inception) through December 31, 2021, prepared in accordance with the United States Generally Accepted Accounting Principles ("U.S. GAAP").
- This Prospectus further includes ADTRAN's audited consolidated financial statements as of and for the financial years ended December 31, 2021, 2020 and 2019, prepared in accordance with U.S. GAAP.
- This Prospectus also includes ADTRAN's unaudited interim consolidated financial statements as of and for the three months ended March 31, 2022, prepared in accordance with U.S. GAAP.
- This Prospectus also includes the audited consolidated financial statements of ADVA as of and for the financial years ended December 31, 2021, 2020 and 2019, prepared in accordance with the International Financial Reporting Standards, as adopted by the European Union ("IFRS").
- This Prospectus also includes pro forma combined condensed financial information of the Combined Group prepared in accordance with IDW Accounting Practice Statement: Preparation of Pro Forma Financial Information (IDW AcPS AAB 1.004) (IDW Rechnungslegungshinweis: Erstellung von Pro-Forma Finanzinformationen (IDW RH HFA 1.004)) as promulgated by the Institute of Public Auditors in Germany (IDW, Institut der Wirtschaftsprüfer in Deutschland e.V.) using the following:
 - Certain income statement information of ADTRAN for the financial year ended December 31, 2021 and balance sheet information for ADTRAN as of December 31, 2021;
 - certain balance sheet information of Acorn HoldCo as of December 31, 2021; and
 - certain income statement information of ADVA for the financial year ended December 31, 2021 and balance sheet information for ADVA as of December 31, 2021.

In the preparation of these pro forma financial statements, a series of assumptions and estimates were made, which affect the recognition and amount of assets and liabilities, income and expenses and contingent liabilities, including in particular in relation to income taxes. Therefore, actual results may differ from assumptions or estimates and net assets, financial position and results of operations or cash flows cannot be extrapolated for future periods or a future reporting date.

The fiscal year of Acorn HoldCo, ADTRAN and ADVA is the calendar year. ADVA's financial information is presented in EUR, except that, in some instances, information in USD is provided in information included elsewhere in this Prospectus. ADTRAN's and Acorn HoldCo's financial information is presented in USD.

Certain totals in the tables that present financial information included in this Prospectus may not calculate due to rounding. Negative amounts are presented in parentheses.

For additional information on the presentation of financial information in the Prospectus, see section "7 *Pro Forma Condensed Combined Financial Information*", the consolidated financial statements of Acorn HoldCo beginning on page F-2.1, the consolidated financial statements of ADTRAN beginning on page F-3.1 and the consolidated financial statements of ADVA beginning on page F-4.1.

2.7 Alternative Performance Measures

This Prospectus contains financial information and operating data that is not prepared in accordance with IFRS, U.S. GAAP, or any other internationally accepted accounting principles, including "working capital", "current ratio", "quick ratio" used by ADTRAN, and "net cash", "net working capital", "pro forma EBIT", "equity ratio" and "non-current assets ratio" used by ADVA (collectively, the "Alternative Performance Measures").

These Alternative Performance Measures are not measures of financial performance under IFRS or U.S. GAAP, but measures used by management to monitor the underlying performance of ADTRAN's and ADVA's business and operations and, accordingly, they have neither been audited nor reviewed. Further, they may not be indicative of ADTRAN's or ADVA's historical operating results, nor are such measures meant to be predictive of ADTRAN's, ADVA's or the Combined Group's future results. These Alternative Performance Measures are presented in this Prospectus because management considers them an important supplemental measure of ADTRAN's and ADVA's performance and believes that they and similar measures are widely used in the industry in which ADTRAN and ADVA operate as a means of evaluating a company's operating performance and liquidity.

However, not all companies calculate Alternative Performance Measures in the same manner or on a consistent basis. As a result, these Alternative Performance Measures may not be comparable to measures and ratios used by other companies under the same or similar names. Accordingly, undue reliance should not be placed on the Alternative Performance Measures contained in this Prospectus and they should not be considered as a substitute for operating profit, cash flow or other financial measures computed in accordance with IFRS or U.S. GAAP.

The presentation of the Alternative Performance Measures in this Prospectus should not be construed as an implication that ADTRAN, ADVA or the Combined Group's future results will be unaffected by exceptional or non-recurring items.

2.7.1 *ADTRAN*

ADTRAN believes that the following Alternative Performance Measures provide useful and relevant information in monitoring, evaluating and managing its business and management believes these measures provide an enhanced understanding of ADTRAN's underlying results and related trends. The following Alternative Performance Measures may not be comparable to other similarly titled measures of other companies and are not intended to be substitutes for measures of financial performance as prepared in accordance with U.S. GAAP.

ADTRAN's Alternative Performance Measures are defined as follows:

Working capital: is defined as current assets less current liabilities. ADTRAN's working capital as of March 31, 2022 and 2021, and as of December 31, 2021, 2020 and 2019 is calculated as follows:

	As of March 31,	As of Dece	ember 31,
(in millions of USD)	2022 2021*	2021 202	20 2019
Current assets	402.1 324.3	376.3 317	7.4 320.3
- Current liabilities	182.8 102.2	155.4 94	4.2 112.7
Working capital	219.4 222.2	220.9 223	3.2 207.6

^{*} Inconsistencies in the values are based on rounding differences.

Current ratio: is defined as current assets divided by current liabilities. ADTRAN's current ratio as of March 31, 2022 and 2021, and as of December 31, 2021, 2020 and 2019 is calculated as follows:

	As of Ma	arch 31,	As of	Decembe	r 31,
(in millions of USD, unless otherwise indicated)	2022	2021	2021	2020	2019
Current assets	402.1	324.3	376.3	317.4	320.3
/ Current liabilities	182.8	102.2	155.4	94.2	112.7
Current ratio (in %)	2.20	3.18	2.42	3.37	2.84

Quick ratio: is defined as cash and cash equivalents, short-term investments, and net accounts receivable, divided by current liabilities. ADTRAN's quick ratio as of March 31, 2022 and 2021, and as of December 31, 2021, 2020 and 2019 is calculated as follows:

	As of M	As of March 31,		1, As of December 31	
(in millions of USD, unless otherwise indicated)	2022	2021	2021	2020	2019
Cash and cash equivalents	54.0	63.8	56.6	60.2	73.8
+ Short-term investments	0.4	4.1	0.4	3.1	33.2
+Net accounts receivable	150.1	103.2	158.7	98.8	90.5
Total	204.5	171.1	215.7	162.1	197.5
/ Current liabilities	182.8	102.2	155.4	94.2	112.7
Quick ratio (in %)	1.12	1.67	1.39	1.72	1.75

2.7.2 *ADVA*

ADVA believes that the following Alternative Performance Measures provide useful and relevant information in monitoring, evaluating and managing its business and management believes these measures provide an enhanced understanding of ADVA's underlying results and related trends. The following Alternative Performance Measures may not be comparable to other similarly titled measures of other companies and are not intended to be substitutes for measures of non-financial performance or financial performance as prepared in accordance with IFRS as adopted by the European Union.

ADVA's Alternative Performance Measures are defined as follows:

Net cash: is calculated by subtracting financial debt comprising of current and non-current liabilities to banks and current and non-current lease liabilities from cash and cash equivalents. A negative calculation result is referred to as net debt. ADVA's net cash as of December 31, 2021, 2020 and 2019 is calculated as follows:

	As of	As of December 31,	
(in millions of EUR)	2021	2020	2019
Liabilities to banks			
current	(25.3)	(15.5)	(19.2)
non-current	(22.5)	(47.1)	(61.8)
Lease liabilities			
current	(6.0)	(5.8)	(6.1)
non-current	(19.0)	(22.0)	(28.3)
Cash and cash liabilities	109.0	64.9	54.3
Net cash / (debt)	36.2	(25.5)	(61.1)

Net working capital: is defined as trade accounts receivable plus inventories minus trade accounts payable. ADVA's net working capital as of December 31, 2021, 2020 and 2019 is calculated as follows:

	As of December 31,		
(in millions of EUR)	2021	2020*	2019
Trade accounts receivable	83.0	83.9	96.2
+ Inventories	129.2	90.1	105.4
- Trade accounts payable	83.2	44.2	73.4
Net working capital	129.0	129.9	128.2

^{*} Inconsistencies in the values are based on rounding differences.

Pro forma EBIT: is calculated prior to non-cash charges related to the stock compensation programs and amortization and impairment of goodwill and acquisition-related intangible assets. Additionally, non-recurring expenses related to M&A and restructuring measures are not included. The reconciliation of ADVA's consolidated operating profit to pro forma operating profit is as follows:

	As of	Decembe 1	er 31,
(in millions of EUR)	2021	2020	2019*
Operating income	45.3	27.5	12.0
+ Expenses related to share-based compensation	1.6	1.2	1.5
+ Amortization of intangible assets from business combinations	4.0	4.4	5.7
+ Expenses related to M&A transactions and restructuring expenses	3.7	0.7	5.7
Pro forma EBIT	54.6	33.8	24.8

^{*} Inconsistencies in the values are based on rounding differences.

Equity ratio: is defined as total stockholders' equity divided by total assets. ADVA's equity ratio as of December 31, 2021, 2020 and 2019 is calculated as follows:

	As of December 31,		
(in millions of EUR, unless otherwise indicated)	2021	2020	2019
Total stockholders' equity	339.9	263.2	255.8
/ Total assets	601.5	500.0	536.4
Equity ratio (in %)	56.5	52.6	47.7

Non-current assets ratio: is defined as total stockholders' equity divided by total non-current assets. ADVA's non-current assets ratio as of December 31, 2021, 2020 and 2019 is calculated as follows:

	As o	As of December 31,		
(in millions of EUR, unless otherwise indicated)	2021	2020	2019	
Total stockholders' equity	339.9	263.2	255.8	
/ Total non-current assets	265.9	252.4	267.1	
Non-current assets ratio (in %)	127.8	104.3	95.8	

2.8 Currency Presentation

All references in this Prospectus to "EUR", "euro" and "€" refer to the legal currency introduced at the start of the third stage of the European Economic and Monetary Union pursuant to the Treaty on the Functioning of the European Union, as amended, and all references to "U.S. dollars", "USD" and "\$" refer to the legal currency of the United States of America.

2.9 Where you can find more information

Acorn HoldCo has filed a Registration Statement according to Form S-4 under the Securities Act of 1933, as amended (the "Securities Act") (the "Registration Statement") with the U.S. Securities and Exchange Commission ("SEC") with respect to the registration of the Shares to be issued in the Merger (as defined below) and the Offer (as defined below). The Registration Statement is required to register the issuance of the Shares under the Securities Act. The SEC has declared the Registration Statement effective on December 2, 2021.

ADTRAN files annual, quarterly and special reports, proxy statements and other information with the SEC under the U.S. Securities and Exchange Act of 1934, as amended (the "Exchange Act"). The SEC maintains a website that contains reports, proxy and information statements and other information about issuers, such as ADTRAN, that file electronically with the SEC. The address of that website is https://www.sec.gov. ADTRAN additionally posts its filings on its website at https://investors.adtran.com. The information contained in, on or accessible through, ADTRAN's website does not constitute a part of, and is not incorporated by reference in, this Prospectus.

ADVA publishes its annual and interim reports and other information on its website at https://www.adva.com. Information contained in, on or otherwise accessible through this website does not constitute a part of, and is not incorporated by reference in, this Prospectus.

2.10 Documents available for inspection

For as long as the Prospectus is valid, the following documents, or copies thereof, may be inspected during regular business hours at Acorn HoldCo's office at 901 Explorer Boulevard, Huntsville, Alabama, 35806, United States:

- the Acorn HoldCo certificate of incorporation;
- the Acorn HoldCo bylaws;
- the audited consolidated financial statements of Acorn HoldCo as of December 31, 2021 and for the period from August 10, 2021 (inception) to December 31, 2021, prepared in accordance with U.S. GAAP;
- the audited annual consolidated financial statements of ADTRAN as of and for the years ended December 31, 2021, 2020 and 2019, as well as the unaudited condensed consolidated financial statements of ADTRAN for the three-month period ended March 31, 2022, each prepared in accordance with U.S. GAAP;
- the audited annual consolidated financial statements of ADVA as of and for the years ended December 31, 2021, 2020 and 2019, each prepared in accordance with IFRS; and
- the pro forma condensed combined financial information of Acorn HoldCo, ADTRAN and ADVA as of and for the financial year ended December 31, 2021 prepared in accordance with IDW Accounting Practice Statement: Preparation of Pro Forma Financial Information (IDW AcPS AAB 1.004) (IDW Rechnungslegungshinweis: Erstellung von Pro-Forma Finanzinformationen (IDW RH HFA 1.004)) as promulgated by the Institute of Public Auditors in Germany (IDW, Institut der Wirtschaftsprüfer in Deutschland e.V.).

The listed documents will also be available in electronic form for twelve months after publication of the Prospectus at https://www.adtran.com. Information contained on Acorn HoldCo's website does not constitute part of and is not incorporated by reference into this Prospectus.

2.11 Potential interests

On August 30, 2021, Acorn HoldCo and its subsidiary Merger Sub, as well as ADTRAN and ADVA entered into a business combination agreement (the "Business Combination Agreement"), pursuant to which, ADTRAN and ADVA have agreed to combine their business under Acorn HoldCo (the "Business Combination"). Upon the completion of the Business Combination, Acorn HoldCo will be the parent company of both ADTRAN and ADVA by way of (i) the merger of the Merger Sub with and into ADTRAN, with ADTRAN surviving the merger (the "Merger") and (ii) settlement of the public voluntary exchange offer by Acorn HoldCo to all shareholders of ADVA (the "Offer"). ADTRAN and its direct and indirect subsidiaries as well as the subsidiary of Acorn HoldCo (i.e. Merger Sub) have an interest in the settlement of the Offer and the completion of the Business Combination.

BofA Securities, Inc. ("**BofA Securities**") and Jefferies LLC ("**Jefferies**") act as financial advisors to ADVA or ADTRAN in connection with the proposed Business Combination and will receive fees for such services. A portion of the fees of BofA Securities and Jefferies are contingent upon the settlement of the Offer, towards which the Listing (as defined under "3.1 Purpose of this Prospectus") is a necessary step.

The Listing Agent is acting exclusively for Acorn HoldCo and for no one else and will not regard any other person as its client in relation to the Listing and will not be responsible to anyone other than to Acorn HoldCo for giving advice in relation to the Listing. The Listing Agent and/or its affiliates have engaged, and may in the future from time to time continue to engage in investment banking, financial advisory and ancillary activities in the ordinary course of business with certain members of the ADTRAN Group, the ADVA Group, the Acorn HoldCo Group or the Combined Group, in respect of which they have and may in the future, receive customary fees and commissions.

ODDO BHF Corporates & Markets AG, a subsidiary of the Listing Agent, is expected to assume the function of a designated sponsor in XETRA of the Frankfurt Stock Exchange starting on the first day of trading; for which a listing is a necessary step.

Certain of the ADTRAN directors, executive officers and designees to the board of directors of the Company and certain of the management board members and supervisory board members of ADVA may have interests in the Business Combination that may be different from, or in addition to, the interests of ADTRAN and ADVA shareholders, respectively. In the case of ADTRAN directors, executive officers and designees to the board of directors of the Company, these interests include the continued service of certain directors and executive officers

following the settlement of the Offer, the treatment of restricted stock units, performance stock units, stock options and other equity-based awards in connection with the Business Combination, and the indemnification of ADTRAN directors, executive officers and designees to the board of directors of the Company by the Company. In the case of certain supervisory board (*Aufsichtsrat*) members and management board (*Vorstand*) members of ADVA, these interests include continued positions as directors and executive officers of the Company following the settlement of the Offer, the treatment of ADVA's stock options and replacement of unvested options by an incentive plan provided by the Company, and severance benefits available to certain executive officers of ADVA. Members of the ADVA's management board (*Vorstand*) have agreed, pursuant to separate agreements with the Company, to convert their respective ADVA stock options into stock options of the Company on the terms set forth in the Business Combination Agreement, with the exception of vested ADVA stock options that are exercised prior to the settlement of the Offer in accordance with past practice.

Other than as described in this section, Acorn HoldCo is not aware of any substantial interest in the Business Combination or the Listing of another party other than interest as an ADTRAN or ADVA equityholder generally nor is it aware of any conflict of interest.

3. GENERAL INFORMATION ABOUT THE SHARES AND THE LISTING

3.1 Purpose of this Prospectus

This Prospectus relates to the admission to the regulated market of the Frankfurt Stock Exchange with simultaneous admission to the sub-segment thereof with additional post-admission obligations (Prime Standard) (the "Listing") of up to 87,158,835 shares of common stock of the Company consisting of (i) the entire outstanding share capital of Acorn HoldCo upon settlement of the Offer, i.e. 77,316,803 shares of common stock (the "Transaction Shares"), and (ii) up to 9,842,032 shares of common stock from the authorized but unissued share capital of the Company reserved for issuance by a resolution of the board of directors of the Company, expected to be adopted on or around July 7, 2022, in connection with stock options exercisable under stock option programs of ADTRAN and ADVA (the "Employee Shares", together with the Transaction Shares, the "Shares"), each with a par value of \$0.01 and with full dividend rights from the date of their respective issuance. The holders of the Shares are entitled to receive such dividends, as the Company's board of directors may from time to time declare out of funds legally available, if they hold the Shares at the relevant record date for such dividends.

3.2 General and Specific Information about the Shares

3.2.1 Voting Rights

Each Share carries one vote at the annual meeting of stockholders of the Company. There are no restrictions on voting rights. All Shares carry the same voting rights. Holders of Shares are not entitled to cumulative voting. For a more detailed discussion, see the section of this Prospectus titled "18 Description of Acorn HoldCo Capital Stock".

3.2.2 Dividend and Liquidation Rights

Holders of Shares will be entitled to receive proportionately any dividends as may be declared by the Acorn HoldCo board of directors. Upon the liquidation, dissolution or winding up, any business combination or a sale or disposition of all or substantially all of Acorn HoldCo assets, the assets legally available for distribution to Acorn HoldCo stockholders will be distributable ratably among the holders of the common stock, subject to prior satisfaction of all outstanding debts and other liabilities and the payment of liquidation preferences, if any. For a more detailed discussion, see the sections of this Prospectus titled "5 Dividends and Dividend Policy" and "18 Description of Acorn HoldCo Capital Stock".

3.2.3 Form and Certification

The Shares will be in book-entry form by the transfer agent and registrar of Acorn HoldCo, American Stock Transfer and Trust Company, LLC, 6201 15th Ave Ste 3K, Brooklyn, NY 11219, United States.

3.2.4 Currency of the Shares

The Shares are denominated in U.S. dollars.

3.2.5 ISIN / Ticker Symbol

The International Securities Identification Number, the German Securities Identification Number and the Ticker Symbol of the Shares will be as follows:

International Securities Identification Number (ISIN) US00486H1059

German Securities Identification Number A3C7M6

(Wertpapierkennnummer) (WKN)

Ticker Symbols "ADTN" (Nasdaq)

"QH9" (Frankfurt Stock Exchange)

3.2.6 Transferability

The Shares are transferable in accordance with applicable law. As of the settlement of the Offer, and subject to applicable law, trading of the Shares will not be subject to any prohibitions on disposals or any restrictions with respect to the transferability of the Shares.

3.3 Stock Exchange Listings

3.3.1 The Shares

Acorn HoldCo has applied to list the Shares on the Nasdaq Global Select Stock Market, New York, United States ("Nasdaq") (trading in U.S. dollars). The Shares are expected to be listed and commence trading on Nasdaq on or about July 11, 2022.

On or around July 7, 2022, Acorn HoldCo together with the Listing Agent expects to apply for admission of the Shares to listing and trading on the regulated market (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and the sub-segment thereof with additional post-admission obligations (Prime Standard) (trading in euros). It is expected that the Shares will be admitted to trading on or about July 13, 2022 and that trading in the Shares on the Frankfurt Stock Exchange will commence on or about July 15, 2022.

It is expected that the Transaction Shares will be credited to holders of ADTRAN shares ("ADTRAN Shareholders") (in the case of ADTRAN Shareholders of record, subject to their prior authorization through, among other things, a letter of transmittal) as part of the Merger, and to ADVA shareholders holding shares in ADVA which were tendered in the Offer as part of the settlement of the Offer.

3.3.2 ADTRAN Shares

ADTRAN shares, which are listed on Nasdaq under the ticker symbol "ADTN" will be delisted from Nasdaq on or as soon as practicable after the Merger becoming effective, as permitted by applicable law, and deregistered under the Exchange Act, and ADTRAN will no longer be required to file periodic reports with the SEC.

3.3.3 ADVA Shares

It is expected that trading in ADVA Shares tendered in the Offer will end on the business day prior to commencement of trading of the Shares on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*). ADVA Shares will continue to be traded under ISIN DE0005103006, WKN 510 300 and the ticker symbol "ADV".

3.4 Listing Agent

ODDO BHF Aktiengesellschaft, Bockenheimer Landstraße 10, 60323 Frankfurt am Main, Germany, LEI: 529900XLAZ15LYK8XK27, is acting as listing agent in connection with the application for admission of the Shares to listing and trading on the regulated market (*regulierter Markt*) of the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*) and the sub-segment thereof with additional post-admission obligations (Prime Standard).

3.5 Timetable

The timetable for the Listing is expected to be as follows:

Date	Event
July 7, 2022	Approval of this Prospectus by BaFin
July 7, 2022	Application for admission to trading of all Shares on the regulated market of the Frankfurt Stock Exchange and the sub-segment thereof with additional post-admission obligations (Prime Standard)
July 7, 2022	Filing of the certificate of merger with the Secretary of State of the State of Delaware with the effective date of July 8, 2022
July 8, 2022	Merger becomes effective
July 11, 2022	Publication of this Prospectus
July 11, 2022	Admission of all Shares to trading on Nasdaq
July 11, 2022	Commencement of trading in all Shares on Nasdaq
July 13, 2022	Admission of all Shares to trading on the regulated market of the Frankfurt Stock Exchange and the sub-segment thereof with additional post-admission obligations (Prime Standard)
July 15, 2022	Settlement of the Offer
July 15, 2022	Commencement of trading in all Shares on the regulated market of the Frankfurt Stock Exchange and its sub-segment with additional post-admission obligations (Prime Standard)
July 29, 2022	End of the settlement of fractional shares

3.6 Information to Distributors

Each distributor is responsible for undertaking its own target market assessment with respect to the Shares and determining appropriate distribution channels.

Solely for the purposes of the product governance requirements contained within (a) EU Directive 2014/65/EU on markets in financial instruments, as amended ("MiFID II Directive"); (b) Articles 9 and 10 of Commission Delegated Directive (EU) 2017/539 supplementing the MiFID II Directive; and (c) local implementing measures (together, the "MiFID II Product Governance Requirements"), and disclaiming all and any liability, whether arising in tort, contract or otherwise, which any "manufacturer" (for the purposes of the MiFID II Product Governance Requirements) may otherwise have with respect thereto, the Shares have been subject to a product approval process by the Listing Agent which has determined that the Shares are: (i) compatible with an end target market of retail investors and investors who meet the criteria of professional clients and eligible counterparties, each as defined in the MiFID II Directive; and (ii) eligible for distribution through all distribution channels as are permitted by the MiFID II Directive (the "Target Market Assessment").

Notwithstanding the Target Market Assessment, any person subsequently offering, selling or recommending the Shares (a "distributor") should note that: the price of the Shares may decline and investors could lose all or part of their investment; the Shares offer no guaranteed income and no capital protection; and an investment in the Shares is compatible only with investors who do not need a guaranteed income or capital protection, who (either alone or in conjunction with an appropriate financial or other adviser) are capable of evaluating the merits and risks of such an investment and who have sufficient resources to be able to bear any losses that may result therefrom.

The Target Market Assessment is without prejudice to the requirements of any contractual, legal or regulatory selling restrictions in relation to any subsequent offering or sale of the Shares and does not constitute: (i) an assessment of suitability or appropriateness for the purposes of the MiFID II Directive or (ii) a recommendation to any investor or group of investors to invest in, purchase, or take any other action whatsoever with respect to, the Shares.

3.7 Existing Quotation

The Shares are not currently listed or traded on any exchanges.

3.8 Designated Sponsor

ODDO BHF Corporates & Markets AG, a subsidiary of the Listing Agent, is expected to assume the function of a designated sponsor of the Shares traded on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*).

Pursuant to the designated sponsor agreement expected to be concluded between ODDO BHF Corporates & Markets AG and Acorn HoldCo prior to the admission to trading of the Shares on the Frankfurt Stock Exchange (*Frankfurter Wertpapierbörse*), the designated sponsor will, among other things, place limited buy and sell orders for the Shares in the electronic trading system of the Frankfurt Stock Exchange during regular trading hours. This is intended to achieve greater liquidity in the market for the Shares.

3.9 Material Costs of the Listing

The costs related to the Listing of the Shares are expected to total approximately \$0.1 million net of any applicable value added tax.

No expenses will be charged to investors in the Shares by Acorn HoldCo.

4. THE BUSINESS COMBINATION

In Acorn HoldCo's view, the Business Combination will bring together two leading companies in the fiber networking space, leveraging the proven strengths of each and creating a global leader in the converged edge.

Acorn HoldCo believes that the transaction will expand the product offering of the Combined Group and help create a stronger and more profitable company, poised to benefit from the current investment cycle in fiber, an expanded market opportunity and increased scale. The Business Combination is also expected to create significant value for the shareholders of both companies, with approximately \$52 million in potential annual run-rate cost synergies (run-rate and pre-tax synergies).

4.1 Information about the Companies

4.1.1 Acorn HoldCo

Acorn HoldCo, Inc. is a corporation formed under the laws of Delaware on August 10, 2021. Upon the settlement of the Offer, Acorn HoldCo will be the parent company of ADTRAN and ADVA. As of the date of this Prospectus, Acorn HoldCo has not conducted any material activities other than those incidental to its formation and the matters contemplated by the Business Combination Agreement. Immediately prior to the effective time of the Merger, Acorn HoldCo will change its legal name to "ADTRAN Holdings, Inc.". Acorn HoldCo's ticker symbols will be "ADTN" (Nasdaq) and "QH9" (Frankfurt Stock Exchange).

Acorn HoldCo's principal executive offices are located at 901 Explorer Boulevard, Huntsville, Alabama, 35806, United States (Telephone: +1 (256) 963-8000). Acorn HoldCo's registered office is located at Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle County, Delaware, 19801, United States.

4.1.2 ADTRAN

ADTRAN, Inc., a Delaware corporation, began operations in 1986. Acorn HoldCo believes that ADTRAN is one of the leading global providers of networking and communications platforms and services focused on the broadband access market. ADTRAN's vision is to enable a fully connected world where the power to communicate is available to everyone, everywhere. ADTRAN's approach as well as its industry expertise and innovative solutions enable ADTRAN to address various customer needs. ADTRAN's products and services are utilized by a diverse global customer base of network operators that range from telephone or cable television network operators with regional or national reach to alternative network providers such as municipalities or utilities, as well as managed service providers who serve small- and medium-sized businesses and distributed enterprises.

Headquartered in Huntsville, Alabama, United States, ADTRAN is located in Cummings Research Park. ADTRAN's mailing address is 901 Explorer Boulevard, Huntsville, Alabama, 35806, United States (Telephone: +1 (256) 963 8000). ADTRAN's website is https://www.adtran.com. No information contained on ADTRAN's website is intended to be included as part of, or incorporated by reference into, this Prospectus.

4.1.3 ADVA

ADVA Optical Networking SE is a European stock company (*Societas Europaea*), incorporated under the laws of the European Union and the laws of Germany. ADVA develops and provides innovative solutions to network operations (private enterprises, communication services providers and internet content provides), focusing on solutions for cloud access, cloud interconnect and network synchronization.

ADVA's registered offices are located at Maerzenquelle 1–3, 98617 Meiningen/Dreißigacker, Germany (Telephone: +49 (0) 36 93 450 0). The address of the head-office is Fraunhoferstrasse 9a, 82159 Martinsried/Munich, Germany. ADVA's website is https://www.adva.com. No information contained on ADVA's website is intended to be included as part of, or incorporated by reference into, this Prospectus. ADVA's shares are listed on the Frankfurt Stock Exchange (Prime Standard), ISIN: DE0005103006 (WKN: 510 300).

4.1.4 Merger Sub

Acorn MergeCo, Inc. ("Merger Sub"), is a Delaware corporation and wholly-owned subsidiary of Acorn HoldCo that was formed on August 10, 2021, solely for the purpose of effecting the Merger. As of the date of this Prospectus, Merger Sub has not conducted any material activities other than those incidental to its formation and

the matters contemplated by the Business Combination Agreement. Upon effectiveness of the Merger, Merger Sub will merge with and into ADTRAN, with ADTRAN surviving the Merger as a direct wholly-owned subsidiary of Acorn HoldCo.

Merger Sub's principal executive offices are located at 901 Explorer Boulevard, Huntsville, Alabama, 35806, United States (Telephone: +1 (256) 963 8000). Its registered office is located at Corporation Trust Center, 1209 N. Orange Street, Wilmington, New Castle County, Delaware, 19801, United States.

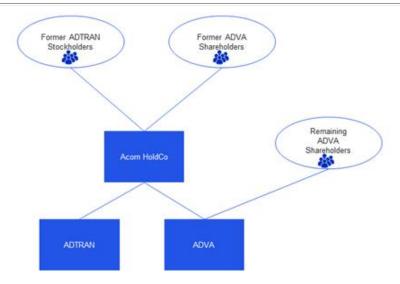
4.2 Business Combination Agreement and Structure of the Business Combination

On August 30, 2021, Acorn HoldCo and its subsidiary Merger Sub, as well as ADTRAN and ADVA entered into the Business Combination Agreement. Pursuant to the Business Combination Agreement, ADTRAN and ADVA have agreed to combine their business under Acorn HoldCo. The effect of the Business Combination will be that ADTRAN will become a direct subsidiary of Acorn HoldCo through the merger of a wholly-owned subsidiary of Acorn HoldCo, with and into ADTRAN, and that ADVA will become a direct subsidiary of Acorn HoldCo through the settlement of the Offer, which was published by Acorn HoldCo on November 12, 2021, to acquire each outstanding ADVA share for 0.8244 Shares.

The Business Combination Agreement has a fixed term of two years from August 30, 2021. Prior to the expiration of the term of the Business Combination Agreement or the settlement of the Offer, the Business Combination Agreement may be terminated with immediate effect by either ADTRAN or ADVA if (i) the Offer lapses as a result of non-satisfaction of the offer conditions, provided that the terminating party is not then in material breach of any of its material covenants or agreements under the Business Combination Agreement relating to the relevant offer condition; (ii) the respective other party violates its material obligations under the Business Combination Agreement and such violation was not cured within thirty business days after the breach has been made known by the terminating party (excluding all other claims for damages resulting from any breach of any obligation under the Business Combination Agreement); or (iii) the Offer has not been settled by the date that is twelve months following expiration of the acceptance period. In addition, the Business Combination Agreement contains certain customary termination rights with regard to the implementation of the Offer. The parties agreed that the right to terminate the Business Combination Agreement for good cause remains unaffected. Notice of any termination must be given in writing and be made within ten business days after the terminating party has become aware of the event triggering a termination right.

The parties have agreed that the Business Combination Agreement will be governed by and construed in accordance with the laws of the Federal Republic of Germany. In addition, the parties have agreed that any dispute arising from or in connection with the Business Combination Agreement and its consummation shall be finally settled by three (3) arbitrators, of which each of Acorn HoldCo, ADTRAN and ADVA may nominate one, in accordance with the arbitration rules of the German Institution of Arbitration (*Deutsche Institution für Schiedsgerichtsbarkeit e.V.*) without recourse to the courts of law. Exclusive legal venue of the arbitration will be Munich, Germany and the language of the arbitral proceedings will be English.

The following diagrams illustrate the simplified shareholding structure of ADTRAN, ADVA and Acorn HoldCo immediately after the settlement of the Offer.



Following the settlement of the Offer, Acorn HoldCo will be the ultimate holding company of the Combined Group, which will operate through its subsidiary undertakings, ADTRAN and ADVA. ADTRAN and ADVA will continue to be the holding companies of the ADTRAN Group and the ADVA Group, respectively.

Following the settlement of the Offer, Acorn HoldCo intends to pursue a post-completion reorganization regarding ADVA. The potential post-completion reorganization after settlement of the Offer is described in more detail in the section "4.7 Potential Post-Completion Reorganization Regarding ADVA".

4.3 The Offer and the Merger

The Business Combination Agreement contemplates that ADVA will become a direct subsidiary of Acorn HoldCo through the Offer. The parties to the Business Combination Agreement have agreed that, prior to the time that Acorn HoldCo exchanges Shares for the ADVA shares that have been validly tendered and not withdrawn in the Offer, Merger Sub will merge with and into ADTRAN, with ADTRAN surviving the Merger as direct wholly-owned subsidiary of Acorn HoldCo.

On November 12, 2021, Acorn HoldCo published the offer document for the Offer, which was amended on January 11, 2022 (the "Offer Document"). Under the terms of the Offer, Acorn HoldCo offered to acquire each outstanding ADVA share in exchange for 0.8244 Shares, subject to certain closing conditions being satisfied. The extended acceptance period of the Offer expired on January 26, 2022. The additional acceptance period of the Offer expired on February 14, 2022. Withdrawal rights expired on January 26, 2022. The Offer has been accepted for a total of 33,957,538 ADVA shares, which corresponds to an acceptance rate of approximately 66.01% of all outstanding ADVA shares as of November 30, 2021.

On January 6, 2022, the ADTRAN shareholders approved the Business Combination at an ADTRAN special shareholders meeting.

In connection with the antitrust and foreign direct investment approvals obtained in respect of the Offer, Acorn HoldCo, ADTRAN and ADVA have committed vis-à-vis the government of the Federal Republic of Germany to certain restrictions and commitments. Such restrictions, in particular, include the obligations set forth in an agreement with the government of the Federal Republic of Germany (the "Consent Agreement"), pursuant to which Acorn HoldCo, ADTRAN and ADVA shall (i) avoid risks to the supply of ADVA's products to public-sector entities as well as certain security-relevant products for customers from the critical infrastructure area and (ii) avoid risks that may result from the leakage of security-relevant know-how and technology.

Under the terms of the Offer, the offer conditions had to be satisfied either at the time of or prior to the expiration of the acceptance period or by no later than 12 January 2023, depending on the respective offer condition. On July 6, 2022, Acorn HoldCo published a notification stating that, for purposes of the Offer, all offer conditions have been satisfied.

Acorn HoldCo will cause a certificate of merger ("Certificate of Merger") to be executed, acknowledged and filed with the Secretary of State of the State of Delaware, United States. The Merger will become effective at the time as agreed by the parties in writing and specified in the Certificate of Merger, which is expected to be on July 8, 2022.

At the effective time of the Merger, each outstanding ADTRAN share will be converted into the right to receive one fully paid and non-assessable Share. This does not apply to ADTRAN shares that are held by ADTRAN or any of its direct or indirect wholly-owned subsidiaries, which will be cancelled for no consideration.

The settlement of the Offer will be subject to and occur as soon as is practicable after the Merger. The settlement agent appointed by the Company will cause the Offer settled by transferring 27,994,595 Shares through Clearstream Banking AG and the respective custodian banks to the respective securities custody account of the ADVA shareholders that have accepted the Offer.

The exchange ratios for the Offer and the Merger are fixed and will not be adjusted to reflect trading prices of ADTRAN shares or ADVA shares prior to the settlement of the Offer.

4.4 Treatment of Equity Awards and Employee Shares

4.4.1 ADTRAN Equity Awards

Pursuant to the Business Combination Agreement, the Company has agreed to assume, at the effective time of the Merger, the rights and obligations of ADTRAN under the equity and deferred plans, including the 2006 Employee Stock Incentive Plan, the 2015 Employee Stock Incentive Plan, the 2020 Employee Stock Incentive Plan and the 2020 Directors Stock Plan, Deferred Compensation Program for Employees, Deferred Compensation Program for Directors, Equity Deferral Program for Employees, and Equity Deferral Program for Directors (together, the "Assumed ADTRAN Plans"), and the agreements evidencing the granting of awards of stock options, restricted stock units ("ADTRAN RSUs", each an "ADTRAN RSU") performance stock units ("ADTRAN PSUs", each an "ADTRAN PSU") and restricted shares, pursuant to which the Assumed ADTRAN Awards will be converted into corresponding stock-based awards of Acorn HoldCo, on substantially the same terms and conditions as applicable to the corresponding Assumed ADTRAN Awards prior to the effective time of the Merger (except as otherwise described below). The settlement of the Offer and the Business Combination will not constitute a "change in control" or similar term for purposes of any such equity-based awards outstanding under the ADTRAN equity plans.

- At the effective time of the Merger, each ADTRAN RSU, whether vested or unvested, that is outstanding immediately prior to the effective time
 of the Merger will, without any required action on the part of the holder thereof, cease to represent an ADTRAN RSU and will be converted into
 an Acorn HoldCo RSU on the same terms and conditions as were applicable to such ADTRAN RSU immediately prior to the effective time of the
 Merger. The number of Shares subject to each Acorn HoldCo RSU will equal the number of ADTRAN shares subject to such ADTRAN RSU
 immediately prior to the effective time of the Merger.
- At the effective time of the Merger, each ADTRAN PSU, whether vested or unvested, that is outstanding immediately prior to the effective time of the Merger will, without any required action on the part of the holder thereof, be converted into an Acorn HoldCo RSU on substantially the same terms and conditions as were applicable to such ADTRAN PSU immediately prior to the effective time of the Merger, except that the Acorn HoldCo RSUs will be subject to service-vesting conditions only, not performance-vesting conditions. The number of Shares subject to each such Acorn HoldCo RSU will equal the target number of ADTRAN shares subject to such ADTRAN PSU. The Acorn HoldCo RSUs will cliff vest at the end of the performance period applicable to the ADTRAN PSU, subject to the holder's continued employment with Acorn HoldCo or its subsidiaries. Any accrued but unpaid dividend equivalents with respect to any ADTRAN PSU will be assumed by Acorn HoldCo and become an obligation with respect to the applicable Acorn HoldCo RSU.
- At the effective time of the Merger, each restricted stock award of ADTRAN ("ADTRAN RSA") that is outstanding immediately prior to the effective time will, without any required action on the part of the holder thereof, be converted into an RSA of Acorn HoldCo ("Acorn HoldCo RSA") on the same terms and conditions as were applicable to such ADTRAN RSA immediately prior to the effective time of the Merger. The number of Shares subject to each such Acorn HoldCo RSA will be equal to the total number of ADTRAN shares subject to such ADTRAN RSA immediately prior to the effective time of the Merger. Any accrued but unpaid dividend equivalents with respect to any ADTRAN RSA will be assumed by Acorn HoldCo and become an obligation with respect to the applicable Acorn HoldCo RSA.

• At the effective time of the Merger, each ADTRAN stock option, whether vested or unvested, that is outstanding immediately prior to the effective time of the Merger, will cease to represent an ADTRAN stock option and will be converted, at the effective time of the Merger and without any required action on the part of the holder thereof, into an Acorn HoldCo stock option on the same terms and conditions as were applicable to such ADTRAN stock option immediately prior to the effective time of the Merger. The number of Shares subject to each such Acorn HoldCo stock option will equal the number of ADTRAN shares subject to each ADTRAN stock option immediately prior to the effective time of the Merger and such Acorn HoldCo stock option will have an exercise price per share equal to the per-share exercise price applicable to such ADTRAN stock option immediately prior to the effective time.

4.4.2 ADVA Equity Awards

According to the Business Combination Agreement, the Company has agreed to assume the rights and obligations under all ADVA option rights agreements for which the holders of the ADVA stock options have elected the Company assume (the "ADVA Option Awards"), pursuant to which such holders may agree, on or after the closing of the Business Combination, to convert their outstanding and unexercised ADVA options into options to purchase (i) Shares (rounded down to the nearest whole share) equal to the product of (A) the number of ADVA shares subject to such ADVA stock option immediately prior to the consummation of the Business Combination and (B) the exchange ratio of the Offer of 0.8244 Shares for one ADVA share (the "Exchange Ratio"), (ii) at an exercise price per ADVA share (rounded up to the nearest whole cent) equal to the quotient of (A) the exercise price per ADVA share of such ADVA stock option immediately prior to the consummation of the Business Combination and (B) the Exchange Ratio (as so assumed and converted, a "Converted ADVA Option"). Each Converted ADVA Option will be subject to (1) the same vesting and expiration terms as applied to such ADVA stock option immediately prior to the consummation of the Business Combination and (2) the same terms and conditions (other than vesting and expiration terms) as applied to ADTRAN stock options immediately prior to the effective time of the Merger. Brian Protiva, Ulrich Dopfer, Christoph Glingener and Scott St. John have each agreed, pursuant to separate agreements with Acorn HoldCo, to convert their respective ADVA stock options into Converted ADVA Options on the same terms as set forth above, with the exception of vested ADVA stock options that are exercised prior to the consummation of the Business Combination in accordance with past practice.

4.4.3 Employee Shares

To enable the issuance of the Employee Shares in connection with the exercise of stock options under the stock option plans of ADTRAN and ADVA, the board of directors of the Company is expected to pass a resolution on or around July 7, 2022, to reserve a portion of the remaining part of the authorized share capital of the Company for such purpose. A total of up to 9,842,032 Shares is thus reserved for issuance under the stock option plans of ADTRAN and ADVA. The issuance of the Employee Shares will only be carried out to the extent that the conversion and option rights arising from the above-mentioned stock-based awards and options are actually exercised.

The Employee Shares are expected to be registered with the SEC by filing a Form S-8 in respect of each of the (i) up to 7,574,471 Employee Shares issuable with respect to the Assumed ADTRAN Awards and (ii) up to 2,267,561 Employee Shares issuable with respect to the Converted ADVA Options (together, the "Form S-8").

4.5 Material Contracts affected by the Business Combination

Other than contracts entered into in the ordinary course of business, no material contracts that Acorn HoldCo, ADTRAN or, to the best knowledge of Acorn HoldCo, ADVA, is a party to, have been materially affected by the Offer or will be materially affected by the Business Combination.

4.6 Listing of the Shares; Delisting and Deregistration of ADTRAN Shares

ADTRAN shares, which are listed on Nasdaq under the symbol "ADTN", will be delisted from Nasdaq on or as soon as practicable after the settlement of the Offer, as permitted by applicable law, and deregistered under the Exchange Act.

Prior to the time of delivery of the 27,994,595 Shares in the context of the settlement of the Offer Acorn HoldCo will ensure that the Shares are admitted to listing and trading on Nasdaq (trading in U.S. dollars) and to listing and trading on the regulated market (*Regulierter Markt*) of the Frankfurt Stock Exchange and the sub-segment thereof with additional post-admission obligations (Prime Standard) (trading in euros).

4.7 Potential Post-Completion Reorganization Regarding ADVA

4.7.1 Domination and Profit and Loss Transfer Agreement (DPLTA)

As of July 6, 2022, Acorn HoldCo and ADVA agreed to enter into negotiations regarding the conclusion of a domination agreement or a domination and profit-and-loss-transfer agreement ("DPLTA") within the meaning of Section 291 (1) of the German Stock Corporation Act (Aktiengesetz - "AktG") between ADVA as the dominated entity and Acorn HoldCo (or a subsidiary of Acorn HoldCo yet to be established) as dominating entity. Pursuant to German law, the conclusion of a DPLTA requires the approval by an extraordinary shareholders' meeting of ADVA with a majority of at least 75% of the votes cast. Under a DPLTA, Acorn HoldCo would be able to give legally binding instructions to the management board of ADVA and would receive the full annual profit of ADVA. Any loss of ADVA would have to be balanced by Acorn HoldCo. A DPLTA would facilitate the integration of the ADVA Group with Acorn HoldCo and ADTRAN as well as the implementation of synergies. However, ADVA's remaining shareholders would have to be granted cash compensation against transfer, whose amount would have to be fixed in the DPLTA based on a company valuation and would be entitled to receive an annual guaranteed dividend payment as compensation for the transfer of profits to Acorn HoldCo. The amount of the cash consideration and the amount of the guaranteed dividend would be fixed in the DPLTA. The guaranteed dividend will be based on the amount that is likely to be distributed as the average dividend per share, given ADVA's past and current results of operations determined pursuant to the German Commercial Code (Handelsgesetzbuch) and the AktG, and ADVA's future earnings prospects. The cash consideration shall reflect the intrinsic value of the ADVA shares. It can be based on the market price or determined on the basis of discounted earnings (Ertragswert) or discounted cash flow valuation method, but must not be less than the volume weighted average market price ("VWAP"), of ADVA shares for the three-month period prior to the announcement of Acorn HoldCo's intention to enter into a DPLTA. The remaining ADVA minority shareholders can challenge the determination of the cash consideration and guaranteed dividend in the DPLTA in court appraisal proceedings pursuant to the German Appraisal Proceedings Act (Spruchverfahrensgesetz). The cash consideration for ADVA shares in an appraisal proceeding, if any, may be higher or lower than, or equal to, the Offer Consideration.

4.7.2 Delisting

After settlement of the Offer, Acorn HoldCo may consider a delisting of the ADVA shares depending on the stake of Acorn HoldCo in ADVA, prevailing market conditions and other economic considerations. A delisting would require a price of not less than the VWAP of the six-month period prior to the announcement of the delisting. A delisting would require the cooperation of ADVA. Its management would have to apply for a delisting to the Frankfurt Stock Exchange following completion of the delisting offer. Such delisting would result in the revocation of the admission to trading of ADVA shares on the regulated market.

4.7.3 Squeeze-out Transactions

After the settlement of the Offer, Acorn HoldCo intends to examine, if it has reached the necessary thresholds, to commence a squeeze-out of the remaining ADVA shareholders, or a squeeze-out transaction. A squeeze-out transaction may be effected in three ways: (1) a cash merger squeeze-out pursuant to Sections 62(1) and 62(5) of the German Transformation Act (*Umwandlungsgesetz*), if Acorn HoldCo holds at least 90% of ADVA's share capital, excluding treasury shares and shares held for the account of ADVA, (2) a corporate squeeze-out pursuant to Sections 327a *et seq.* of the AktG, if Acorn HoldCo holds at least 95% of ADVA's share capital, excluding treasury shares and shares held for the account of ADVA or (3) a takeover squeeze-out pursuant to Sections 39a *et seq.* of the German Securities Acquisition and Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz - "WpÜG"*), if Acorn HoldCo acquires in connection with the Offer at least 95% of ADVA's share capital, excluding treasury shares and shares held for the account of ADVA.

In the event of a cash merger squeeze-out or a corporate squeeze-out, shares of ADVA shareholders who did not tender their shares in the Offer will automatically be converted into the right to receive adequate cash compensation. In a squeeze-out transaction, Acorn HoldCo will determine the adequate compensation using ADVA's discounted earnings (*Ertragswert*) or, if appropriate, discounted cash flow, to value the ADVA shares. In general, the compensation must not be less than the VWAP of ADVA shares for the three-month period prior to the announcement of Acorn HoldCo's intention to effect such squeeze-out transaction. In a takeover squeeze-out, the consideration offered in connection with the Offer shall be considered adequate where Acorn HoldCo has acquired, in connection with the Offer, shares representing not less than 90% of the share capital (excluding treasury shares of ADVA) for which the Offer was made. Following the approval of a cash merger squeeze-out

or a corporate squeeze-out by a shareholder meeting of ADVA and its registration with the competent commercial register, each remaining minority ADVA shareholder may review such determination in court pursuant to the German Appraisal Proceedings Act. The amount of compensation paid for ADVA shares in an appraisal proceeding, if any, may be higher or lower than, or equal to, the Offer Consideration. However, appraisal rights are not available in connection with a takeover squeeze-out. If Acorn HoldCo is unable to complete a squeeze-out, the remaining ADVA shareholders will continue to be entitled to all ordinary shareholder rights (except for annual dividends in the case of a DPLTA).

4.7.4 Open Market Purchases

In addition to acquiring ADVA shares in the Offer, Acorn HoldCo may, subject to applicable law, purchase additional ADVA shares in the open market or otherwise. So long as ADVA has remaining minority shareholders, it must invite such minority shareholders to annual meetings according to the AktG. In such annual meetings, these minority shareholders may exercise all shareholder rights under the AktG, including information rights. Resolutions adopted in such annual meetings can also be reviewed in court by any minority shareholder pursuant to Sections 243 *et seq.* of the AktG.

4.8 Dilution

4.8.1 Dilution of outstanding Shares

The participation quota of the current stockholder of Acorn HoldCo, ADTRAN, will be diluted from 100% to 0% through the cancellation of all currently issued Acorn HoldCo shares in the course of the completion of the Business Combination.

4.8.2 Dilution due to issuance of Employee Shares

As holders of the Assumed ADTRAN Awards and Converted ADVA Options exercise their option rights or these are mandatorily triggered, the shareholding percentage of other shareholders will decline and their voting rights will be diluted through the issuance of Employee Shares. Based on the number of 77,316,803 total outstanding Shares upon settlement of the Offer and subject to future capital measures, the issuance of all 9,842,032 Employee Shares expected to be registered with the SEC under the Form S-8 will ultimately lead to a dilution of 11.29% for holders not holding any Assumed ADTRAN Awards and Converted ADVA Options as described under "source not found. Employee Shares source not found."

4.9 Appraisal Rights

4.9.1 ADTRAN Stockholders

Under the Delaware General Corporation Law ("DGCL"), which governs the Merger, as well as under ADTRAN's certificate of incorporation and bylaws, ADTRAN stockholders are not entitled to any appraisal rights in connection with the Merger.

4.9.2 ADVA Shareholders

German law does not grant appraisal rights or provide for appraisal proceedings in connection with a public offer. Certain post-closing reorganization transactions may, however, trigger appraisal rights for the ADVA-shareholders. Those transactions are (i) a cash merger squeeze-out; (ii) a corporate squeeze-out; and (iii) a DPLTA. In the event of any of these transactions, ADVA shareholders would be entitled to an adequate cash compensation or consideration. Under the German Appraisal Proceedings Act (*Spruchverfahrensgesetz*), the shareholders may ask a court to determine the adequacy of this cash compensation or consideration. See section "4.7 Potential Post-Completion Reorganization Regarding ADVA".

5. DIVIDENDS AND DIVIDEND POLICY

5.1 General Provisions Relating to Profit Allocation and Dividend payments under the Delaware General Corporation Law

All shares of Acorn HoldCo's common stock will carry full dividend rights from the date of their respective issuance. The holders of Acorn HoldCo common stock, including stockholders whose place of residence, incorporation or habitual abode is outside the United States, are entitled to receive such dividends as the Acorn HoldCo board of directors from time to time may declare out of funds legally available, if they hold Shares at the relevant record date for such dividends. Under Delaware law, dividends that remain unclaimed by the applicable owner for five years following the date of payment of the dividend are presumed abandoned and are turned over to the state of Delaware; however, owners may thereafter make a claim against the state of Delaware to recover such dividends. Pursuant to Section 173 of the DGCL, a dividend or distribution may be paid in cash, property, or shares of a corporation. As per Section 170 of the DGCL, directors may declare and pay up dividends out of its surplus, as defined in Section 154 of the DGCL, or in case there are no surplus, out of its net profits for the financial year in which the dividend is declared and/or the preceding year.

Entitlement to dividends is subject to the preferences granted to other classes of securities Acorn HoldCo may have outstanding in the future and may be restricted by the terms of Acorn HoldCo's debt instruments. In the event of liquidation of Acorn HoldCo, holders of Acorn HoldCo common stock are entitled to share in any assets of Acorn HoldCo remaining after satisfaction in full of its liabilities and satisfaction of such dividend and liquidation preferences as may be possessed by the holders of other classes of securities of Acorn HoldCo.

5.2 Dividend History

Acorn HoldCo was incorporated on August 10, 2021 and has not paid any dividends to date.

Irrespective of the Business Combination, ADVA's policy has been not to distribute any undistributed earnings, and accordingly did not pay dividends on its shares in the three-month period ended March 31, 2022 and the years 2021, 2020 and 2019. As of March 31, 2022, ADVA has not declared a dividend to be paid to its shareholders.

The table below sets forth, for the periods indicated, the dividends declared on ADTRAN shares.

	Three mor Marc			icial years ei December 31,	
(in thousands, except per share data)	2022	2021	2021	2020	2019
Earnings (loss) per common share – basic	\$ (0.02)	\$ 0.02	\$ (0.18)	\$ 0.05	\$ (1.11)
Earnings (loss) per common share – diluted	\$ (0.02)	\$ 0.02	\$ (0.18)	\$ 0.05	\$ (1.11)
Number of weighted-average shares outstanding					
Basic shares	49,113	48,336	48,582	47,996	47,836
Diluted shares	49,113	49,004	48,582	48,288	47,836
Dividends					
Common dividends paid	\$ 4,438	\$ 4,361	\$17,529	\$17,334	\$17,212
Common dividends paid per share	\$ 0.09	\$ 0.09	\$ 0.36	\$ 0.36	\$ 0.36

5.3 Dividend Policy

ADTRAN paid dividends of \$4,438 million and \$4,361 million in the three months ended March 31, 2022 and 2021 respectively. Quarterly dividends were \$0.09 per share for both periods. ADTRAN paid dividends of \$17.5 million, \$17.3 million and \$17.2 million in the years ended December 31, 2021, 2020 and 2019, respectively. Annualized dividends per share were \$0.36 for each of the years ended December 31, 2021, 2020 and 2019.

The dividend policy for the Combined Group will be determined following the settlement of the Offer. The Acorn HoldCo amended and restated certificate of incorporation and bylaws authorizes the directors to declare dividends out of funds lawfully available for the purpose without stockholder approval. The board of directors may also

recommend a dividend to be approved and declared by the Acorn HoldCo stockholders at a general meeting. Any dividend paid or changes to dividend policy are within the discretion of the board of directors and will depend upon many factors, including distributions of earnings to Acorn HoldCo by its subsidiaries, the financial condition and results of operations of the Combined Group, legal requirements, including limitations imposed by the DGCL restrictions in any debt agreements that limit its ability to pay dividends to stockholders and other factors the board of directors deems relevant. Acorn HoldCo currently expects to pay dividends subject to its ability to do so. Acorn HoldCo has not yet any intention whether Acorn HoldCo will pay annual dividends or quarterly dividends (as ADTRAN currently does) following the settlement of the Offer. However, it is most probable that, subject to any restrictions under the DGCL, Acorn HoldCo will pay quarterly dividends to its stockholders.

6. CAPITALIZATION AND INDEBTEDNESS; STATEMENT ON WORKING CAPITAL AND SIGNIFICANT CHANGES

Investors should read this section in conjunction with section "8 Management's Discussion and Analysis of Financial Condition and Results of Operations of ADTRAN", the audited consolidated financial statements of Acorn HoldCo for the period from August 10, 2021 (inception) through December 31, 2021, prepared in U.S. GAAP, including the notes thereto, which are included in the section "20 Financial Information" of this Prospectus.

6.1 Capitalization

The following table sets forth, on an unaudited basis and under U.S. GAAP, Acorn HoldCo's consolidated capitalization as of May 31, 2022, taken or derived from Acorn HoldCo's accounting records or internal management reporting systems on an actual basis.

For information regarding the pro forma financial position of Acorn HoldCo had the Business Combination already been completed, see section "7 Pro Forma Condensed Combined Financial Information" of this Prospectus.

	As of May 31, 2022
	(in USD)* (unaudited)
Total current debt	_
thereof guaranteed	_
thereof secured	_
thereof unguaranteed/unsecured	_
Total non-current debt	
thereof guaranteed	_
thereof secured	_
thereof unguaranteed/unsecured	_
Shareholder equity	10
thereof share capital $^{(1)}$	10
thereof legal reserve(s)	_
thereof other reserves	_
Total	10

- (*) Columns may not add up due to rounding.
- (1) Referred to as "Stockholder's equity" in Acorn HoldCo's financial statements.

6.2 Indebtedness

The following table sets forth, on an unaudited basis and under U.S. GAAP, Acorn HoldCo's consolidated indebtedness as of May 31, 2022, taken or derived from Acorn HoldCo's accounting records or internal management reporting systems on an actual basis.

For information regarding the pro forma financial position of Acorn HoldCo had the Business Combination already been completed, see section "7 Pro Forma Condensed Combined Financial Information" of this Prospectus.

	As of May 31, 2022 (in USD)* (unaudited)
A. Cash(**)	10
B. Cash equivalents	
C. Other current financial assets	_
D. Liquidity (A)+(B)+(C)	10
E. Current financial debt	_
F. Current portion of non-current financial debt	_
G. Current financial indebtedness (E+F))	_
H. Net current financial indebtedness (G-D)	-10
I. Non-current financial debt (excluding current portion and debt instruments)	
J. Debt instruments	
K. Non-current trade and other payables	_
L. Non-current financial indebtedness (I)+(J)+(K)	
M. Total financial indebtedness (H)+(L)	-10

- (*) Columns may not add up due to rounding.
- (**) Referred to as "Cash and cash equivalents" in Acorn HoldCo's financial statements.

6.3 Indirect and Contingent Indebtedness

As of May 31, 2022, Acorn HoldCo had no indirect liabilities and contingent liabilities.

6.4 Working Capital Statement

In Acorn HoldCo's opinion, the Acorn HoldCo Group has sufficient working capital to meet its present requirements for the next twelve months from the date of this Prospectus. Acorn HoldCo's transaction costs are carried solely by ADTRAN and are financed from ADTRAN's free cash flow.

6.5 No Significant Changes

There have been no significant changes in the financial or trading position of the Acorn HoldCo Group between December 31, 2021 and the date of this Prospectus.

7. PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION

7.1 Introduction

The following pro forma condensed combined financial information is based on the historical consolidated financial statements of Acorn HoldCo, Inc. ("Acorn HoldCo"), ADTRAN, Inc. ("ADTRAN"), and ADVA Optical Networking SE ("ADVA"); and are adjusted to give effect to the proposed business combination. ADTRAN and ADVA have agreed to combine their businesses under Acorn HoldCo. ADTRAN will become a subsidiary of Acorn HoldCo through a merger of Merger Sub, a wholly-owned direct subsidiary of Acorn HoldCo, with and into ADTRAN, with ADTRAN surviving the merger, and ADVA will become a subsidiary of Acorn HoldCo through an exchange offer of ADVA shares for Acorn HoldCo shares. Additionally, at the option of the holder thereof, each ADVA stock option that is outstanding and unexercised immediately prior to the closing of the business combination may be converted at or after the closing of the business combination into an Acorn HoldCo stock option. As a result, ADTRAN and ADVA will become subsidiaries of Acorn HoldCo, a new Delaware corporation. Following the consummation of the proposed business combination, Acorn HoldCo will change its name to "ADTRAN Holdings, Inc", its ticker symbol will be "ADTN" and shares of ADTRAN Holdings, Inc. common stock will be listed on Nasdaq and the Frankfurt Stock Exchange. The combined group will account for the transaction as a business combination between ADTRAN and ADVA using the acquisition method of accounting with ADTRAN as the accounting acquirer. The historical financial statements of Acorn HoldCo will be those of ADTRAN upon completion of the proposed business combination.

The following pro forma condensed combined balance sheet as of December 31, 2021, and the pro forma condensed combined statement of operations for the year ended December 31, 2021, are presented herein. The pro forma condensed combined balance sheet combines the consolidated balance sheets of Acorn HoldCo, ADTRAN, and ADVA as of December 31, 2021 and gives effect to the proposed business combination as if it occurred on December 31, 2021. The pro forma condensed combined statement of operations combines the historical results of Acorn HoldCo, ADTRAN and ADVA for the year ended December 31, 2021 gives effect to the proposed business combination as if it occurred on January 1, 2021. The historical financial information has been adjusted to give effect to pro forma adjustments deemed to be directly related to the proposed business combination and expected to be incurred either prior to the transaction or post-close, irrespective of whether such adjustment is deemed to be recurring. These pro forma adjustments address differences in reporting currencies, basis of accounting and classification and presentation of certain financial information, as well as reflect the transaction accounting impacts. Any adjustments for differences in basis of accounting are determined before taking into effect the impacts of purchase accounting. The pro forma condensed combined financial statements were prepared in accordance with IDW Accounting Practice Statement: Preparation of Pro Forma Financial Information (IDW AcPS AAB 1.004) (IDW Rechnungslegungshinweis: Erstellung von Pro forma-Finanzinformationen (IDW RH HFA 1.004)), as promulgated by the Institute of Public Auditors in Germany (IDW, Institut der Wirtschaftsprüfer in Deutschland e. V.).

The pro forma adjustments are subject to modification based on the final purchase price which is based on (i) the number of ADVA shares acquired, (ii) the value of ADTRAN's common shares, and (iii) the fair value of the replacement ADTRAN stock options issued on the closing date; the final determination of the fair value of the assets acquired, liabilities assumed, and noncontrolling interest; and additional information that may become available, which may cause the final adjustments to be materially different from the pro forma condensed combined financial information presented below. Following the consummation of the business combination, ADTRAN management will perform a detailed review of ADVA's accounting policies in an effort to determine if differences in accounting policies require further adjustment or reclassification of ADVA's results of operations or assets or liabilities to conform to ADTRAN's accounting policies and classification. As a result, ADTRAN may subsequently identify additional differences in the accounting policies which could have a material impact on the pro forma condensed combined financial information.

The pro forma condensed combined financial information presented is for informational purposes only and is not necessarily indicative of the financial position or results of operations that would have been realized if the proposed business combination had been completed on the dates set forth above, nor is it indicative of future results or financial position of the combined company. The final determination of the purchase price will only be known upon the completion of the proposed business combination as it is based on the closing share price of ADTRAN's common shares and fair value of the replacement Acorn HoldCo stock options issued on the closing date. Additionally, the purchase price allocation will be finalized upon (or soon after) the completion of the business combination, and will be based on ADVA's fair value of net assets acquired as of that date and will depend on a number of factors that cannot be predicted with certainty at this time. The pro forma condensed combined financial information does not reflect any anticipated synergies or dis-synergies, operating efficiencies

or cost savings that may result from the proposed business combination. The pro forma adjustments, which ADTRAN believes are reasonable under the circumstances, are preliminary and are based upon available information and certain assumptions described in the accompanying notes to the pro forma condensed combined financial information. Actual results and valuations may differ materially from the assumptions within the accompanying pro forma condensed combined financial information. Additionally, for purposes of preparing the pro forma condensed combined financial information, it was assumed that no actions will be required in connection with obtaining regulatory approvals.

The pro forma condensed combined financial information should be read in conjunction with the following:

- The historical audited consolidated financial statements of Acorn HoldCo as of December 31, 2021 and for the period between August 10, 2021 (inception) and December 31, 2021, which were prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP");
- The historical audited consolidated financial statements of ADTRAN for the year ended December 31, 2021, which were prepared in accordance with U.S. GAAP; and
- ADVA's audited consolidated financial statements and notes for the year ended December 31, 2021, which were prepared in accordance with the International Financial Reporting Standards ("IFRS") as adopted by the European Union ("EU").

PRO FORMA CONDENSED COMBINED BALANCE SHEET AS OF DECEMBER 31, 2021 (in thousands of USD)

Personal Property of the Personal Property o		Historical								
Current assets: Cash and cash equivalents \$ 5,600 \$ 125,60 \$ - 215,00 \$ - 215		HoldCo (US	(U.S.	(IFRS)	U.S. GAAP	(Note)	(U.S.		(Note)	
Rash and cash equivalents S \$56,00 \$123,613 S — \$125 S S \$215 S S \$350 S S \$350 S S \$350 S \$350 S \$350										
Restricted cash										
Short-ceriminestments	•	\$ —		\$ 123,613	\$ —		\$ 123,613	\$ —		
Content Cont		_						_		
Other receivables — 11,228 204 — 204 — 11,432 28,208 Prepaid expenses and other current assets — 9,296 12,776 — 37,55		_			_			_		
Inventory, net	•	_			_			_		
Prepaid expenses and other current assets − 9,996 12,776 − 12,776 − 23,75 − 375 − 370,75 1 380,303 42,167 798,795 799,795 799,795 799,795 73,75 380,303 42,167 798,795 799,795						4.4			(A	
Tax assets — — 375, 380,697 — 3375, 375 — 735,788 780,788 810,789 810,788 810,789 810,788 810,789 810,788 810,789 810,788 810,789 <td></td> <td></td> <td></td> <td></td> <td>` ′</td> <td>4A</td> <td></td> <td>42,167</td> <td>θA</td> <td></td>					` ′	4A		42,167	θA	
Total current asserts			-					_		
Property, plant and equipment, net										
Deferred tax assets, net					(394)					
Goodwill Intangibles, net — 6,968 81,203 — 81,203 141,333 6C 29,545 Other non-current assets — 30,971 30,968 2,228 4C 33,196 (29) 6E 63,877 Long-term investments — 70,615 — — 70,615 — — 70,615 Total assets — 70,615 560,971 \$566,977 \$690,428 \$120,615 Total assets — 70,615 \$62,248 \$15,264 \$70,615 \$104,809 — 94,391 — 90,680 Locunts payable — 10,2489 94,391 — 94,391 — 39,071 Accrued expenses and other liabilities — 17,737 21,334 — 94,391 — 196,880 Accrued wages and benefits — 14,900 — — 70,821 152,598 61 110,900 Accrued wages and benefits — 14,900 — — — 28,683									6B	
Intamplibles, net	· ·					4E				
Other non-current assets — 30,971 30,968 2,228 4C 33,196 (290) 6E 63,877 70,615 — 70,615 — 70,615 70,616 70,615 70,616 70,615 70,616 70,615 70,616 70,615 70,615 70,615 70,615 70,615 70,615 70,615 70,615						40				
Total assets										
Total assets				30,968	2,228	4C	33,196	(290)	6E	
Current liabilities	5									
Current liabilities: Accounts payable — 102,489 94,391 — 94,391 — 39,071 Accrued expenses and other liabilities — 13,673 70,821 — 70,821 152 6E 110,244 Accrued wages and benefits — 14,900 — — — — — 14,900 Income tax payable, net — 6,560 — — — — — 6,560 Current portion of debt — — — 28,683 — 82,683 — 28,683 Tax liabilities — 155,359 221,772 — 221,772 25,750 402,881 Non-current liabilities — 9,271 10,576 — 10,576 — 19,847 Pension liability — 11,402 8,394 1,059 4D 9,453 — 20,855 Deferred compensation liability — 31,383 — — — — 1	Total assets	<u>\$ </u>	\$ 569,017	\$ 682,248	<u>\$ (115,271)</u>		\$ 566,977	\$ 690,428		\$1,826,422
Accounts payable										
Unearmed revenue Accrued expenses and other liabilities — 17,737 21,334 — 70,821 52 6E 110,244 39,071 21,344 — 70,821 52 6E 110,244 Accrued wages and benefits — 14,900 — — — — — — — — — 14,900 — — — — — — — — — 6,560 — — — — — — — — 6,560 — — — — — — — 6,560 — — — — — — — — 6,560 — — — — — — — — — 6,560 — — — — — — — — 6,560 — — — — — — — 6,560 — — — — — — — — 6,560 — — — — — — — — — 6,560 — — — — — — — — — 6,560 — — — — — — — — — — 6,560 — — — — — — — — — — — — — — 6,560 — — — — — — — — — — — — — 6,560 — — — — — — — — — — — 6,560 — — — — — — — — — — 6,560 — — — — — — — — — — 6,560 — — — — — — — — — — — — — — 19,847 — — — — — — — — — — 19,847 — — — — — — — — — 19,847 — — — — — — — — — — 19,847 — — — — — — — — — — 19,847 — — — — — — — — — — — — 19,847 — — — — — — — — — — — 19,847 — — — — — — — — — — — — — — — — — —		_	102.489	94.391	_		94.391	_		196.880
Accrued expenses and other liabilities		_			_			_		
Accrued wages and benefits					_			152	6E	
Accrued wages and benefits	ri ara i promonento de la composición dela composición de la composición dela composición de la compos		-,	, .			, .			- ,
Income tax payable, net	Accrued wages and benefits	_	14,900	_	_		_			14,900
Current portion of debt — — 28,683 — 28,683 — 28,683 Tax liabilities — 6,543 — 6,543 — 6,543 Total current liabilities — 155,359 221,772 — 221,772 25,550 402,881 Non-current uncarned revenue — 9,271 10,576 — 10,576 — 19,847 Pension liability — 11,402 8,394 1,059 4D 9,453 — 20,855 Deferred compensation liabilities — 4,500 6,433 — — — 31,383 Other non-current liabilities — 4,500 6,433 — — 25,540 — 25,540 — 25,540 — 21,565 560 6E 22,125 25,640 — 21,565 560 6E 22,125 25,540 — 21,565 560 6E 22,125 25,540 — 21,565 560 6E 22,125		_		_	_		_	_		
Tax liabilities — 6,543 — 6,543 — 6,543 Total current liabilities — 155,359 221,772 — 221,772 25,750 402,881 Non-current uneamed revenue — 9,271 10,576 — 10,576 — 19,847 Pension liability — 11,402 8,394 1,059 4D 9,453 — 20,855 Deferred compensation liability — 31,383 — — — — 31,383 Other non-current liabilities — 4,500 6,433 — — — 25,540 Non-current portion of debt — — 225,540 — 25,540 Non-current lease liabilities — — 21,665 — 21,565 — 21,565 560 6E 22,125 Deferred tax liabilities — — 2,404 (39,236) 4E (36,796) 161,014 6F 124,218 Total liabilities — <td></td> <td>_</td> <td>_</td> <td>28,683</td> <td>_</td> <td></td> <td>28,683</td> <td>_</td> <td></td> <td>28,683</td>		_	_	28,683	_		28,683	_		28,683
Total current liabilities — 155,359 221,772 — 221,772 25,750 402,881 Non-current unearned revenue — 9,271 10,576 — 10,576 — 19,847 Pension liability — 31,383 — — — — — — — — — — — — 31,383 — — — — — — — — — — — — — — — 31,383 Other non-current liabilities — 4,500 6,433 — — 6,433 — — 10,933 Non-current portion of debt — — 25,540 — — 25,540 — — 25,540 — — 25,540 Non-current lease liabilities — — — 2,440 (39,236) 4E (36,796) 161,014 6F 124,218 Deferred tax liabilities — — 21,956 — — 2,440 (39,236) 4E (36,796) 161,014 6F 124,218 Total liabilities — 211,915 296,720 (38,177) 258,543 187,324 657,782 Total liabilities — 797 58,350 — — 58,350 280 6G 1,077 Colspan="4">Total liabilities — 797 58,350 — — 371,765 549,767 6G 838,713 Additional paid-in capital — 288,946 371,765 —		_	_	6,543	_		6,543	_		6,543
Non-current unearned revenue	Total current liabilities		155,359	221,772			221,772	25,750		402,881
Pension liability	Non-current unearned revenue	_			_			•		
Deferred compensation liability	Pension liability	_			1,059	4D		_		
Non-current portion of debt		_		_	_		_	_		31,383
Non-current lease liabilities	Other non-current liabilities	_	4,500	6,433	_		6,433	_		10,933
Deferred tax liabilities	Non-current portion of debt	_	_	25,540	_		25,540	_		25,540
Total liabilities — 211,915 296,720 (38,177) 258,543 187,324 657,782 Stockholders' equity: Common stock — 797 58,350 — 58,350 280 6G 1,077 Additional paid-in capital — 288,946 371,765 — 371,765 549,767 6G 838,713 Accumulated other comprehensive loss — (11,914) (4,758) — (4,758) 4,758 6H (11,914) Retained earnings — 740,820 (39,829) (394) 4A (116,923) 116,923 6H 715,222 Expression of the comprehensive loss — (110,909) 4B (25,598) 6I 11,914 11,014 110,909 4B (25,598) 6I 11,014 11,014 110,909 4B (25,598) 6I 11,014 11,014 11,014 11,014 11,014 11,014 11,014 11,014 11,014 11,014 11,014 11,014 11,014 11,014	Non-current lease liabilities	_	_	21,565	_		21,565	560	6E	22,125
Stockholders' equity: Common stock	Deferred tax liabilities	_	_	2,440	(39,236)	4E	(36,796)	161,014	6F	124,218
Common stock — 797 58,350 — 58,350 280 6G 1,077 Additional paid-in capital — 288,946 371,765 — 371,765 549,767 6G 838,713 Accumulated other comprehensive loss — (11,914) (4,758) — (4,758) 4,758 6H (11,914) Retained earnings — 740,820 (39,829) (394) 4A (116,923) 116,923 6H 715,222 (110,909) 4B (25,598) 6I Teasury stock — (661,547) — — — — (661,547) Total stockholders' equity allocated to Acorn HoldCo — 357,102 385,528 (77,094) 308,434 216,015 881,551 Noncontrolling interests — — — — 287,089 6K 287,089 Total stockholders' equity — 357,102 385,528 (77,094) 308,434 503,104 1,168,640	Total liabilities	_	211,915	296,720	(38,177)		258,543	187,324		657,782
Additional paid-in capital — 288,946 371,765 — 371,765 549,767 6G 838,713 Accumulated other comprehensive loss — (11,914) (4,758) — (4,758) 4,758 6H (11,914) Retained earnings — 740,820 (39,829) (394) 4A (116,923) 116,923 6H 715,222 (110,909) 4B (25,598) 6I Treasury stock — (661,547) — — — — (661,547) Total stockholders' equity allocated to Acorn HoldCo — 357,102 385,528 (77,094) 308,434 216,015 881,551 Noncontrolling interests — — — — — 287,089 6K 287,089 Total stockholders' equity — 357,102 385,528 (77,094) 308,434 503,104 1,168,640	Stockholders' equity:									
Additional paid-in capital — 288,946 371,765 — 371,765 549,767 6G 838,713 Accumulated other comprehensive loss — (11,914) (4,758) — (4,758) 4,758 6H (11,914) Retained earnings — 740,820 (39,829) (394) 4A (116,923) 116,923 6H 715,222 (110,909) 4B (25,598) 6I Treasury stock — (661,547) — — — — (661,547) Total stockholders' equity allocated to Acorn HoldCo — 357,102 385,528 (77,094) 308,434 216,015 881,551 Noncontrolling interests — — — — — 287,089 6K 287,089 Total stockholders' equity — 357,102 385,528 (77,094) 308,434 503,104 1,168,640	Common stock	_	797	58,350	_		58,350	280	6G	1,077
Accumulated other comprehensive loss — (11,914) (4,758) — (4,758) 4,758 6H (11,914) Retained earnings — 740,820 (39,829) (394) 4A (116,923) 116,923 6H 715,222 (110,909) 4B (25,598) 6I 2,228 4C (1,059) 4D 33,040 4E Treasury stock — (661,547) — — — — (661,547) Total stockholders' equity allocated to Acorn HoldCo — 357,102 385,528 (77,094) 308,434 216,015 881,551 Noncontrolling interests — — — — — 287,089 6K 287,089 Total stockholders' equity — 357,102 385,528 (77,094) 308,434 503,104 1,168,640								(58,350)	6H	
Accumulated other comprehensive loss — (11,914) (4,758) — (4,758) 4,758 6H (11,914) Retained earnings — 740,820 (39,829) (394) 4A (116,923) 116,923 6H 715,222 (110,909) 4B (25,598) 6I 2,228 4C (1,059) 4D 33,040 4E Treasury stock — (661,547) — — — — (661,547) Total stockholders' equity allocated to Acorn HoldCo — 357,102 385,528 (77,094) 308,434 216,015 881,551 Noncontrolling interests — — — — — 287,089 6K 287,089 Total stockholders' equity — 357,102 385,528 (77,094) 308,434 503,104 1,168,640	Additional paid-in capital	_	288,946	371,765	_		371,765	549,767	6G	838,713
Retained earnings — 740,820 (39,829) (394) 4A (116,923) 116,923 6H 715,222 (110,909) 4B (25,598) 6I Treasury stock — (661,547) — — — — (661,547) Total stockholders' equity allocated to Acorn HoldCo — 357,102 385,528 (77,094) 308,434 216,015 881,551 Noncontrolling interests — — — — 287,089 6K 287,089 Total stockholders' equity — 357,102 385,528 (77,094) 308,434 503,104 1,168,640										
Comparison of the control of the c		_			_			4,758	6H	
2,228 4C	Retained earnings	_	740,820	(39,829)			(116,923)			715,222
(1,059) 4D 33,040 4E Treasury stock — (661,547) — — — — — — (661,547) Total stockholders' equity allocated to Acorn HoldCo — 357,102 385,528 (77,094) 308,434 216,015 881,551 Noncontrolling interests — — — — — — — — 287,089 6K 287,089 Total stockholders' equity — 357,102 385,528 (77,094) 308,434 503,104 1,168,640								(25,598)	6I	
33,040 4E Treasury stock — (661,547) — — — — — — — (661,547) Total stockholders' equity allocated to Acorn HoldCo — 357,102 385,528 (77,094) 308,434 216,015 881,551 Noncontrolling interests — — — — — — — — 287,089 6K 287,089 Total stockholders' equity — 357,102 385,528 (77,094) 308,434 503,104 1,168,640										
Treasury stock — (661,547) — — — — (661,547) Total stockholders' equity allocated to Acorn HoldCo — 357,102 385,528 (77,094) 308,434 216,015 881,551 Noncontrolling interests — — — — 287,089 6K 287,089 Total stockholders' equity — 357,102 385,528 (77,094) 308,434 503,104 1,168,640										
Total stockholders' equity allocated to Acorn HoldCo — 357,102 385,528 (77,094) 308,434 216,015 881,551 Noncontrolling interests — — — — — 287,089 6K 287,089 Total stockholders' equity — 357,102 385,528 (77,094) 308,434 503,104 1,168,640	Treasury stock	_	(661.547)	_			_	_		(661.547)
HoldCo — 357,102 385,528 (77,094) 308,434 216,015 881,551 Noncontrolling interests — — — — — 287,089 6K 287,089 Total stockholders' equity — 357,102 385,528 (77,094) 308,434 503,104 1,168,640										
Noncontrolling interests — — — — 287,089 6K 287,089 Total stockholders' equity — 357,102 385,528 (77,094) 308,434 503,104 1,168,640		_	357,102	385.528	(77,094)		308,434	216,015		881,551
Total stockholders' equity — 357,102 385,528 (77,094) 308,434 503,104 1,168,640				_			_		6K	
	_		357,102	385.528	(77,094)		308.434			
		<u>\$ —</u>								

7.3

PRO FORMA CONDENSED COMBINED STATEMENT OF OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2021

(in thousands of USD except per share amounts)

	Historical								
	Acorn HoldCo (US GAAP)	ADTRAN (U.S. GAAP)	ADVA (IFRS) (See Note 3)	ADVA U.S. GAAP Adjustments	(Note)	ADVA (U.S. GAAP)	Transaction Adjustments	(Note)	Pro Forma Combined
Revenue									
Network Solutions	\$ —	\$498,834	\$ 615,317	\$ —		\$615,317	\$ —		\$1,114,151
Services & Support		64,170	99,708			99,708			163,878
Total Revenue		563,004	715,025			715,025			1,278,029
Cost of Revenue									
Network Solutions	_	307,841	443,902	411	4A	392,974	44,061	6A	787,361
				(51,339)	4B		582	6B	
							41,903	6D	
Services & Support	_	36,786	12,098	_		12,098	123	6G	49,693
							686	6J	
Total Cost of Revenue		344,627	456,000	(50,928)		405,072	87,355		837,054
Gross Profit		218,377	259,025	50,928		309,953	(87,355)		440,975
Selling, general and administrative expenses	_	124,414	118,828	882	4C	119,710	337	6B	375,168
							98,978	6D	
							(1,093)	6E	
							1,098	6G	
							25,598	6I	
							6,126	6J	
Research and development expenses	_	108,663	90,929	49,872	4B	140,801	1,487	6B	254,438
							(1,225)	6D	
							716	6G	
		(1.4.700)	40.260	154		40.442	3,996	6J	(100 (21)
Operating Income (Loss)		(14,700)	49,268	174		49,442	(223,373)		(188,631)
Interest and dividend income		2,844	119	(402)	40	119			2,963
Interest expense	_	(34)	(2,175)	(493)	4B	(1,726)	_		(1,760)
Net investment gain (loss)	_	1,761		942	4C		_		1,761
Other income (expense), net	_	3,824	7,585	348	4D	7,933	_		11,757
Income (loss) Before Income Taxes		(6,305)	54,797	971	40	55,768	(223,373)		(173,910)
Income tax (expense) benefit	_	(2,330)	15,386	(291)	4E	15,095	56,488	6F	69,253
Net income (loss)	<u> </u>				4E	\$ 70,863		ОГ	
Net income (loss) Net income (loss) attributable to noncontrolling	5 —	\$ (8,635)	\$ 70,183	\$ 680		\$ 70,003	(166,885)		\$ (104,657)
interest							(29,395)	6K	(29,395)
Net income (loss) attributable to common									
shareholders	<u>\$ —</u>	\$ (8,635)	\$ 70,183	\$ 680		\$ 70,863	\$ (137,490)		\$ (75,262)
Weighted average shares outstanding - basic		48,582					27,995	6L	76,577
Weighted average shares outstanding - diluted	_	48,582					27,995	6L	76,577
Earnings (loss) per common share - basic	\$ —	\$ (0.18)							\$ (0.98)
Earnings (loss) per common share - diluted	\$ —	\$ (0.18)							\$ (0.98)

7.4 Notes to the Pro Forma Condensed Combined Financial Information

Note 1 - Proposed business combination of ADTRAN and ADVA into Acorn HoldCo

In August 2021, the ADTRAN board voted to adopt the Business Combination Agreement ("BCA") which provided the structure under which ADVA, a German public company which develops, manufactures and sells ethernet-based networking solutions to telecommunications carriers and enterprises to deliver data, storage, voice and video services for consideration will combine its business with ADTRAN under Acorn HoldCo. ADTRAN will become a subsidiary of Acorn HoldCo through a merger of Merger Sub, a wholly-owned direct subsidiary of Acorn HoldCo, with and into ADTRAN, with ADTRAN surviving the merger.

As of March 14, 2022, the offer has been accepted for a total of 34.0 million ADVA shares, which corresponds to an acceptance rate of approximately 66.01% of all outstanding ADVA shares as of December 31, 2021. The acceptance period for the offer expired on February 14, 2022 and therefore, no additional acceptance is anticipated. Additionally, for purposes of the condensed combined pro forma financial information it is assumed that Acorn HoldCo does not intend to purchase any additional shares on the open market prior to the consummation of the business combination. As such, the pro forma condensed combined financial information assumes that Acorn HoldCo will acquire 66.01% of the equity of ADVA, which has an estimated fair value of approximately \$550.0 million. The transaction price will be comprised of shares of Acorn HoldCo common stock and replacement Acorn HoldCo stock options, which is determined based on the closing share price of the ADTRAN common stock of \$19.12 on March 14, 2022.

The proposed business combination of ADVA will be accounted for using the acquisition method of accounting as per the provisions of Accounting Standards Codification 805, "Business Combinations" ("ASC 805"). The BCA uses a fixed exchange ratio of Acorn HoldCo shares of common stock for ADVA shares of common stock, which will result in approximately 36% pro forma equity stake for ADVA stockholders and 64% equity stake for ADTRAN stockholders in the post-closing combined company (calculated on a fully diluted basis and assuming a tender of 66.01% of ADVA's current issued and outstanding share capital). Therefore, ADTRAN shareholders will continue to hold a majority interest in the combined company after the proposed business combination is completed. The board of directors will be comprised of six members from ADTRAN and three members from ADVA; the current ADTRAN chief executive officer will act as the chairman of the board. Additionally, the current ADTRAN chief executive officer and ADTRAN chief financial officer will continue to hold these positions within the combined company. Therefore, under ASC 805, ADTRAN represents the accounting acquirer. Additionally, per the terms of the BCA, ADTRAN will be required to replace the historical ADVA stock options outstanding (vested and unvested) with Acorn HoldCo stock options adjusted for the fixed exchange ratio and a revised strike price based on the fixed exchange ratio and translated to U.S. dollars ("USD").

The proforma condensed combined financial information was prepared to illustrate the effects of the proposed business combination. For each of the periods presented, the proforma condensed combined financial information reflects the combination of historical financial information of Acorn HoldCo, ADTRAN and ADVA, adjusted to give effect to the acquisition method of accounting in accordance with ASC 805 based on a preliminary purchase price allocation and as subsequently described in greater detail below. Furthermore, additional proforma adjustments have also been reflected to show impacts of differences in reporting currencies, basis of accounting and classification and presentation of certain financial information. For purposes of certain disclosures that follow, for the period before the inception of Acorn HoldCo, August 10, 2021, ADTRAN and ADVA and for the period after the inception of Acorn HoldCo, ADTRAN and ADVA may be referred to collectively as the combined company.

Note 2 - Basis of presentation

The pro forma condensed combined financial information was prepared on the basis of IDW Accounting Practice Statement: Preparation of Pro Forma Financial Information (IDW AcPS AAB 1.004) (*IDW Rechnungslegungshinweis*: *Erstellung von Pro forma-Finanzinformationen (IDW RH HFA 1.004)*), as promulgated by the IDW. Acorn HoldCo and ADTRAN's historical financial statements were prepared in accordance with U.S. GAAP and presented in thousands of USD. ADVA's consolidated income statement for the year ended December 31, 2021 has been prepared in accordance with IFRS as adopted by the EU and presented in thousands of Euros ("**Euro**") and translated to thousands of USD for pro forma condensed combined financial information purposes. As such, certain IFRS, as adopted by the EU to U.S. GAAP adjustments are included in the pro forma condensed combined financial information as discussed in Note 4 below.

For purposes of preparing the pro forma condensed combined financial information, the historical financial information of ADVA and related pro forma adjustments were translated from Euro to USD using the following historical exchange rates as posted by Oanda:

		€/\$
I	Balance sheet and related adjustments as of December 31, 2021: period-end exchange rate at	
	December 31, 2021	1.134
5	Statement of operations and related adjustments for the year ended December 31, 2021:	
	average exchange rate for that period	1.185

Note 3 – Reclassifications

Certain reclassifications were made to align ADVA's financial statement presentation with that of ADTRAN based on information available to date.

Pro forma condensed combined balance sheet as of December 31, 2021:

Presentation in ADVA's IFRS financial statements			Amount millions)
Trade accounts receivable	Accounts receivable, less allowance for doubtful accounts	\$	94.1
Contract assets	Other Receivables	\$	0.2
Other current assets	Accounts receivable, less allowance for doubtful accounts	\$	3.1
Inventories	Inventory, net	\$	146.5
Other current assets	Prepaid expenses and other current assets	\$	12.8
Right-of-use assets	Other non-current assets	\$	25.5
Property, plant and equipment	Property, plant and equipment, net	\$	37.8
Deferred tax assets	Deferred tax assets, net	\$	17.4
Intangible assets acquired in business combinations	Intangibles, net	\$	13.6
Other intangible assets	Intangibles, net	\$	9.7
Capitalized development projects	Intangibles, net	\$	110.9
Current lease liabilities	Accrued expenses and other liabilities	\$	6.8
Current liabilities to banks	Current portion of debt	\$	28.7
Trade accounts payable	Accounts payable	\$	94.4
Current contract liabilities	Unearned revenue	\$	21.3
Refund liabilities	Accrued expenses and other liabilities	\$	1.1
Other current liabilities	Accrued expenses and other liabilities	\$	45.4
Current provisions	Accrued expenses and other liabilities	\$	17.5
Provisions for pensions and similar employee benefits	Pension liability	\$	8.4
Other non-current provisions	Other non-current liabilities	\$	2.8
Non-current liabilities to banks	Non-current portion of debt	\$	25.5
Non-current contract liabilities	Non-current unearned revenue	\$	10.6
Share capital	Common stock	\$	58.4
Capital reserve	Additional paid-in capital	\$	371.8
Accumulated deficit	Retained earnings	\$	(107.0)
Accumulated other comprehensive income	Accumulated other comprehensive loss	\$	(4.8)
Net income	Retained earnings	\$	67.2

Pro forma condensed combined statement of operations for the year ended December 31, 2021:

Presentation in ADVA's IFRS financial statements	Presentation in pro forma condensed combined statement of operations	-	Amount millions)
Revenue	Network Solutions	\$	615.3
Revenue	Services & Support	\$	99.7
Cost of Revenue	Network Solutions	\$	(443.9)
Cost of Revenue	Services & Support	\$	(12.1)
Selling and marketing expenses	Selling, general and administrative expenses	\$	(74.6)
General and administrative expenses	Selling, general and administrative expenses	\$	(46.0)
Other operating income - Government grants received	Other income (expense), net	\$	2.7
Other operating income - Release of provisions	Selling, general and administrative expenses	\$	1.0
Other operating income - Income for the supply of development services	Other income (expense), net	\$	0.3
Other operating income - Release of bad debt allowances	Selling, general and administrative expenses	\$	0.1
Other operating income - Refund of duty and logistics charges	Selling, general and administrative expenses	\$	1.3
Other operating income - Reversal of customer credit notes	Selling, general and administrative expenses	\$	0.3
Other operating income - Other	Other income (expense), net	\$	1.3
Other operating expenses - Impairment of trade accounts receivable	Selling, general and administrative expenses	\$	(0.2)
Other operating expenses - Reversal of prepayment	Selling, general and administrative expenses	\$	(0.3)
Other operating expenses - Other	Selling, general and administrative expenses	\$	(0.3)
Interest income	Interest and dividend income	\$	0.1
Foreign currency exchange gains	Other income (expense), net	\$	14.5
Foreign currency exchange losses	Other income (expense), net	\$	(11.4)

Note 4 - IFRS to U.S. GAAP adjustments

ADVA's historical consolidated statement of financial position as of December 31, 2021 and income statement for the year ended December 31, 2021 have been prepared in accordance with IFRS as adopted by the EU, which differs in certain material respects from U.S. GAAP. The historical financial statements have been adjusted to align ADVA's historical accounting policies to accounting policies in accordance with U.S. GAAP. Adjustments are initially calculated in EUR and translated to USD based on the exchange rates detailed in Note 2. Any differences between adjustments impacting the pro forma condensed combined balance sheet and the pro forma condensed combined statement of operations are due to foreign exchange rates.

- A. Represents an adjustment to eliminate ADVA's inventory impairment reversals that were recorded in accordance with IFRS but are prohibited under U.S. GAAP. The balance sheet impact resulted in a derecognition of \$0.4 million of inventory as of December 31, 2021. The net impact to the statement of operations for the year ended December 31, 2021 includes an increase to cost of revenue—network solutions of \$0.4 million.
- **B.** Represents an adjustment to ADVA's capitalized development projects, which are capitalized under IFRS; however, these costs would be expensed under U.S. GAAP. The amount expensed is presented as research and development costs as technological feasibility was not met under U.S. GAAP. The reversal of the related amortization expense is eliminated in cost of revenue network solutions where it was historically recorded under IFRS. The pro forma condensed combined balance sheet impact resulted in a derecognition of capitalized development projects of \$110.9 million. The net impact to the pro forma condensed combined statement of operations for the year ended December 31, 2021 involves a \$51.3 million reversal of the historical amortization expense, a \$49.9 million increase to research and development expenses incurred during the period, and a \$0.5 million increase in interest expense that was previously capitalized as part of the development costs.

C. Represents an adjustment to ADVA's real estate leases accounted for under IFRS to operating leases under U.S. GAAP, by adjusting the right-of-use assets and related depreciation and interest expense recognized. The pro forma condensed combined balance sheet impact results in an increase to the right-of-use assets, presented in other non-current assets, of \$2.2 million. Additionally, expense is adjusted to reflect straight line rent expense by adjusting the historical amortization of the right-of-use asset recorded in selling, general and administrative expenses and reclassifying the historical interest expense to selling, general and administrative expenses. This expense adjustment results in the following (in millions of USD):

	Decei	r ended mber 31, 2021
Adjustment to historical amortization expense	\$	(0.1)
Reclassification of interest expense		1.0
Net adjustment to selling, general and administrative expenses	\$	0.9

See Note 6 adjustment E for the related purchase accounting impacts to the acquired leases.

- **D.** Represents an adjustment to ADVA's net pension obligation and return on plan assets due changes in assumptions under U.S. GAAP. The change in assumptions resulted in a \$1.1 million increase to the net pension obligation in the pro forma condensed combined balance sheet. Additionally, adjusted for the increase in expected return on plan assets and the change in interest expense which increased other income (expense), net by \$0.3 million for the year ended December 31, 2021. No further balance sheet adjustments were made as any changes to other comprehensive income would be eliminated due to the application of purchase accounting; see Note 6 adjustment H.
- E. Represents an adjustment to deferred tax liabilities and tax expense for the tax effects of adjustments reflected herein to align ADVA's historical accounting policies in accordance with U.S. GAAP (calculated at an estimated statutory rate of 30%). The balance sheet impact resulted in a reclassification of \$6.2 million of deferred tax assets to deferred tax liabilities, related to jurisdictional netting alignment, as well as the derecognition of deferred tax liabilities of \$33.0 million for a net impact to deferred tax liabilities of \$39.0 million and retained earnings of \$33.0 million. The net impact to the statement of operations for the year ended December 31, 2021 resulted in a decrease to tax benefit of \$0.3 million.

Note 5 - Preliminary purchase price and allocation

Preliminary purchase price

The preliminary purchase price is approximately \$550.0 million based on ADVA shareholders receiving 28.0 million shares of Acorn HoldCo common stock at a closing share price of \$19.12 for the ADTRAN common stock as of March 14, 2022 and a total of \$14.8 million attributable to the purchase price for the fair value of the 2.4 million replacement Acorn HoldCo stock options issued based on a Black-Scholes model. Upon completion of the proposed business combination, ADTRAN will be required to replace the historical ADVA stock options outstanding (vested and unvested) with replacement Acorn HoldCo stock options adjusted for the fixed exchange ratio and a revised strike price based on the fixed exchange ratio and translated to USD. For historical unvested ADVA stock options, option holders are subject to continued employment through the remaining vesting period. As such, of the total fair value of \$23.4 million for the replacement Acorn HoldCo stock options granted, \$14.8 million is allocated to the purchase price based on the pre-combination services provided by the option holder and the remaining of \$8.6 million is allocated to post-combination expense which will be recognized over the remaining vesting period (see Note 6 adjustment G).

The detailed calculation of the preliminary purchase price is as follows (in millions of USD, except exchange ratio and share price):

Preliminary purchase price	
ADVA shares to be acquired as of March 14, 2022	34.0
Fixed exchange ratio	0.8244
Number of Acorn HoldCo shares issued	28.0
Share price at March 14, 2022	\$ 19.12
Preliminary purchase price paid for ADVA shares	\$ 535.2
Fair value of replacement Acorn HoldCo stock options attributable to the purchase price	\$ 14.8
Total Preliminary Purchase Price	\$ 550.0

The preliminary purchase price does not purport to represent the actual value of the total consideration that will be received by ADVA's shareholders when the proposed business combination is completed. In accordance with U.S. GAAP, the fair value of the shares of Acorn HoldCo common stock issued as part of the consideration will be measured on the closing date at the closing price and the fair value of the replacement Acorn HoldCo stock options will be estimated using a Black-Scholes model on the grant date. These requirements will likely result in a difference in the purchase price and that difference may be material. For example, with other assumptions held constant, an increase or decrease of 10% in the closing price would increase or decrease the fair value of the preliminary purchase price by \$56.0 million and \$55.8 million, respectively, which would result in an increase or decrease to goodwill. However, a change in the closing share price does not change the number of Acorn HoldCo shares to be issued or replacement Acorn HoldCo stock options to be granted.

(in millions except for per share amounts)	Pro Forma	+10% ch	ange	-10%	6 change
Price per share	\$ 19.12	\$ 2	1.03	\$	17.21
Preliminary purchase price	\$ 550.0	\$ 6	06.0	\$	494.2

Preliminary purchase price allocation

Under the acquisition method of accounting, ADVA's assets and liabilities will be recorded at fair value at the date of the business combination and combined with the historical carrying amounts of ADTRAN's assets and liabilities. For this purpose, fair value shall be determined in accordance with the fair value concepts defined in ASC 820, "Fair Value Measurements and Disclosures" ("ASC 820"). Fair value is defined in ASC 820 as "the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date." Fair value measurements can be highly subjective and can involve a high degree of estimation. In the pro forma condensed combined balance sheet, the purchase price paid by ADTRAN to acquire ADVA has been allocated to the assets acquired, liabilities assumed, and goodwill based upon management's preliminary estimate of respective fair values.

In October 2021, the FASB issued ASU 2021-08, "Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers" ("ASU 2021-08"). Upon the adoption of this update, contract assets and contract liabilities (i.e. deferred revenue) acquired in a business combination will be recognized and measured by the acquirer on the acquisition date in accordance with ASC 606, "Revenue from Contracts with Customers," as if the acquirer had originated the contracts, which would generally result in an acquirer recognizing and measuring acquired contract assets and contract liabilities consistent with how they were recognized and measured in the acquiree's financial statements. ADTRAN intends to early adopt ASU 2021-08 prior to the consummation of the proposed business combination. Therefore, the pro forma condensed combined financial information presented reflects the adoption of ASU 2021-08, and ADVA's historical deferred revenue balances as of December 31, 2021 have been included in the preliminary purchase price allocation in accordance with ASU 2021-08.

ADTRAN's purchase price allocation for the proposed business combination is preliminary and subject to revision once the proposed business combination is complete and as additional information about the fair value of the assets to be acquired and liabilities to be assumed becomes available. ADTRAN has engaged a third-party valuation company to assist it in completing the valuation of certain assets to be acquired and liabilities to be assumed. However, ADTRAN has not completed a full, detailed valuation analysis. The preliminary valuation performed is limited to inventory, intangible assets, real estate leases, fixed assets, and deferred taxes. The valuation is based on available financial statement information as of December 31, 2021 and current forecasts prepared by ADTRAN. Accordingly, the pro forma condensed combined financial information includes a preliminary allocation of the purchase price based on assumptions and estimates that, while considered reasonable under the circumstances, are subject to changes, which may be material. ADTRAN will continue to refine its identification and valuation of assets to be acquired and liabilities to be assumed as further information becomes available.

The final determination of the purchase price allocation will be completed as soon as practicable and will be based on the fair values of the assets acquired and liabilities assumed as of the closing date. The final amounts allocated to assets acquired and liabilities assumed could differ significantly from the amounts presented in the pro forma condensed combined financial information.

The preliminary purchase price is allocated to the assets to be acquired and liabilities to be assumed based on the estimated fair values, with any excess purchase price allocated to goodwill as follows (in millions of USD):

Consideration:	
Estimated total purchase price	\$ 550.0
Noncontrolling interest	287.1
Net Assets:	
Cash and cash equivalents	123.6
Accounts receivable	97.2
Other current assets	201.7
Intangible assets	522.6
Other non-current assets	89.7
Accounts payable	(94.4)
Accrued liabilities	(71.0)
Other current liabilities	(56.6)
Other non-current liabilities	(74.1)
Deferred tax liabilities	(124.2)
Goodwill	\$ 222.6

As ADVA shares will remain trading after the business combination, the noncontrolling interest is calculated using 17,488,354 ADVA shares held by noncontrolling interest multiplied by the ADVA share price of €15.00 (\$16.42 using the March 14, 2022 EUR to USD conversion rate of \$1.0944) on March 14, 2022. A 10% increase or decrease to the ADVA share price would result in a \$28.7 million increase or \$28.7 million decrease, respectively, to the value of noncontrolling interest, with an offset to goodwill.

Note 6 - Transaction accounting adjustments

Adjustments included in the pro forma condensed combined financial information are represented by the following. Adjustments are initially calculated in EUR and translated to USD based on the exchange rates detailed in Note 2. Any differences between adjustments impacting the pro forma condensed combined balance sheet and the pro forma condensed combined statement of operations are due to foreign exchange rates.

- A. Represents an adjustment to reflect the estimated fair value of inventory. The fair value of the inventory was determined using a top-down approach and accordingly ADTRAN considered the components of ADVA's inventory, as well as estimated selling prices and selling and distribution costs resulting in an increase of \$42.2 million to inventory as of December 31, 2021. Additionally, inventory is expected to turnover during the first-year post-close. Therefore, cost of revenue—network solutions in the pro forma condensed combined statement of operations for the year ended December 31, 2021 has been adjusted to recognize the additional non-recurring expense of \$44.1 million. An increase or decrease of 10% in the fair value of the inventory would increase or decrease inventory by \$4.2 million with an increase or decrease to deferred tax assets (liabilities) and goodwill; and an increase or decrease to cost of revenue—network solutions for \$4.4 million.
- **B.** Represents an adjustment to reflect the net increase in fair value of the acquired property, plant and equipment, net of \$7.8 million to reflect the total fair value of \$45.6 million. The fair value was estimated using a cost approach based on the net book value of each asset class adjusted for (i) the current market replacement cost, (ii) the physical and technology attributes of the property, plant and equipment and (iii) the estimated accumulated depreciation as if replacement cost was applied at the original purchase date.

The following table summarizes the estimated fair values for each asset class, the remaining estimated useful life and the impact to depreciation, a recurring expense, reflected in the pro forma condensed combined statement of operations (in millions of USD, except useful lives):

	Fair Value	Remaining Estimated Useful Life (in years)	Pro Forma depreciation expense Year ended December 31, 2021
Land	\$ 0.8	n/a	n/a
Buildings and improvements	3.7	23.2	0.2
Computer hardware, software and networking equipment	3.9	2.1	1.9
Furniture, fixtures and office equipment	1.9	4.1	0.5
Leasehold improvements	4.4	4.8	1.0
Technical machinery and equipment	28.8	2.3	13.0
Other assets	2.1	n/a	n/a
Total	\$ 45.6		16.6
Historical depreciation expense			14.2
Pro forma adjustment			2.4

Depreciation expense increased for the year ended December 31, 2021. The adjustment to increase depreciation expense of \$2.4 million for the year ended December 31, 2021 is presented as follows: \$0.6 million in cost of revenue — network solutions, \$0.3 million in selling, general and administrative expenses and \$1.5 million in research and development expenses.

An increase or decrease of 10% in the estimated fair value of the property, plant and equipment, net would increase or decrease fair value by \$4.6 million with an increase or decrease to deferred tax assets (liabilities) and goodwill. With other assumptions held constant, a 10% increase or decrease in the estimated fair value of the property, plant and equipment, net would increase or decrease the estimated depreciation expense by \$1.7 million for the year ended December 31, 2021.

- C. Represents an adjustment to reflect estimated goodwill of \$222.6 million recognized from the proposed business combination and the elimination of historical ADVA goodwill of \$81.2 million.
- D. Represents an adjustment of \$499.4 million to eliminate ADVA's historical intangible assets recorded and to reflect the acquired identifiable intangible assets consisting of developed technology, customer backlog, customer relationships and the ADVA trade name at the estimated fair value of \$522.6 million, which, as noted above, is preliminary and subject to change once the proposed business combination is completed. The fair value of the developed technology, customer backlog and customer relationships is estimated based on a multi-period excess earnings method which calculates the present value of the estimated revenues and net cash flows derived from the developed technology, customer backlog and customer relationships, respectively. The fair value of the trade name is based on the relief from royalty method which estimates the value based on the hypothetical royalty payments that are saved by owning the asset. The following table summarizes the fair values of ADVA's identifiable intangible assets, their estimated useful lives and the impact to ADTRAN's amortization, a recurring expense, reflected in the pro forma condensed combined statement of operations (in millions of USD, except for useful lives):

	Fair	Estimated Useful Life	Pro Forma Amortization Expense Year ended December 31,	Income Statement
	Value	(in years)	2021	Classification
Developed technology	\$342.4	8	44.7	Cost of revenue—Network Solutions
Backlog	85.5	1	89.4	Selling, general and administrative expense
Customer relationships	53.2	11	5.1	Selling, general and administrative expense
Trade name	41.5	5	8.7	Selling, general and administrative expense
Total	\$522.6		147.9	
Historical amortization expense			8.2	
Pro forma adjustment			139.7	

The adjustment to amortization expense of \$139.7 million for the year ended December 31, 2021, is presented as follows: \$41.9 million in cost of revenue—network solutions and \$99.0 million in selling, general and administrative expenses; additionally, \$1.2 million was removed from research and development expenses for the year ended December 31, 2021 in the historical ADVA financial statements.

An increase or decrease of 10% in the fair value of the intangible assets acquired would increase or decrease the fair value by \$52.3 million with an increase or decrease to deferred tax assets (liabilities) and goodwill. With other assumptions held constant, a 10% increase or decrease in the fair value of the intangible assets would increase or decrease the estimated amortization expense by \$14.8 million for the year ended December 31, 2021.

- E. Represents an adjustment to the right-of-use assets and lease liabilities for real estate leases acquired as part of the proposed business combination to fair value of \$26.1 million. ADTRAN calculated the lease liability based on the remaining lease payments and discount rates at December 31, 2021. This resulted in an increase to the current lease liability of \$0.2 million, presented in accrued expenses and other liabilities, and an increase to the noncurrent lease liability of \$0.6 million, presented in non-current lease liabilities. The right of use asset is calculated based on the lease liability less lease incentives and the tenant improvement allowance to be received post-close. This resulted in a decrease to other non-current assets of \$0.3 million. Additionally, the recurring lease expense was decreased by \$1.1 million for the year ended December 31, 2021, presented in selling, general, and administrative expenses.
- F. Represents an adjustment to deferred tax liabilities for the tax effects of recognizing the preliminary purchase price allocation reflected herein (calculated at an estimated statutory rate of 30%). Deferred taxes relating to goodwill for prior ADVA acquisitions have also been removed from the pro forma condensed combined financial information. This resulted in an adjustment to deferred tax liabilities for \$161.0 million as of December 31, 2021. Additionally, represents the income tax impact of the pro forma adjustments, a recurring adjustment, (calculated at an estimated statutory rate of 30%) for an increase to the income tax benefit of \$56.5 million for the year ended December 31, 2021. These adjustments are based on estimates of the fair value of ADVA's assets to be acquired, liabilities to be assumed, and the related purchase price allocations. These estimates are subject to further review by ADTRAN's and ADVA's respective managements, which may result in material adjustments to deferred taxes with an offsetting adjustment to goodwill.

Additionally, the adjustments discussed above include additional tax costs associated with ADVA's operations within ADTRAN's structure of approximately \$2.8 million for the year ended December 31, 2021. The effective tax rate of the combined company could be significantly different than what is presented in these pro forma condensed combined financial statements depending on post-business combination activities, including legal entity restructuring, repatriation decisions, and the geographical mix of taxable income.

G. Represents the preliminary purchase price of \$550.0 million based on the issuance of 28.0 million shares of Acorn HoldCo common stock to ADVA shareholders and 2.4 million replacement Acorn HoldCo stock options granted to ADVA option holders. The fair value of the ADTRAN common stock was based on a closing price at March 14, 2022 of \$19.12 per share. The fair value of the replacement Acorn HoldCo stock options is based on a Black-Scholes model with the following weighted average assumptions:

ADTRAN share price at March 14, 2022	\$19.12
Strike price	\$10.94
Expected term (in years)	5.5
Volatility	44.00%
Dividend rate	1.92%
Risk-free rate	1.96%

ADTRAN will have additional recurring post-close compensation expense of \$8.6 million, of which \$3.6 million will be recognized during the first year post-close, \$2.7 million recognized during the second year post-close, and the remaining thereon through 2025. As such, an additional pro forma adjustment increases the historical ADVA stock compensation expense for these replacement Acorn HoldCo stock options by \$1.9 million for the year ended December 31, 2021. The compensation expense of \$1.9 million is presented as \$0.1 million to costs of goods sold – services and support, and \$1.1 million to selling, general, and administrative expenses, and \$0.7 million to research and development expenses for the year ended December 31, 2021. With other assumptions held constant, an increase or decrease of 10% in the ADTRAN share price would increase or decrease the post-close compensation expense by \$1.5 million or \$1.4 million, respectively.

- H. Represents an adjustment to eliminate all of ADVA's historical shareholders' equity.
- I. Represents an adjustment to reflect an accrual of \$25.6 million of transaction costs expected to be incurred by ADTRAN and ADVA between January 1, 2022 through the close of the proposed business combination that are not reflected in the historical financial statements. This \$25.6 million has been recorded as an accrued liability in the pro forma condensed combined balance sheet at December 31, 2021 and a non-recurring expense in the pro forma condensed combined statement of operations for the year ended December 31, 2021.

Additionally, \$16.3 million in non-recurring transactions costs have been incurred as of December 31, 2021 and are recorded in ADTRAN's and ADVA's historical balance sheet and statement of operations as of and for the year ended December 31, 2021.

J. Represents additional recurring compensation expense related to the modification of the ADTRAN performance stock units (PSUs). Upon completion of the proposed business combination, the ADTRAN PSUs will be modified to remove the performance and/or market conditions; but will continue to require holders to provide services through the remaining vesting period. As such, the ADTRAN PSUs with performance conditions, which were not probable of being met historically, are remeasured on the modification date, based on the March 14, 2022 closing share price of \$19.12 for a total fair value of \$9.4 million. For the PSUs with market conditions, the new fair value was based on (i) the fair value at the grant date plus (ii) an incremental amount (if any), when the fair value immediately before the modification is higher than the fair value upon the modification.

The incremental expense, due to the modification and based on the changes in fair value, is recognized on a straight-line basis over the remaining vesting period. The pro forma adjustment increases the historical ADTRAN stock compensation expense for these modified ADTRAN PSUs by \$10.8 million for the year ended December 31, 2021. The additional compensation expense is presented as \$0.7 million to costs of goods sold – services and support, and \$6.1 million to selling, general, and administrative expenses, and \$4.0 million to research and development expenses for the year ended December 31, 2021. With other assumptions held constant, an increase or decrease of 10% in the ADTRAN share price would increase or decrease the post-close compensation expense by \$1.3 million. This modification may have an impact on the number of PSUs considered in the calculation of pro forma diluted earnings per share because of the removal of the performance and/or market conditions.

- **K.** Represents an adjustment to recognize the noncontrolling interest at its fair value of \$287.1 million which is based the share price of ADVA (see Note 5). Additionally, the pro forma condensed combined statement of operations for the year ended December 31, 2021 reflects an adjustment of \$29.4 million to present the net loss attributable to noncontrolling interests as a result of the business combination. This amount represents ADVA's net loss attributable to noncontrolling interest after all U.S. GAAP adjustments and transaction adjustments, excluding \$9.5 million of net loss related to ADTRAN's transaction expenses attributable to Acorn Holdco shareholders.
- L. Represents an adjustment to the weighted average shares outstanding due to the increase of the number of Acorn HoldCo shares to be issued in the transaction of 28.0 million shares. The 2.4 million replacement Acorn HoldCo stock options issued and an incremental 0.2 million ADTRAN PSUs were not included in the calculation of pro forma diluted EPS for the year ended December 31, 2021 as their inclusion would be anti-dilutive.

7.5 Auditor's Report

To Acorn HoldCo, Inc., Alabama, United States

We have audited whether the pro forma financial information as of December 31, 2021 of Acorn HoldCo, Inc. (the "Company") has been properly compiled on the basis stated in the pro forma notes and whether this basis is consistent with the accounting policies of the Company. The pro forma financial information comprises a pro forma statement of operations for the period from January 1, 2021 to December 31, 2021 and a pro forma balance sheet as of December 31, 2021, as well as pro forma notes.

The purpose of the pro forma financial information is to present the material effects the transactions described in the pro forma notes would have had on the historical financial statements if the group had existed in the structure created by the transactions throughout the entire reporting period of the pro forma statement of operations and as of the balance sheet date of the pro forma balance sheet. As pro forma financial information reflects a hypothetical situation, it is not entirely consistent with the presentation that would have resulted had the relevant events actually occurred at the beginning of the reporting period of the pro forma statement of operations and as of the balance sheet date of the pro forma balance sheet. Therefore, we do not issue an opinion on the actual effects of the transaction described in the pro forma notes.

The compilation of pro forma financial information in accordance with the principles of the *IDW Accounting Practice Statement: Preparation of Pro Forma Financial Information (IDW AcPS AAB 1.004)* promulgated by the Institut der Wirtschaftsprüfer in Deutschland e.V. (IDW) is the responsibility of the management of the Company.

Our responsibility is to express an opinion, based on our audit, whether the pro forma financial information has been properly compiled on the basis stated in the pro forma notes and whether this basis is consistent with the accounting policies of the Company. This includes the evaluation of the overall presentation of the pro forma financial information. The subject matter of this engagement does neither include an audit or review of the basic figures including their adjustment to the accounting policies of the Company, nor of the pro forma assumptions stated in the pro forma notes.

We have planned and performed our audit in accordance with the *IDW Auditing Practice Statement: Audit of Pro Forma Financial Information (IDW AuPS 9.960.1)* promulgated by the Institut der Wirtschaftsprüfer in Deutschland e.V. (IDW) in such a way that material errors in the compilation of the pro forma financial information on the basis stated in the pro forma notes and in the compilation of this basis consistent with the accounting policies of the Company are detected with reasonable assurance.

In our opinion, the pro forma financial information has been properly compiled on the basis stated in the pro forma notes. This basis is consistent with the accounting policies of the Company.

Frankfurt am Main, March 18, 2022

PricewaterhouseCoopers GmbH

Wirtschaftsprüfungsgesellschaft

Nadja Picard Stephan Wyrobisch

Wirtschaftsprüferin Wirtschaftsprüfer

(German Public Auditor) (German Public Auditor)

8. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS OF ADTRAN

The following discussion should be read in conjunction with ADTRAN's unaudited condensed consolidated financial statements as of and for the three months ended March 31, 2022, ADTRAN's audited consolidated financial statements as of and for the financial years ended December 31, 2021, December 31, 2020 and December 31, 2019 and the related notes thereto included in this Prospectus.

This discussion is designed to provide information that will assist in understanding ADTRAN's unaudited condensed consolidated financial statements and ADTRAN's audited consolidated financial statements, the changes in certain key performance indicators in those financial statements from period to period, and the primary factors that accounted for those changes, as well as how certain accounting principles affect ADTRAN's financial statements. See section "1.3 Risks Relating to the Business of ADTRAN" and "2.4 Forward Looking Statements" in this Prospectus for a description of important factors that could cause actual results to differ from expected results.

8.1 Overview

ADTRAN considers itself to be one of the leading global providers of networking and communications platforms, systems and services focused on the broadband access market, serving a diverse domestic and international customer base in multiple countries that includes tier-1, -2 and -3 service providers, alternative service providers, such as utilities, municipalities and fiber overbuilders, cable/multiple system operators ("MSO"), small- to medium-sized businesses ("SMBs") and distributed enterprises. ADTRAN's innovative solutions and services enable voice, data, video and internet-communications across a variety of network infrastructures and are currently in use by a multitude of people worldwide. ADTRAN supports its customers through its direct global sales organization and its distribution networks. The success of ADTRAN depends upon its ability to increase unit volume and market share through the introduction of new products and succeeding generations of products having optimal selling prices and increased functionality as compared to both the prior generation of a product and to the products of competitors in order to gain market share. In order to service customers and grow revenue, ADTRAN is continually conducting research and development of new products addressing customer needs and testing those products for the specific requirements of the particular customers. ADTRAN is focused on being a leading global supplier of access infrastructure and related value-added solutions from the cloud edge to the subscriber edge. ADTRAN offers a broad portfolio of flexible software and hardware network solutions and services that enable service providers to meet today's service demands, while enabling them to transition to the fully-converged, scalable, highly-automated, cloud-controlled voice, data, internet and video network of the future. In addition to ADTRAN's corporate headquarters in Huntsville, Alabama, United States, the ADTRAN Group has sales and research and development facilities in strategic global locati

ADTRAN ended the first quarter of 2022 with an increase of its consolidated revenue of 21.2% compared to the three months ended March 31, 2021, driven by increased shipments to a diverse mix of global tier-1 and regional service providers. During the three months ended March 31, 2022, ADTRAN had three 10% revenue customers geographically diversified, one U.S. distributor, one international service provider customer and one U.S. service provider customer. The year-over-year domestic revenue of the ADTRAN Group increased by 14.5% in the three months ended March 31, 2022 compared to the three months ended March 31, 2021 was driven by increased volume of network termination and fiber CPE in ADTRAN's Network Solutions segment. Internationally, ADTRAN's consolidated revenue for the three months ended March 31, 2022 increased by 35.1% compared to the three months ended March 31, 2021, primarily driven by increased shipments to a tier-1 network operator and multiple alternative network operators in Europe. ADTRAN experienced strong demand for its solutions in the first quarter of 2022 and achieved significant year-over-year bookings growth. Bookings are defined as orders received for a product or service during a fiscal period that will be delivered or performed sometime in the future and is a forward-looking metric that ADTRAN utilizes to help it understand future revenue growth. Bookings are generally subject to modification and or cancellation per the terms of the order. A substantial portion of ADTRAN's shipments in any fiscal period relates to orders received and shipped within that fiscal period for customers under agreements containing nonbinding purchase commitments. ADTRAN's increase in demand comes from service providers planning to deploy ADTRAN's fiber access platforms, in-home service delivery platforms and Software as a Service ("Saa8") applications. During 2021 and continuing in 2022, ADTRAN secured several tier-1 next-generation fiber customers, and previously announced tier-1 fiber customers significan

Among its customers, ADTRAN made progress with its fiber, fiber-extension, in-home service delivery platforms and cloud services while also continuing to engage in value-added service opportunities that are expected to contribute to ADTRAN's 2022 revenue and beyond. In addition, ADTRAN believes that ADTRAN is at the beginning of a significant investment cycle for fiber deployment and in-home Wi-Fi connectivity driven by technology advancements and regulatory influences. Payments to service providers under government funding programs such as the United States Federal Communications Commission (FCC) Rural Digital Opportunity Fund (RDOF) started in 2021, and they are expected to continue in 2022. The transition to next-generation network architectures is beginning, and ADTRAN is seeing demand for its next-generation fiber access and connected home solutions.

ADTRAN Group's revenue is generated by two reportable segments: (i) Network Solutions and (ii) Services & Support.

- (i) The Network Solutions segment includes hardware products and software defined next-generation virtualized solutions used in service provider or business networks, as well as prior generation products. The majority of the revenue generated from this segment is from hardware sales.
- (ii) The Services & Support segment comprises a complete portfolio of maintenance, network implementation and solutions integration and managed services, which include hosted cloud services and subscription services to complement ADTRAN's Network Solutions segment.

In addition to classifying its operations into two reportable segments, ADTRAN reports revenue across three categories of products and services — (i) Access & Aggregation, (ii) Subscriber Solutions & Experience and (iii) Traditional & Other Products.

- (i) ADTRAN's "Access & Aggregation" platforms are used by communication service providers (CSPs) to connect their network infrastructure to subscribers. This revenue category includes hardware- and software-based products and services that aggregate and/or originate access technologies. ADTRAN solutions within this category include a wide array of modular or fixed platforms designed to deliver customized technology and economy based on subscriber density and environmental conditions.
- (ii) ADTRAN's "Subscriber Solutions & Experience" portfolio is used by service providers to terminate their infrastructure at the customer's premises while providing an immersive and interactive experience for the subscriber. These solutions include copper and fiber WAN termination, LAN switching, Wi-Fi access, and cloud software services, for both residential and business markets.
- (iii) ADTRAN's "Traditional & Other Products" category generally includes a mix of prior-generation technologies' products and services, as well as other products and services that do not fit within the other revenue categories.

8.2 Factors Affecting Results of Operations

ADTRAN believes that the factors discussed below have significantly affected its results of operations, financial position and cash flows in the period from 2019 to 2021 and until the date of this Prospectus, and expects that these factors will continue to have a material impact on its results of operations, financial position and cash flows in the future. For a discussion of how these and certain other factors may adversely affect ADTRAN's results of operations, financial position and cash flows, see also section "1.3 Risks Relating to the Business of ADTRAN".

8.2.1 The COVID-19 Pandemic

In March 2020, the World Health Organization declared the COVID-19 outbreak a global pandemic. COVID-19 (or variants of COVID-19) continues to spread throughout the U.S. and the world and has resulted in authorities implementing varying measures to contain the virus, including travel bans and restrictions, quarantines, shelter-in-place orders, and business limitations and shutdowns. The lifting of lockdowns in most areas started a slow economic recovery, but it cannot be predicted how long it will take before market conditions return to normal and there can be no assurance that the economic recovery will offset the uncertainty and instability triggered by the pandemic. New and potentially more contagious variants of the COVID-19 virus are developing in several countries, including regions in which we have significant operations. The COVID-19 variants could further amplify the impact of the pandemic. While ADTRAN is unable to accurately predict the full impact that the COVID-19 global pandemic will have on the results of operations, financial condition, liquidity and cash flows of ADTRAN due to numerous uncertainties, including the duration and severity of the pandemic and containment measures, the compliance with these measures has impacted ADTRAN's day-to-day operations.

ADTRAN has experienced a significant impact to ADTRAN's supply chain given COVID-19 and the related global semiconductor chip shortage, including delays in supply chain deliveries, extended lead times and shortages of some key components, some raw material cost increases and slowdowns at certain production facilities. ADTRAN has also had to increase its volume of inventory to ensure supply continuity during the pandemic. In addition, ADTRAN has experienced significant increases in freight-related costs due to the global shipping crisis. Starting in the third quarter of 2021 and continuing into 2022, ADTRAN incurred supply chain constraint expenses including price inflation for certain electronic components, semiconductor chips and transportation related costs, which lowered ADTRAN's gross margins and decreased profitability. Throughout the pandemic, ADTRAN has seen increased demand in networking requirements and utilization due to social distancing guidelines issued by governments, as well as COVID-19 related reductions in travel and infrastructure expenses. In addition, actions that have been taken by ADTRAN, its customers, suppliers and counterparties in response to the pandemic, including the implementation of alternative work arrangements for certain employees, as well as the impacts to its supply chain, including delays in supply chain deliveries and the related global semiconductor chip shortage, have delayed the timing of some orders

8.2.2 Fluctuation of operating results

ADTRAN's consolidated operating results have fluctuated on a quarterly basis due to a number of factors, including customer order activity, supply chain constraints, component availability, and backlog. A substantial portion of ADTRAN's shipments in any fiscal period relates to orders received and shipped within that fiscal period for customers under agreements containing non-binding purchase commitments. Further, a significant percentage of orders requires delivery within a few days requiring ADTRAN to maintain higher inventory levels. These factors normally result in a varying order backlog and limited order flow visibility; however, with the current global supply chain and transportation constraints, and limited availability of semiconductor chips and other components of ADTRAN's products, ADTRAN has experienced extended lead times, increased logistics intervals and costs, and lower volume of products deliveries, which has had a material adverse effect on the customer relationship and financial condition of the ADTRAN Group. Normal operating expenses are relatively fixed in the short term; therefore, a shortfall in quarterly revenues has significantly impacted ADTRAN's consolidated financial results.

ADTRAN continues to support its customer demand for its products by working with their suppliers, contract manufacturers, distributors, original design manufacturers, and customers to address and to limit the disruption to ADTRAN's operations and order fulfillment.

ADTRAN's consolidated operating results have fluctuated as a result of a number of other factors, including a decline in general economic and market conditions, specifically the decline that has resulted from the COVID-19 pandemic, foreign currency exchange rate movements, increased competition, customer order patterns, changes in product and services mix, domestic and international geopolitical mix, timing differences between price decreases and product cost reductions, product warranty returns, expediting costs, tariffs and announcements of new products by the ADTRAN Group or its competitors. In recent years, ADTRAN initiated restructuring plans to realign its expense structure with the reduction in revenue experienced and with ADTRAN's overall objectives. ADTRAN's management assessed the efficiency of ADTRAN's operations and consolidated locations and personnel, among other things, and implemented certain cost savings initiatives, where possible.

ADTRAN's historical financial performance is not necessarily a meaningful indicator of future results, and in general, management expects that ADTRAN's financial results may vary from period to period. Factors that could materially affect ADTRAN's business, financial condition or operating results are included in this Prospectus under the section "1.3 Risks Relating to the Business of ADTRAN".

8.3 Critical Accounting Policies and Estimates

An accounting policy is deemed to be critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made, if different estimates reasonably could have been used or if changes in the accounting estimate that are reasonably likely to occur could materially impact the results of financial operations. Several accounting policies require material subjective or complex judgment and have a significant impact on ADTRAN's financial condition and results of operations, as applicable. ADTRAN believes the following critical accounting policies affect ADTRAN's more significant judgments and estimates used in the preparation of ADTRAN's consolidated financial statements:

8.3.1 Revenue

ADTRAN's revenue is measured based on the consideration expected to be received in exchange for transferring goods or providing services to a customer and as performance obligations under the terms of the contract are

satisfied. Generally, this occurs with the transfer of control of a product to the customer. Review of contracts with customers, for both direct customers and distributors, are performed and assessed for principal versus agent considerations to determine primary responsibility for delivery of performance obligation, presumed inventory risk, and discretion in establishing pricing, when applicable. For transactions where there are multiple performance obligations, individual products and services are accounted for separately if they are distinct (if a product or service is separately identifiable from other items and if a customer can benefit from it on its own or with other resources that are readily available to the customer). The consideration, including any discounts, is allocated between separate products and services based on their stand-alone selling prices. Stand-alone selling prices are determined based on the prices at which the separate products and services are sold and are allocated based on each item's relative value to the total value of the products and services in the arrangement. For items that are not sold separately, ADTRAN estimates stand-alone selling prices primarily using the "expected cost plus a margin" approach. Payment terms are generally 30 days in the U.S. and typically longer in many geographic markets outside the U.S. Shipping fees are recorded as revenue and the related cost, which ADTRAN has elected to account for as a cost of fulfilling the related contract is included in cost of revenue. Sales, value-added and other taxes collected concurrently with revenue-producing activities are excluded from revenue. Costs of obtaining a contract, if material, are capitalized and amortized over the period that the related revenue is recognized if greater than one year. ADTRAN has also elected to apply the practical expedient related to the incremental costs of obtaining contracts and recognize those costs as an expense when incurred if the amortization period of the assets is one year or le

Revenue is generated by the following two reportable segments: Network Solutions and Services & Support.

8.3.1.1 Network Solutions

The reportable segment "Network Solutions" includes hardware products and software defined next-generation virtualized solutions used in service provider or business networks, as well as prior generation products. The majority of the revenue from this segment is from hardware sales.

Hardware and Software Revenue

Revenue from hardware sales is recognized when control is transferred to the customer, which is generally when the products are shipped. Shipping terms are generally "freight on board" (FOB) shipping point. Revenue from software license sales is recognized at delivery and transfer of control to the customer. Revenue is recorded net of estimated discounts and rebates using historical trends. Customers are typically invoiced when control is transferred and revenue is recognized. ADTRAN's products generally include assurance-based warranties of 90 days to five years for product defects.

In certain transactions, ADTRAN is also the lessor in sales-type lease arrangements for network equipment that have terms of 18 months to five years. These arrangements typically include network equipment, network implementation services and maintenance services.

8.3.1.2 Services & Support

The reportable segment "Services & Support Segment" includes a complete portfolio of maintenance, network implementation and solutions integration and managed services, including hosted cloud services and subscription services which complement our Network Solutions segment.

Maintenance Revenue

ADTRAN's maintenance service periods range from one month to five years. Customers are typically invoiced and pay for maintenance services at the beginning of the maintenance period. ADTRAN recognizes revenue for maintenance services on a straight-line basis over the maintenance period as ADTRAN's customers benefit evenly throughout the contract term and deferred revenue, when applicable, is recorded in unearned revenue and non-current unearned revenue. The total balance of ADTRAN's unearned revenue was \$28.8 million as of March 31, 2022 and \$27.0 million, \$21.0 million and \$18.0 million as of December 31, 2021, 2020 and 2019, respectively.

Network Implementation Revenue

ADTRAN recognizes revenue for network implementation, which primarily consists of engineering, execution and enablement services at a point in time when each performance obligation is complete. If ADTRAN has recognized revenue but has not billed the customer, the right to consideration is recognized as a contract asset that is included in other receivables on ADTRAN's consolidated balance sheet. The contract asset is transferred to accounts receivable when the completed performance obligation is invoiced to the customer.

8.3.2 Inventory

ADTRAN carries its inventory at the lower of cost and net realizable value, with cost being determined using the first-in, first-out method. Standard costs for material, labor, and manufacturing overhead are used to value inventory and are updated at least quarterly. Most variances are expensed in the current period; therefore, ADTRAN's inventory costs approximate actual costs at the end of each reporting period. ADTRAN establishes reserves for estimated excess and obsolete inventory equal to the difference between the cost of the inventory and the estimated net realizable value of the inventory based on estimated reserve percentages, which consider historical usage, known trends, inventory age and marketing conditions. If actual trends and market conditions are less favorable than those projected by management, ADTRAN may be required to make additional inventory write-downs. The reserve for excess and obsolete inventory was \$46.3 million as of March 31, 2022, and \$44.6 million, \$39.6 million and \$34.1 million at December 31, 2021, 2020 and 2019, respectively. For the three months ended March 31, 2022 and 2021, inventory disposals charged against the reserve were \$0.5 million, respectively. Inventory disposals charged against the reserve were \$1.0 million, \$6.0 million and \$1.8 million for the years ended December 31, 2021, 2020 and 2019, respectively.

8.3.3 Stock-Based Compensation

For purposes of determining the estimated fair value of market-based performance stock unit ("PSU") awards on the date of grant, the Monte Carlo Simulation valuation method is used. These PSUs are subject to a market condition based on the relative total shareholder return of ADTRAN against all of the companies in the NASDAQ Telecommunications Index and vest at the end of a three-year performance period. The fair value of performancebased PSUs, restricted stock units ("RSU") and restricted stock is equal to the closing price of ADTRAN's stock on the business day immediately preceding the grant date. Compensation expense related to unvested performance-based PSUs is recognized over the requisite service period of two to three years as the achievement of the performance obligation becomes probable. For purposes of determining the estimated fair value of ADTRAN stock option awards on the date of grant, the Black-Scholes Model is used. This model requires the input of certain assumptions that require subjective judgment. These assumptions include, but are not limited to, expected stock price volatility over the term of the awards and actual and projected employee stock option exercise behaviors. Because ADTRAN stock option awards have characteristics significantly different from those of traded options, and because changes in the input assumptions can materially affect the fair value estimate, the existing model may not provide a reliable, single measure of the fair value of ADTRAN stock option awards. Management will continue to assess the assumptions and methodologies used to calculate the estimated fair value of stock-based compensation. Circumstances may change and additional data may become available over time, which could result in changes to these assumptions and methodologies and thereby materially impact ADTRAN's fair value determination. If factors change in future periods, the compensation expense that ADTRAN records may differ significantly from what ADTRAN has recorded in the current period. As of March 31, 2022, total unrecognized compensation expenses related to the non-vested portion of market-based PSUs, RSUs and restricted stock was approximately \$15.9 million.

8.3.4 Goodwill

Goodwill represents the excess purchase price over the fair value of net assets acquired. ADTRAN qualitatively assesses the carrying value of goodwill in each reporting period for events or circumstance changes that would more likely than not reduce the fair value of the reporting unit below its carrying amount. Based on ADTRAN's assessment of certain qualitative factors such as macro-economic conditions, industry and market considerations, cost factors and overall financial performance, ADTRAN's management concluded that no such events or circumstance changes were identified that would suggest that the fair value of the goodwill was more likely than not greater than its carrying amount as of March 31, 2022. No impairment charges on goodwill were recognized during the three-month period ended March 31, 2022 and during the years ended December 31, 2021, 2020 and 2019. The balance of ADTRAN's goodwill was \$7.0 million as of March 31, 2022 and year-end 2021, 2020 and 2019.

8.3.5 Income Taxes

ADTRAN estimates its income tax provision or benefit in each of the jurisdictions in which the ADTRAN Group operates, including estimating exposures related to examinations by taxing authorities. ADTRAN also makes judgments regarding the realization of deferred tax assets and establishes valuation allowances where ADTRAN believes it is more likely than not that future taxable income in certain jurisdictions will be insufficient to realize these deferred tax assets. ADTRAN estimates regarding future taxable income and income tax provision or benefit may vary due to changes in market conditions, changes in tax laws, or other factors. If ADTRAN's assumptions, and consequently its estimates, change in the future, the valuation allowances ADTRAN has established may be increased or decreased, impacting future income tax expense. ADTRAN continually reviews the adequacy of its valuation allowance and recognizes the benefits of deferred tax assets only as the reassessment indicates that it is more likely than not that the deferred tax assets will be realized in accordance with Accounting Standards Codification (ASC) 740, Income Taxes. Due to a decrease in revenue and profitability for 2019, and all other positive and negative objective evidence considered as part of ADTRAN's analysis, its ability to consider other subjective evidence such as projections for future growth is limited when evaluating whether ADTRAN's deferred tax assets will be realized. As such, ADTRAN is no longer able to conclude that it is more likely than not that its domestic deferred tax assets will be realized and a valuation allowance against its domestic deferred tax assets was established in 2019. However, the amount of the deferred tax assets considered realizable could be adjusted in future periods in the event sufficient evidence is present to support a conclusion that it is more likely than not that all or a portion of ADTRAN's domestic deferred tax assets will be realized.

ADTRAN establishes reserves to remove some or all of the tax benefit of any of its tax positions at the time ADTRAN determines that the positions become uncertain. ADTRAN adjusts these reserves, including any impact on the related interest and penalties, as facts and circumstances change.

8.3.6 Liability for Warranty

ADTRAN's products generally include warranties of 90 days to five years for product defects. ADTRAN accrues warranty returns at the time of product shipment based on its historical return rate and an estimate of the cost to repair or replace the defective products. ADTRAN engages in extensive product quality programs and processes, including actively monitoring and evaluating the quality of its component suppliers. ADTRAN's products continue to become more complex in both size and functionality as many of its product offerings migrate from line card applications to total systems. The increasing complexity of ADTRAN's products will cause warranty incidences, when they arise, to be more costly. ADTRAN's estimates regarding future warranty obligations may change due to product failure rates, material usage, and other rework costs incurred in correcting a product failure. In addition, from time to time, specific warranty accruals may be recorded if unforeseen problems arise. Should ADTRAN's actual experience relative to these factors be worse than its estimates, ADTRAN will be required to record additional warranty expense. The liability for warranty obligations totaled \$5.1 million as of March 31, 2022 and \$5.4 million, \$7.1 million and \$8.4 million at December 31, 2020, 2020 and 2019, respectively. These liabilities are included in accrued expenses and other liabilities in the accompanying consolidated balance sheets.

8.3.7 Pension Benefit Plan Obligations

Pension benefit plan obligations are based on various assumptions used by ADTRAN's actuaries in calculating these amounts. These assumptions include discount rates, compensation rate increases, expected return on plan assets, retirement rates and mortality rates. Actual results that differ from the assumptions and changes in assumptions could affect future expenses and obligations. ADTRAN's net pension liability totaled \$10.7 million as of March 31, 2022 and \$11.4 million, \$18.7 million and \$15.9 million at December 31, 2021, 2020 and 2019, respectively. This liability is included in pension liability in the accompanying consolidated balance sheets.

8.4 Effect of Recent Accounting Pronouncements

See ADTRAN's consolidated financial statements included beginning on page F-3.1 for a full description of recent accounting pronouncements, including the expected dates of adoption and estimated effects on results of operations and financial condition, which is incorporated herein by reference.

8.5 Results of Operations

The following table presents selected financial information derived from ADTRAN's audited consolidated financial statements of income (loss) and ADTRAN's unaudited condensed consolidated financial statements of income (loss) for the periods indicated. Amounts may not foot due to rounding.

	Three Months Ended March 31,		I			
	2022	2021	2021	2020	2019	
	(in thousands of U.S. dollars, unless otherwise stated)					
-	(unaua		(audited)			
Revenue						
Network Solutions	138,374	113,809	498,834	438,015	455,226	
Services & Support	16,144	13,724	64,170	68,495	74,835	
Total Revenue	154,518	127,533	563,004	506,510	530,061	
Cost of Revenue						
Network Solutions	90,653	65,001	307,841	244,226	263,677	
Network Solutions cost of revenue as % of Network Solutions Revenue	65.5	57.1	61.7	55.8	57.9	
Services & Support	9,549	8,931	36,786	44,733	47,217	
Services & Support cost of revenue as % of Service & Support Revenue	59.1	65.1	57.3	65.3	63.1	
Total Cost of Revenue	100,202	73,932	344,627	288,959	310,894	
Total Cost of Revenue as % of Total Revenue	64.8	58.0	61.2	57.0	58.7	
Gross Profit	54,316	53,601	218,377	217,551	219,167	
Selling, general and administrative expenses	27,893	27,435	124,414	113,972	130,288	
Selling, general and administrative expenses as % in Total Revenue	18.1	21.5	22.1	22.5	24.6	
Research and development expenses	26,491	27,501	108,663	113,287	126,200	
Research and development expenses as % in Total Revenue	17.1	21.6	19.3	22.4	23.8	
Asset impairments	_	_	_	65	3,872	
Gain on contingency					(1,230)	
Operating Loss	(68)	(1,335)	(14,700)	(9,773)	(39,963)	
Interest and dividend income	204	290	2,844	1,936	2,765	
Interest expense	(30)	(6)	(34)	(5)	(511)	
Net investment (loss) gain	(3,415)	996	1,761	4,850	11,434	
Other (expense) income, net	(226)	1,999	3,824	(3,254)	1,498	
Loss Before Income Taxes	(3,535)	1,944	(6,305)	(6,246)	(24,777)	
Income tax benefit (expense)	2,408	(1,048)	(2,330)	8,624	(28,205)	
Net Income (Loss)	(1,127)	896	(8,635)	2,378	(52,982)	
Net Income (Loss) as % in Total Revenue	(0.7)	0.7	(1.5)	0.5	(10.0)	

8.5.1 Revenue

8.5.1.1 Comparison of Three Months Ended March 31, 2022 to Three Months ended March 31, 2021

ADTRAN's revenue increased by 21.2% from \$127.5 million for the three months ended March 31, 2021 to \$154.5 million for the three months ended March 31, 2022. The increase in revenue for the three months ended March 31, 2022 was primarily attributable to a \$26.4 million increase in Access & Aggregation revenue and a \$0.6 million increase in the revenue of ADTRAN's Traditional & Other Products, respectively. Although ADTRAN's revenue increased, supply of semiconductor chips and other components of ADTRAN's products has become constrained resulting in extended lead times and increased costs. Transportation constraints, including shortages for both air and surface freight, as well as labor shortages in the transportation industry, have also affected the timing and the cost of obtaining raw materials and production supplies.

Network Solutions segment revenue increased 21.6% from \$113.8 million for the three months ended March 31, 2021 to \$138.4 million for the three months ended March 31, 2022. The increase in revenue for the three months ended March 31, 2022 was due primarily to revenue of Access & Aggregation products and Traditional & Other Products partially offset by Subscriber Solutions & Experience products.

Services & Support segment revenue increased by 17.6% from \$13.7 million for the three months ended March 31, 2021 to \$16.1 million for the three months ended March 31, 2022. The increase in revenue for the three months ended March 31, 2022 was primarily attributable to increased network planning and implementation services as well as maintenance and managed services.

International revenue, which is defined as revenue generated from the Network Solutions and Services & Support segments provided to a customer outside of the U.S., increased by 35.1% from \$41.0 million for the three months ended March 31, 2021 to \$55.5 million for the three months ended March 31, 2022. International revenue, as a percentage of total revenue, increased from 32.2% for the three months ended March 31, 2021 to 35.9% for the three months ended March 31, 2022 was primarily driven by increased shipments to a tier-1 network operator and multiple alternative network operators in Europe. For the three months ended March 31, 2022 as compared to the three months ended March 31, 2021, changes in foreign currencies relative to the U.S. dollar decreased ADTRAN's net sales by approximately \$2.3 million.

ADTRAN's international revenue is largely focused on broadband infrastructure and is consequently affected by the decisions of ADTRAN's customers as to timing for installation of new technologies, expansion of their networks and/or network upgrades. The international customers of ADTRAN must make these decisions in the regulatory and political environment in which they operate – both nationally and in some instances, regionally – whether of a multi-country region or a more local region within a country.

8.5.1.2 Comparison of Years Ended December 31, 2021 and December 31, 2020

ADTRAN's revenue increased by 11.2% from \$506.5 million for the year ended December 31, 2020 to \$563.0 million for the year ended December 31, 2021. The Services & Support revenue decreased by \$4.3 million compared to 2020 and the Network Solutions revenue increased by \$60.8 million versus the prior year. The increase in ADTRAN's 2021 revenue was primarily attributable to increases in Access & Aggregation revenue of \$31.1 million and Subscriber Solutions & Experience revenue of \$28.5 million, partially offset by decreases in Traditional & Other Products revenue of \$3.1 million. Although ADTRAN's revenue increased, supply of semiconductor chips and other components of ADTRAN's products has become constrained resulting in extended lead times and increased costs. Transportation constraints, including shortages for both air and surface freight, as well as labor shortages in the transportation industry, have also affected the timing and the cost of obtaining raw materials and production supplies. Although ADTRAN's revenue growth and profitability in the near-term may be impacted by these global supply chain issues, the long-term outlook continues to strengthen given the strong customer order bookings during the last half of 2021.

Network Solutions revenue increased by 13.9% from \$438.0 million in 2020 to \$498.8 million in 2021, due primarily to increases in Access & Aggregation revenue and Subscriber Solutions & Experience revenue, partially offset by a decrease in Traditional & Other Products revenue. The increase in revenue of 9.9% of ADTRAN's Access & Aggregation products for 2021 was primarily attributable to increased volume of fiber access. The increase of 16.7% in 2021 for revenue of ADTRAN's Subscriber Solutions & Experience products was primarily attributable to increased volume of network termination and fiber CPE. While ADTRAN expects that revenue from Traditional & Other Products will continue to decline over time, this revenue may fluctuate, and continue to fluctuate, for years because of the time required for ADTRAN's customers to transition to newer technologies.

Services & Support revenue decreased by 6.3% from \$68.5 million in 2020 to \$64.2 million in 2021. The decrease in revenue for 2021 was primarily attributable to decreased network planning and implementation services partially offset by an increase in maintenance and managed services.

Domestic revenue increased by 6.4% from \$352.1 million in 2020 to \$374.6 million in 2021. ADTRAN's domestic growth was driven by increased volume of network termination and fiber CPE in our Network Solutions segment. In addition, such growth was a result of increased revenue to tier-2 and tier-3 customers with diversified business among ADTRAN's fiber access and CPE, service provider CPE and services.

International revenue, which is included in the amounts for the Network Solutions and Services & Support segments discussed above, increased by 22.0% from \$154.4 million for the year ended December 31, 2020 to \$188.4 million for the year ended December 31, 2021. International revenue, as a percentage of total revenue, increased from 30.5% for the year ended December 31, 2020 to 33.5% for the year ended December 31, 2021.

The increase in international revenue for 2021 was primarily driven by increased shipments to alternative network operators and a tier-1 operator in Europe.

For the financial year ended December 31, 2021, foreign currency fluctuation did not materially impact ADTRAN's results of operations.

8.5.1.3 Comparison of Years Ended December 31, 2020 and December 31, 2019

ADTRAN's revenue decreased by 4.4% from \$530.1 million for the year ended December 31, 2019 to \$506.5 million for the year ended December 31, 2020. The Services & Support revenue decreased by \$6.3 million compared to 2019 and the Network Solutions revenue decreased by \$17.2 million versus the prior year. The decrease in ADTRAN's 2020 revenue was primarily attributable to a decrease in Access & Aggregation revenue of \$35.7 million and Traditional & Other Products revenue of \$6.0 million, partially offset by increases in Subscriber Solutions & Experience revenue of \$18.2 million.

Network Solutions revenue decreased by 3.8% from \$455.2 million in 2019 to \$438.0 million in 2020, due primarily to a decrease in sales of ADTRAN's Access & Aggregation products and Traditional & Other Products, partially offset by increases in Subscriber Solutions & Experience revenue. The decrease in revenue of 9.4% of ADTRAN's Access & Aggregation products for 2020 was primarily attributable to decreased volume in sales of fiber to the node ("FTTN") products. The increase of 11.9% in 2020 for sales of ADTRAN's Subscriber Solutions & Experience products was primarily attributable to an increased volume of network termination and fiber customer-premises equipment ("CPE"). While ADTRAN expects that revenue from Traditional & Other Products will continue to decline over time, this revenue may fluctuate, and continue to fluctuate, for years because of the time required for ADTRAN's customers to transition to newer technologies.

Services & Support revenue decreased by 8.5% from \$74.8 million in 2019 to \$68.5 million in 2020. The decrease in revenue for 2020 was primarily attributable to decreased sales volume of FTTN products for Access & Aggregation.

Domestic revenue increased by 17.0% from \$300.9 million in 2019 to \$352.1 million in 2020. ADTRAN's domestic growth was driven by an increase in revenue to the retail service provider (RSP) market segment and additional fiber deployments across all customers. In addition, such growth was driven by an increase in sales to tier-2 and tier-3 customers with diversified business among ADTRAN's fiber access and CPE, service provider CPE and services.

International revenue decreased by 32.6% from \$229.2 million for the year ended December 31, 2019 to \$154.4 for the year ended December 31, 2020. International revenue, as a percentage of total revenue, decreased from 43.2% for the year ended December 31, 2019 to 30.5% for the year ended December 31, 2020. The decrease in international revenue for 2020 was primarily attributable to the slowdown in shipments to an international tier-1 customer.

8.5.2 Cost of Revenue

8.5.2.1 Comparison of Three Months Ended March 31, 2022 to Three Months ended March 31, 2021

Cost of revenue increased by 35.5% from \$73.9 million for the three months ended March 31, 2021 to \$100.2 million for the three months ended March 31, 2022. As a percentage of revenue, cost of revenue increased from 58.0% for the three months ended March 31, 2021 to 64.8% for the three months ended March 31, 2022. For the three months ended March 31, 2022, the increase was primarily attributable to supply chain constraint related expenses and to a lesser extent changes in customer and product mix and a regional revenue shift.

For the three months ended March 31, 2022 as compared to the three months ended March 31, 2021, changes in foreign currencies relative to the U.S. dollar decreased ADTRAN's cost of revenue by approximately \$0.9 million.

Network Solutions cost of revenue increased by 39.5% from \$65.0 million for the three months ended March 31, 2021 to \$90.7 million for the three months ended March 31, 2022. As a percentage of that segment's revenue, Network Solutions cost of revenue increased from 57.1% for the three months ended March 31, 2021 to 65.5% for the three months ended March 31, 2022. The increase in cost of revenue as a percentage of revenue for the three months ended March 31, 2022 was primarily attributable to supply chain constraint related expenses and to a lesser extent changes in customer and product mix and a regional revenue shift.

Services & Support cost of revenue increased by 6.9% from \$8.9 million for the three months ended March 31, 2021 to \$9.5 million for the three months ended March 31, 2022. As a percentage of that segment's revenue, Services & Support cost of revenue decreased from 65.1% for the three months ended March 31, 2021 to 59.1% for the three months ended March 31, 2022. The decrease in cost of revenue as a percentage of revenue for the three months ended March 31, 2022 was primarily attributable to customer mix, changes in services and support mix.

Services & Support revenue is comprised of network planning and implementation, maintenance, support and cloud-based management services, with network planning and implementation being the largest and fastest growing component in the long-term. Compared to other services, such as maintenance, support and cloud-based management services, ADTRAN's network planning and implementation services typically utilize a higher percentage of internal and subcontracted engineers, professionals and contractors to perform the work for customers. The additional costs incurred to perform these infrastructure and labor-intensive services inherently result in lower average gross margins as compared to maintenance and support services. Within the Services & Support segment, ADTRAN expects variability in gross margins from quarter-to-quarter based on the mix of the services recognized.

8.5.2.2 Comparison of Years Ended December 31, 2021 and December 31, 2020

Cost of revenue increased by 19.3% from \$289.0 million for the year ended December 31, 2020 to \$344.6 million for the year ended December 31, 2021. As a percentage of revenue, cost of revenue increased from 57.0% for the year ended December 31, 2020 to 61.2% for the year ended December 31, 2021. The increase was primarily attributable to supply chain constraint-related expenses and to a lesser extent changes in customer and product mix and a regional revenue shift.

Network Solutions cost of revenue increased by 26.0% from \$244.2 million for the year ended December 31, 2020 to \$307.8 million for the year ended December 31, 2021. As a percentage of that segment's revenue, Network Solutions cost of revenue increased from 55.8% of revenue in 2020 to 61.7% of revenue in 2021. The increase in Network Solutions cost of revenue as a percentage of that segment's revenue was primarily attributable to supply chain constraint-related expenses and to a lesser extent changes in customer and product mix and a regional revenue shift.

Services & Support cost of revenue decreased by 17.8% from \$44.7 million for the year ended December 31, 2020 to \$36.8 million for the year ended December 31, 2021. As a percentage of that segment's revenue, Services & Support cost of revenue decreased from 65.3% of revenue in 2020 to 57.3% of revenue in 2021. The decrease in Services & Support cost of revenue as a percentage of that segment's revenue in 2021 was primarily attributable to customer mix, changes in services and support mix.

8.5.2.3 Comparison of Years Ended December 31, 2020 and December 31, 2019

Cost of revenue decreased by 7.1% from \$310.9 million for the year ended December 31, 2019 to \$289.0 million for the year ended December 31, 2020. As a percentage of revenue, cost of revenue decreased from 58.7% for the year ended December 31, 2019 to 57.0% for the year ended December 31, 2020. The decrease was primarily attributable to regional revenue shifts, changes in customer and product mix and a decrease in fixed personnel costs as a result of ADTRAN's restructuring program initiated in 2019.

Network Solutions cost of revenue decreased by 7.4% from \$263.7 million for the year ended December 31, 2019 to \$244.2 million for the year ended December 31, 2020. As a percentage of that segment's revenue, Network Solutions cost of revenue decreased from 57.9% of revenue in 2019 to 55.8% of revenue in 2020. The decrease in Network Solutions cost of revenue as a percentage of that segment's revenue was primarily attributable to changes in customer and product mix, a regional revenue shift and a decrease in fixed personnel costs as a result of ADTRAN's restructuring program initiated in 2019.

Services & Support cost of revenue decreased by 5.3% from \$47.2 million for the year ended December 31, 2019 to \$44.7 million for the year ended December 31, 2020. As a percentage of that segment's revenue, Services & Support cost of revenue increased from 63.1% of revenue in 2019 to 65.3% of revenue in 2020. The increase in Services & Support cost of revenue as a percentage of that segment's revenue in 2020 was primarily attributable to changes in services and support mix and volume.

As network planning and implementation revenue grew to become the largest component of ADTRAN's Services & Support segment business, ADTRAN's Services & Support segment gross margins decreased versus those reported when maintenance and support comprised the majority of the business. Further, because the growth in ADTRAN's network planning and implementation services has resulted in the Services & Support segment revenue comprising a larger percentage of ADTRAN's overall revenue, and because ADTRAN's Services & Support segment gross margins are generally below those of the Network Solutions segment, ADTRAN's overall corporate gross margins declined as that business continues to grow.

8.5.3 Selling, General and Administrative Expenses

8.5.3.1 Comparison of Three Months Ended March 31, 2022 to Three Months ended March 31, 2021

Selling, general and administrative expenses increased by 1.7% from \$27.4 million for the three months ended March 31, 2021 to \$27.9 million for the three months ended March 31, 2022. As a percentage of revenue, selling, general and administrative expenses decreased from 21.5% for the three months ended March 31, 2021 to 18.1% for the three months ended March 31, 2022. Selling, general and administrative expenses as a percentage of revenue will generally fluctuate whenever there is a significant fluctuation in revenue for the periods being compared.

The increase in selling, general and administrative expenses for the three months ended March 31, 2022 was primarily attributable to increased acquisition expenses, salary and commission expenses, travel expense and insurance expense, partially offset by decreases in market driven fluctuations in ADTRAN's deferred compensation related costs and legal expenses.

For the three months ended March 31, 2022 as compared to the three months ended March 31, 2021, changes in foreign currencies relative to the U.S. dollar decreased ADTRAN's selling, general and administrative expenses by approximately \$0.4 million.

Selling, general and administrative expenses include personnel costs for management, accounting, information technology, human resources, sales and marketing, as well as accounting, tax and other professional fees, contract services and legal and litigation related costs.

8.5.3.2 Comparison of Years Ended December 31, 2021 and December 31, 2020

Selling, general and administrative expenses increased by 9.2% from \$114.0 million for the year ended December 31, 2020 to \$124.4 million for the year ended December 31, 2021. Selling, general and administrative expenses as a percentage of revenue decreased from 22.5% for the year ended December 31, 2020 to 22.1% for the year ended December 31, 2021.

The increase in selling, general and administrative expenses was primarily attributable to increased acquisition expenses, deferred compensation related costs and insurance expense, partially offset by decreases in restructuring expenses, travel-related expenses and legal expenses.

8.5.3.3 Comparison of Years Ended December 31, 2020 and December 31, 2019

Selling, general and administrative expenses decreased by 12.5% from \$130.3 million for the year ended December 31, 2019 to \$114.0 million for the year ended December 31, 2020. Selling, general and administrative expenses as a percentage of revenue decreased from 24.6% for the year ended December 31, 2019 to 22.5% for the year ended December 31, 2020.

The decrease in selling, general and administrative expenses was primarily attributable to lower travel related expenses, personnel costs due to ADTRAN's restructuring program initiated in 2019 and the capitalization of certain costs related to ADTRAN's ongoing enterprise resource planning implementation project as well as marketing related costs, such as trade show expenses, offset by increased contract and professional services mainly related to ADTRAN's enterprise resource planning implementation project.

8.5.4 Research and Development Expenses

8.5.4.1 Comparison of Three Months Ended March 31, 2022 to Three Months ended March 31, 2021

Research and development expenses decreased by 3.7% from \$27.5 million for the three months ended March 31, 2021 to \$26.5 million for the three months ended March 31, 2022. As a percentage of revenue, research and development expenses decreased from 21.6% for the three months ended March 31, 2021 to 17.1% for the three months ended March 31, 2022. Research and development expenses as a percentage of revenue will fluctuate whenever there are incremental product development activities or significant fluctuations in revenue for the periods being compared as these costs are relatively fixed in the short term.

The decrease in research and development expenses for the three months ended March 31, 2022 was primarily attributable to lower labor and engineering project expenses which fluctuate across the various phases of the projects. For the three months ended March 31, 2022 as compared to the three months ended March 31, 2021, changes in foreign currencies relative to the U.S. dollar decreased ADTRAN's research and development expenses by approximately \$0.4 million.

8.5.4.2 Comparison of Years Ended December 31, 2021 and December 31, 2020

Research and development expenses decreased by 4.1% from \$113.3 million for the year ended December 31, 2020 to \$108.7 million for the year ended December 31, 2021. Research and development expenses as a percentage of revenue decreased from 22.4% for the year ended December 31, 2020 to 19.3% for the year ended December 31, 2021.

The decrease in research and development expenses was primarily attributable to lower personnel costs which were mainly the result of our restructuring programs, partially offset by increased contract services. Research and development expenses as a percentage of revenue will fluctuate whenever there are incremental product development activities or significant fluctuations in revenue for the periods being compared as these costs are relatively fixed in the short term.

8.5.4.3 Comparison of Years Ended December 31, 2020 and December 31, 2019

Research and development expenses decreased by 10.2% from \$126.2 million for the year ended December 31, 2019 to \$113.3 million for the year ended December 31, 2020. Research and development expenses as a percentage of revenue decreased from 23.8% for the year ended December 31, 2019 to 22.4% for the year ended December 31, 2020.

The decrease in research and development expenses was primarily attributable to lower personnel costs and other expenses, such as operating expenses, which were mainly the result of ADTRAN's restructuring program initiated in 2019 as well as lower travel related costs, partially offset by increased contract services and restructuring related costs.

8.5.5 Asset Impairments

8.5.5.1 Comparison of Three Months Ended March 31, 2022 to Three Months ended March 31, 2021

There were no asset impairments recognized during the three months ended March 31, 2022 and 2021.

8.5.5.2 Comparison of Years Ended December 31, 2021 and December 31, 2020

No impairments incurred in the year ended December 31, 2021. Asset impairments were less than \$0.1 million for the year ended December 31, 2020. Asset impairments relate to the abandonment of certain information technology implementation projects in which ADTRAN had previously capitalized costs.

8.5.5.3 Comparison of Years Ended December 31, 2020 and December 31, 2019

Asset impairments, which were \$3.9 million and less than \$0.1 million for the years ended December 31, 2019 and 2020, respectively, relate to the abandonment of certain information technology implementation projects in which ADTRAN had previously capitalized costs.

8.5.6 Gain on Contingency

8.5.6.1 Comparison of Three Months Ended March 31, 2022 to Three Months ended March 31, 2021

There was no gain on contingency recognized during the three months ended March 31, 2022 and 2021.

8.5.6.2 Comparison of Years Ended December 31, 2021 and December 31, 2020

There was no gain on contingency recognized during the years ended December 31, 2021 and 2020.

8.5.6.3 Comparison of Years Ended December 31, 2020 and December 31, 2019

Gain on contingency, which was \$1.2 million for the year ended December 31, 2019, relates to the reversal of unearned contingent liabilities which were initially recognized upon the acquisition of SmartRG Inc. in the fourth quarter of 2018. There was no gain on contingency recognized during the year ended December 31, 2020.

8.5.7 Interest and Dividend Income

8.5.7.1 Comparison of Three Months Ended March 31, 2022 to Three Months ended March 31, 2021

Interest and dividend income decreased by 29.7% from \$0.3 million for the three months ended March 31, 2021 to \$0.2 million for the three months ended March 31, 2022. The decrease in interest and dividend income was primarily attributable to a decrease in the rate of return on ADTRAN's long-term investments and a decrease in the investment balance. ADTRAN's total long-term investments decreased from \$70.6 million as of March 31, 2021 to \$67.7 million as of March 31, 2022.

8.5.7.2 Comparison of Years Ended December 31, 2021 and December 31, 2020

Interest and dividend income increased by 46.9% from \$1.9 million for the year ended December 31, 2020 to \$2.8 million for the year ended December 31, 2021. The increase in interest and dividend income was primarily attributable to an increase in the rate of return on ADTRAN investments. ADTRAN's investments decreased from \$83.3 million as of December 31, 2020 to \$71.0 million as of December 31, 2021.

8.5.7.3 Comparison of Years Ended December 31, 2020 and December 31, 2019

Interest and dividend income decreased by 30.0% from \$2.8 million for the year ended December 31, 2019 to \$1.9 million for the year ended December 31, 2020. The decrease in interest and dividend income was primarily attributable to a decrease in interest income as a result of a decline in ADTRAN's investment balances. The investment balances decreased due to the maturity of ADTRAN's certificate of deposit which served as collateral for ADTRAN's taxable revenue bonds and the sale of certain equity investments for working capital and other purposes. ADTRAN's investments decreased from \$127.7 million as of December 31, 2019 to \$83.3 million as of December 31, 2020.

8.5.8 Interest Expense

8.5.8.1 Comparison of Three Months Ended March 31, 2022 to Three Months ended March 31, 2021

Interest expense was less than \$0.1 million for each of the three months ended March 31, 2022 and 2021. Interest expense during the first three months of 2022 was primarily related to ADTRAN's revolving credit agreement that it entered into during the fourth quarter of 2020.

8.5.8.2 Comparison of Years Ended December 31, 2021 and December 31, 2019

Interest expense was less than \$0.1 million for each of the years ended December 31, 2021 and 2020. Interest expense during 2021 was primarily related to ADTRAN's revolving credit agreement that it entered into during the fourth quarter of 2020.

8.5.8.3 Comparison of Years Ended December 31, 2020 and December 31, 2019

Interest expense, which is related to ADTRAN's taxable revenue bonds, decreased by \$0.5 million for the year ended December 31, 2020 compared to the year ended December 31, 2019. The decrease was due to the outstanding principal balance of the taxable revenue bonds being paid off upon maturity in January 2020.

8.5.9 Net Investment (Loss) Gain

8.5.9.1 Comparison of Three Months Ended March 31, 2022 to Three Months ended March 31, 2021

ADTRAN recognized a net investment gain of \$1.0 million and a net investment loss of \$3.4 million for the three months ended March 31, 2021 and 2022, respectively. The fluctuations in ADTRAN's net investments were primarily attributable to changes in the fair value of its securities recognized during the period.

8.5.9.2 Comparison of Years Ended December 31, 2021 and December 31, 2020

ADTRAN recognized a net investment gain of \$4.9 million and \$1.8 million for the years ended December 31, 2020 and 2021, respectively. The fluctuations in net investments were primarily attributable to changes in the fair value of our securities recognized during the period.

8.5.9.3 Comparison of Years Ended December 31, 2020 and December 31, 2019

ADTRAN recognized a net investment gain of \$11.4 million and \$4.9 million for the years ended December 31, 2019 and 2020, respectively. The decrease in the net investment gain was primarily attributable to changes in fair value of equity securities recognized during the period and impairment charges related to an equity investment. During the year ended December 31, 2020, ADTRAN's investments were impacted by varying market conditions, including the COVID-19 pandemic, which resulted in a sharp downturn in the markets during the first quarter of 2020 followed by market improvements and more positive results from a favorable portfolio mix during the remainder of 2020.

8.5.10 Other (Expense) Income, Net

8.5.10.1 Comparison of Three Months Ended March 31, 2022 to Three Months ended March 31, 2021

Other (expense) income, net, which primarily consisted of gains and losses on foreign currency transactions and income from excess material sales, decreased from income of \$2.0 million for the three months ended March 31, 2021 to expense of \$0.2 million the three months ended March 31, 2022.

8.5.10.2 Comparison of Years Ended December 31, 2021 and December 31, 2020

Other income (expense), net, increased from an expense of \$3.3 million for the year ended December 31, 2020 to an income of \$3.8 million for the year ended December 31, 2021. For the year ended December 31, 2021, other income (expense), net, is comprised primarily of gains and losses on foreign currency transactions and income from excess material sales. For the year ended December 31, 2021 and 2020, other income (expense), net, is comprised primarily of gains and losses on foreign currency transactions and income from excess material sales.

8.5.10.3 Comparison of Years Ended December 31, 2020 and December 31, 2019

Other income (expense), net, decreased from an income of \$1.5 million for the year ended December 31, 2019 to an expense of \$3.3 million for the year ended December 31, 2020. For the year ended December 31, 2020, other income (expense), net, is comprised primarily of gains and losses on foreign currency transactions. For the year ended December 31, 2019, other income (expense), net, consisted mainly of the receipt of a one-time insurance proceeds from a life insurance policy.

8.5.11 Income Tax (Benefit) Expense

8.5.11.1 Comparison of Three Months Ended March 31, 2022 to Three Months ended March 31, 2021

ADTRAN's effective tax rate changed from an expense of 53.9% of pre-tax income for the three months ended March 31, 2021, to a benefit of 68.1% of pre-tax loss for the three months ended March 31, 2022. The change in the effective tax rate for the three months ended March 31, 2022, was driven primarily by a change in ADTRAN's annual estimated tax rate as a result of the requirement to begin capitalizing research and development expenses for U.S. tax purposes beginning in 2022 as previously passed as part of the Tax Cuts and Jobs Act in December 2017 and the associated impact of those changes on ADTRAN's previously established valuation allowance.

8.5.11.2 Comparison of Years Ended December 31, 2021 and December 31, 2020

ADTRAN's effective tax rate decreased from a benefit of 138.1%, for the year ended December 31, 2020 to an expense of 37.0% for the year ended December 31, 2021. The change in the effective tax rate for the year ended December 31, 2021 was primarily driven by a tax benefit in the amount of \$10.8 million during 2020, \$7.9 million of which related to the utilization of deferred tax assets which had previously been offset with a valuation allowance and \$2.9 million primarily related to the tax rate differential on carrying back losses from 2018 and 2019 tax years to prior years in which the U.S. Corporate tax rate was 35% versus the current 21% U.S. federal tax rate.

8.5.11.3 Comparison of Years Ended December 31, 2020 and December 31, 2019

ADTRAN's effective tax rate decreased from an expense of 113.8%, for the year ended December 31, 2019 to a benefit of 138.1% for the year ended December 31, 2020. The change in the effective tax rate between the two periods was primarily driven by the establishment of a valuation allowance against ADTRAN's domestic deferred tax assets in the amount of \$42.8 million during the year ended December 31, 2019, and tax benefits generated from loss carrybacks as a result of the passage of the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"), partially offset by tax expense in foreign jurisdictions during the year ended December 31, 2020.

8.5.12 Net Income (Loss)

8.5.12.1 Comparison of Three Months Ended March 31, 2022 to Three Months ended March 31, 2021

As a result of the above factors, net (loss) income decreased from net income of \$0.9 million for the three months ended March 31, 2021 to a net loss of \$1.1 million for the three months ended March 31, 2022.

8.5.12.2 Comparison of Years Ended December 31, 2021 and December 31, 2020

As a result of the above factors, ADTRAN's net income (loss) decreased from a net income of \$2.4 million for the year ended December 31, 2020 to a net loss of \$8.6 million for the year ended December 31, 2021. As a percentage of revenue, net income was 0.5% for the year ended December 31, 2020. As a percentage of revenue, net loss was 1.5% for the year ended December 31, 2021.

8.5.12.3 Comparison of Years Ended December 31, 2020 and December 31, 2019

As a result of the above factors, ADTRAN's net income (loss) increased from a net loss of \$53.0 million for the year ended December 31, 2019 to net income of \$2.4 million for the year ended December 31, 2020. As a percentage of revenue, net loss was 10.0% for the year ended December 31, 2019. As a percentage of revenue, net income was 0.5% for the year ended December 31, 2020.

8.6 Financial Position

	As of M	arch 31.	1	Year Ended December 31,		
	2022	2021	2021	2020	2019	
	(in thousands of U.S. dollars)					
	(unau	dited)	(audited)			
Current Assets	402,141	324,345	376,325	317,418	320,310	
Assets	589,092	530,763	569,017	525,679	545,118	
Current Liabilities	182,773	102,155	155,359	94,193	112,711	
Liabilities	236,776	160,388	211,915	152,735	164,692	
Stockholders' Equity	352,316	370,375	357,102	372,944	380,426	

8.6.1 Total Assets

8.6.1.1 Comparison of March 31, 2022 to March 31, 2021

ADTRAN's total assets increased by \$58.3 million from \$530.8 million as of March 31, 2021 to \$589.1 million as of March 31, 2022. This increase was mainly due to an increase in inventory by \$48.3 million, as well as an increase in accounts receivable by \$46.9 million which was partly offset by a decrease in long-term investment of \$13.6 million, and a decrease in cash and cash equivalents of \$9.8 million.

8.6.1.2 Comparison of December 31, 2021 to December 31, 2020

ADTRAN's total assets increased by \$43.3 million from \$525.7 million as of December 31, 2020 to \$569.0 million as of December 31, 2021. This increase was mainly due to an increase in accounts receivable by \$59.9 million, as well as an increase in inventory by \$14.4 million, which was partly offset by a decrease in other receivables of \$10.3 million, and a decrease in long-term investment of \$9.5 million.

8.6.1.3 Comparison of December 31, 2020 to December 31, 2019

ADTRAN's total assets decreased by \$19.4 million from \$545.1 million as of December 31, 2019 to \$525.7 million as of December 31, 2020. This decrease was mainly due to a decrease in short-term and long-term investments resulting from a \$24.6 million decrease in a certificate of deposit utilized for the payment of a taxable revenue bond that matured January 1, 2020 and support of on-going operations, as well as, a decrease in property, plant and equipment and cash and cash equivalents, which was partly offset by an increase in inventory, other non-current assets.

8.6.2 Total Liabilities

8.6.2.1 Comparison of March 31, 2022 to March 31, 2021

ADTRAN's total liabilities consisted primarily of accounts payable, unearned revenue, deferred compensation liability and pension liability.

ADTRAN's total liabilities increased by \$76.4 million and amounted to \$236.8 million as of March 31, 2022 and \$160.4 million as of March 31, 2021. This increase was mainly due to an increase in accounts payable by \$71.6 million, and partially offset by a decrease in pension liability by \$6.9 million.

8.6.2.2 Comparison of December 31, 2021 to December 31, 2020

ADTRAN's total liabilities increased by \$59.2 million and amounted to \$211.9 million as of December 31, 2021, compared to \$152.7 million as of December 31, 2020. The increase was mainly due to an increase in current liabilities by \$61.2 million, and partially offset by a decrease in pension liability by \$7.3 million.

8.6.2.3 Comparison of December 31, 2020 to December 31, 2019

ADTRAN's total liabilities decreased by \$12.0 million and amounted to \$152.7 million as of December 31, 2020, compared to \$164.7 million as of December 31, 2019. The decrease was mainly due to a decrease in current liabilities by \$18.5 million for the payment of a \$24.6 million taxable revenue bond that matured on January 1, 2020 that was paid in full. Pension liability as well as deferred compensation liability increased by \$2.8 million and \$4.2 million, respectively.

8.6.3 *Equity*

8.6.3.1 Comparison of March 31, 2022 to March 31, 2021

ADTRAN's equity decreased by \$18.1 million and amounted to \$370.4 million as of March 31, 2021 and \$352.3 million as of March 31, 2022. This decrease was mainly due to a decrease in retained earnings by \$41.9 million primarily attributable to \$17.6 million of dividend payments to ADTRAN's shareholders.

8.6.3.2 Comparison of December 31, 2021 to December 31, 2020

ADTRAN's equity decreased by \$15.8 million and amounted to \$357.1 million as of December 31, 2021, compared to \$372.9 million as of December 31, 2020. The decrease was mainly due to a decrease in retained earnings by \$41.0 million primarily attributable to \$17.5 million of dividend payments to ADTRAN's shareholders.

8.6.3.3 Comparison of December 31, 2020 to December 31, 2019

ADTRAN's equity decreased by \$7.5 million and amounted to \$372.9 million as of December 31, 2020, compared to \$380.4 million as of December 31, 2019. The decrease was mainly due to a decrease in retained earnings by \$24.9 million primarily attributable to \$17.3 million of dividend payments to shareholders.

8.7 Liquidity and Capital Resources

8.7.1 Liquidity

ADTRAN has historically financed, and currently expects to continue to finance, the ongoing business with existing cash, investments and cash flow from operations. In the current supply environment ADTRAN also

expects to utilize its credit arrangements to manage its working capital needs. ADTRAN has used, and expects to continue to use, existing cash, investments and cash generated from operations for working capital, business acquisitions, purchases of treasury stock, shareholder dividends and other general corporate purposes, including product development activities to enhance ADTRAN's existing products and develop new products, expand its sales and marketing activities and fund capital expenditures. Under the Business Combination Agreement, ADTRAN will bear the transaction costs of the Business Combination attributable to Acorn HoldCo and ADTRAN. Based on its own estimate as of December 31, 2021, ADTRAN will incur an additional \$10.0 million of transaction costs related to the Business Combination. ADTRAN believes that its cash and cash equivalents, investments, cash generated from operations and access to funds under various borrowing arrangements will be adequate to meet its operating needs and capital needs and obligations under the Business Combination for at least the next 12 months.

As of March 31, 2022, cash on hand was \$54.0 million and short-term investments were \$0.4 million, which resulted in available short-term liquidity of \$54.4 million, of which \$45.1 million was held by ADTRAN's foreign subsidiaries. As of December 31, 2021, cash on hand was \$56.6 million and short-term investments were \$0.4 million, which resulted in available short-term liquidity of \$57.0 million, of which \$47.7 million was held by ADTRAN's foreign subsidiaries. As of December 31, 2020, cash on hand was \$60.2 million and short-term investments were \$3.1 million, which resulted in available short-term liquidity of \$63.3 million, of which \$49.7 million was held by ADTRAN's foreign subsidiaries. As of December 31, 2019, cash on hand was \$73.8 million and short-term investments were \$33.2 million, which resulted in available short-term liquidity of \$107.0 million, of which \$52.3 million was held by ADTRAN's foreign subsidiaries. The decrease in short-term liquidity from December 31, 2020 to December 31, 2021 was primarily attributable to the sale of certain equity and fixed income investments for working capital and other purposes. The decrease in short-term liquidity from December 31, 2019 to December 31, 2020 was primarily attributable to the maturity of a certificate of deposit of \$25.6 million that served as collateral for ADTRAN's revenue bond, which matured in January 2020, and the sale of certain equity investments for working capital and other purposes.

The following table summarizes ADTRAN's cash flows:

	Three Mon Marcl					
	2022	2021	2021	2020	2019	
	(in thousands of U.S. dollars)					
	(unaua	lited)				
Net cash provided by (used in)						
Operating activities	4,869	10,685	3,008	(16,518)	(2,472)	
Investing activities	(2,700)	(2,004)	10,266	41,399	(9,791)	
Financing activities	(3,924)	(3,230)	(12,958)	(42,977)	(17,870)	
Net increase (decrease) in cash, cash equivalent and restricted cash	(1,755)	5,451	316	(18,096)	(30,133)	
Net effect of exchange rate changes	(1,032)	(1,734)	(3,677)	(4,502)	(1,598)	
Cash, cash equivalents, and restricted cash at the end of the period	54,031	63,896	56,818	60,179	73,773	

8.7.2 *Operating Activities*

Net cash provided by operating activities of \$4.9 million during the three months ended March 31, 2022 decreased by \$5.8 million compared to net cash provided of \$10.7 million during the three months ended March 31, 2021. This decrease was primarily due to net cash outflows from working capital, specifically, an inventory build related to component availability and an increase in other receivables partially offset by an increase in the average number of days payable to ADTRAN's trade suppliers, and a decrease in accounts receivable. Net cash provided by operating activities of \$3.0 million during the year ended December 31, 2021 increased by \$19.5 million compared to \$16.5 million net cash used in operating activities during the year ended December 31, 2020. Net cash used in operating activities of \$16.5 million during the year ended December 31, 2020 increased by \$14.0 million compared to \$2.5 million cash used in operating activities during the year ended December 31, 2019. The increase in the year ended December 31, 2021 was primarily due to net cash inflows from working capital, specifically, an increase in the average number days payable to ADTRAN's trade suppliers and a decrease in other receivables, partially offset by an inventory build related to component availability, an increase in accounts receivable, and an increase in the average number of days it takes ADTRAN to collect cash payment for sales.

The increase in the year ended December 31, 2020 resulted primarily from the decrease in ADTRAN's net cash inflow from working capital. The decrease in ADTRAN's net cash inflow from working capital in the year ended December 31, 2020 was primarily driven by an increase in payments made to trade suppliers for inventory and a decrease in inventory turnover. Additional details related to ADTRAN's working capital and its drivers are discussed below.

Net accounts receivable decreased by 5.4% from \$158.7 million as of December 31, 2021 to \$150.1 million as of March 31, 2022. The decrease in net accounts receivable was due primarily to customer and geographical mix. Quarterly accounts receivable DSO decreased from 95 days as of December 31, 2021 to 87 days as of March 31, 2022. The decrease in DSO was due to customer and geographical mix. Net accounts receivable increased by 60.6% from \$98.8 million as of December 31, 2020 to \$158.7 million as of December 31, 2021. ADTRAN had no allowance for credit losses as of March 31, 2022 and December 31, 2021, and less than \$0.1 million as of December 31, 2020. Quarterly accounts receivable DSO (days sales outstanding) increased from 70 days as of December 31, 2020 to 95 days as of December 31, 2021. The increase in DSO was due to the higher sales volume and timing of shipments late in the quarter tied to supply chain constraints and customer mix. Net accounts receivable increased by 9.2% from \$90.5 million as of December 31, 2019 to \$98.8 million as of December 31, 2020. ADTRAN's allowance for doubtful accounts was less than \$0.1 million as of December 31, 2020 and 2019. Quarterly accounts receivable DSO decreased from 72 days as of December 31, 2019 to 70 days as of December 31, 2020. The decrease in DSO was due to the timing of product shipments and customer mix.

Other receivables increased 54.7% from \$11.2 million as of December 31, 2021 to \$17.4 million as of March 31, 2022. The increase in other receivables was primarily attributable to the increase in contract assets. Other receivables decreased by 47.9% from \$21.5 million as of December 31, 2020 to \$11.2 million as of December 31, 2021. The decrease in other receivables was primarily attributable to decreases in income tax receivables related to the CARES Act. Other receivables increased by 30.0% from \$16.6 million as of December 31, 2019 to \$21.5 million as of December 31, 2020. The increase in other receivables was primarily attributable to increases in income tax receivables related to the CARES Act partially offset by a decrease in contract assets and purchasing shipments.

Quarterly inventory turnover was 3.0 turns as of December 31, 2021 and 2.6 turns as of March 31, 2022, respectively. Inventory increased 22.3% from \$139.9 million as of December 31, 2021 to \$171.1 million as of March 31, 2022. The increase in inventory was due to strategic inventory buffer purchases given extended component lead times and availability constraints as well as new product ramp ups to ensure supply continuity during the COVID-19 pandemic. Annual inventory turnover increased from 2.58 turns as of December 31, 2020 to 2.60 turns as of December 31, 2021. Inventory increased by 11.5% from \$125.5 million as of December 31, 2020 to \$139.9 million as of December 31, 2021. The increase in inventory was due to increased purchases in preparation for strategic inventory buffer purchases as well as new product ramp ups to ensure supply continuity during the COVID-19 pandemic. Annual inventory turnover decreased from 3.14 turns as of December 31, 2019 to 2.58 turns as of December 31, 2020. Inventory increased by 27.6% from \$98.3 million as of December 31, 2019 to \$125.5 million as of December 31, 2020. The increase in inventory was due to increased purchases in preparation for new product ramp ups as well as strategic inventory buffer purchases to ensure supply continuity during the COVID-19 pandemic.

Accounts payable increased 24.0% from \$102.5 million as of December 31, 2021 to \$127.1 million as of March 31, 2022. Accounts payable will fluctuate due to variations in the timing of the receipt of inventory, supplies and services and ADTRAN's subsequent payments for these purchases. The significant increase in the first quarter was due to additional purchases of raw material inventory. Accounts payable increased by 105.3% from \$49.9 million as of December 31, 2020 to \$102.5 million as of December 31, 2021. Accounts payable will fluctuate due to variations in the timing of the receipt of inventory, supplies and services and ADTRAN's subsequent payments for these purchases. The significant increase in the fourth quarter was due to higher sales volume and additional purchases of raw material inventory buffer stock. Accounts payable increased 11.3% from \$44.9 million as of December 31, 2019 to \$49.9 million as of December 31, 2020.

ADTRAN's working capital, defined as current assets less current liabilities, increased by 7.5% from \$207.6 million as of December 31, 2019 to \$223.2 million as of December 31, 2020, slightly decreased by 1% from \$223.2 million as of December 31, 2020 to \$220.9 million as of December 31, 2021, and decreased by 0.7% from \$220.9 million as of December 31, 2021 to \$219.4 million as of March 31, 2022.

The current ratio, defined as current assets divided by current liabilities, increased from 2.84 as of December 31, 2019 to 3.37 as of December 31, 2020, decreased from 3.37 as of December 31, 2020 to 2.42 as of December 31, 2021, and decreased from 2.42 as of December 31, 2021 to 2.20 as of March 31, 2022. The increase in working capital and current ratio as of December 31, 2020 compared to year-end 2019 was primarily attributable to an

increase in inventory, accounts receivable and other receivables, partially offset by a decrease in cash and short-term investments, which consisted of a certificate of deposit related to ADTRAN's taxable revenue bond as of December 31, 2019 and the related bonds payable. The decrease in working capital and decrease in ADTRAN's current ratio as of December 31, 2021 compared to year-end 2020 were primarily attributable to the increase in accounts payable partially offset by increases in accounts receivable and inventory. The decrease in working capital and decrease in ADTRAN's current ratio as of March 31, 2022 compared to year-end 2021 were primarily attributable to the increase in accounts payable partially offset by increases in inventory and accounts receivable.

The quick ratio, defined as cash and cash equivalents, short-term investments, and net accounts receivable, divided by current liabilities, decreased from 1.75 as of December 31, 2019 to 1.72 as of December 31, 2020, decreased from 1.72 as of December 31, 2020 to 1.39 as of December 31, 2021, and decreased from 1.39 as of December 31, 2021 to 1.12 as of March 31, 2022. The decrease in the quick ratio as of December 31, 2020 compared to year-end 2019 was primarily attributable to the decrease in cash and cash equivalents as well as a decrease in short-term investments, offset by a decrease in current liabilities due to the repayment of ADTRAN's revenue bond payable. The decrease in ADTRAN's quick ratio as of December 31, 2021 compared to year-end 2020 were primarily attributable to the increase in accounts payable, partially offset by increases in accounts receivable. The decrease in ADTRAN's quick ratio as of March 31, 2022 compared to year-end 2021 were primarily attributable to an increase in accounts payable of \$71.6 million.

8.7.3 *Investing Activities*

Capital expenditures totaled approximately \$1.5 million and \$0.7 million for the three months ended March 31, 2022 and 2021, respectively. Capital expenditures totaled approximately \$5.7 million, \$6.4 million and \$9.5 million for the years ended December 31, 2021, 2020 and 2019, respectively. These expenditures were primarily used to purchase manufacturing and test equipment, software, computer hardware and to finance building improvements.

ADTRAN's combined short-term and long-term investments decreased by \$44.5 million from \$127.7 million as of December 31, 2019 to \$83.3 million as of December 31, 2020, decreased by \$12.3 million from \$83.3 million as of December 31, 2020 to \$71.0 million as of December 31, 2021, and decreased by \$2.9 million from \$71.0 million as of December 31, 2021 to \$68.1 million as of March 31, 2022. The decrease during the financial year ended December 31, 2020 reflects the maturity of a certificate of deposit which served as collateral for ADTRAN's revenue bond and the sale of certain equity investments for working capital and other purposes. The decrease during the financial year ended December 31, 2021 reflects the sale of certain fixed income investments for working capital and other purposes. The decrease during the first quarter of 2022 reflects the impact of net realized and unrealized gains and losses on ADTRAN's investments.

ADTRAN typically invests all available cash not required for immediate use in operations, primarily in securities that ADTRAN believes bear minimal risk of loss. As of March 31, 2022, ADTRAN's corporate bonds, municipal fixed-rate bonds, asset-backed bonds, mortgage/agency-backed bonds, U.S. government bonds, and foreign government bonds were classified as available-for-sale and had a combined duration of 1.79 years with an average Standard & Poor's credit rating of AA-. Because ADTRAN's investment portfolio has a high-quality rating and contractual maturities of short duration, ADTRAN is able to obtain prices for these bonds derived from observable market inputs, or for similar securities traded in an active market, on a daily basis

ADTRAN's long-term investments decreased by 15.2% from \$94.5 million as of December 31, 2019 to \$80.1 million as of December 31, 2020, decreased by 11.9% from \$80.1 million as of December 31, 2020 to \$70.6 million as of December 31, 2021, and decreased by 4.1% from \$70.6 million as of December 31, 2021 to \$67.7 million as of March 31, 2022. ADTRAN's investments include various marketable equity securities classified as long-term investments with a fair market value of \$12.6 million, \$11.0 million and \$35.8 million, as of December 31, 2021, December 31, 2020 and December 31, 2019, respectively, and a fair market value of \$11.1 million and \$11.5 million as of March 31, 2022 and March 31, 2021, respectively. Long-term investments as of December 31, 2021, and 2019 also included \$26.9 million, \$23.9 million and \$21.7 million, respectively, related to ADTRAN's deferred compensation plan, and \$0.2 million and \$0.3 million as of December 31, 2020 and 2019, respectively, of other investments, consisting of interests in a private equity fund. There was no interest in a private equity fund as of December 31, 2021. Long-term investments as of March 31, 2022 and March 31, 2021 also included \$26.1 million and \$24.4 million, respectively, related to ADTRAN's deferred compensation plans.

As at the date of the Prospectus, ADTRAN does not have any ongoing material investments, i.e. projects which have been commenced but not yet completed as at the date of the Prospectus.

8.7.4 Financing Activities

8.7.4.1 Revolving Credit Agreements

During the fourth quarter of 2020, ADTRAN entered into a revolving credit and security agreement (together with the related promissory note, the "Cadence Revolving Credit Agreement") with Cadence Bank, N.A., as lender. The Cadence Revolving Credit Agreement provides ADTRAN with a \$10.0 million secured revolving credit facility. Loans under the Cadence Revolving Credit Agreement will bear interest at a rate equal to 1.50% over the screen rate as obtained by Reuter's, Bloomberg or another commercially available source as may be designated by ADTRAN from time to time; provided, however, that in no event shall the applicable rate of interest under the Cadence Revolving Credit Agreement be less than 1.50% per annum. Such loans are secured by all of the cash, securities, securities entitlements and investment property in a certain bank account, as outlined in the Cadence Revolving Credit Agreement, at a maximum loan-to-value ratio of 75% determined by dividing the full commitment amount under the Cadence Revolving Credit Agreement on the date of testing, determined by ADTRAN each fiscal quarter, by the market value of the collateral. Based on the market value of the collateral at March 31, 2022, ADTRAN had \$10.0 million of loan availability under the revolving credit facility as of such date. In November 2021, ADTRAN entered into a loan modification agreement and amendment to loan documents. The renewed Cadence Revolving Credit Agreement matures on November 3, 2022, subject to earlier termination upon the occurrence of certain events of default. ADTRAN entered into the Cadence Revolving Credit Agreement in order to increase the flexibility and management of its short-term liquidity. During the fourth quarter of 2021, ADTRAN made draws totaling \$10.0 million under the Cadence Revolving Credit Agreement all of which had been repaid as of December 31, 2021. During the first quarter of 2022, ADTRAN made draws totaling \$8.0 million under the Cadence Revolving Credit Agreement all of which had been repaid as of March 31, 2022. ADTRAN agreed to certain negative covenants that are customary for credit arrangements of this type, including, among other things, restrictions on ADTRAN's ability to enter into mergers, acquisitions or other business combination transactions, grant liens or suffer a material adverse change in the condition or affairs (financial or otherwise) of ADTRAN, which negative covenants are subject to certain exceptions. ADTRAN must be in compliance with all covenants to be able to draw on the line of credit. As of the date of the Prospectus, ADTRAN is in compliance with all covenants.

On April 1, 2022, ADTRAN entered into a credit agreement and related revolving line of credit note (together, the "Wells Revolving Credit Agreement") in favor of Wells Fargo Bank, National Association, as lender (the "Wells Lender"). The Wells Revolving Credit Agreement provides ADTRAN with a new \$25.0 million secured revolving credit facility. The Wells Revolving Credit Agreement matures on April 1, 2023, subject to earlier termination upon the occurrence of certain events of default as set forth in the Wells Revolving Credit Agreement. Loans under the Wells Revolving Credit Agreement will bear interest at a fluctuating rate per annum equal to: (i) the Daily Simple SOFR (as defined below) plus (ii) an applicable margin, which will equal 1.00%, 1.25%, 1.5% or 2.0% per annum depending on ADTRAN's senior funded debt to EBITDA ratio. The "Daily Simple SOFR" is calculated based upon the greater of (a) a floor of 0.00% and (b) the secured overnight financing rate, as established by the Federal Reserve Bank of New York (or a successor thereto) from time to time. Accrued interest is payable on the last day of each quarter, commencing June 30, 2022. Borrowings under the Wells Revolving Credit Agreement may be used solely for issuing letters of credit, financing capital expenditures, and working capital and general corporate purposes. Loans under the Wells Revolving Credit Agreement are secured by a first priority security interest in all of the accounts receivable of ADTRAN and its subsidiary, ADTRAN International, Inc. Specifically, in connection with the Wells Revolving Credit Agreement, ADTRAN pledged to the Wells Lender all of the rights to payment, accounts, deposit accounts, chattel paper (whether electronic or tangible), instruments, promissory notes, documents, licenses, general intangibles, payment intangibles, software, letter of credit rights and healthcare insurance receivables existing as of the date of execution or arising at any time thereafter.

8.7.4.2 Alabama State Industrial Development Authority Financing

In conjunction with the 1995 expansion of ADTRAN's Huntsville, Alabama facility, ADTRAN was approved for participation in an incentive program offered by the State of Alabama Industrial Development Authority (the "Authority"). Pursuant to the program, in January 1995, the Authority issued \$20.0 million of its taxable revenue bonds (the "Taxable Revenue Bonds") and loaned the proceeds from the sale of the Taxable Revenue Bonds to ADTRAN. Further advances on the Taxable Revenue Bonds were made by the Authority, bringing the total amount to \$50.0 million. The Taxable Revenue Bonds bore interest, payable monthly with an interest rate of 2% per annum. The Taxable Revenue Bonds aggregate principal amount of \$24.6 million matured on January 1, 2020 and was repaid in full on January 2, 2020, using the funds held in a certificate of deposit by ADTRAN.

8.7.4.3 Dividends

In July 2003, ADTRAN's board of directors elected to begin declaring quarterly dividends on ADTRAN's common stock considering the tax treatment of dividends and adequate levels of ADTRAN's liquidity. During each of the three month periods ended March 31, 2022 and 2021, ADTRAN paid dividends totaling \$4.4 million. During 2021, 2020 and 2019, ADTRAN paid shareholder dividends totaling \$17.5 million, \$17.3 million and \$17.2 million, respectively. The continued payment of dividends is at the discretion of ADTRAN's board of directors and is subject to general business conditions and ongoing financial results of ADTRAN.

8.7.4.4 Stock Repurchase Program

Since 1997, ADTRAN's board of directors has approved multiple share repurchase programs that have authorized open market repurchase transactions of its common stock, which are implemented through open market or private purchases from time to time as conditions warrant. During the three months ended March 31, 2022 and 2021, ADTRAN did not repurchase any shares of our common stock. There were no stock repurchases during the year ended December 31, 2021 or the year ended December 31, 2020. For the year ended December 31, 2019, ADTRAN repurchased less than 0.1 million shares for \$0.2 million, at an average price of \$14.06 per share. ADTRAN currently has authorization to repurchase an additional 2.5 million shares of its common stock under the current authorization of up to 5.0 million shares.

8.7.4.5 Stock Option Exercises

To accommodate employee stock option exercises, ADTRAN issued 0.3 million and 0.1 million shares of treasury stock which resulted in proceeds of \$0.6 million and \$1.2 million during the three months ended March 31, 2022 and 2021, respectively. ADTRAN issued 0.4 million shares of treasury stock for \$6.4 million during the year ended December 31, 2021, and less than 0.1 million shares of treasury stock for \$0.5 million during the year ended December 31, 2019. There were no stock option exercises during the year ended December 31, 2020. The increase in stock option exercises in 2021 and 2022 are related to the increase in ADTRAN's stock price.

8.8 Off-Balance Sheet Arrangements

ADTRAN does not have off-balance sheet financing arrangements and has not engaged in any related party transactions or arrangements with unconsolidated entities or other persons that are reasonably likely to materially affect liquidity or the availability of or requirements for capital resources.

8.9 Cash Requirements

The following table summarizes ADTRAN's material short- and long-term cash requirements from known obligations pursuant to certain contracts and commitments as of December 31, 2021, as well as an estimate of the timing in which such obligations and payments are expected to be satisfied.

(in thousands of USD)	Total	2022	2023	2024	2025	2026	After 2026
Pledged collateral ⁽¹⁾	15,000	15,000					
Purchase obligations ⁽²⁾	361,626	340,770	15,859	4,997	_	_	
Operating lease obligations ⁽³⁾	5,084	1,767	1,419	1,188	710	_	_
Business combination transaction costs ⁽⁴⁾	9,540	9,540				_	
Totals	391,250	367,077	17,278	6,185	710		

- ADTRAN is required to maintain a pledged collateral amount related to a letter of credit agreement with a bank to guarantee performance obligations under a contract with a certain customer. The obligations under this customer contract will be performed over multiple years. ADTRAN reached the maximum value of its minimum collateral requirement of \$15.0 million during the first quarter of 2021 as outlined in the customer contract. The letter of credit was secured by a pledge of a portion of ADTRAN's fixed-income securities, which totaled \$18.3 million as of December 31, 2021, of which \$0.2 million is included in restricted cash and \$18.1 million is included in long-term investments on ADTRAN's consolidated balance sheet. This pledged collateral value will fluctuate as ADTRAN changes the mix of the pledged collateral between restricted cash and investments. Any shortfalls in the minimum collateral value are required to be restored by ADTRAN from available cash and cash equivalents, short-term investments and/or long-term investments. The collateral under the letter of credit will be released when all obligations under the customer contract have been met. As of December 31, 2021, ADTRAN was in compliance with all contractual requirements under the letter of credit.
- (2) ADTRAN has purchase obligations related to open purchase orders to ADTRAN's contract manufacturers, ODMs, component suppliers, service partners and other vendors, including those assisting with the implementation of ADTRAN's new ERP system. The settlement of ADTRAN's purchase obligations will occur at various dates beginning in 2022 and going through 2024.

- (3) ADTRAN has operating leases for office space, automobiles and various other equipment in the U.S. and in certain international locations. ADTRAN's operating leases had remaining lease terms of one month to 44 months. As of December 31, 2021, the remaining future minimum rental payments under non-cancelable operating leases, including renewals determined to be reasonably assured, with original maturities of greater than 12 months totaled \$5.1 million as of December 31, 2021.
- (4) Under the Business Combination Agreement, ADTRAN will bear the transaction costs of the Business Combination attributable to Acorn HoldCo and ADTRAN.

ADTRAN has committed to invest up to an aggregate of \$5.0 million in a private equity fund, of which \$4.9 million has been applied to these commitments. ADTRAN is uncertain as to when the additional \$0.1 million commitment will be applied.

Certain contracts, customers and/or jurisdictions in which ADTRAN does business require ADTRAN to provide various guarantees of performance such as bid bonds, performance bonds and customs bonds. As of March 31, 2022, ADTRAN had commitments related to these bonds totaling \$20.9 million (as of December 31, 2021: \$22.9 million; 2020: \$15.2 million; 2019: \$9.3 million), which expire at various dates through August 2024. Although the triggering events vary from contract to contract, in general ADTRAN would only be liable for the amount of these guarantees in the event of default in its performance under each contract, the probability of which ADTRAN believes is remote.

ADTRAN also has obligations related to uncertain income tax positions that have uncertainty as of when the related expense will be recognized.

In November 2021, ADTRAN renewed the Cadence Revolving Credit Agreement.

9. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS OF ADVA

For purposes of this Section "Management's Discussion and Analysis of Financial Condition and Results of Operations of ADVA", unless otherwise indicated, references to "ADVA SE" refer to the ADVA Optical Networking SE and references to "ADVA" refer to the ADVA Optical Networking SE together with its subsidiaries.

The following discussion should be read in conjunction with the ADVA's annual consolidated financial statements and related notes thereto beginning on page F-4.1 of this Prospectus. ADVA's consolidated financial statements and the financial information discussed herein have been prepared in accordance with IFRS as adopted by the EU.

Where financial statements in the following tables are labeled "audited", this means that it has been taken from ADVA's audited consolidated financial statements mentioned above. The label "unaudited" is used in the following tables to indicate financial information that has not been taken from ADVA's audited consolidated financial statements mentioned above.

9.1 Business Overview

ADVA develops and provides solutions to network operations (private enterprises, communication services providers and internet content providers), focusing on solutions for cloud access, cloud interconnection and network synchronization.

9.2 Factors Affecting Results of Operations

ADVA believes that the factors discussed below have significantly affected its results of operations, financial position and cash flows in the period from 2019 to 2021 and until the date of this Prospectus, and expects that these factors will continue to have a material impact on its results of operations, financial position and cash flows in the future. For a discussion of how these and certain other factors may adversely affect ADVA's results of operations, financial position and cash flows, see also section "1.4 Risks Relating to the Business of ADVA".

9.2.1 General Economic Conditions

In 2021, global supply chains and shipments slowed, causing worldwide shortages and affecting consumer patterns. In particular, the semiconductor market experienced a significant shortage in capacities due to surging demands across the globe. Starting at the end of 2020 and into 2022, the increased demands in consumer goods, electric vehicles as well as a global economic recovery have triggered an unprecedented supply shortfall across all semiconductor commodities. ADVA has reacted to these shortfalls with a variety of actions such as a closed communication loop on executive level with major semiconductor vendors, improved planning and buffer models, a steering committee to oversee the critical components on a daily basis as well as a prioritized collaboration between operations and R&D to qualify second source and alternative components. The bottlenecks with the supply of semiconductors once again demanded a great deal of creativity and flexibility from ADVA's employees in the operations department in order to ensure ADVA's ability to deliver. On the other hand, the order books for ADVA products were at all-time highs. As of year-end 2021, ADVA reported significantly increased inventories, which reflects advance procurement of materials due to expected delivery difficulties for semiconductors.

9.2.2 Exchange Rate Effects

ADVA sells its products and services to customers around the world. Most transactions are conducted in EUR, USD and GBP. Any non-Euro pricing results in foreign currency exposure for ADVA as the foreign exchange rate for USD and GBP changes with respect to the Euro. At a high-level, ADVA has a significant outflow in USD as the purchases for product components substantially exceed the revenues generated from product and service sales. In contrast, ADVA generates a material positive cash flow in Euros and GBP. All foreign exchange fluctuations with respect to the above mentioned currencies can have significant impact on ADVA's net income, equity and cash.

ADVA's subsidiaries report their financials in the agreed functional currency of each individual entity. Intercompany loans and account receivables or account payables between ADVA SE and its subsidiaries are subject to foreign exchange fluctuations and can result in foreign currency exchange gains and losses from foreign exchange translation. These gains and losses affect net income and equity, but not cash.

ADVA's foreign exchange hedging strategy is to hedge income statement exposure against foreign exchange fluctuations. The objective is to offset foreign exchange effects on net income, not to earn money with foreign exchange speculation. Approvals are made based on the four eyes-principle, which is the requirement that two individuals make an approval before it is executed.

ADVA uses forward contracts only. This means that there is no pending decision whether to execute a hedge. Instead, a defined amount of foreign currency is exchanged to a target currency on the due date.

All currencies are continuously monitored and hedged if significant. The logic applied limits the risk that a forward contract leads to an "over-hedging". Under-hedging is accepted up to a certain extent. It should be monitored though if the actual foreign exchange volume hedged agrees to the target coverage (corridor). This is to ensure that the algorithm applied continues to function or is adjusted if needed.

In addition, if ADVA sets up an intercompany loan between two subsidiaries or if ADVA has significant other intercompany relations, ADVA's treasury reviews and decides in consultation with the chief financial officer of ADVA, if a special hedge contract should be created.

As ADVA does not account for hedge accounting, foreign exchange results from hedging are shown under financial results.

9.3 Research and Development

ADVA's research and development activities are driven by the distinct emphasis on differentiating its innovative connectivity solutions for cloud and mobile services and working with customers and partners to identify and meet their current and future needs. The resulting key technologies and products simplify complicated existing network structures and supplement existing solutions.

During the financial year 2021, ADVA's research and development activities were focused on the following three technology areas:

- enhancements to the open optical transport solution including the development of the new TeraFlex[™] terminal and a new generation of open line system ("OLS");
- a new generation of 100G products including NFV software for ADVA's cloud access portfolio; and
- ultra-precise synchronization technologies for 5G mobile networks and other industry verticals.

9.4 Trends

In view of the global semiconductor crisis, ADVA does not expect the supply chain issue to recover significantly in the remainder of the year 2022. With respect to the COVID-19 pandemic, it remains to be seen whether whether new lockdowns in China will lead to further tightening of supply chains or the crisis will lessen over the course of the year, as some economic and health experts assume. Nevertheless, the network expansion continues and the demand for ADVA's products and services across all technology areas is very high. In addition to the steadily growing security requirements in communication networks, the importance of the country of origin in the choice of technology plays an increasingly important role for many network operators. ADVA believes that this trend strengthens ADVA's competitive position as one of the remaining specialists in optical transmission technology with a synchronization portfolio in Europe. The bottlenecks in the supply of semiconductors are still a major threat to the stability of the supply chain and can also lead to revenue shifts in the coming quarters.

9.5 Off-Balance Sheet Arrangements

As of December 31, 2021, ADVA had purchase commitments totaling €170.4 million in respect to suppliers (as of December 31, 2020: €57.1 million; as of December 31, 2019: €45.5 million).

ADVA has issued guarantees in favor of some customers. As of December 31, 2021, ADVA had issued performance bonds with a maximum guaranteed amount of €334,000 (as of December 31, 2020: €414,000; as of December 31, 2019: €2.4 million). As of December 31, 2021, ADVA did not expect claims from these guarantees.

In the normal course of business, claims may be asserted, or lawsuits filed against ADVA SE and its subsidiaries from time to time. As of December 31, 2021, ADVA did not expect that potential titles or litigation, individually or in the aggregate, will have a material impact on its results of operations.

9.6 Consolidated Results of Operations

The following table presents selected financial information derived from ADVA's consolidated income statements for the financial years ended December 31, 2021, 2020 and 2019:

		Year Ended December 31,	
(Euros in thousands)	2021	2020 (audited)	2019
Revenues	603,317	564,958	556,821
Cost of goods sold	(384,759)	(368,416)	(365,908)
Gross Profit	218,558	196,542	190,913
Selling and marketing expenses	(62,943)	(60,803)	(72,828)
Thereof net impairment results on financial assets	205	(1,192)	(1,131)
General and administrative expenses	(38,811)	(35,897)	(35,126)
Research and development expenses	(76,723)	(74,997)	(75,186)
Net other operating income	5,912	3,800	4,764
Net other operating expenses	(698)	(1,172)	(534)
Operating income	45,295	27,473	12,003
Interest income	100	110	372
Interest expenses	(1,835)	(2,717)	(2,676)
Foreign currency exchange gains	12,260	10,779	8,217
Foreign currency exchange losses	(9,584)	(10,826)	(7,613)
Other financial gains, net	_	_	_
Other financial losses, net	_	_	(1,374)
Income before tax	46,236	24,819	8,929
Income tax expense, net	12,982	(4,505)	(1,884)
Net income	59,218	20,314	7,045

The following discussion and financial information are presented to aid in an understanding of ADVA's current results of operations and cash flows and should be read in conjunction with the audited consolidated financial statements and notes thereto included herein.

9.6.1 Comparison of the Years Ended December 31, 2021 and December 31, 2020

9.6.1.1 Revenues

Revenues increased by 6.8% to 603.3 million for the year ended December 31, 2021 from 6565.0 million for the year ended December 31, 2020 despite the ongoing challenges caused by the COVID-19 pandemic and material shortages in the semiconductor industry. This increase was primarily attributable to the significantly increased demand, particularly in the market areas of telecommunications service providers and enterprises customers, with the focus being on optical transport solutions.

9.6.1.2 Cost of Goods Sold

Cost of goods sold increased by 4.4% to \in 384.8 million for the year ended December 31, 2021 from \in 368.4 million for the year ended December 31, 2020. This increase was primarily due to the higher revenues. Cost of goods sold includes amortization charges for capitalized development projects of \in 43.3 million as of December 31, 2021, as compared to \in 37.3 million as of December 31, 2020.

9.6.1.3 Gross Profit

Gross profit during the year ended December 31, 2021 was $\[Engline]$ 218.6 million, an increase of 11.2% compared to gross profit of $\[Engline]$ 196.6 million during the year ended December 31, 2020. This increase was a result of increased high-margin sales under the business transformation strategy. In addition, the USD devaluation against the EUR

had an increasing effect on the gross profit, as a significant portion pf the costs of goods sold is incurred in this currency. In general, the development of ADVA's gross profit was impacted by variations in regional revenue distribution and in product and customer mix.

9.6.1.4 Selling and Marketing Expenses

Selling and marketing expenses for the year ended December 31, 2021 were 62.9 million, an increase of 3.5% compared to selling and marketing expenses of 60.8 million for the year ended December 31, 2020. This increase was primarily attributable to higher personnel expenses relating to the increased revenues and order entries in 2021.

9.6.1.5 General and Administrative Expenses

General and administrative expenses were €38.8 million for the year ended December 31, 2021, an increase of 8.1% from €35.9 million for the year ended December 31, 2020. The share of total revenues remained at 6.4% in 2021 compared to the year ended December 31, 2020. The increase was mainly due to higher expenses for legal and consulting services in connection with the Business Combination.

9.6.1.6 Research and Development Expenses

Net research and development expenses for the year ended December 31, 2021 and for the year ended December 31, 2020 were €76.7 million and €75.0 million, respectively, constituting 12.7% and 13.3% of total revenues in 2021 and 2020, respectively. Capitalization of development expenses of €42.5 million in 2021 increased by 6.3% from €40.0 million in 2020.

9.6.1.7 Operating Income

Net other operating income and expenses amounted to positive €5.2 million for the year ended December 31, 2021, significantly up from positive €2.6 million for the year ended December 31, 2020. Net other operating income and expenses were primarily impacted by subsidies received for specific research activities, refund of duty and logistic costs and release of provisions recorded in earlier periods.

Total operating expenses amounted to €173.3 million or 28.7% of revenue for the year ended December 31, 2021, compared with €169.1 million or 29.9% of revenue for the year ended December 31, 2020.

Overall, ADVA reported a significantly increased operating income of \in 45.3 million for the year ended December 31, 2021, as compared to \in 27.5 million for the year ended December 31, 2020. The increase in operating income was largely due to an increase in gross margin combined with decreasing operating costs.

9.6.1.8 Interest Income

Interest income decreased by 9.1% to €100,000 for the year ended December 31, 2021 from €110,000 for the year ended December 31, 2020.

9.6.1.9 Interest Expenses

Interest expenses decreased by 32.5% to €1.8 million for the year ended December 31, 2021 compared to €2.7 million for the year ended December 31, 2020. The decrease was mainly due to the premature termination of the German Credit Institute for Reconstruction (*Kreditanstalt für Wiederaufbau*, "*KfW*") credit line in January 2021 and lower outstanding bank debt.

9.6.1.10 Other financial Gains and Losses, Net

ADVA recognized net foreign currency gains of $\in 2.7$ million and a net loss of $\in 47,000$ for the years ended December 31, 2021 and December 31, 2020, respectively. Other financial gains and losses primarily relate to the revaluation of foreign currency assets and liabilities and the results on hedging instruments.

9.6.1.11 Income Tax Benefit, Net

ADVA reported an income tax benefit of €13.0 million for the year ended December 31, 2021, compared to the income tax expenses of €4.5 million for the year ended December 31, 2020. The income tax benefit results mainly from increase of deferred tax assets on ADVA's tax loss carry forwards.

9.6.1.12 *Net Income*

Net income strongly increased by 191.5% to ϵ 59.2 million for the year ended December 31, 2021 from ϵ 20.3 million for the year ended December 31, 2020. The increase was attributable to due to the improved gross margin, the relatively lower increase in operating expenses and the positive effect from income tax.

9.6.2 Comparison of Years Ended December 31, 2020 and December 31, 2019

9.6.2.1 Revenues

Revenues increased by 1.5% to €565.0 million for the year ended December 31, 2020 from €556.8 million for the year ended December 31, 2019. Despite the COVID-19 pandemic, demand for the year ended December 31, 2020 was robust. However, the devaluation of the U.S. dollar against the Euro had a negative impact on U.S. dollar denominated revenues.

9.6.2.2 Cost of Goods Sold

Cost of goods sold increased to €368.4 million for the year ended December 31, 2020 from €365.9 million for the year ended December 31, 2019. This increase was primarily due to higher revenues. Cost of goods sold includes amortization charges for capitalized development projects of €37.3 million as of December 31, 2020, as compared to €33.5 million as of December 31, 2019.

9.6.2.3 Gross Profit

Gross profit during the year ended December 31, 2020 was \in 196.6 million, an increase compared to gross profit of \in 190.9 million during the year ended December 31, 2019. The increase of ADVA's gross margin is a result of several factors, including variations in regional revenue distribution and in product and customer mix. ADVA's gross margin was also impacted by the USD devaluation against the euro, as a significant portion of the cost of sales is incurred in this currency.

9.6.2.4 Selling and Marketing Expenses

Selling and marketing expenses for the year ended December 31, 2020 were €60.8 million, a decrease compared to selling and marketing expenses of €72.8 million for the year ended December 31, 2019. This decrease was primarily attributable to cost savings resulting from the cost improvement program introduced for the year ended December 31, 2019 and less discretionary spending due to the COVID-19 pandemic.

9.6.2.5 General and Administrative Expenses

General and administrative expenses were €35.9 million for the year ended December 31, 2020, an increase from €35.1 million for the year ended December 31, 2019, representing 6.4% of total revenue for the year ended December 31, 2020 compared to 6.3% for the year ended December 31, 2019. This increase was primarily attributable to the cost for the implementation of a new human resources (HR) system.

9.6.2.6 Research and Development Expenses

Research and development expenses, net of capitalization of development expenses, were $\[Color orange < C75.0\]$ million for the year ended December 31, 2019, constituting 13.3% and 13.5% of the total revenue, respectively. The capitalization of development expenses of $\[Color orange < C40.0\]$ million for the year ended December 31, 2020 decreased from $\[Color orange < C42.4\]$ million for the year ended December 31, 2019.

9.6.2.7 Operating Income

Net other operating income decreased to \in 2.6 million for the year ended December 31, 2020 from \in 4.2 million for the year ended December 31, 2019. Net other operating income and expenses were primarily impacted by subsidies received for specific research activities and the release of provisions for legal disputes recorded in earlier periods.

Total operating expenses decreased to €169.1 million for the year ended December 31, 2020 from €178.9 million for the year ended December 31, 2019, representing 29.9% and 32.1% of revenue, respectively.

Overall, a significantly increased operating income of \in 27.5 million for was reported for the year ended December 31, 2020, as compared to the \in 12.0 million for the year ended December 31, 2019. The increase in operating income is largely due to an increase in gross margin combined with decreased operating costs.

9.6.2.8 Interest Income

Interest income significantly decreased by 70.4% to epsilon110,000 for the year ended December 31, 2020 from epsilon372,000 for the year ended December 31, 2019. The decrease in interest income was primarily attributable to the book value step-up of epsilon199,000 in connection with the effective interest calculation for accounting treatment of the syndicated loan in 2019.

9.6.2.9 Interest Expenses

Interest expenses increased slightly by $\[mathcal{\in}$ 41,000 to $\[mathcal{\in}$ 2.7 million for the year ended December 31, 2020 compared to the year ended December 31, 2019. The increase was due to higher financing activities primarily due to the back-up credit facility from the "KfW Entrepreneur Loan" special program introduced by the German federal government in 2020 as an economic stimulus measure to overcome the COVID-19 pandemic.

9.6.2.10 Other Financial Gains and Losses, Net

A net financial loss of $\in 0.05$ million and $\in 0.8$ million was recognized for the years ended December 31, 2020 and 2019, respectively. The increase in net financial losses was primarily attributable to lower foreign exchange effects from revaluations for the year ended December 31, 2020. Additionally, foreign exchange hedges positively impacted net financial losses for the year ended December 31, 2020. Other financial gains and losses, net includes foreign currency exchange gains, foreign currency exchange losses, other financial gains and other financial losses, whereby 2019 was impacted with $\in 1.4$ million relating to write off of an investment.

9.6.2.11 Income Tax Expense, net

Income tax expenses increased to \in 4.5 million for the year ended December 31, 2020 from \in 1.9 million, for the year ended December 31, 2019. The increase in income tax expense was a result of the significant increase in net income before taxes for the year ended December 31, 2020.

9.6.2.12 *Net Income*

Net income increased to &cupe eq 20.3 million for the year ended December 31, 2020 from &cupe eq 7.0 million for the year ended December 31, 2019, mainly due to higher operating income.

9.7 Liquidity and Capital Resources

ADVA's liquidity requirements currently consist mainly of working capital financings and investments in research and development, as well as additional cash outflows in connection with the expansion of ADVA's production facilities in Meiningen, Germany, which began in May 2021 and will continue until April 2023. Additionally, ADVA will have liquidity needs for a joint development agreement with II-VI, Inc., a U.S. manufacturer of optical materials and semiconductors. In addition, as a result of the current semiconductor shortage and delivery difficulties, ADVA is purchasing a surplus of materials resulting in additional prepayments to its partners specializing in the volume production of electronic components. ADVA's primary sources of liquidity are cash from operations, investments, and available credit and factoring facilities. Based on ADVA's cash balance of €109.0 million as of December 31, 2021, improved free cash flow and additional working capital facilities, ADVA believes it has sufficient cash and cash equivalents, investments and cash generated from operations to meet its operating and capital needs for at least the next 12 months.

As of December 31, 2021, cash and cash equivalents were \in 109.0 million, which includes short-term cash and short-term financial assets whose original remaining maturity does not exceed three months. As of December 31, 2020, cash and cash equivalents were \in 64.9 million. The significant increase in short-term liquidity from December 31, 2020 to December 31, 2021 was primarily attributable to the positive development of the result. As of December 31, 2019, cash and cash equivalents were \in 54.3 million. The increase in short-term liquidity from December 31, 2019 to December 31, 2020 was primarily attributable to the decreased operating expenses as well as lower usage of funds for net working capital.

As of December 31, 2021, ADVA had available \in 10.0 million of undrawn committed borrowing facilities, a decrease from the \in 50.0 million of available undrawn committed borrowing facilities as of December 31, 2020. The substantial reduction in borrowing facilities was the result of the termination of the "KfW Entrepreneur Loan" special program in January 2021. This borrowing facility was concluded as a security measure in connection with the COVID-19 pandemic and was terminated by ADVA as the management expects future utilization is unlikely.

The following table and discussion reflect the principal components of ADVA's cash flows for the years ended December 31, 2021 and 2020 and 2019:

(Euros in millions)		Year Ended December 31,		
		(audited)		
	2021	2020	2019	
Operating cash flow	123.3	97.1	66.9	
Investing cash flow	(64.3)	(58.4)	(60.3)	
Financing cash flow	(14.8)	(26.8)	(14.5)	
Net effect of foreign currency translation on cash and cash equivalents	(0.1)	(1.4)	(0.5)	
Net change in cash and cash equivalents	44.1	10.6	(8.4)	
Cash and cash equivalents at the end of the period	109.0	64.9	54.3	

9.7.1 Comparison of the Year Ended December 31, 2021 to the Year Ended December 31, 2020

9.7.1.1 Operating Cash Flow

Cash flow from operating activities of €123.3 million during the year ended December 31, 2021 increased by €26.2 million compared to €97.1 million during the year ended December 31, 2020. This increase was mainly due to the strongly increased income before tax.

9.7.1.2 Investing Cash Flow

Cash flow from investing activities was negative \in 64.3 million for the year ended December 31, 2021, compared to negative \in 58.4 million for the year ended December 31, 2020. The change in period over period was mainly due to the increased capital expenditures for property, plant and equipment as well as for capitalized development projects and other intangible assets.

9.7.1.3 Financing Cash Flow

Cash flow from financing activities was negative €14.8 million for the year ended December 31, 2021, a significant decrease of 44.7% compared to negative €26.8 million for the year ended December 31, 2020. The net outflow mainly resulted from scheduled repayments and interest payments for existing liabilities to banks. Repayments to banks were lower in 2021 than in 2020 due to the full repayment of some loans in the previous year. In addition, higher inflows from the exercise of stock options were taken into account in 2021.

9.7.1.4 Capital Expenditures

Capital expenditures for additions to property, plant and equipment in year ended December 31, 2021 amounted to &15.9 million, an increase of 16.5% compared to the &13.6 million seen in year ended December 31, 2020, largely reflecting higher investments in connection with the expansion of the Meiningen production site.

Capital expenditures for intangible assets of \in 48.4 million during the year ended December 31, 2021 were up from \in 44.7 million during the year ended December 31, 2020. This total mainly consists of capitalized development projects of \in 42.5 million during the year ended December 31, 2021 after \in 40.0 million during the year ended December 31, 2020 and investments in concessions, software licenses and other intangible assets of \in 5.9 million in 2021 after \in 4.8 million in 2020. Investments in capitalized development projects are mainly driven by development activities for open optical transmission technology including the new TeraFlexTM CoreChannelTM terminal as well as the new generation of 100G cloud access products and network synchronization solutions.

9.7.2 Comparison of the Year Ended December 31, 2020 to the Year Ended December 31, 2019

9.7.2.1 Operating Cash Flow

Cash flow from operating activities of €97.1 million during the year ended December 31, 2020 increased by €30.2 million compared to €66.9 million during the year ended December 31, 2019. This improvement was mainly due to a significant increase in income before taxes, deriving from an increase in gross profit and significantly reduced operating expenses due to lower travel and personal expenses for the year ended December 31, 2020. Additionally, operating cash flow benefited from decreased cash outflows for net working capital, which was mainly attributable to a decrease in accounts receivable for the year ended December 31, 2020, resulting from improved collection management and a significant decrease in inventories, which were partly offset by a significant decrease in accounts payable.

9.7.2.2 Investing Cash Flow

Cash flow from investing activities was negative €58.4 million for the year ended December 31, 2020, compared to negative €60.3 million for the year ended December 31, 2019. During the year ended December 31, 2020, capital expenditures for property, plant and equipment decreased as compared to such expenditures during the year ended December 31, 2019, which was mainly due to one-time investments in buildings for the year ended December 31, 2019.

9.7.2.3 Financing Cash Flow

Cash flow from financing activities was negative $\[\in \]$ 26.7 million for the year ended December 31, 2020, a significant increase compared to negative $\[\in \]$ 14.4 million for the year ended December 31, 2019. The net outflow results mainly from scheduled repayments and interest payments for existing liabilities to banks. Additionally, for the year ended December 31, 2019, inflows from a new loan in the amount of $\[\in \]$ 10.0 million was included. The new loan of $\[\in \]$ 10.0 million was drawn in 2019 to provide additional inventory financing due to U.S. tariffs and the relocation of production facilities out of China.

9.7.2.4 Capital Expenditures

Capital expenditures for additions to property, plant and equipment in 2020 amounted to €13.6 million, down from €16.9 million in 2019, largely reflecting lower investments in land and equipment.

Capital expenditures for intangible assets of \in 44.7 million in 2020 were up from \in 43.6 million in the prior year. This total consists of capitalized development projects of \in 40.0 million in 2020 after \in 42.4 million in 2019, and investments in concessions and software licenses and other intangible assets of \in 4.8 million in 2020 after \in 1.1 million in 2019. Investments in capitalized development projects were mainly driven by development activities for open optical transmission technology including the new TeraFlexTM terminal and the new generation of 100G products.

9.8 Investments of ADVA

9.8.1 Historical material investments of ADVA

Material investments of ADVA relate to acquisitions of companies or business operations. For the years ended December 31, 2021, 2020 and 2019, ADVA had no material investments.

9.8.2 Current and future material investments of ADVA

From year-end 2021 until the date of this Prospectus, ADVA has no material investments that are in progress or for which firm commitments have already been made.

9.9 Financial Position

The following table provides an overview of ADVA's consolidated statement of financial position as of the reporting dates indicated:

	As of December 31,		
(in thousands of EUR)			
		(audited)	
	2021	2020	2019
Total current assets	335,653	247,575	269,240
Total assets	601,524	499,972	536,362
Total current liabilities	195,532	130,638	159,140
Total liabilities	261,612	236,754	280,570
Total stockholders' equity	339,912	263,218	255,792

9.9.1 December 31, 2021 compared to December 31, 2020

ADVA's net assets and financial position improved in the year ended December 31, 2021 in particular due to increased cash and cash equivalents.

9.9.1.1 Total assets

ADVA's total assets increased by €101.5 million from €500.0 million at the end of 2020 to €601.5 million at the end of 2021.

At $\[\in \]$ 335.6 million as of December 31, 2021, current assets were $\[\in \]$ 88.1 million higher than the corresponding figure of $\[\in \]$ 247.6 million at the end of 2020, accounting for 55.8% and 49.5% of the balance sheet total, respectively, at these reporting dates. The increase in current assets was mainly driven by a significant increase in cash and cash equivalents. At the same time, inventories were up by $\[\in \]$ 39.1 million to $\[\in \]$ 129.2 million. The increase in inventories reflects advance procurement of materials due to expected delivery difficulties for semiconductors. Inventory turns slightly decreased from 3.9x in the year ended December 31, 2021 to 3.8x in the year ended December 31, 2020. Other current assets increased in particular due to increased receivables from funded research projects and higher VAT refund claims by $\[\in \]$ 6.1 million to $\[\in \]$ 14.0 million at year-end 2021. In addition, trade accounts receivables slightly decreased from $\[\in \]$ 83.9 million as of December 31, 2020 to $\[\in \]$ 83.0 million as of December 31, 2021. DSOs further improved from 58 days in the year ended December 31, 2021.

Non-current assets increased to $\[\in \] 265.9 \]$ million as of December 31, 2021 from $\[\in \] 252.4 \]$ million at year-end 2020. This increase results in particular from higher goodwill that rose by $\[\in \] 4.6 \]$ million at the end of 2021 due to exchange rate effects. Deferred tax assets increased by $\[\in \] 8.1 \]$ million to $\[\in \] 15.3 \]$ million at the end of 2021 mainly due to the increase of deferred tax asset on tax loss carry forwards of ADVA SE. As of December 31, 2021, ADVA SE did not show a cumulative loss for the last 3 years. Due to the discontinuation of the history of losses deferred tax asset on ADVA SE's tax loss carry forwards was recognized in 2021 in excess of the amount of taxable temporary differences, to the extent it can be utilized against future taxable income. Deferred tax assets and liabilities are presented net in accordance with relevant netting requirements. Other intangible assets increased by $\[\in \] 3.2 \]$ million to $\[\in \] 8.5 \]$ million to $\[\in \] 8.5 \]$ million in 2020 to $\[\in \] 12.0 \]$ million at the end of 2021, in particular due to scheduled amortization. Capitalized development projects slightly decreased from $\[\in \] 97.8 \]$ million at the end of 2021.

Meaningful additional assets belonging to ADVA are the broad and global customer base of several hundred service providers and thousands of enterprises, the ADVA, Oscilloquartz and Ensemble brands, the vendor and partner relationships and a highly motivated and skilled global team. These assets are not recognized in ADVA's balance sheet. Customer satisfaction as measured by the Net Promoter Score ("NPS") represents one of ADVA's key performance indicators.

9.9.1.2 Total Liabilities

Current liabilities increased by ϵ 64.9 million from ϵ 130.6 million on December 31, 2020 to ϵ 195.5 million on December 31, 2021. The increase was mainly due to significantly higher trade accounts payables that were up by ϵ 39.1 million to ϵ 83.2 million at the end of 2021. In the 12 months ended December 31, 2021, DSOs were at 58 days compared to 55 days in the 12 months ended December 31, 2020. The increase in trade accounts payables corresponds with the higher number of inventories and resulted in particular from advance procurement in order to avoid supply chain shortages. Other current liabilities at the end of 2021 include in particular liabilities to employees and obligations from subsidized research projects and increased by ϵ 8.1 million compared to year-end 2021.

At ϵ 66.1 million as of December 31, 2021, non-current liabilities significantly decreased from ϵ 106.1 million reported at the end of 2020. Non-current lease liabilities amounted to ϵ 19.0 million as of December 31, 2021 compared to ϵ 22.0 million reported at year-end 2020. Non-current liabilities to banks decreased by ϵ 24.6 million to ϵ 22.5 million at the end of 2021 due to scheduled repayments and the reclassification of a loan maturing in 2022 to current liabilities to banks. At the same time, deferred tax liabilities significantly decreased to ϵ 2.2 million after ϵ 13.5 million reported as of December 31, 2020 due to the netting of deferred tax assets.

9.9.1.3 Stockholders' Equity

Stockholders' equity significantly increased from $\[mathebox{\@color}\]$ 263.2 million reported on December 31, 2020, to $\[mathebox{\@color}\]$ 39.9 million on December 31, 2021. This increase was mainly due to improved net income and positive effects from currency translation in other comprehensive income. The equity ratio was at 56.5% on December 31, 2021, after 52.6% on December 31, 2020. The non-current assets ratio amounted to 127.8% and 104.3%, respectively with stockholders' equity thus fully covering the non-current assets. For the year ended December 31, 2021, capital increased totaling $\[mathebox{\@color}\]$ 6.6 million from the exercise of stock options, and stock compensation expenses totaling $\[mathebox{\@color}\]$ 6.1.6 million were reported.

9.9.1.4 Financial Liabilities

Financial liabilities decreased by \in 17.6 million to \in 72.8 million at the end of 2021. While current liabilities to banks increased to \in 25.3 million in 2021, from \in 15.5 million at the end of 2020, as a result of the reclassification of a loan maturing in the third quarter of 2022. Non-current liabilities to banks decreased to \in 22.5 million at the end of December 2021, down from \in 47.1 million at the end of the previous year. Current lease liabilities slightly increased by \in 0.2 million, to \in 6.0 million at the end of December 2021 while non-current lease liabilities reduced by \in 3.0 million to \in 19.0 million.

As of December 31, 2021, ADVA had available \in 10.0 million of undrawn committed borrowing facilities (as of December 31, 2020: undrawn committed borrowing facilities amounted to \in 50.0 million).

9.9.1.5 Net Cash / (Debt)

As a result of the decline in financial debt and a simultaneous increase in cash and cash equivalents, ADVA's net cash improved significantly by ϵ 61.7 million from net debt of ϵ 25.5 million at the end of 2020 to ϵ 36.2 million at the end of 2021. Cash and cash equivalents of ϵ 109.0 million on December 31, 2021, and of ϵ 64.9 million on December 31, 2020, were invested mainly in Euro, USD and in GBP.

		As of December 31,		
	(audited, unless oth	erwise stated)		
(in millions of EUR)	2021	2020		
Liabilities to banks				
current	(25.3)	(15.5)		
non-current	(22.5)	(47.1)		
Lease liabilities				
current	(6.0)	(5.8)		
non-current	(19.0)	(22.0)		
Cash and cash equivalents	109.0	64.9		
Net cash / (debt)*	36.2	(25.5)		

* Unaudited

9.9.2 December 31, 2020 Compared to December 31, 2019

ADVA's net assets and financial position improved in 2020 mainly due to the decline in financial debt with a simultaneous increase in cash and cash equivalents due to the improved cash flow from operating activities.

9.9.2.1 Total Assets

ADVA's total assets decreased by €36.4 million or 6.8%, from €536.4 million at the end of 2019 to €500.0 million at the end of 2020.

Current assets decreased by &epsilon21.7 million or 8.0% from &epsilon26.2 million on December 31, 2019, to &epsilon247.6 million on December 31, 2020, and comprised 49.5% of the balance sheet total after 50.2% at the end of the prior year. The decline in current assets was mainly driven by a decrease in inventories by &epsilon15.2 million to &epsilon90.1 million. The decrease in inventories reflects in particular the utilization of inventory capacities built up in the previous year. This increase in purchasing in 2019 was made to prevent negative effects of the trade dispute between the USA and China. Inventory turns decreased from 4.0x in 2019 to 3.9x in 2020. Trade accounts receivable also decreased from &epsilon96.2 million to &epsilon83.9 million at the end of December 2020 in particular due to the improvement in receivables management. DSOs improved from 66 days reported in 2019 to 58 days in 2020. At the same time, cash and cash equivalents at &epsilon66 million up at the end of 2020, mainly due to the decreased operating expenses as well as lower usage of funds for net working capital.

Non-current assets decreased by \in 14.7 million from \in 267.1 million at the end of 2019 to \in 252.4 million on December 31, 2020. This decrease results in particular from lower right- of-use assets amounting to \in 25.4 million at the end of 2020 compared to \in 32.0 million on December 31, 2019 due to scheduled depreciation. In addition, goodwill decreased by \in 5.0 million to \in 67.0 million at the end of 2020 due to exchange rate effects. Intangible assets from business combinations decreased from \in 20.9 million in 2019 to \in 15.0 million at the end of 2020, in particular due to scheduled amortization and exchange rate effects. In contrary, capitalized development projects increased from \in 96.2 million to \in 98.6 million at the end of 2020. Deferred tax assets increased by \in 0.9 million to \in 7.2 million at the end of 2020. Deferred tax assets and liabilities are presented net in accordance with relevant netting requirements.

9.9.2.2 Liabilities

Current liabilities decreased by \in 27.5 million from \in 158.2 million at year-end 2019 to \in 130.7 million at the end of 2020. The decrease is mainly due to the significant reduction in trade accounts payables by \in 29.2 million to \in 44.2 million at the end of 2020. DPO decreased to 55 days in 2020 compared to 63 days in the previous year. The reduction in trade accounts payable resulted in particular from demand-oriented purchases of materials as well as from premature settlement of trade payables to strengthen the supply chain. These measures were essential due to various bottlenecks in the availability of components.

Non-current liabilities at \in 106.2 million at year-end 2020 were also down from \in 121.4 million reported at the end of the prior year. Non-current liabilities to banks decreased by \in 14.6 million to \in 47.1 million at the end of 2020 due to scheduled repayments. Financial liabilities are explained in more detail in a separate section below. In addition, non-current liabilities from leases were \in 6.4 million lower at \in 22.0 million.

9.9.2.3 Stockholders' Equity

Stockholders' equity increased by \in 7.4 million from \in 255.8 million at year-end 2019 to \in 263.2 million at the end of 2020, mainly due to net income partly offset by negative effects from currency translation in other comprehensive income. In 2020, capital increases totaling \in 1.3 million from the exercise of stock options, and stock compensation expenses totaling \in 1.2 million were reported.

9.9.2.4 Financial liabilities

In 2020, financial liabilities decreased significantly by \in 25.0 million to \in 90.4 million at the end of 2020. As a result of scheduled repayments, current liabilities to banks decreased to \in 15.5 million in 2020, down from \in 19.2 million at the end of 2019, and non-current liabilities to banks decreased to \in 47.1 million at the end of December 2020, down from \in 61.8 million at the end of the previous year. Current lease liabilities remained largely stable year-on-year at \in 5.8 million, while non-current lease liabilities reduced to \in 22.0 million.

In 2020, the loans at IKB Industriekreditbank of \in 12.5 million were fully repaid. All financial liabilities were exclusively denominated in euro at the end of 2019 and 2020. On December 31, 2020, ADVA had available \in 50.0 million (on December 31, 2019: \in 10.0 million) of undrawn committed borrowing facilities.

9.9.2.5 *Net Debt / (Cash)*

As a result of the decline in financial debt and a simultaneous increase in cash and cash equivalents, ADVA's net debt improved significantly by \in 35.6 million to \in 25.5 million at the end of 2020. Cash and cash equivalents of \in 64.9 million on December 31, 2020, and of \in 54.3 million on December 31, 2019, were invested mainly in euro, USD and in GBP. At the end of 2020, access to \in 0.2 million of cash and cash equivalents was restricted (2019: \in 0.2 million).

ADVA's net debt as of December 31, 2020 and 2019 is calculated as follows:

	As of December (audited, unless other	- ,
(in millions of EUR)	2020	2019
Liabilities to banks		
current	15.5	19.2
non-current	47.1	61.8
Lease liabilities		
current	5.8	6.1
non-current	22.0	28.3
Cash and cash equivalents	(64.9)	(54.3)
Net debt*	25.5	61.1

^{*} Unaudited

9.10 Quantitative and Qualitative Disclosures about Market Risk

ADVA is exposed to various credit, liquidity and market risks, including interest rate and exchange rate risks. In addition, the ongoing COVID-19 pandemic has caused an economic downturn and volatility in financial markets.

9.10.1 Interest rate risk

Interest rate risk is the risk that fair values or future interest payments on existing and future interest-bearing financial instruments will fluctuate due to changes in market interest rates. ADVA increased its cash position to ϵ 64.9 million for the year ended December 31, 2020 from ϵ 54.3 million for the year-ended December 31, 2019 and subsequently increased its cash position to ϵ 109.0 million for the year ended December 31, 2021. With increasing liquidity, the risk of having to pay negative interest on bank balances also increases.

In addition to medium- and long-term financial instruments with fixed interest rates, ADVA SE has a variable rate loan of nominal \in 38.0 million as well as another variable-interest bullet loan of \in 10.0 million to finance its investments, which fundamentally results in an interest rate risk. Additionally, there is one outstanding credit line of \in 10.0 million, which has not been drawn as of December 31, 2021. The interest on a loan drawn under these credit lines is also dependent on EURIBOR.

ADVA's treasury department regularly analyzes the existing interest rate risk and, in the event of a material risk, makes proposals for the use of appropriate hedging instruments. As part of risk management to limit interest rate risks, derivative financial instruments such as interest rate caps and interest rate swaps can be used. Due to the continued expansive interest rate policy of the European Central Bank, the EURIBOR interest rate was negative as of December 31, 2021. Despite increased core inflation, ADVA does not expect any significant interest rate spreads change in the Euro area and thus rates the interest rate risk as low as of December 31, 2021.

Sensitivity Analysis

As of December 31, 2021, the 3-month EURIBOR was negative. Due to the floor agreed in the loan agreement, a reduction in EURIBOR as of December 31, 2021 would have had no effect on the interest rate. An EURIBOR increase of 0.5% would also have had no effect on the interest expense.

9.10.2 Foreign currency risks

ADVA is exposed to foreign currency risks as investments, financing and operations are carried out in several currencies. This results in foreign currency risks from future transactions as well as from recognized assets and liabilities denominated in a currency other than the functional currency of the respective group company. As part of the reporting date analysis of balance sheet exposures and exchange rate sensitivities, the currency pairs EUR/USD, EUR/AUD, EUR/GBP and EUR/JPY were identified as relevant. The risks from the currency pairs EUR/ILS, EUR/CFH and USD/SGD considered in 2020 are insignificant as of December 31, 2021. The relevance of the different currencies can vary depending on the reporting date.

The foreign currency risk of ADVA on the basis of the underlying operating activities as of December 31, 2021 in the major currencies was as follows:

(in thousands)	USD	JPY	GBP	AUD
Trade accounts receivable	13,960	446,028	77	1,333
Trade accounts payable	26,120		12	

The foreign currency risk of ADVA on the basis of the underlying operating activities as of December 31, 2020 in the major currencies was as follows:

(in thousands)	USD
Trade accounts receivable	16,174
Trade accounts payable	19.213

There were no receivables from or liabilities to third parties in ILS, CHF and SGD as of December 31, 2020.

As of December 31, 2019, the foreign currency risk in the major currencies was as follows:

(in thousands)	USD
Trade accounts receivable	8,062
Trade accounts payable	35,110

ADVA's risk with regard to other currency fluctuations was insignificant as of December 31, 2021.

ADVA's risk management framework considers operational business risks to the business that affect the income statement. Specific hedging transactions are only concluded if larger non-recurring foreign exchange risks are expected (e.g. due to a planned M&A transaction). Regarding intercompany payments, the treasury department is closely involved in order to optimize the cash flows with regard to currencies and separate hedging considerations. Foreign currency risks from recognized financial assets and liabilities are only considered by ADVA's risk management in specific cases.

For the years ended December 31, 2021, 2020 and 2019, ADVA recorded significant external net cash inflows in GBP and significant external net cash outflows in USD. In order to mitigate these material risks from operating activities and as a means to offset cash flow fluctuations, ADVA's treasury department has hedged some of its net cash flows in USD versus GBP through the use of forward foreign exchange agreements in GBP during the year ended December 31, 2021, 2020 and 2019. These transactions became due in 2022 and resulted in a net gain of \in 5,000 in 2019, a net loss of \in 424,000 in 2020 and a net gain of \in 468,000 in 2021.

To hedge exchange rate risks from future cash flows, ADVA entered into derivatives that matured in the first quarter of 2022. The fair value of these foreign exchange agreements is recognized in other current assets or other current liabilities. As of December 31, 2021, the related fair values amounted to an asset of \in 89,000 and a liability of \in 88,000, respectively (December 31, 2020: positive \in 0 thousand and negative \in 396,000; December 31, 2019: positive \in 0 thousand and negative \in 336,000). As of December 31, 2021, the nominal value of these derivatives amounted to \in 14.4 million (December 31, 2020: \in 13.7 million; December 31, 2019: \in 15.0 million). The nominal value is the accounting value from which payments are derived.

Sensitivity Analysis

The foreign exchange rate sensitivity of the most relevant currency pairs with respect to balance sheet risks on earnings after tax at the end of the reporting period is illustrated below. The analysis does not take into account effects from the translation of the financial statements of ADVA's foreign subsidiaries into Euro, ADVA's reporting currency.

If, on the balance sheet date, the relevant exchange rates would have appreciated or depreciated by 10% relative to the base currency in the relevant currency relations (base currency/spot currency), the following impact on earnings after tax from the currency translation of reported primary financial instruments would have to be considered:

(Euros in thousands)	As of Decembe	As of December 31, 2021	
	+10%	(10%)	
EUR/USD	(999)	1,222	
EUR/AUD	98	(120)	
EUR/GBP	327	(400)	
EUR/JPY	403	(493)	

The relevant currency pairs have changed in 2021 compared to 2020. In 2020, the following sensitivities were reported for the currency relations relevant in 2019:

(Euros in thousands)	As of December 31, 2020	
	+10%	(10%)
USD/ILS	2,185	(2,671)
EUR/USD	389	(476)
EUR/CHF	(345)	422
EUR/SGD	(290)	354

The relevant currency pairs have changed in 2020 compared to 2019. In 2019, the following sensitivities were reported for the currency relations relevant in 2019:

(Euros in thousands)	As of December	As of December 31, 2019	
	+10%	(10%)	
USD/ILS	2,036	(2,489)	
EUR/USD	(1,483)	1,813	
EUR/ILS	(387)	473	
EUR/CNY	(353)	432	

In addition, the currency pair USD/GBP is relevant for risk management considerations. The currency pairs USD/GBP and USD/EUR are hedged by using forward contracts. If, at the balance sheet date, the spot currency GBP had appreciated or depreciated by 10% against the base currency USD, the following effects would have been recognized in profit or loss:

(Euro in thousands)	As of December	As of December 31, 2021	
	GBP+10%	GBP(10%)	
USD/GBP	1,141	(858)	
	EUR+10%	EUR(10%)	
USD/EUR	43	(374)	

The following sensitivities have been reported in 2020:

(Euro in thousands)	As of December	31, 2020
	GBP+10%	GBP(10%)
USD/GBP	1,001	(820)
	EUR+10%	EUR(10%)
USD/EUR	(122)	(525)

The following sensitivities have been reported in 2019:

(Euro in thousands)	As of December	r 31, 2019
	GBP+10%	GBP(10%)
USD/GBP	1,142	(934)
	EUR+10%	EUR(10%)
USD/EUR	(462)	444

9.10.3 Default Risk

The default risk arising from financial assets involves the risk of the default of a contractual partner and thus includes at maximum the amount of the related recognized carrying amounts. ADVA's default risks arise from cash at banks, contract assets and contractual cash flows from debt instruments that are measured at amortized cost or at fair value through profit or loss, including outstanding trade receivables.

All default risks are managed at group level. The default risk is mitigated by various measures, depending on the class of financial assets. In addition, the credit risk from non-derivative financial assets is taken into account by means of risk provisioning and bad debt allowances.

ADVA enters into transactions with creditworthy banks and financial institutions. To assess the creditworthiness of banks, financial institutions and other financial assets, ADVA uses current credit ratings from rating agencies (S&P, Moody's or Fitch) as well as current default rates (credit default swaps). Based on the capital market ratings, ADVA divided the banks into three internal rating classes, determining their exposure at default and calculating the expected loss at default as of December 31, 2021, 2020 and 2019. Rating class 1 means investment grade assets, rating class 2 means non-investment grade assets and rating class 3 includes assets in default. Due to immateriality, no risk provisions were recognized as of December 31, 2021.

The gross carrying amounts (risk positions) by rating class each as of December 31, 2021, 2020 and 2019 are as follows:

As of December 31, 2021:

	Rating	Rating	Rating	
(in thousands of EUR)	class 1	class 2	class 3	Total
Cash and cash equivalents	108,922	10	54	108,987
Other current financial assets	6,629		_	6,629
Other non-current financial assets	4,812	_	_	4,812

As of December 31, 2020:

	Rating	Rating	Rating	
(in thousands of EUR)	class 1	class 2	class 3	Total
Cash and cash equivalents	64,623	258	_	64,881
Other current financial assets	3,726	_	_	3,726
Other non-current financial assets	2,594		_	2,594

As of December 31, 2019:

	Rating	Rating	Rating	
(in thousands of EUR)	class 1	class 2	class 3	Total
Cash and cash equivalents	54,209	12	42	54,263
Other current financial assets	2,906	_	_	2,906
Other non-current financial assets	3,419	_	_	3,419

ADVA has distributed its investments to more than 10 international credit institutions. As of December 31, 2021, one bank was responsible for approximately 92.6% of all investments, compared to approximately 87% as of December 31, 2020 and approximately 91% as of December 31, 2019. This results in a risk exposure of epsilon100.9 million as of December 31, 2021, compared to epsilon56.6 million as of December 31, 2020 and epsilon49.3 million as of December 31, 2019.

When concluding contracts with clients, the creditworthiness and credit quality of the client is assessed on the basis of independent ratings (e.g. Dun & Bradstreet), audited financial statements, or historical experience. Depending on the risk assessment, deliveries are made solely only under reasonable payment terms, which may include down payments or advance payments.

ADVA applies the general expected credit loss model for significant financial assets. To measure the expected credit losses on trade receivables carried at amortized cost and contract assets the simplified approach under IFRS 9 is used. Trade receivables are summarized on the basis of common credit risk characteristics and overdue days.

As of December 31, 2021, 2020 and 2019, the expected loss ratios are based on historical payment profiles of receivables and the corresponding historical defaults. They are adjusted to reflect up-to-date and forward-looking information on macroeconomic factors (such as geopolitical events, currency fluctuations, inflation, trade conflicts, state subsidies) that may affect clients' solvency. Contract assets relate to work that has not yet been invoiced, and accordingly have the same risk characteristics as trade receivables of the underlying contracts.

In addition, ADVA applies a specified valuation if certain criteria are met.

Regarding major other financial assets ADVA reviews the risk on a case-by-case basis considering the counterparty-specific credit default swaps or assumptions regarding the expected creditworthiness of the contractual partners.

The following table shows the overdue structure of gross carrying amounts of trade accounts receivable and contract assets by as of December 31, 2021:

(in thousands of EUR)	Not yet	Overdue up to 90	90 –180 days	180 days to 1 year overdue	Credit	Total
(in thousands of EUR)	due	days	overdue	overuue	impaired	Total
Trade accounts receivable (simplified approach)	70,571	9,257	2,499	475	2,799	85,601
Contract assets	180		_	_	_	180

The following table shows the overdue structure of gross carrying amounts of trade accounts receivable and contract assets as of December 31, 2020:

				180 days		
(in thousands of EUR)	Not yet due	Overdue to 90 davs	90 –180 days overdue	to 1 year overdue	Credit impaired	Total
Trade accounts receivable (simplified approach)	71,098	10,824	1,231	643	2,797	86,593
Contract assets	442	_	_	_	_	442

As of December 31, 2019, the overdue structure of gross carrying amounts of trade receivables and contract assets were as follows:

	Not vet	Overdue up to 90	90 –180 days	to 1 year	More than 1 vear	High default	
(in thousands of EUR)	due	days	overdue	overdue	overdue	risk	Total
Trade accounts receivable (simplified approach)	83,346	9,779	744	1,170	353	2,492	97,884
Contract assets	654	_	_	_	_	_	654

100

Due to immateriality, no valuation allowances were recognized relating to contract assets as of December 31, 2021, 2020 and 2019.

Carrying amount of other financial assets carried at amortized cost was €11.4 million for the year ended December 31, 2021, as compared to €6.3 million for the year ended December 31, 2020 and €6.3 million for year ended December 31, 2019, ADVA analyzes the risk on a case-by-case basis. As of December 31, 2021, 2020 and 2019, there were no significant default risks. Therefore, no valuation allowances were recognized.

9.10.4 Liquidity risk

In general, the inability to meet its financial obligations, such as servicing its debts, composes the liquidity risk of ADVA.

ADVA's management uses rolling forecasts to monitor ADVA's liquidity reserves, consisting of cash and cash equivalents, based on expected cash flows and unused credit lines. To manage liquidity, ADVA considers compliance with internally defined operating liquidity at all times.

ADVA's liquidity management policies include the forecast of cash flows in the major currencies and the assessment of required cash in these currencies, the monitoring of balance sheet liquidity ratios and the management of debt financing plans. In general, ADVA pursues a conservative and risk-avoidant strategy.

9.10.4.1 Financing agreements

The loan agreements contain restrictions and covenants that restrict the financial and operating scope of ADVA. A breach of these agreements would result in a compulsory early repayment of the loans. As of December 31, 2021, all agreements were met. The existing financing agreements include termination rights in the event of a change of control. On March 4, 2022, the lending banks confirmed to ADVA that they will waive the change of control clause by accepting the waiver request.

As of December 31, 2021, ADVA had financing agreements with various banks. This includes a syndicated loan of a nominal amount of \in 38.0 million with maturity in September 2023 and a bilateral bullet term loan of \in 10.0 million due in September 2022. In addition, the syndicated loan has one undrawn revolving credit facility over \in 10.0 million.

9.10.4.2 Maturities of financial liabilities

The tables below analyze ADVA's undiscounted cash outflows for non-derivative financial liabilities according to their maturity based on the remaining time at the respective balance sheet date to the contractual maturity date:

	Carrying			Future Cash	1 Flows		
(Euros in thousands, on December 31, 2021)	value	≤ 12 mo	nths	13-36 mo	nths	> 36 mo	nths
		Redemption	Interest	Redemption	Interest	Redemption	Interest
Lease liabilities	25,014	6,001	575	8,880	850	10,133	970
Liabilities to banks	47,807	25,289	552	22,518	207	_	_
Trade accounts payable	83,223	83,223	_	_	_	_	_
Other financial liabilities	3,559	3,473	_	86	_	_	_
	159,603	117,986	1,127	31,484	1,057	10,133	970

(Euros in thousands, on December 31, 2020)	<u>Carrying</u>			Future Cas	h Flows		
	value	≤ 12 mo	nths	13-36 mc	onths	> 36 mo	nths
		Redemption	Interest	Redemption	Interest	Redemption	Interest
Lease liabilities	27,805	5,807	794	10,215	1,143	11,783	1,107
Liabilities to banks	62,621	15,492	785	47,129	759		_
Trade accounts payable	44,151	44,151	_	_	_	_	_
Other financial liabilities	4,416	2,967	_	1,449	_	_	_
	138,993	68,417	1,579	58,793	1,902	11,783	1,107
(Euros in thousands, on December 31, 2019)	Carrying			Future Cas	h Flows		
(Euros in thousands, on December 31, 2019)	Carrying value	≤ 12 mo	nths	Future Cas 13-36 mg		> 36 mo	nths
(Euros in thousands, on December 31, 2019)		≤ 12 mor	nths Interest			> 36 mor	nths Interest
(Euros in thousands, on December 31, 2019) Lease liabilities				13-36 mc	onths		
	value	Redemption	Interest	Redemption	Interest	Redemption	Interest
Lease liabilities	34,430	Redemption 6,082	Interest 1,058	13-36 mo Redemption 16,772	Interest 2,033	Redemption 11,576	1,074
Lease liabilities Liabilities to banks	34,430 80,979	Redemption 6,082 19,221	1,058 1,038	13-36 mo Redemption 16,772	Interest 2,033	Redemption 11,576	Interest 1,074 215
Lease liabilities Liabilities to banks Trade accounts payable	34,430 80,979 73,398	Redemption 6,082 19,221 73,398	Interest 1,058 1,038	13-36 mo Redemption 16,772 40,019	Interest 2,033 1,379 —	Redemption 11,576 21,739	Interest 1,074 215

9.11 Significant Accounting Judgments, Estimates and Assumptions

The preparation of ADVA's consolidated financial statements requires ADVA's management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities and the disclosure of contingent liabilities on the respective reporting date. Uncertainty about these assumptions and estimates could result in outcomes that could require a material adjustment to the carrying amount of the asset or liability affected in the future. Assumptions used to make estimates are regularly reviewed. Changes in estimates only affecting one accounting period are only considered in that accounting period. In the case of changes in estimates that affect the current and future accounting periods, these are considered appropriately in the current and subsequent accounting periods.

10. BUSINESS OF ACORN HOLDCO

10.1 Overview

According to the terms of the Business Combination Agreement, ADTRAN and ADVA will combine their businesses under Acorn HoldCo. Upon the settlement of the Offer, Acorn HoldCo will be the parent company of ADTRAN and ADVA and will be listed on Nasdaq and the Frankfurt Stock Exchange. Immediately prior to the effective time of the Merger, Acorn HoldCo will change its name to "ADTRAN Holdings, Inc.". Acorn HoldCo's ticker symbols will be "ADTN" (Nasdaq) and "QH9" (Frankfurt Stock Exchange).

10.2 Information about Acorn HoldCo before the Business Combination

To date, Acorn HoldCo has not conducted any material activities other than those incidental to its formation and the matters contemplated by the Business Combination Agreement, such as the formation of Merger Sub (a wholly-owned subsidiary of Acorn HoldCo), the making of certain required securities law filings, the publication of the Offer Document and the preparation of a registration statement on Form S-4 filed with the SEC, which was declared effective by the SEC on December 2, 2021, entering into certain contractual relationships with external advisors for the purpose of preparing the post-closing activities of the Combined Group, and this Prospectus, and entering into the Consent Agreement.

Acorn HoldCo does not have any material assets and the management of Acorn HoldCo has not resolved to make any future investments other than in relation to the Business Combination.

Other than Thomas R. Stanton and Michael K. Foliano, who currently serve as Acorn HoldCo's chief executive officer and chief financial officer, respectively, Acorn HoldCo has no officers or employees.

10.3 Information about Acorn HoldCo following the Business Combination

The information provided below pertains to Acorn HoldCo following the settlement of the Offer. Following the settlement of the Offer, Acorn HoldCo will serve as the holding company for ADTRAN and ADVA, and, therefore, the information contained under the sections "11 Business of ADTRAN" and "12 Business of ADVA" should also be considered in understanding the business and operations of the Combined Group.

10.3.1 Markets and Geographical Presence

Acorn HoldCo has no operating history. The markets and geographical presence of the Combined Group will be those of ADTRAN and ADVA, along with customary company management and holding company functions based in the U.S. and Germany, respectively. For further information on the markets and geographical presence of ADTRAN and ADVA, see sections "11 Business of ADTRAN" and "12 Business of ADVA".

10.4 Employees and employee representation

Acorn HoldCo will focus on the activities of a holding company and as such on the management of the Combined Group following the settlement of the Offerand expects to only have a limited number of employees. It is not expected that there will be any employee representation on the level of the Acorn HoldCo.

Acorn HoldCo, ADTRAN and ADVA acknowledge that ADTRAN and ADVA have a complementary product and geographic focus, which will offer opportunity for growth and development for the combined employee base. Both companies highly value their employees and Acorn HoldCo believes that the Combined Group will shape the future success of the Combined Group based on the joint foundation of valued, competent, and committed employees around the world.

10.5 Certain Relationships and Related Party Transactions

In the period from August 10, 2021 (inception) through December 31, 2021, as well as in the current financial year 2022 until the date of this Prospectus, there has not been, and there is not currently proposed, any transaction or series of similar transactions to which ADTRAN was or will be a party in which the amount involved exceeded or will exceed USD 120,000 and in which any related person had or will have a direct or indirect material interest.

10.6 Legal Proceedings

During the period since the incorporation of Acorn HoldCo to the date of this Prospectus, there were no governmental, legal or arbitration proceedings (including pending or threatened proceedings that Acorn HoldCo is aware of), which may have, or have had, a significant effect on the financial position or profitability of Acorn HoldCo or the Group.

11. BUSINESS OF ADTRAN

11.1 Overview

ADTRAN considers itself to be one of the leading global providers of networking and communications platforms, software, and services focused on the broadband access market. ADTRAN's products and services are utilized by a diverse global customer base of network operators that range from those having regional or national reach and operating as telephone or cable television network operators to alternative network providers such as municipalities or utilities, as well as managed service providers who serve small- and medium-sized businesses and distributed enterprises.

ADTRAN operates under two reportable segments: (1) *Network Solutions*, which includes hardware and software products, and (2) *Services & Support*, which includes a portfolio of network implementation services, support services and cloud-hosted SaaS applications that complement the product portfolio and can be utilized to support other platforms as well.

These two segments span across three revenue categories: (1) *Access & Aggregation*, (2) *Subscriber Solutions & Experience* and (3) *Traditional & Other Products*. These revenue categories are distinguished by the types of products and services offered:

- Access & Aggregation is focused on solutions that are used by service providers to connect their network infrastructure to subscribers;
- Subscriber Solutions & Experience is concentrated on subscriber solutions that terminate broadband access in the home and/or business along with complementary software applications to optimize the subscriber experience; and
- Traditional & Other Products encompasses prior-generation technologies, products and services and certain other offerings.

ADTRAN Revenue



ADTRAN's platforms and services enable voice, data and video communications across a variety of network infrastructures. ADTRAN considers itself to be one of the top suppliers of broadband access solutions in the Europe, Middle East and Africa ("EMEA") and Asia-Pacific ("APAC") regions. The APAC region includes Australia, New Zealand, China, India, Japan and Southeast Asia.

In the three-month period ended March 31, 2022, the total revenue of the ADTRAN Group amounted to approximately USD 154.5 million (March 31, 2021: USD 127.5 million). Thereof, approximately USD 99.0 million was generated in the United States (March 31, 2021: USD 86.5 million) and approximately USD 55.5 million was generated outside of the United States (March 31, 2021: USD 41.0 million).

In the financial year ended December 31, 2021, the total revenue of the ADTRAN Group amounted to approximately USD 563.0 million (2020: USD 506.5 million; 2019: USD 530.1 million). Thereof, approximately USD 374.6 million was generated in the United States (2020: USD 352.1 million; 2019: USD 300.9 million), approximately USD 65.2 million in Germany (2020: USD 74.9 million; 2019: USD 78.1 million), approximately USD 56.4 million in United Kingdom (2020: USD 13.8 million; 2019: USD 2.6 million), approximately USD 4.6 million in Mexico (2020: USD 4.1 million; 2019: USD 90.8 million) and approximately USD 62.2 million was generated in other countries (2020: USD 61.7 million; 2019: USD 57.8 million).

ADTRAN considers itself to be one of the leading suppliers of fiber-based communications infrastructure and SaaS applications spanning from the cloud edge (data center) to the subscriber edge (customer premise) serving both the residential and enterprise connectivity markets. ADTRAN offers a broad portfolio of flexible network infrastructure solutions, customer premises equipment, software applications, and global services and support that enable service providers to meet their service demands now and in the future. These products and services enable service providers to transition to a common network supporting the simplified delivery of high-capacity services, regardless of subscriber density, network topology and infrastructure diversity.

11.2 Reportable Segments

ADTRAN's business operates under two reportable segments: (1) Network Solutions and (2) Services & Support. ADTRAN reviews its financial performance, specifically revenue and gross profit, based on these two segments.

11.2.1 Network Solutions Segment

ADTRAN's Network Solutions segment includes hardware and software products that primarily enable multi-Gigabit service delivery over fiber to homes and businesses. In addition to fiber access, this portfolio also includes several products that enable high-speed broadband delivery over alternative mediums including copper, coax and fixed wireless. In the fixed broadband access segment, ADTRAN offers traditional chassis-based network solutions, such as the Total Access 5000 and hiX 5600, while also accelerating the industry's transition to open, disaggregated fiber access solutions with its SDX (software-defined everything) Series. In ADTRAN's subscriber solutions portion of the Network Solution segments, ADTRAN offers cloud-managed wireless network ("Wi-Fi") gateways and switches that provide a mix of wired and wireless connectivity at the customer premises. ADTRAN's complete portfolio of broadband access and subscriber connectivity solutions are managed and orchestrated by its Mosaic software suite. The Mosaic software suite includes a mix of orchestration and management solutions that simplify next generation fiber access networks.

In the three-month period ended March 31, 2022, revenue in the segment Network Solutions amounted to approximately USD 138.4 million (for the three months ended March 31, 2021: USD 113.8 million). In the financial year ended December 31, 2021, revenue in the segment Network Solutions amounted to approximately USD 498.8 million (2020: USD 438.0 million; 2019: USD 455.2 million).

11.2.2 Services & Support Segment

In addition to the network connectivity solutions, ADTRAN offers a comprehensive portfolio of network design, implementation and cloud-hosted services to assist operators in the deployment of multi-vendor networks while reducing its cost to maintain these networks. The cloud-hosted services include a suite of SaaS applications under its Mosaic One platform that manages end-to-end network and service optimization for both fiber access infrastructure and mesh Wi-Fi connectivity. These services are backed by a global support organization that offers on-site and off-site support services with varying service level agreements. By pairing the network solutions with the global services and support organization, customers can turn to ADTRAN as its turnkey partner to assist with the deployment and maintenance of modern fiber access networks to connect homes and businesses.

In the three-month period ended March 31, 2022, revenue in the segment Services & Support amounted to approximately USD 16.1 million (for the three months ended March 31, 2021: USD 13.7 million). In the financial year ended December 31, 2021, revenue in the segment Services & Support amounted to approximately USD 64.2 million (2020: USD 68.5 million; 2019: USD 74.8 million).

11.3 Revenue Categories

In addition to classifying operations into two reportable segments, ADTRAN reports revenue across three categories of products and services: (1) Access & Aggregation, (2) Subscriber Solutions & Experience and (3) Traditional & Other Products.

11.3.1 Access & Aggregation

ADTRAN's Access & Aggregation platforms are used by communications service providers to connect their network infrastructure to subscribers. This revenue category includes hardware- and software-based products and services that aggregate and/or originate access technologies. ADTRAN solutions within this category include a wide array of modular or fixed platforms designed to deliver customized technology and economy based on subscriber density and environmental conditions.

The Access & Aggregation category includes the following product, software and service families:

- Total Access 5000 Series Fiber Access Platform
- Total Access 11xx/12xx/5000 and hiX 5600 FTTN platforms
- All technology varieties of PON Optical Line Terminals ("OLTs")
 used in conjunction with the ADTRAN family of optical network
 terminals ("ONTs") or select third-party ONTs
- SFP (small form-factor pluggable), SFP+, XFP (10 gigabit small form-factor pluggable), QSFP (quad small form-factor pluggable) transceivers, cables and other miscellaneous materials
- Planning, engineering, program management, maintenance, installation and commissioning services to implement customer network solutions
- SDX Series of open, disaggregated fiber access platforms

- SDX Series of open, disaggregated fiber access platforms FTTdp (fiber to the distribution point) Gfast DPUs (data processing units)
- Cabinet and OSP enclosures and services
- Mosaic-branded network management and subscriber services control and orchestration software within SD-Access architectures
- ADTRAN ONE branded packet optical transport
- MetNet 60 GHz fixed wireless access platform
- Other products and services that are generally applicable to Access & Aggregation

In the three-month period ended March 31, 2022, revenue in the revenue category Access & Aggregation amounted to approximately USD 95.5 million (for the three months ended March 31, 2021: USD 69.1 million). In the financial year ended December 31, 2021, revenue in the revenue category Access & Aggregation amounted to approximately USD 344.2 million (2020: USD 313.1 million; 2019: USD 348.9 million).

11.3.2 Subscriber Solutions & Experience

ADTRAN's Subscriber Solutions & Experience portfolio is used by service providers to terminate their access services infrastructure at the customer premises while providing an immersive and interactive experience for the subscriber. These solutions include copper and fiber Wide Area Network ("WAN") termination, Local Area Network ("LAN") switching, Wi-Fi access and cloud software services for both residential and business markets.

The Subscriber Solutions & Experience category includes the following products, software and services:

- Broadband customer premises solutions, including GPON, XGS-PON, 10G EPON, point-to-point Ethernet ONTs and RFoG (radio frequency over glass)micro-nodes
- NetVanta business class ethernet switches and routers
- Residential gateways for xDSL and DOCSIS (data over cable service interface specification) connectivity
- Mosaic One cloud-based SaaS management platform for service providers to manage residential and enterprise networks
- Bluesocket vWLAN (virtual wireless LAN) for business-class Wi-Fi and management
- Planning, engineering, program management, maintenance, installation, and commissioning services to implement customer devices solutions into consumer, small business, and enterprise locations
- IoT Gateways
- ProServices pre-sale and post-sale technical support
- SDG (service delivery gateways) Series of multi-Gigabit mesh Wi-Fi gateways
- Other products, software and services applicable to Subscriber Solutions & Experience

In the three-month period ended March 31, 2022, revenue in the revenue category Subscriber Solutions & Experience amounted to approximately USD 54.6 million (for the three months ended March 31, 2021: USD 54.6 million). In the financial year ended December 31, 2021, revenue in the revenue category Subscriber Solutions & Experience amounted to approximately USD 199.6 million (2020: USD 171.1 million; 2019: USD 152.9 million).

11.3.3 Traditional & Other Products

ADTRAN's Traditional & Other Products category generally includes a mix of prior-generation technologies' products and services, as well as other products and services that do not fit within the other revenue categories.

The Traditional & Other Products category includes products and services such as:

- TDM and ATM-based aggregation systems and customer devices
- HDSL, ADSL and other mature technologies used to deliver business and residential services over service provider access and customer networks
- Other products and services outside the Access & Aggregation and Subscriber Solutions & Experience categories

In the three-month period ended March 31, 2022, revenue in the revenue category Traditional & Other Products amounted to approximately USD 4.5 million (for the three months ended March 31, 2021: USD 3.9 million). In the financial year ended December 31, 2021, revenue in the revenue category Traditional & Other Products amounted to approximately USD 19.2 million (2020: USD 22.3 million; 2019: USD 28.3 million).

11.4 Industry Overview

Communications solution providers are investing in their networks for growth in subscriber acquisition and retention, while streamlining their operations to reduce costs and complexity. ADTRAN believes that drivers for this network investment include the evolution of government funding programs, regulatory broadband policies, competition, increasing subscriber demand for broadband and merger obligations.

ADTRAN expects subscriber demand for higher bandwidth to continue to increase due to increasing numbers of connected devices, shifting working arrangements, Over-The-Top (OTT) video, the prevalence of "internet of things" and cloud services and the increasing use of internet applications. Performance is directly related to bandwidth availability. As the demand for high-definition video streaming services, symmetric bandwidth for video conferencing and collaboration tools, low-latency cloud gaming services and smart home video surveillance applications continues to increase, so too does the need for higher bandwidth to the home and business. ADTRAN serves as a trusted partner to its customers. Working side-by-side with its customers, ADTRAN strives to enable them to maximize their performance from its network, providing a flexible path for their networks to evolve cost effectively, and to further monetize their investments.

11.5 ADTRAN's Strategy

ADTRAN's strategy is to provide innovative and cost-effective solutions for service providers that enable them to address their increasing broadband demands. ADTRAN's solutions focus on technology transformations that are happening in broadband network infrastructure, home and business CPE and software platforms, and services needed to help its customers address increasing complexity while scaling to meet increasing consumer demands. ADTRAN's goal is to be one of the leading communication technology players in the world and plans to achieve this goal through innovation in network, home and business technology paired with a customer-focused organizational structure that tailors solutions to meet the needs of its target customers. ADTRAN has an approach to its portfolio in which it is focused in specific markets where it can offer competitive differentiation and scale while also having enough diversity and breadth in the portfolio to provide end-to-end connectivity solutions that offer value to its customers.

11.6 Customers

ADTRAN has a diverse global customer base that includes tier-1, -2 and -3 service providers, alternative service providers, such as utilities, municipalities and fiber overbuilders, cable/MSOs, SMBs, and distributed enterprises. Many network operators require product approval before the purchase or installation of a product. The nature of ADTRAN's business involves a dynamic process of submitting new and succeeding generations of products for approval prior to orders being placed.

During the first quarter of 2022, ADTRAN had three 10% revenue customers geographically diversified, one U.S. distributor, one international service provider customer and one U.S. service provider customer.

For a discussion of risks associated with customers, service providers and approval processes, see sections "1.3.24 The lengthy sales and approval process required by major and other service providers for new products could result in fluctuations in ADTRAN's revenue." in this Prospectus.

11.7 Distribution, Sales and Marketing

ADTRAN sells its products through its direct sales organization and its distribution network. The direct sales organization supports major accounts and has offices in domestic and international locations. Sales to most smaller and independent telephone companies are fulfilled through a combination of direct sales and distributors. ADTRAN's services offerings can be purchased directly from it or through one of its service providers, channel partners or distribution partners.

Before placing an order, service providers typically require lengthy product qualification and standardization processes that can extend for several months or even years. Once approved, product orders are typically placed under single- or multi-year supply agreements that are generally not subject to minimum volume commitments. Service providers generally prefer having two or more suppliers for most products. Therefore, individual orders are usually subject to competition based on some combination of total value, service, price, delivery and other terms.

Orders for end-user products are fulfilled through a combination of direct sales and distributors. This is supported by a direct sales organization for major accounts and a channel-based sales organization to facilitate sales to ADTRAN's partners. Managed service providers, VARs and SIs may be affiliated with ADTRAN as channel partners, or they may purchase from a distributor in an unaffiliated fashion. Affiliated partners participate with ADTRAN at various program levels, based on sales volume and other factors, to receive benefits such as product discounts, market development funds, technical support and training.

Outside of the United States, most service provider products are sold through ADTRAN's direct sales organization and end-user products are sold direct or through distribution arrangements customized for each region. Some regions are supported from a field office that offers sales and support functions, and in some cases, warehousing and manufacturing support. ADTRAN's field sales organizations, distributors and service provider customers receive support from regional-based marketing, sales and customer support groups.

ADTRAN's marketing organization promotes all brands associated with ADTRAN to key stakeholders, including customers, partners and prospects throughout the world. Marketing is complemented by product marketing and management teams that work with the engineering teams to develop and promote new products and services as well as product enhancements.

11.8 Research and Development

ADTRAN believes that rapidly changing technologies, evolving industry standards, changing customer requirements and continuing developments in communications service offerings characterize the markets for its products. ADTRAN's on-going ability to adapt to these changes and to develop new and enhanced products that meet or anticipate market demand is a significant factor influencing its competitive position and its ability to grow.

ADTRAN's product development activities are an important part of its strategy. ADTRAN plans to maintain emphasis on product development to enable it to respond to rapidly changing technology and evolving industry standards. Its research and development and engineering functions are global. ADTRAN maintains research and development functions at its Huntsville, Alabama, United States headquarters and in Germany and other locations worldwide. During the three-month periods ended March 31, 2022 and 2021, research and development expenditures totaled USD 26.5 million and USD 27.5 million, respectively. During the years ended December 31, 2021, 2020 and 2019, research and development expenditures totaled USD 108.7 million, USD 113.3 million and USD 126.2 million, respectively.

ADTRAN develops its products either internally or by leveraging partners. Additionally, in some cases, it licenses intellectual property or acquires technologies. Internal development on advanced technology products gives ADTRAN more control over design and manufacturing issues, while for traditional designs, original design manufacturing ("**ODM**") and/or licensed intellectual property provides it with the ability to leverage the economies of scale of its technology partners. ADTRAN believes that this balanced approach ensures ADTRAN provides best-in-class solutions for its customers.

As ADTRAN continues to create more software-based intellectual property, such as network function virtualization ("NFV") portfolio, ADTRAN believes that the use of lean agile practices in research and development ensures that it remains responsive and customer-focused. In ADTRAN's view, such practices enable it to deliver products faster, at higher quality and more economically to its customers and the market on a continuous basis.

ADTRAN's efforts to continually reduce product costs, while focusing on delivery and quality, are important parts of its overall business strategy. ADTRAN's product development efforts are often centered on entering a market with improved technology, enabling it to offer products at, in its view, competitive prices and competes for market share. It continually re-engineers successive generations of existing products to improve its product performance, costs and value. Furthermore, ADTRAN has encountered supply chain disruptions and component shortages, which resulted in ADTRAN re-engineering some of its products to work around component end of life issues. For further discussion regarding our supply chain disruptions see" 11.13 Backlog and Inventory" in this Prospectus.

Development activities focus on solutions that support both existing and emerging communications industry technologies in segments that ADTRAN considers viable revenue opportunities. It is actively engaged in developing and refining technologies to support data, voice and video transport primarily over IP/Ethernet network architectures. This includes Ethernet aggregation, fiber-optic transport and access, DSL, access routing, Ethernet switching, wireless local area networks, integrated access, converged services, voice over internet protocol, network management and professional services. In 2021, ADTRAN completed the design of certain IoT products, added Wi-Fi 6 gateways and completed its 10G EPON strand mount OLT. ADTRAN also enhanced its SaaS delivery abilities and Mosaic One software.

ADTRAN's research function supports product development efforts throughout the ADTRAN Group. This function guides ADTRAN's various product design and engineering teams in digital signal processing technologies, computer simulation and modeling, computer-aided design/computer-aided manufacturing toolsets, custom semiconductor design, optical transceiver design, industry standards, technological forecasting, product development methods and emerging networks standards.

Many communication requirements, processes and technologies are governed by standard developing organizations ("SDO"). These SDOs consist of representatives from various manufacturers, service providers and testing laboratories who work to establish specifications and compliance guidelines for emerging communications technologies. ADTRAN is an active participant in several SDOs and has assisted with the development of worldwide standards in various technologies.

ADTRAN's SDO activities are primarily in the area of broadband access. This includes involvement with the International Telecommunication Union - Telecommunication Standardization Sector ("ITU-T"), Alliance for Telecommunications Industry Solutions, European Telecommunications Standards Institute and the broadband

forum ("BBF"). ADTRAN is involved in the evolution of optical access technologies, participating in activities in the ITU-T, full-serviced access network and BBF on next-generation PON. ADTRAN is also involved in standards development efforts related to maximizing the bandwidth potential of the copper pair to enable new applications in the ITU-T. ADTRAN continues to be involved with the industry-wide interoperability, performance-testing and system-level projects related to those standards in the BBF. It is also a member of Metro Ethernet Forum, Open Compute Project, Wi-Fi Alliance, Telecommunications Industry Association, CableLabs and Telecom Infra-Project.

For a discussion of risks associated with its research and development activities, see section "1.3.4 Failure by ADTRAN to continue to update and improve its products and develop new products to compete and to keep pace with improvements in communications technology could materially affect its ability to competitively market its products. "and "1.3.3 ADTRAN engages in research and development activities to develop new, innovative solutions and to improve the application of developed technologies; and as a consequence, may miss certain market opportunities enjoyed by larger companies with substantially greater research and development efforts and which may focus on more leading-edge development." in this Prospectus.

11.9 Manufacturing and Operations

The principal steps in ADTRAN's manufacturing process include the purchase and management of materials, assembly, testing, final inspection, packing and shipping. ADTRAN purchases parts and components for the assembly of some products from a large number of suppliers through a worldwide sourcing program. Additionally, it manages a process that identifies the components that are best purchased directly by contract manufacturers for use in the assembly of its products to achieve manufacturing efficiency, quality and cost objectives. Certain key components used in its products are currently available from a single source, and other key components are available from only a limited number of sources. In the past, ADTRAN has experienced delays in the receipt of certain key components, which has resulted in delays in related product deliveries. ADTRAN attempts to manage these risks through developing alternative sources, by staging inventories at strategic locations, through engineering efforts designed to prevent the necessity of certain components and by maintaining close contact and building long-term relationships with its suppliers. With the current global supply chain and transportation constraints, and limited availability of semiconductor chips and other components of ADTRAN's products, it has experienced extended lead times, increased logistics intervals and costs, and lower volume of products deliveries, which have a material adverse effect on ADTRAN's operating results. For further discussion regarding our supply chain disruptions see "11.13 Backlog and Inventory" in this Prospectus.

ADTRAN relies on subcontractors for assembly and testing of certain printed circuit board assemblies, sub-assemblies, chassis, enclosures and equipment shelves, and to purchase some of the raw materials used in such assemblies. ADTRAN typically manufactures its lower-volume, higher-mix products and build and test product prototypes and many of its initial production units at its manufacturing site in Huntsville, Alabama, United States. It later transfers the production of higher-volume, lower-mix assemblies to its subcontractors. Subcontract assembly operations can lengthen fulfillment cycle times, but ADTRAN believes it can respond more rapidly to uncertainties in incoming order rates by selecting assembly subcontractors that have significant reserve capacity and flexibility. ADTRAN's subcontractors have generally proven to be flexible and able to meet its quality requirements.

ADTRAN ships the majority of products to its U.S. customers from its facilities in Huntsville, Alabama, United States, although it also fulfills customer orders from other locations near its customers' sites, when possible. The majority of its products shipped to EMEA customers come from locations in that region. ADTRAN also ships directly from subcontractors to a number of customers in the U.S. and international locations. Most of its facilities are certified pursuant to the most current releases of ISO 9001, TL 9000, ISO 14001 and ISO 27001. ADTRAN's Huntsville, Alabama, United States, facilities and many of its key suppliers are certified according to the "Customs-Trade Partnership Against Terrorism" program (C-TPAT). Its products are also certified to certain other customer, industry and privacy standards, including those relating to emission of electromagnetic energy and safety specifications.

For a discussion of risks associated with manufacturing activities, see "1.3.18 ADTRAN's strategy of outsourcing a portion of its manufacturing requirements to subcontractors located in various international regions may result in ADTRAN not meeting its cost, quality or performance standards." and "1.3.2 ADTRAN's dependence on a limited number of suppliers for certain raw materials, key components and original design manufacturing (ODM) products, combined with supply shortages, have prevented and may continue to prevent it from delivering its products on a timely basis, which has had and may continue to have a materially adverse effect on ADTRAN's operating results and could have a material adverse effect on customer relations. "in this Prospectus.

11.10 Competition

ADTRAN competes in markets for networking and communications services and solutions for service providers, businesses, government agencies and other organizations worldwide. Its products and services provide solutions supporting voice, data and video communications across fiber-, copper-, coaxial- and wireless-based infrastructure, as well as across wide area networks, local area networks and the internet.

ADTRAN competes with a number of companies in the markets it serves.

- In its Access & Aggregation category, key competitors include Calix, Casa Systems, Ciena, CommScope, DZS, Harmonic, Huawei, Nokia, Radisys, Tibit Communications, Vecima Networks and ZTE.
- In the Subscriber Solutions & Experience category, its primary competitors include Calix, Cisco, CommScope, Hewlett Packard Enterprise, Juniper Networks, Ribbon Communications, Ubiquiti Networks and Zyxel. In addition to these original equipment manufacturer (OEM) vendors, ADTRAN faces increasing competition from various ODM vendors who are being engaged directly by some of its service provider customers. Some of these companies compete in a single product segment, while others compete across multiple product lines.
- Competitors of ADTRAN's Services & Support business include Calix, Fujitsu Network Communications and Nokia.

For further discussion of risks associated with its competition, see sections "1.3.4 Failure by ADTRAN to continue to update and improve its products and develop new products to compete and to keep pace with improvements in communications technology could materially affect its ability to competitively market its products. "and "1.3.1 ADTRAN competes in markets that have become increasingly competitive, which may result in reduced gross profit margins and market share." in this Prospectus.

11.11 Seasonality

ADTRAN has experienced quarterly fluctuations in its revenue that occur due to many factors including the varying budget cycles and seasonal buying patterns of its customers. More specifically, ADTRAN's customers tend to spend less in the first fiscal quarter as they are finalizing their annual capital spending budgets. These seasonal effects may continue to vary and do not always correlate to ADTRAN's operating results. Accordingly, they should not be considered a reliable indicator of ADTRAN's future revenue or operating results.

11.12 Foreign Currency

Transactions with customers that are denominated in foreign currencies are recorded using exchange rates from throughout the year. Assets and liabilities denominated in foreign currencies are remeasured at the balance sheet dates using the closing rates of exchange between those foreign currencies and the functional currency with any transaction gains or losses reported in other income (expense). ADTRAN's primary exposure to foreign currency exchange rate movements are with its German subsidiary, whose functional currency is the euro, its Australian subsidiary, whose functional currency is the Australian dollar. Adjustments resulting from translating financial statements of international subsidiaries are recorded as a component of accumulated other comprehensive income (loss).

11.13 Backlog and Inventory

A substantial portion of ADTRAN's shipments in any fiscal period relates to orders received and shipped within that fiscal period for customers under agreements containing nonbinding purchase commitments. Further, a significant percentage of orders require delivery within a few days. These factors normally result in a varying order backlog and limited order flow visibility, however, with the current global supply chain and transportation constraints, and limited availability of semiconductor chips and other components of ADTRAN's products, ADTRAN has experienced extended lead times, increased logistics intervals and costs, and lower volume of products deliveries, which has had a material adverse effect on ADTRAN's operating results. The backlog has been increasing due to increased demand and supply chain constraints. Additionally, backlog levels may vary because of seasonal trends, the timing of customer projects and other factors that affect customer order lead times.

To meet this type of demand, ADTRAN has enhanced and implemented supply chain management systems and processes to manage the materials planning and production processes. ADTRAN maintains substantial inventories of raw materials for long lead time components to support this demand and avoid expedite fees. In

the current environment, ADTRAN's raw material inventory has grown due to increased purchases in preparation for strategic inventory buffer purchases as well as new product ramp ups to ensure supply continuity during the COVID-19 pandemic. ADTRAN expects inventory levels to fluctuate as it attempts to maintain sufficient inventory in response to COVID-19 uncertainties related to supply chain and supply, seasonal cycles of its business and ensuring competitive lead times while managing the risk of inventory. ADTRAN also maintains substantial finished goods inventories. ADTRAN's practice of maintaining sufficient inventory levels to assure prompt delivery of its products and services increases the amount of inventory that may be considered excess and/or obsolete. This excess and obsolete inventory may require ADTRAN to write down the value of the inventory.

For further discussion of risks associated with managing its inventory, see section "1.3.10 Managing ADTRAN's inventory is complex and may include write-downs of excess or obsolete inventory." in this Prospectus.

11.14 Employees of ADTRAN

ADTRAN believes that its most valuable asset is its people. To ensure it continues to succeed, ADTRAN's objective is to be able to recruit, hire and retain top talent. The ability to attract and retain a high-quality workforce is dependent on ADTRAN's ability to maintain a diverse, equitable and inclusive workplace that provides opportunities for its employees to learn and grow in their careers. This is supported by competitive compensation and benefits, along with strong community service and other programs that enable employees to build connections within the community.

As of the date of the Prospectus, ADTRAN has approximately 1,334 full-time equivalents ("FTEs") in the U.S. and in its international subsidiaries located in North America, Latin America, EMEA and APAC regions (each as of March 31, 2022: 1,346 FTEs; December 31, 2021: 1,335 FTEs; December 31, 2020: 1403 FTEs; December 31, 2019: 1,838 FTEs). ADTRAN also utilized contractors and temporary employees domestically and internationally in various manufacturing, engineering, sales and general and administrative capacities, as needed. ADTRAN has a diverse employee base located in 17 countries, and the majority of its employees serve in engineering, information technology and technical roles within the organization.

As of the date of the Prospectus, approximately 466 FTEs are active in the engineering area (each as of March 31, 2022: 469 FTEs; December 31, 2021: 470 FTEs; December 31, 2020: 512 FTEs; 2019: 821 FTEs), approximately 222 FTEs are active in the general administration area (each as of March 31, 2022: 223 FTEs; December 31, 2021: 228 FTEs; December 31, 2020: 218 FTEs; December 31, 2019: 241 FTEs), approximately 335 FTEs are active in the production area (each as of March 31, 2022: 350 FTEs; December 31, 2021: 343 FTEs; December 31, 2020: 367 FTEs; December 31, 2019: 451 FTEs), approximately 78 FTEs are active in the marketing area (each as of March 31, 2022: 76 FTEs; December 31, 2021: 73 FTEs; December 31, 2020: 84 FTEs; December 31, 2019: 89 FTEs), approximately 51 FTEs in the quality control area (each as of March 31, 2022: 51 FTEs; December 31, 2021: 50 FTEs; December 31, 2020: 54 FTEs; December 31, 2019: 78 FTEs) and approximately 182 FTEs in the sales area (each as of March 31, 2022: 177 FTEs; December 31, 2021: 171 FTEs; December 31, 2020: 168 FTEs; December 31, 2019: 158 FTEs).

As of March 31, 2022, approximately 165 employees (76%) of ADTRAN GmbH were subject to collective bargaining agreements of either the Association of Metal and Electrical Industry in Berlin and Brandenburg e.V. or NORDMETALL Association of Metal and Electrical Industry e.V. Although these collective bargaining agreements will on September 30, 2022, negotiations with the employees of ADTRAN GmbH for a new collective bargaining agreement are ongoing and ADTRAN has not experienced any work stoppage. None of its other employees are subject to collective bargaining agreements.

ADTRAN continually works to recruit technical talent in diverse communities through its cooperative education program. This program seeks to identify college students that major in relevant technology areas and expose them to the work environment at ADTRAN on an alternating semester basis. ADTRAN's goal is to retain as many of these students as possible for full-time employment after graduation.

11.15 Intellectual Property

ADTRAN develops and owns a significant amount of intellectual property. It holds over 630 patents worldwide related to its products and over 55 additional pending patent applications. ADTRAN's patents expire at various dates between 2022 and 2040. ADTRAN continues to seek additional patents related to its research and development activities. ADTRAN does not derive any material amount of revenue from the licensing of its patents.

The ADTRAN corporate logo is a registered trademark of ADTRAN, as are the names "ADTRAN", "SmartRG" and a number of its product identifiers and names. ADTRAN also claims rights to a number of unregistered trademarks.

ADTRAN protects its intellectual property and proprietary rights in accordance with standard legal and business practices. It believes, however, that its competitive success will not fully depend on the ownership of intellectual property, but instead will depend primarily on the innovative skills, technical competence and marketing abilities of its personnel.

The communications industry is characterized by the existence of an ever-increasing volume of patent litigation and licensing activities. ADTRAN has received, and may continue to receive, notices of claims alleging that it is infringing upon patents or other intellectual property. ADTRAN cannot predict whether it will prevail in any claims or litigation over alleged infringements, or whether it will be able to license any valid and infringed patents, or other intellectual property, on commercially reasonable terms. For a discussion of risks associated with its intellectual property and proprietary rights, see section "1.3.25 ADTRAN's failure to maintain rights to intellectual property used in its business could adversely affect the development, functionality and commercial value of its products." in this Prospectus.

11.16 Certain Relationships and Related Person Transactions

11.16.1 Policies and Procedures for Review and Approval of Related Person Transactions

ADTRAN believes that business decisions and actions taken by its officers, directors and employees should be based on the best interests of ADTRAN, and must not be motivated by personal considerations or relationships. It attempts to analyze all transactions in which ADTRAN participates and in which a related person may have a direct or indirect material interest, both due to the potential for a conflict of interest and to determine whether disclosure of the transaction is required under applicable SEC rules and regulations.

Related persons include any of ADTRAN's directors or executive officers, certain of its stockholders and their immediate family members. A conflict of interest occurs when an individual's private interest interferes or appears to interfere in any way with the interests of ADTRAN. ADTRAN's code of business conduct and ethics requires all directors, officers and employees who may have a potential or apparent conflict of interest to fully disclose all the relevant facts to either a personnel supervisor, if applicable, or ADTRAN's director of internal audit.

Once a personnel supervisor receives notice of a conflict of interest, he or she will report the relevant facts to the director of internal audit. The director of internal audit will then generally consult with ADTRAN's audit committee, and a determination will be made as to whether the activity is permissible.

In addition to the reporting requirements under the Code of Business Conduct and Ethics, each year ADTRAN's directors and officers complete directors' and officers' questionnaires identifying any transactions with ADTRAN in which the officer or director or their family members have an interest. A list is then maintained by ADTRAN of all companies known to it that are affiliated with a related person. Any potential transactions with such companies or other related party transactions are reviewed by the CFO and brought to the attention of the audit committee as appropriate. The audit committee is responsible for reviewing and approving all material transactions with any related person.

11.16.2 Related Person Transactions Entered into by the ADTRAN

In the financial years 2021, 2020 and 2019 as well as during the current financial year until the date of this Prospectus, there has not been, and there is not currently proposed, any transaction or series of similar transactions to which ADTRAN was or will be a party in which the amount involved exceeded or will exceed USD 120,000 and in which any related person had or will have a direct or indirect material interest.

11.17 Properties

ADTRAN's headquarters and principal administrative, engineering and manufacturing facilities are located on an 82-acre campus in Cummings Research Park in Huntsville, Alabama, United States. Two office buildings serve both the Network Solutions and the Services & Support segments. ADTRAN leases engineering facilities in the U.S. and Europe that are used to develop products sold by the Network Solutions segment. In addition, ADTRAN leases office space in North America, Latin America, EMEA and APAC, providing sales and service support for both of its segments. These cancelable and non-cancelable leases expire at various times through 2026.

ADTRAN also has numerous sales and support staff operating from home-based offices serving both its Network Solutions and its Services & Support segments, which are located within the U.S. and abroad.

11.18 Legal Proceedings

Other than as set out below, during the twelve-month period to the date of this Prospectus, there were no governmental, legal or arbitration proceedings (including pending or threatened proceedings that ADTRAN is aware of), which may have, or have had, a significant effect on the financial position or profitability of ADTRAN or the ADTRAN Group.

11.18.1 Shareholder Derivative Lawsuit

On March 31, 2020, a shareholder derivative suit, captioned *Johnson (derivatively on behalf of ADTRAN) v. Stanton, et al.*, Case No. 5:20-cv-00447, was filed in the U.S. District Court for the Northern District of Alabama against two of ADTRAN's current executive officers, one of its former executive officers, and certain current and former members of its board of directors. The derivative suit alleges, among other things, that the defendants made or caused ADTRAN to make materially false and misleading statements regarding, and/or failed to disclose material adverse facts about, ADTRAN's business, operations and prospects, specifically relating to ADTRAN's internal control over financial reporting, excess and obsolete inventory reserves, financial results and demand from certain customers. The plaintiff in the shareholder derivative suit sent a demand letter dated June 29, 2021 to ADTRAN's board of directors. The letter contains similar allegations to those made in the plaintiff's filed complaint and in the now dismissed securities class action, and it demands, among other things, that the board of directors commence an investigation into the alleged wrongdoing. On December 10, 2021, after investigating the allegations in the plaintiff's demand with the assistance of independent counsel, the independent members of ADTRAN's board of directors concluded that pursuing the claims asserted in the demand would not be in ADTRAN's best interests and exercised its business judgement to refuse the demand. The plaintiff subsequently dismissed the case. On February 25, 2022, the court entered an order on the parties' joint stipulation dismissing the case without prejudice.

11.18.2 Other Legal Matters

In addition to the litigation described above, from time-to-time ADTRAN is subject to or otherwise involved in various lawsuits, claims, investigations and legal proceedings that arise out of or are incidental to the conduct of its business (collectively, "Legal Matters"), including those relating to employment matters, patent rights, regulatory compliance matters, stockholder claims, and contractual and other commercial disputes. Such Legal Matters, even if not meritorious, could result in the expenditure of significant financial and managerial resources. Additionally, an unfavorable outcome in a legal matter, including in a patent dispute, could require ADTRAN to pay damages, entitle claimants to other relief, such as royalties, or could prevent ADTRAN from selling some of its products in certain jurisdictions. At this time, ADTRAN is unable to predict the outcome of or estimate the possible loss or range of loss, if any, associated with these legal matters.

11.19 Significant Changes

During the second quarter of 2022, ADTRAN made draws totaling \$10.0 million under the Cadence Revolving Credit Agreement all of which had been repaid as of June 30, 2022. During the second quarter of 2022, ADTRAN also made draws totaling \$10.0 million under the Wells Revolving Credit Agreement which had been fully repaid as of June 30, 2022.

Other than that, there have been no significant changes in the financial or trading position of the ADTRAN Group between March 31, 2022 and the date of this Prospectus.

12. BUSINESS OF ADVA

12.1 Overview

ADVA develops and provides networking solutions to network operators (private enterprises, communication services providers and internet content providers), focusing on solutions for cloud access, cloud interconnection and network synchronization. ADVA believes that its networking solutions enable its customers to deliver high-speed, secure cloud and mobile services.

ADVA develops, manufactures and sells networking solutions for a digital future. Its technologies and products are based on three core areas of expertise: (1) *Optical Networking*, (2) *Cloud Access* and (3) *Network Synchronization*. All three technology areas are unified by intelligent software for network management.

- Optical Networking focuses on open optical networking solutions based on wavelength division multiplexing (WDM) technology to
 deliver scalable bandwidth for access, metro and long-haul networks with high levels of open interworking, programmability and ease of
 use:
- Cloud Access provides customers with carrier Ethernet access and network functions virtualization (NFV) solutions that enable
 communication service providers to deliver software-defined, differentiated and performance-assured wholesale, mobile backhaul and
 business services;
- Network Synchronization encompasses primary reference sources and distribution solutions to deliver accurate and scalable time and frequency synchronization for mobile network infrastructure, utilities, financial services, distributed data bases and meteorology.

ADVA believes that these three technology pillars are fundamental to the rapidly advancing digitalization of ecosystems around the world. ADVA is of the opinion that optical networking technology with WDM provides the scalable transmission capacity needed to handle bandwidth growth. ADVA further believes that cloud access solutions allow the flexible and fast deployment of new communication services, and that the synchronization technology ensures maximum performance in the network.

In the financial year ended December 31, 2021, the total revenue of the ADVA Group amounted to EUR 603.3 million (2020: EUR 565.0 million; 2019: EUR 556.8 million). Thereof, EUR 381.3 million was generated in EMEA (2020: EUR 308.8 million; 2019: EUR 299.0 million), EUR 166.0 million in the Americas (2020: EUR 201.6 million; 2019: EUR 213.8 million) and EUR 56.0 million was generated in Asia-Pacific (2020: EUR 54.6 million; 2019: EUR 44.1 million).

Strategic goals of the ADVA Group are focused on growth and profitability, innovation, operational excellence, its customer's experience and the individual development of its employees (e.g. through continuing education programs and a commitment to the creation of a workplace free of discrimination and harassment).

12.2 Worldwide Presence

The ADVA Group has a globally-diverse operational presence with products and services sold throughout the Americas, EMEA and the Asia-Pacific regions. The map below shows the locations of the regional headquarters, facilities and the number of employees in each region across operations of the ADVA Group as of December 31, 2021.





^{*} Total number at year-end 2021 (2020 in brackets)

12.3 Technologies and Product Portfolio

12.3.1 Optical Networking

ADVA considers fiber to be the optimum physical medium to transmit large amounts of data over long distances, as the bandwidth- over-distance capabilities of fiber by far exceed those of any other physical medium such as copper or wireless technologies. Therefore, ADVA believes that fiber-optic transport is the foundation for all high-speed networks.

ADVA's optical transmission solutions are based on wavelength division multiplexing ("**WDM**") technology. With WDM, multiple data streams are transmitted simultaneously over a single optical fiber by assigning each stream to a different wavelength (i.e., color) of laser light. Every wavelength (more than 100 in total) can carry a different application such as voice, video, data or storage traffic. Combining (i.e., multiplexing) these wavelengths at one end of the fiber, transmitting them over distance and then separating (i.e., de-multiplexing) them at the far end multiplies the fiber capacity and makes transmission more efficient. ADVA believes that WDM supports all data protocols and transmission speeds and is a natural foundation for all high-capacity networks.

The ADVA FSP 3000 (the "FSP 3000") is a WDM-based optical networking system designed to maximize the bandwidth and service flexibility of access, metro and core networks. The modular design is highly scalable and enables high levels of network automation.

The FSP 3000 features high-performance terminals, which bundle data streams and generate transmission rates of up to 600 Gigabits per second ("Gbit/s") per wavelength and can be optimized for access, metro and long-haul applications through ADVA's OLS. The combination of the platform's latest generation terminal and OLS supports transmission capacities of more than 50 Terabits per second ("Tbit/s") per fiber. The FSP 3000 enables network operators in ADVA's view to reduce the cost of data transmission and optimize their numerous network scenarios.

For the year ended December 31, 2021, ADVA's open optical transmission technology and products were an important driver of revenue, representing approximately 73% of ADVA's total sales revenue, including associated software and services revenue (2020: 71%; 2019: 70%).



The ADVA FSP 3000 - The open optical transport solution

12.3.2 Cloud Access

ADVA believes that Ethernet is the dominant data-link protocol for today's networks supporting a multitude of communication applications. ADVA provides Ethernet-optimized transmission solutions for fiber-based networks. Carrier Ethernet ("CE") is often used at the network edge supporting several important applications. Network operators use the technology to backhaul traffic from mobile base stations and to connect their enterprise customers. Over the years, Ethernet has evolved to be the key protocol used to carry applications in high-speed optical networks for data backhaul and the interconnection of routers. The importance of software in networking technology is increasing rapidly. Network operations are increasingly automated by means of intelligent software, which increases user friendliness and simplifies network control and maintenance, and network functions are increasingly virtualized. With the increase in NFV, ADVA believes that hardware has become less important in some network elements, as individual network functions can be developed and provided independently of the underlying hardware.

Packet-based data transmission technology and innovative network operating systems to run on open compute and switching platforms are the foundation for ADVA's cloud access solutions.

ADVA offers a solution set in this space that it believes to be highly competitive. ADVA's FSP 150 ("FSP 150") cloud access portfolio enables service providers to provide their customers with intelligent solutions quickly and efficiently in all relevant application scenarios. The portfolio allows the creation of programmable edge cloud solutions, provisioning of virtual network functions and the definition of a universal network termination. In combination with ADVA's Ensemble software solutions, network functions can be reliably hosted and orchestrated. ADVA believes that in mobile backhaul applications, the FSP 150 excels by delivering and assuring precise synchronization information in addition to powerful data plane performance. The network operating system Ensemble Activator enables the use of standard low-cost hardware as cell site gateways in mobile network infrastructure.

The FSP 150, pictured below, is a programmable, universal networking solution based on CE technology for the network edge.



The ADVA FSF 150 - The programmable cloud access solution

With the introduction of NFV, ADVA believes that increasingly more network functions will be realized as software applications, independent of application-centric hardware. These software applications can then be deployed centrally in a data center, or alternatively can be installed on a network termination device with integrated server functionality. With the Ensemble software framework, ADVA aims to provide an NFV-optimized infrastructure that enables network operators and IT solution providers to quickly and efficiently generate, deploy and administer value-added services, regardless of the underlying hardware. Functions from higher network levels can therefore also be mapped onto the ADVA portfolio. As a result, ADVA believes that its addressable application space is thereby significantly expanded.

In addition to Ensemble Connector, a network operating system that converts generic servers into high- performance network demarcation devices, ADVA also introduced Ensemble Activator, which runs on bare metal switches that can be turned into feature-rich network elements and used as cell site gateways in mobile network infrastructure, among other applications.

For the year ended December 31, 2021, ADVA's programmable cloud access solutions were an important driver of revenue and comprised approximately 21% of ADVA's total sales revenue, including associated software and services revenue (2020: 23%; 2019: 25%).

12.3.3 Network Synchronization

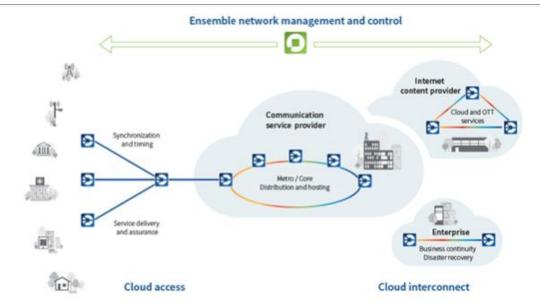
Reference sources that deliver stable frequency and time-of-day information are crucial to the effective transmission of digital signals. Especially in mobile networks, ADVA believes that the availability of highly accurate synchronization and timing information is crucial for best end-user experience.

Under the Oscilloquartz brand, ADVA develops, manufactures and distributes a broad product portfolio for the synchronization of distributed systems and network elements. This portfolio includes:

- Highly accurate, self-contained frequency sources (e.g., cesium clocks);
- Synchronization supply units ("SSUs");
- End-to-end solutions to synchronize 3G, 4G (LTE and LTE-Advanced) and 5G networks via a packet-based infrastructure;
- Global navigation satellite system receivers;
- Network timing protocol solutions (standalone or integrated in SSUs); and
- Network management solutions.

In addition to the constantly increasing demands on the precision of time and frequency, ADVA believes that there is also a trend towards miniaturization. Also in this area, ADVA believes that Oscilloquartz has a leading portfolio, including a unique plug-in reference device in the small form-factor pluggable.

The most important use cases for the Oscilloquartz technology include the provision of high-precision frequency and time information for 5G mobile networks, timing for power utilities to synchronize their decentralized power generation and so-called smart grid solutions, and the synchronization of globally dispersed server farms in the internet economy. The Oscilloquartz portfolio also offers protection against failures or attacks on the global navigation satellite systems ("GNSS"). Due to the terrestrial delivery of synchronization signals, critical infrastructure is less vulnerable to GNSS outages.



For the year ended December 31, 2021, ADVA's network synchronization products drove approximately 6% of the total revenue, representing a minor but fast-growing part of ADVA's total sales, including associated software and services revenue (2020: 6%; 2019: 5%).

12.4 ADVA's Business Strategy

Strategic goals of the ADVA Group are focused on growth and profitability, innovation, operational excellence, customer experience and individual development of its employees. The strategic goals are reviewed by both the management board and the supervisory board of ADVA on an annual basis and amended where appropriate. Each of these goals are defined in detail and then broken down into specific departmental and individual targets.

ADVA measures the accomplishment of its strategic goals against revenues, pro forma EBIT, net debt or net cash and customer experience measured by the NPS. These metrics represent ADVA's key performance indicators. ADVA's management board sets target values for all four metrics for the coming year and measures actual values against the target values on a monthly basis for revenues and pro forma operating income, on a quarterly basis for net debt and on an annual basis for the NPS. This information is summarized and communicated to the management board in monthly, quarterly and annual reports.

12.5 Regions, Sales and Marketing

ADVA sells its products to a broad customer base worldwide, either through distribution partners or its own direct sales force. In 2021, the ADVA Group successfully developed its worldwide customer base and won new customers in the Americas, EMEA and Asia-Pacific regions.

12.5.1 Regions

In the EMEA region, the ADVA Group has a balanced mix of customers of various sizes and relies on a powerful network of value-added reseller partners to support the sales of the area. For the year ended December 31, 2021, EMEA was again the strongest performing region of the ADVA Group, contributing 63.2% of the ADVA Group's total revenue (2020: 54.7%; 2019: 53.7%).

The Americas region covers North America and Latin America. For the year ended December 31, 2021, the Americas were the second strongest revenue-generating region behind EMEA, delivering 27.5% of the ADVA Group's total revenue (2020: 35.7%; 2019: 38.4%).

ADVA is focused on select countries and applications in the Asia-Pacific region and only has a few larger accounts that guarantee sustainable and recurring revenues. The revenue generated from the Asia-Pacific region accounted for 9.3% of total revenue of the ADVA Group for the year ended December 31, 2021 (2020: 9.7%; 2019: 7.9%).

The graphic below shows the number of employees and revenue from each of the EMEA, Americas and Asia-Pacific region of the ADVA Group as of December 31, 2021:



^{*} Total number at year-end 2021 (2020 in brackets)

The table below shows the revenues by region of the ADVA Group for the years ended December 31, 2021, 2020 and 2019:

	For	For the years ended December 31,		
	2021 (in million	2020 as of EUR, unless othe	2019 rwise indicated)	
EMEA	381.3	308.8	299.0	
relative to the total revenues (in %)	63.2	54.7	35.7	
Americas	166.0	201.6	213.8	
relative to the total revenues (in %)	27.5	35.7	38.4	
Asia-Pacific	56.0	54.6	44.1	
relative to the total revenues (in %)	9.3	9.7	7.9	

12.5.2 Sales

ADVA aims to employ a well-balanced sales distribution strategy to maximize customer reach around the world:

12.5.2.1 Direct sales

ADVA continues to focus on its direct-touch initiative as well as its direct sales force to win new customers. ADVA believes that establishing direct contact with enterprises and carriers enables it to work more closely and to better understand customers' specific requirements, which in turn helps to develop the right products and solutions. ADVA believes that a direct sales approach is required in particular to address Internet content providers ("ICPs") and strategically important communication service providers.

12.5.2.2 Partner sales

Sales partners of ADVA include global system integrators such as IBM, Dell and NEC, OEM partners such as Fujitsu Network Communications and VARs. Especially in the case of large enterprise networks and carriers, ADVA works closely with its sales partners during the planning and consulting phase and aims to develop an optimal solution for the customer. Technical support after commissioning is generally performed by the partners. ADVA's Partner Ecosphere Program is designed to provide sales partners with intensive training courses for their staff, quick and easy access to equipment engineering and support for projects.

12.5.3 Marketing

Direct-touch efforts are supported by the marketing team to build the ADVA brand and to expand visibility of the entire product portfolio. Specific marketing activities include regular participation in tradeshows and conferences, tactical online advertising, news coverage and bylined articles in trade publications.

The COVID-19-related travel and contact restrictions continued to significantly disrupted ADVA's 2021 trade show and conference plans. ADVA therefore transitioned to virtual event formats to continue a regular and creative engagement with customers and partners. ADVA supports co-marketing efforts with its partners and delivers regular e-newsletters to its customers and partners. ADVA also maintains a dynamic and active online presence, including an influential, popular blog and social media outreach on multiple platforms.

ADVA's brand promise can be summarized by three headlines: "Innovation", "Speed for customers" and "Trusted partner". With the combination of these three elements, ADVA believes to differentiate itself from other competitors in the industry.

In addition, ADVA has continued to engage in marketing alliances with various global network solution providers. Of particular importance are the numerous interoperability tests, especially in the field of NFV, which ADVA is conducting with its technology partners in order to demonstrate the seamless interaction of the different systems. In the area of NFV, ADVA has established a global network of technology partners around its Harmony program to ensure the seamless operation of virtualized network functions.

12.6 Competition and Market Position

The addressable market for the ADVA Group is determined by the digitization of ecosystems and the resulting increase in demand for cloud-based solutions and the underlying communication networks. ADVA believes that the rapid adoption of digital processes across all industries, the creation and use of artificial intelligence, and the ubiquitous use of high-definition videos over mobile and fixed networks are important and sustainable growth drivers for the market. Recent developments such as the increased use of home office, home schooling and video conferencing are currently accelerating investments in network expansion. State stimulus and support programs create an additional positive dynamic.

The ADVA Group competes with a number of companies in the markets it serves, such as Ciena, Infinera, Cisco, Nokia, Huawei and ZTE in the optical networking segment, Ciena, Cisco and RAD in the cloud access category and Microsemi in the technology area of network synchronization.

ADVA believes that the tension between high development costs and tough competition has led to a strong selection of network equipment providers, and only a few providers have been able to assert themselves. Market participants with insufficient innovative strength or business models that are not profitable have largely disappeared from the market. This has led to changed market conditions. In addition, the COVID-19 pandemic has re-defined the importance of network infrastructure. ADVA believes that a high-performance communication infrastructure is vital for economies and companies in the age of home offices, video conferences and virtual collaboration. The ADVA Group is also experiencing a market environment in which security and trust are becoming increasingly important. As a result of growing security threats and a greater appreciation of the dangers, numerous manufacturers from countries in Asia are currently being pushed out of western networks. In recent years, ADVA has consistently invested in the development of innovative solutions and has brought excellent solutions in the field of secure data transmission to the market. ADVA's network technology enables the construction of a high-performance communication infrastructure that serves as the basis for the digital economy, the industrial internet of things (industrial IoT) – often referred to as Industry 4.0 in Germany – and the digitization of ecosystems. ADVA addresses important applications in this growth market. Fiber optic transmission technology delivers scalable bandwidth for network operators' infrastructure and the data center interconnect (DCI) networks of large enterprises and internet content providers. In the access area of the networks and the so-called "network edge", new technologies with virtualization enables fast and flexible provision of cloud services

and new possibilities for creating edge computing solutions. In addition, ADVA's synchronization technology provides timing information that is, in ADVA's view, of the utmost importance when building broadband 5G mobile networks, globally distributed data centers and for energy suppliers.

ADVA believes that it is well positioned in several areas of the WDM market, the core segment of the overall optical networking hardware market. In ADVA's opinion, adjacent market for Ethernet-based network access solutions is gaining new momentum with the introduction of virtualized network features. Here, ADVA's solutions can address more and more new growth applications and open up additional opportunities. Finally, ADVA provides differentiated network synchronization solutions for mobile networks and expands the feature set of the portfolio to address timing requirements for other industries.

12.7 Development and Operations

12.7.1 Organizational Setup

ADVA aims to take an advanced approach to development and operations. In order to further optimize product quality, manufacturability and time to market, these traditionally separate areas are integrated with cross-functional teams working closely across the entire system. DevOps and the business lifecycle ("BLC") form the two main units in ADVA's organizational setup for development and operations.

The DevOps team covers products throughout their lifecycle. Its goal is to ensure consistently high quality and to deliver the right product to the customer in the shortest possible time.

The BLC organization is ADVA's move into next-generation, automated manufacturing, supply chain management, sales and operations planning, logistics and reverse logistics.

A third unit, the Advanced Technology Team, aims to identify new areas of innovation. It explores research possibilities and potential avenues for feasibility analysis and proofs of concept.

12.7.2 DevOps

DevOps refers to a combined approach to development and operations. ADVA has translated this model, which has originally been used in software development firms, into a combined hardware plus software research and development environment. ADVA believes this model fosters communication, collaboration and shared goals across cross-functional teams in all business areas. With a set of practices and policies being adopted by the whole team, the aim is to improve quality at all stages of the development lifecycle by enabling fast feedback loops and rapidly changing systems.

ADVA's DevOps model or organization is fully integrated and value-stream oriented, and involves product-line management, research and development and new product introduction — lifecycle engineering and quality management. It also employs a cohesive approach to system verification testing, network engineering and customer application testing. This setup allows a smooth and efficient integration of new products to existing portfolios.

ADVA's differentiated product offering is the result of its DevOps setup. Innovation ensures ADVA's position as a global technology leader in important growth markets. ADVA intends to evolve its intellectual property rights portfolio, which as of December 31, 2021, included more than 450 granted individual patents in 197 patent families.

As a member of what ADVA believes to be all key industry standardization groups, ADVA aims to contribute to the development of standards. It also intends to demonstrate technology leadership through multiple publications and presentations. Through new technology trials and the development of early prototypes, ADVA seeks to validate innovative ideas and concepts. Strategies are developed in close cooperation with partners, including suppliers and colleagues in research centers and universities. Various collaborative projects are conducted in conjunction with partner organizations.

The DevOps teams innovate in the areas of optics, Ethernet, network management software, fiber assurance as well as network virtualization and network synchronization. The development processes are designed to be agile and iterative, targeted to reinforce ADVA's position as a leader in the field of programmable networking on a secure, flexible infrastructure.

ADVA expanded its activities in the photonic integration area and launched development projects for highly integrated optical components and modules with the objective of reducing product cost and increasing product differentiation. In its view, this enables ADVA to tailor solutions more closely to individual customer needs for a more vertically integrated value chain. The expanding family of MicroMux™ modules, for example, is a result of these activities. ADVA believes that these modules significantly expand the capabilities of the FSP 3000 and can also be used in third-party devices.

To further enhance ADVA's capabilities as a supplier for critical infrastructure, ADVA recently created a business unit focused on network security solutions for transporting sensitive data. The business unit is called "ANS", and has the objective of providing highly secured end-to-end connectivity solutions, including encryption, authentication, and key management solutions.

12.7.3 Intellectual Property

The ADVA Group owns an intellectual property rights portfolio, which includes more than 450 granted individual patents in 197 patent families as of December 31, 2021. ADVA believes that its competitive success will not fully depend on the ownership of intellectual property. However, ADVA considers its proprietary technology to be important to the development, manufacture, and sale of its products, software and technologies and seeks to protect such intellectual property assets through a combination of patents, trademarks, and trade secrets.

12.7.4 BLC Organization

ADVA's BLC organization is customer-oriented: it works to identify the needs and desires of current and potential future customers to determine requirements for product features, delivery and service activities. Project requirements and potential obstacles are reviewed and evaluated prior committing to supply products and/or services to a customer. In ADVA's opinion, this approach ensures that requirements are clearly defined and understood, potential issues are resolved and ADVA is able to meet and exceed customer expectations.

"Speed for customers" is a key promise of the ADVA brand. ADVA believes that this is directly reflected in the way ADVA aligns its supply chain management and sales and operations teams. Intelligent information technology tools are designed to create full transparency along the entire value chain, leading to better forecasting, material planning, shorter delivery times and higher inventory turnover.

12.8 Quality Management

In ADVA's view, quality management is crucial to maintaining ADVA's reputation as a trusted partner and its position as a quality leader in the marketplace. ADVA's quality management system is based on carefully controlled business processes and dynamic and continuous improvement. ADVA's quality management team also deals with cross-functional quality planning and monitoring.

In 2021, ADVA successfully re-certified itself according to the international telecommunications quality management standards TL 9000:R6.3/R5.7, a quality management system defined specifically for the telecommunications industry, which standardizes the quality system requirements for the design, development, delivery, installation and maintenance of telecommunication products and services. In 2021, ADVA also sought and received re-certifications pursuant to the International Organization for Standardization's (ISO) standards for quality management (ISO 9001), business continuity management (ISO 22301), environmental management (ISO 14001), and energy management (ISO 50001).

Compliance with ADVA's quality management process is driven by the quality management team, which ADVA believes takes a proactive approach to problem solving as well as to advanced quality planning for new products in development and optimization of business processes across the entire value chain. ADVA is of the opinion that its quality management process is underpinned by strong customer orientation and a clear focus on customer experience. During the financial year 2021, ADVA received a NPS of 48%, close to the 2020 value of 50%. The NPS is obtained by asking customers a single question on a 0 to 10 rating scale: "How likely is it that you would recommend our company to a friend or a colleague?" Based on their response, customers are categorized into one of three groups: promoters (9-10 rating), passives (7-8 rating), and detractors (0-6 rating). The percentage of detractors is then subtracted from the percentage of promoters to obtain a net promoter score.

To identify weaknesses and opportunities in order to optimize cross-functional business processes, ADVA reviews outcomes based on Lean Six Sigma methodologies, i.e. project management methodologies to reduce process defects and so-called "waste" and that provide a framework for overall organizational change. This is designed to ensure that all aspects of the business can be measured and analyzed so that "waste" can be eliminated from every process.

12.9 Information Technology Strategy

Since 2017, ADVA has continually invested in new IT services and infrastructure and as a result, ADVA believes that it was well prepared for remote work as a result of the COVID-19 pandemic with a team that was already accustomed to the collaboration tools for remote communication and work.

In addition, ADVA believes that it benefits from its highly integrated and standardized applications landscape, which enables it to integrate acquisitions within a short timeframe.

12.10 Compliance and Sustainability

12.10.1 Corporate ethics and compliance

ADVA considers integrity and ethical decision making to be central requirements for its sustainable success. ADVA recognizes its responsibility to comply with national and international laws and regulations, internal policies and ethical standards. ADVA strives to continuously communicate and reinforce its commitment to compliance not only by the management board but also by the group's managers. This is reflected in a code of conduct and a range of group-wide policies that govern the ADVA Group's business operations and are mandatory for all employees to follow.

12.10.2 Sustainability

ADVA's commitment to ethical decision making extends to the ADVA Group's operations and products. To continuously strengthen ADVA's sustainability record, ADVA created a sustainability department with a direct reporting line to the ADVA Group's chief technology officer.

ADVA is regularly assessed regarding its sustainability performance by independent bodies such as EcoVadis and the Carbon Disclosure Project ("CDP"). In 2020, ADVA achieved its first "Platinum" ranking in the EcoVadis assessment. In 2021, the ADVA Group achieved its second consecutive "Platinum" ranking in the EcoVadis assessment, following three "Gold" ratings from 2017 to 2019, putting ADVA in the top 1 % of companies ranked by that platform.

In order to further strengthen ADVA's sustainability strategy and efforts, ADVA joined the Science-Based Targets Initiative ("SBTI") in 2016 as one of the first 200 companies worldwide and one of the first 10 German companies. SBTI is a joint initiative among CDP, the United Nations Global Compact, the World Resources Institute and the World Wildlife Fund. In 2017, the ADVA Group submitted its emissions-reduction targets, which were accepted in the first half of 2019, making ADVA one of the first German companies with approved SBTI targets. In 2020, ADVA tightened these standards even further, going beyond the original commitment aligned with 2°C maximum global warming, and set new targets aimed at a limit of 1.5°C. The new targets have already been officially adopted.

12.11 Manufacturing and Raw Materials

In the areas of manufacturing, logistics and reverse logistics, ADVA partners with two global electronics manufacturing services ("EMS") providers. The EMS providers operate the entire value chain from material purchasing, printed circuit board assembly, software loading and functional testing to storage and distribution logistics. Co-located ADVA experts monitor the results of the individual production and testing steps using remote shop floor control systems and striving to ensure efficient communication between ADVA's development centers and the manufacturing partners. In ADVA's view, the immediate feedback on the manufacturability of a product results in a shorter time to market and ensures a very high product quality at a competitive cost. As of December 31, 2021, ADVA was able to transfer the production of selected products between manufacturing partners' various locations within eight weeks. ADVA believes that the manufacturing system can thus react dynamically to intensifying global trade conflicts and minimize tariffs and penalties in the interest of customers. For example, in 2019, manufacturing lines for products sold in the United States were transferred from China to other countries to minimize the negative impact of the US government-imposed import duties and respond to the increasingly skeptical view of the world on China's geopolitical agenda.

ADVA continues to increase transactional efficiency through automation and robotics, both in-house and at the EMS sites. ADVA Group's own system integration and staging and/or distribution centers include Meiningen, Germany, Atlanta, Georgia, United States, York, United Kingdom, and Shenzhen, China.

The ADVA Group purchases raw materials and other goods from more than 500 suppliers. In most cases, there are a number of suppliers who can provide the services and produce the parts and components that the ADVA Group utilizes. However, there are some services and components that are purchased from a single supplier, e.g. due to price, quality or technology.

To further mitigate geopolitical risks, ADVA has taken the decision to transfer parts of its optical assembly operations from external manufacturing in Asia to internal manufacturing in Meiningen, Germany. In addition, a significant part of external manufacturing of the ADVA Group will be consolidated into EMS manufacturing sites that are located within the European Union.

12.12 Employees

As of the date of this Prospectus, the ADVA Group has approximately 2,035 employees worldwide, including 26 apprentices (each as of December 31, 2021: 1,973 employees, including 27 apprentices; December 31, 2020: 1,870 including 22 apprentices; December 31, 2019: 1,903 including 24 apprentices). Furthermore, there are approximately 24 temporary employees working for the ADVA Group as of the date of this Prospectus (each as of December 31, 2021: 41 temporary employees; December 31, 2020: 39 temporary employees; December 31, 2019: 35 temporary employees).

As of the date of this Prospectus, approximately 1,365 employees of the ADVA Group are based in the EMEA region, approximately 424 employees in the Americas region and approximately 246 employees in the Asia-Pacific region.

The table below shows the employees of the ADVA Group by regions as of years ended December 31, 2021, 2020 and 2019:

		AS OI		
	<u></u>	December 31,		
	2021	2020	2019	
EMEA	1,300	1,225	1,225	
Americas	432	410	431	
Asia-Pacific	241	235	247	
Total	1,973	1,870	1,903	

As of the date of this Prospectus, approximately 1,038 employees are active in the research & development area, approximately 514 employees in the sales/marketing-communication/service area, approximately 299 in the area of operations, and approximately 184 in the area of finance/administration/IT.

The table below shows the breakdown of employees of the ADVA Group by functional area as of December 31, 2021, 2020 and 2019:

		As of	
	D	December 31,	
	2021	2020	2019
Research & Development	994	935	941
Sales/Marketing-Communication/Service	499	507	540
Operations	274	229	229
Finance/Administration/IT	179	177	169
Apprentices	27	22	24
Total	1,973	1,870	1,903

12.13 Legal Proceedings

During the twelve-month period prior to the date of this Prospectus, there were no other governmental, legal or arbitration proceedings (including pending or threatened proceedings that ADVA is aware of), which may have, or have had in the recent past, significant effects on the financial position or profitability of ADVA or the ADVA Group.

However, legal disputes may arise in the ordinary course of business, for instance, with regard to product supplied and services rendered, product liability, product defects, quality issues, or the infringement of property rights and ordinary course termination related employee disputes.

There can be no guarantee that the outcome of these or other legal disputes will not be detrimental to the business activities or the reputation of ADVA. In addition, despite training programs as system of compliance management, ADVA may be affected by compliance-related infringements (such as antitrust and corruption violations) as well as by regulatory risks arising from ADVA Group's international business activities.

12.14 Certain Relationships and Related Party Transactions

Related persons of ADVA consist of the members of the management board and supervisory board listed above and their immediate family members as well as certain major shareholders. In the financial years 2021, 2020 and 2019, as well as during the current financial year 2022 until the date of this Prospectus, there were no significant transactions between ADVA and members of the management board and supervisory board or their family members.

EGORA Holding GmbH and its subsidiaries (the "EGORA Group") owned 14.71% of ADVA's outstanding shares as of December 31, 2021. In the financial year ended December 31, 2021, ADVA did not acquire any components from the EGORA Group. ADVA has acquired components from the EGORA Group in the amounts of €11,000 in the financial year ended December 31, 2020 and €12,000 in the financial year ended December 31, 2019. In the financial years ended December 31, 2021, 2020 and 2019, ADVA did not sell any products to the EGORA Group. Additionally, ADVA and the EGORA Group are parties to several agreements pursuant to which ADVA is entitled to make use of certain facilities and services of the EGORA Group. For the financial years ended December 31, 2021, 2020 and 2019, ADVA did not utilize these agreements. ADVA had no trade accounts payable and provision in respect of the EGORA Group as of the financial years ended December 31, 2020 and 2019.

As of December 31, 2021, Fraunhofer Heinrich Hertz Institute ("**Fraunhofer**") was also considered a related party to ADVA within the meaning of International Accounting Standard 24 as issued by IFRS, "Related Party Disclosures". Christoph Glingener, the Chief Technology Officer and Chief Operating Officer of ADVA, is a member of the board of trustees of Fraunhofer. ADVA has a service agreement in place with Fraunhofer. For the financial year ended December 31, 2021, ADVA did not acquire any services with respect to Fraunhofer. For the financial year ended December 31, 2020, ADVA acquired services with respect to Fraunhofer in the amount of €120,000 and as of December 31, 2020, ADVA did not have any accounts payable in respect of Fraunhofer. For the financial year ended December 31, 2019, ADVA did not acquire any services or have any accounts payable with respect to Fraunhofer.

All transactions with the related parties listed above were conducted on an arm's-length basis.

12.15 No Significant Changes

There have been no significant changes in the financial or trading position of the ADVA Group between December 31, 2021 and the date of this Prospectus.

13. MATERIAL CONTRACTS

13.1 Material Contracts of Acorn HoldCo

Besides the Business Combination Agreement described above (see section "4.2 Business Combination Agreement and Structure of the Business Combination"), neither Acorn HoldCo nor any member of the Acorn HoldCo Group have entered into any material contract, other than the contracts entered into in the ordinary course of business, for the two years immediately preceding the date of this Prospectus.

13.2 Material Contracts of ADTRAN

Other than the Cadence Revolving Credit Agreement and the Wells Revolving Credit Agreement described under section "8.7.4.1 Revolving Credit Agreements" and the Business Combination Agreement described under section "4.2 Business Combination Agreement and Structure of the Business Combination", neither ADTRAN nor any member of the ADTRAN Group have entered into any material contract, other than the contracts entered into in the ordinary course of business, for the two years immediately preceding the date of this Prospectus.

13.3 Material Contracts of ADVA

To refinance the short-term bridge loan taken out for the acquisition of MRV Communications Inc. (see section "17.2 History of the ADVA Group" for more information regarding the acquisition), ADVA contracted a syndicated loan amounting to ϵ 75,000,000 with a banking syndicate in September 2018. The syndicated loan consists of two tranches with a total maturity of five years including a redeemable loan amounting to ϵ 65,000,000 as well as a revolving credit line of ϵ 10,000,000. The interest rate for the redeemable loan is currently based on EURIBOR plus a margin, linked to the leverage development of the ADVA Group. Due to an improvement of the leverage, the margin has been reduced to 1.35% p.a. in 2021. Repayment in bi-annual instalments started from June 2019. The redeemable loan has been accounted for applying the effective interest method.

In July 2020, the ADVA Group extended the above-mentioned syndicated loan agreement by a new KfW credit line of the "KfW Unternehmerkredit" special program 2020 in the amount of €40,000,000, which can be drawn in case of COVID-19-related liquidity needs. In January 2021, the ADVA Group prematurely terminated the KfW credit line.

In October 2019, ADVA entered into a epsilon10,000,000 bullet loan with Deutsche Bank AG. The loan is due for repayment in one amount in September 2022 and bears interest at EURIBOR plus 1.1% p.a.

ADVA's existing financing agreements include termination rights in the event of a change of control. On March 4, 2022, the lending banks confirmed that they will waive the change of control clause by accepting the waiver request from ADVA.

Furthermore, a supplier finance agreement is in place, which entitles ADVA to transfer trade receivables from a specific customer. Credit risks and settlement risks are transferred to the financing institution. In 2021, ADVA paid an annual fee amounting to LIBOR plus 0.75% on the volume of receivables transferred. In second quarter of 2020, ADVA concluded another revolving factoring agreement with a maximum annual volume of EUR 20,000,000. The contract entitles ADVA to transfer uninsured trade receivables with certain customers. The agreement is for an indefinite period. As of March 31, 2022, receivables amounting to $\{4,175\}$ thousand (as of December 31, 2021: $\{7,144\}$ thousand; as of December 31, 2020: $\{8,91\}$ thousand) was not paid out as reserve. These reserves are recognized in other assets.

Other than the financing agreements described above and other than the Business Combination Agreement as described under section "4.2 Business Combination Agreement and Structure of the Business Combination", neither ADVA nor any member of the ADVA Group have entered into any material contract, other than the contracts entered into in the ordinary course of business, for the two years immediately preceding the date of this Prospectus.

14. REGULATION

Following the settlement of the Offer, the Combined Group will be, subject to a number of regulations imposed by the various jurisdictions in which ADTRAN and ADVA currently operate. Specifically, the Combined Group's operations and products, as well as the activities of their officers, directors, employees, contractors and agents, are and/or will be subject to U.S. federal, state, and local laws and regulations, in addition to laws and regulations of the European Union, Germany, UK and other jurisdictions around the globe. These laws and regulations include environmental laws and regulations, domestic and international tax laws and currency controls, safety, securities laws, trade and import/export restrictions, economic sanctions laws, antitrust matters and global anti-bribery laws. The regulatory requirements that will be applicable to the Combined Group's business activities following the settlement of the Offer, are subject to change, as they are continuously modified at all levels.

The following contains brief overview of select regulations applicable to the Combined Group following the settlement of the Offer. This section should be read together with the section "1.5 Risks Relating to the Regulatory Environment and Legal Risks", "1.6 Risks Relating to Tax Matters" and "10.6 Legal Proceedings", "11.18 Legal Proceedings" and "12.13 Legal Proceedings".

14.1 Data Protection and Privacy Laws

As providers of networking and communications platforms and services focused on the broadband access market, ensuring secure and compliant processing of information and personal data as well as a high standard of cyber security are a priority for ADTRAN and ADVA and, therefore, the Combined Group following the settlement of the Offer.

Regulators around the world have adopted or proposed requirements regarding the collection, use, transfer, security, storage, destruction, and other processing of personally identifiable information and other data relating to individuals, and these laws are increasing in number, enforcement, fines, and other penalties. The EU General Data Protection Regulation ("GDPR") went into effect in May 2018, implementing more stringent requirements in relation to companies' use of personal data relating to individuals ("data subjects"). Under the GDPR, the expanded definition of personal data includes information such as name, identification number, email address, location data, online identifiers such as internet protocol addresses, or any other type of information that can identify a living individual. The GDPR imposes a number of new requirements, which include: a valid ground for processing each instance of personal data; higher standards for organizations to demonstrate that they have obtained valid consent or have another legal basis in place to justify their data processing activities; providing expanded information about how data subjects' personal data is or will be used; carrying out data protection impact assessments for operations which present specific risks to individuals due to the nature or scope of the processing operation; and obligation to appoint data protection officers in certain circumstances; new rights for individuals to be "forgotten" and rights to data portability, as well as enhanced current rights; the principal of accountability and demonstrating compliance through policies, procedures, training, and audit; profiling restrictions; and a new mandatory data breach reporting regime.

In the United States, California recently adopted the California Consumer Privacy Act (the "CCPA"), which came into effect in January 2020. Similar, in certain respects to the GDPR, the CCPA establishes a new privacy framework for covered businesses, including, among other things, an expanded definition of personal information, as well as a potentially severe statutory damages framework and private rights of action for CCPA violations and failure to implement reasonably security procedures and practices. The CCPA is expected to be significantly amended and expanded by the California Privacy Rights and Enforcement Act (CPRA), which will come into effect in January 2023. Also, a new Consumer Data Protection Act ("CDPA") for the State of Virginia, United States, has been signed into law in spring 2021. The CDPA, which is planned to come into effect in January 2023 will impose obligations on data controllers that are comparable to those under the GDPR and the CCPA.

In Canada, the Personal Information Protection and Electronic Documents Act ("PIPEDA") enacted on April 13, 2000, sets the ground rules for how private-sector organizations collect, use, and disclose personal information in the course of for-profit, commercial activities across Canada. PIPEDA also applies to the personal information of employees of federally-regulated businesses, *inter alia*, telecommunications companies. The Office of the Privacy Commissioner (OPC) is responsible for overseeing compliance over PIPEDA by investigating complaints, conducting audits and pursuing court action under Canadian federal laws. In November 2020, the Digital Charter Implementation Act, 2020 ("Bill C-11") was introduced. Bill C-11 seeks to enact the Consumer Privacy Protection Act (the "CPPA") while simultaneously repealing corresponding provisions from PIPEDA.

The CPPA would create new data privacy obligations and maintain PIPEDA's principles. In Quebec, the Act Respecting the Protection of Personal Information in the Private Sector (the "Quebec Private Sector Act") regulates the collection, use, and disclosure of personal information at the provincial level. On September 21, 2021, the Québec National Assembly adopted the Act to modernize legislative provisions as regards the protection of personal information ("Bill 64"), which brings significant changes to Québec private sector privacy law. To comply with Bill 64, companies, that operate in Quebec, must i) establish data governance processes, including ones to assist individuals in exercising new privacy rights, ii) develop corporate data management policies, iii) adopt technological solutions to de-index or transfer personal information upon request; and iv) issue internal guidelines to support staff and service providers in the implementation of the new privacy regime.

Australia regulates data privacy and protection through a mix of federal, state and territory laws. The Australian federal Privacy Act 1988 (the "Privacy Act") and the Australian Privacy Principles ("APPs") contained in the Privacy Act apply to private sector entities with an annual turnover of at least 3 million Australian dollars. The Privacy Act regulates the handling of personal information and under the Privacy Act, the Australian Privacy Commissioner has authority to conduct investigations, including own motion investigations, to enforce the Privacy Act and seek civil penalties for serious and egregious breaches or for repeated breaches of the APPs where an entity has failed to implement remedial efforts. Additionally, the state Victoria has its own data protection legislation, i.e. the Privacy and Data Protection Act 2014.

Moreover, the Chinese government has recently adopted a series of privacy laws that amend and supplement the existing Cyber Security Law, in particular the Personal Information Protection Law ("PIPL") which came into effect on November 1, 2021. The PIPL is the first dedicated and comprehensive legislation in China addressing the personal data rights of individuals. While the substantive provisions of the PIPL do not depart in very many consequential ways from previous regulations enacted under the Cyber Security Law, the PIPL is the first law that grants directly enforceable rights to individuals and thus represents a new chapter in the protection of personal data in China.

14.2 Cybersecurity

As providers of networking and communications platforms and services, general rules on cybersecurity apply to ADTRAN and ADVA in various jurisdictions where they operate and, therefore, to the Combined Group following the settlement of the Offer. For example, certain technical and organizational measures must be implemented to protect the security of personal data. These measures may include, inter alia, physical security against unauthorized access and manipulation, password assignment, authorization concepts, logging of subsequent changes of data, reasonable encryption as well as protection against accidental loss, destruction or damage. In addition, according to general corporate laws, companies must implement appropriate risk management systems that also cover the detection and control of IT-related risks.

In the EU, additional compliance burdens have been introduced by EU Directive 2016/1148/EU of the European Parliament and of the Council of July 6, 2016 on Security of Network and Information Systems (the "NIS Directive") which entered into force on August 8, 2016. The NIS Directive requires "essential service operators" within critical infrastructure sectors, such as the energy, transport or banking sector, as well as "digital service providers", e.g. online marketplaces, to carefully review existing network security mechanisms, to implement "state of the art" security measures which shall ensure a level of security for their infrastructure appropriate to the risk of the respective entity as well as to establish proper notification measures to promptly notify the competent authority of any incident which has a substantial impact on the services offered in the EU.

14.3 Anti-Bribery and Corruption Laws

ADTRAN and ADVA are subject to the U.S. Foreign Corrupt Practices Act (the "FCPA"), and similar worldwide anti-bribery laws, which generally prohibit companies and their intermediaries from engaging in bribery or making other improper payments foreign officials for the purpose of obtaining or retaining business or gaining an unfair business advantage. The FCPA also requires proper record keeping and characterization of such payments in reports filed with the SEC. The FCPA applies to companies, individual directors, officers, employees and agents. Under the FCPA, U.S. companies may be held liable for the corrupt actions taken by employees, strategic or local partners or other representatives.

Because a significant portion of ADTRAN's total revenues is generated from sales outside of the U.S., ADTRAN has proactively implemented internally and externally focused measures and controls to address this risk. Despite ADTRAN's commitment to legal compliance and corporate ethics, neither can ensure that its policies and procedures will always protect it from intentional, reckless or negligent acts committed by employees or agents.

Violations of these laws, or allegations of such violations, could disrupt the companies' business and result in financial penalties, debarment from government contracts and other consequences that may have a material adverse effect on the companies' reputation, business, financial condition and result of operations. Future changes in anti-bribery or economic sanctions laws and enforcement could also result in increased compliance requirements and related expenses that may also have a material adverse effect on the companies' business, financial condition or results of operations.

14.4 Other Laws and Regulations

Furthermore, ADTRAN's and ADVA's products must comply with various regulations and standards established by communications authorities in various countries, as well as those of certain international bodies. These include, for example, environmental, health and safety regulations governing the manufacture, assembly and testing of our products, including without limitation regulations governing the use of hazardous materials. In particular, environmental legislation within the EU may increase the cost of doing business as the companies amend their products to comply with these requirements. For example, the EU issued the Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) and the Directive 2012/19/EU on waste electrical and electronic equipment (WEEE), which set collection, recycling and recovery targets for all types of electrical goods, as well as the Regulation (EC) No. 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), which stipulates and extensive regime for the production, import and handling of chemical substances at an EU level. ADTRAN and ADVA continue to implement measures to comply with these directives and other similar directives and regulations from additional countries. In addition, the Combined Group will be subject to requirements by the SEC governing the disclosure of the use of "conflict minerals" mined from the Democratic Republic of Congo and adjoining countries and procedures to identify the source of such minerals included in manufactured products. The disclosures will require the Combined Group to verify the origins of the identified minerals used and comply with disclosure requirements.

ADTRAN's and ADVA's business activities are also subject to occupational health and safety laws that are aimed at preventing health risks for employees in the workspace and providing protection against accidents and occupational diseases. In the US, for example, the Occupational Safety & Health Administration, under the U.S. Department of Labor has promulgated regulations to develop workplace health and safety standards, which sets and enforces standards to which employers must comply. Under the Occupational Safety and Health Act of 1970, employers are also responsible for providing a safe and healthy workspace. In the EU, Directive 89/391/EEC on the introduction of measures to encourage improvements in the safety and health of workers at work, guarantees minimum safety and health requirements throughout the EU while the member states are allowed to maintain or establish a more stringent system.

ADTRAN strives to deliver innovative network access solutions that lower the total cost and reduce the time of deploying services, increase the level of performance achievable with established infrastructures, reduce operating and capital expenses for its customers, increases network bandwidth and functionality, and extend network reach. ADTRAN's development process is conducted in accordance with ISO 9001, TL 9000, ISO 14001, and ISO 27001, all of which are international standards for quality and environmental management systems.

15. GENERAL INFORMATION ON ACORN HOLDCO

15.1 Legal and Commercial Name, Registered Office and LEI

Acorn HoldCo was incorporated as a corporation under the laws of Delaware, United States, on August 10, 2021, and has an issued share capital of \$10 comprising 1,000 shares of common stock, par value \$0.01 per share. See section "18 Description of Acorn HoldCo Capital Stock" for more information regarding Acorn HoldCo's share capital. Acorn HoldCo has been formed to have perpetual existence.

The legal name of Acorn HoldCo is Acorn HoldCo, Inc. Acorn HoldCo currently does not have a commercial name. Immediately prior to the effective time of the Merger, Acorn HoldCo will change its legal name to ADTRAN Holdings, Inc.

Acorn HoldCo's principal executive offices are located at 901 Explorer Boulevard, Huntsville, Alabama, 35806, United States (tele: +1 (256) 963-8000). Acorn HoldCo's registered office is located at Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle County, Delaware, 19801, United States.

Acorn HoldCo is registered with the division of corporations of the state of Delaware, United States, under registration number 6141966. As a corporation incorporated under the laws of Delaware, Acorn HoldCo is subject to the laws of Delaware, United States.

The Legal Entity Identifier (LEI) of Acorn HoldCo is 549300VV36J86CRRWF77.

15.2 Auditors

Acorn HoldCo has appointed PricewaterhouseCoopers LLP, 300 Madison Avenue, New York, United States ("PwC US"), as independent registered public accounting firm of its financial statements for the period from August 10, 2021 (inception) to December 31, 2021. PwC US conducted its audit of Acorn HoldCo's financial statements for the period from August 10, 2021 (inception) to December 31, 2021 in accordance with standards of the Public Company Accounting Oversight Board (United States) ("PCAOB") and issued an English language audit opinion in accordance with PCAOB auditing standards thereon.

PwC US is a public accounting firm registered with the PCAOB.

15.3 Financial Year and Duration

Acorn HoldCo's financial year is the calendar year.

15.4 Corporate Purpose

Article 3 of the certificate of incorporation (the "Articles of Association") defines Acorn HoldCo's corporate purpose as follows:

"The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware."

15.5 History of the Acorn HoldCo Group

Acorn HoldCo was incorporated as a corporation under the laws of Delaware on August 10, 2021. As of the date of the Prospectus, Acorn HoldCo has not conducted any material activities other than those incidental to its formation, the matters contemplated by the Business Combination Agreement.

According to the terms of the Business Combination Agreement, ADTRAN, Inc. and ADVA have agreed to combine their business under Acorn HoldCo. Upon settlement of the Offer, Acorn HoldCo will be the parent company of both ADTRAN, Inc. and ADVA.

15.6 Corporate Governance Structure of Acorn HoldCo

15.6.1 Overview

Acorn HoldCo is required to comply with the DGCL. Following the settlement of the Offer, Acorn HoldCo will also be subject to the corporate governance frameworks required by virtue of the listing of the Shares on Nasdaq and the Frankfurt Stock Exchange.

15.6.2 Corporate Governance of Acorn HoldCo before the settlement of the Offer

15.6.2.1 Acorn HoldCo Stockholders

As of the date of this Prospectus, ADTRAN is the only stockholder of Acorn HoldCo.

15.6.2.2 Directors and Management

As of the date of this Prospectus, Acorn HoldCo is managed by a board of directors with two directors, Thomas R. Stanton and Michael K. Foliano, both of whom are designated by ADTRAN.

Immediately prior to the settlement of the Offer, it is intended to expand the size of the board of directors of the Company to a total of six members comprising: Thomas R. Stanton (chairman), H. Fenwick Huss, Gregory McCray, Balan Nair, Jacqueline H. Rice, and Kathryn A. Walker. Immediately after settlement of the Offer, the board of directors of the Company will be expanded to a total of nine members by appointing three additional members to the board of directors: Brian Protiva, Nikos Theodosopoulos and Johanna Hey. As of the date of this Prospectus, Mr. Protiva still serves as CEO of ADVA. Due to his transition into the new position of Vice Chairman of the Company's board of directors following settlement of the Offer, ADVA announced on July 6, 2022, that Mr. Protiva will resign as CEO and member of ADVA's management board (*Vorstand*) after a transition period of several weeks.

The current directors of Acorn HoldCo's board of directors can be reached at Acorn HoldCo's principal executive offices: 901 Explorer Boulevard, Huntsville, Alabama, 35806, United States (tel. +1 (256) 963-8000).

15.6.2.3 Certain Information on the Members of the Board of Directors

During the previous five years, no member of the board of directors has been convicted of any fraudulent offenses. No member of the board of directors, acting in the capacity of a member of a management or supervisory entity or as founder of an issuer, has been associated with any bankruptcies and/or insolvencies, receiverships or liquidations. In addition, no member of the board of directors has been publicly incriminated or sanctioned by statutory or regulatory authorities (including professional associations) and no member of the board of directors has ever been deemed by a court to be unfit for membership in a management or supervisory entity of a company or to be unfit to exercise management duties for or manage the business of an issuer during the previous five years. No family relationships exist among the members of the board of directors.

Other than mentioned under the sections "15.6.3.1 Composition of Acorn HoldCo Board of Directors" below, no member of the board of directors of Acorn HoldCo has been a member of any administrative, management or supervisory bodies or a partner of a company or partnership outside the Acorn HoldCo Group at any time in the previous five years.

No member of the board of directors holds a service contract with Acorn HoldCo or any of its current subsidiaries providing for benefits upon termination of employment.

15.6.2.4 Other interests

In addition to serving as officers and members of the Acorn HoldCo board of directors, Messrs. Stanton and Foliano are employed by ADTRAN. In their capacity as employees of ADTRAN, they receive a salary which comprises, among others, equity awards. For a description of the treatment of outstanding equity awards, refer to "4.4 Treatment of Equity Awards".

In their capacity as members of the Acorn HoldCo board of directors, Messrs. Stanton and Foliano receive no compensation and none of them holds shares or equity-based instruments in Acorn HoldCo.

Other than stated above, there are no conflicts of interest or potential conflicts of interest of the members of the pre-closing Acorn HoldCo board of directors regarding their duties towards Acorn HoldCo, and their private interests or other duties.

Regarding the interests and potential conflicts of interest of the potential future members of the Acorn HoldCo board of directors, please refer to section "2.11 Potential interests".

15.6.2.5 Committees

Acorn HoldCo has not yet established an audit committee, a nomination and governance committee or a compensation committee. For information on Acorn HoldCo's corporate governance and committees following the settlement of the Offer, see section "10.3 Information about Acorn HoldCo following the Business Combination".

15.6.3 Corporate Governance of Acorn HoldCo after the settlement of the Offer

15.6.3.1 Composition of Acorn HoldCo Board of Directors

Following the settlement of the Offer, the Acorn HoldCo board of directors will consist of nine members, including Thomas R. Stanton, the current CEO and Chairman of the ADTRAN board of directors, and eight other directors, consisting of five non-executive directors to be designated for appointment by ADTRAN and three directors to be designated for appointment by ADVA.

Members of the board of directors will each hold office for a term of one year from the date of the annual meeting of the Company's stockholders.

The following table sets forth the names, as well as certain other biographical information, as to those individuals who are expected to be the members of the board of directors of Acorn HoldCo upon the settlement of the Offer:

Nama

Thomas R. Stanton

Position, Principal Occupation, Business Experience and Directorships during Last Five Years, Qualifications to Serve

Mr. Stanton was appointed chief executive officer of ADTRAN in September 2005 and named chairman of the ADTRAN board of directors in 2007. He has served as director of Acorn HoldCo's board of directors since August 2021. In addition, Mr. Stanton currently serves on the board of the Economic Development Partnership of Alabama and the Huntsville Chamber of Commerce and has served on the board of BancorpSouth Bank (NYSE: BXS) since October 2015.

Mr. Stanton joined ADTRAN in 1995 as Vice President of Marketing for the Carrier Networks ("CN"), Division. Since that time, he has held a number of senior management positions within ADTRAN, including Senior Vice President and General Manager of the CN Division. Prior to joining ADTRAN, he served as Vice President of Marketing and Engineering at Transcrypt International and held several senior management positions with E. F. Johnson Company. Mr. Stanton has served on the board of directors of a number of technology companies and is a past chairman of the board for both the Federal Reserve Bank of Atlanta's Birmingham Branch and the Telecommunications Industry Association. Mr. Stanton holds a Bachelor of Science degree in Computer Engineering from Auburn University.

Dr. Huss has been a member of the ADTRAN board of directors since October 2002 and has served as its lead director since May 2015.

He has served as the Willem Kooyker Dean of the Zicklin School of Business at Baruch College, a senior college of The City University of New York, since July 2014. He is also a tenured Professor in Baruch's Stan Ross Department of Accountancy. He previously served as Dean of the J. Mack Robinson College of Business at Georgia State University from 2004 to 2014. Prior to his appointment as Dean, Dr. Huss was Associate Dean from 1998 to 2004 and Director of the School of Accountancy at Georgia State from 1996 to 1998, and on the faculty since 1989. He also served on the faculty of the University of Maryland as an assistant professor from 1983 to 1989 and is a visiting professor at the Université Paris 1 Pantheon-Sorbonne. Dr. Huss has extensive experience and knowledge of financial accounting and corporate finance and management experience in the academic environment.

H. Fenwick Huss

Gregory McCray

Mr. McCray has been a member of the ADTRAN board of directors since May 2017. In addition, Mr. McCray currently serves on the board of directors of FDH, FreeWave Technologies, and DigitalBridge Group, Inc. (NYSE: SBRG). Mr. McCray served as a director of Centurylink, Inc. (NYSE: CTL), from January 2005 to February 2017, where he served as chairman of the Cyber Security & Risk Committee from 2015 to 2017. Mr. McCray has also served as CEO of Access/Google Fiber in 2017.

Mr. McCray is an experienced executive with more than 30 years of business, marketing, sales, engineering, operations, mergers and acquisitions, management and international experience in the communications technology industry. Since June 2018, Mr. McCray has served as the CEO of FDH Infrastructure Services, or FDH, an engineering and science company that monitors, inspects, designs and performs structural analysis for infrastructure assets utilizing wireless monitoring devices and patented non-destructive testing techniques. During his career, Mr. McCray has served in a number of management and executive roles, including CEO of Aero Communications Inc., which provides installation, services and support to the communications industry, from 2013 to 2016; CEO of Antenova, a developer of antennas and radio frequency modules for mobile devices, from 2003 to 2012; Chairman and CEO of Piping Hot Networks, which brought broadband fixed wireless access equipment to market, from 2001 to 2002; and Senior Vice President of customer operations at Lucent Technologies from 1996 to 2000, where he managed the Customer Technical Operations Group for Europe, the Middle East and Africa. Mr. McCray holds a Bachelor of Science degree in Computer Engineering from Iowa State University and a Master of Science degree in Industrial & Systems Engineering from Purdue University. He has also completed executive business programs at the University of Illinois, Harvard, and INSEAD.

Mr. Nair has been a member of the ADTRAN board of directors since February 2007. He has served as President and Chief Executive Officer of Liberty Latin America Ltd. (NASDAQ: LILA) since 2018. He also served as Executive Vice President and Chief Technology and Innovation Officer at Liberty Global plc (NASDAQ: LBTYA) from 2007 to 2017.

Mr. Nair is an experienced executive with more than 20 years in the telecommunications industry. He has been a part of the Liberty family of companies since 2007, when he joined Liberty Global plc (NASDAQ: LBTYA) as its Senior Vice President and Chief Technology Officer. In this role as Executive Vice President and Chief Technology and Innovation Officer of Liberty Global plc, he was responsible for overseeing Liberty Global's worldwide network, as well as Technology and Innovation operations, including Product Development, IT, Network Operations, Mobile Operations and Global Supply Chain functions. He was also responsible for Corporate Strategy and Venture Investments. Mr. Nair was an executive officer of Liberty Global and sat on Liberty Global's Executive Leadership Team and the Investment

Balan Nair

Jacqueline H. Rice

Kathryn A. Walker

Committee. Before joining Liberty Global, Mr. Nair served as Chief Technology Officer and Executive Vice President of AOL LLC, a global web services company. Prior to his role at AOL LLC, he spent more than 12 years at Qwest Communications International Inc., most recently as Chief Information Officer and Chief Technology Officer. Mr. Nair has a long history of working in the telephone, web world, and cable and media industries. He has served on the board of directors of Charter Communications, Inc. (NASDAQ: CHTR), a leading cable operator in the United States, since 2013, and on the board of Liberty Latin America since December 2017. He graduated from Iowa State University with a Bachelor of Science degree in Electrical Engineering and a Master of Business Administration degree. Mr. Nair holds a patent in systems development and is a Licensed Professional Engineer in Colorado.

Ms. Rice has been a member of the ADTRAN board of directors since August 2016. From 2014 to 2017, Ms. Rice served as Executive Vice President and Chief Risk and Compliance Officer of Target Corporation (NYSE: TGT) with responsibility for enterprise and vendor risk, corporate security and corporate compliance and ethics.

She has served as General Counsel and Corporate Secretary of MillerKnoll, Inc. (NASDAQ: MLKN), an office furniture, equipment and home furnishings company, since February 2019. Previously, she served as Principal of RH Associates, a global consulting firm providing legal, risk and compliance advisory services for clients across all industries and geographies, from January 2018 to January 2019. Prior to joining Target Corporation, she served as Chief Compliance Officer and legal counsel of General Motors (NYSE: GM) from 2013 to 2014 and Executive Director, Global Ethics and Compliance of General Motors from 2010 to 2013. Ms. Rice has served as the Corporate Secretary of the Herman Miller Cares Foundation since February 2019 and on the board of directors for West Coast Chamber since October 2021. Ms. Rice graduated from the University of Detroit Mercy School of Law, where she was editor-in-chief of the Law Review, and she obtained her undergraduate degree from James Madison College at Michigan State University.

Ms. Walker has been a member of the ADTRAN board of directors since May 2014. Since 2009, she has served as a managing director for OpenAir Equity Partners, a venture capital firm focusing on the wireless, communications and mobile internet sectors. In addition, Ms. Walker is serving concurrently as Chief Technology Officer at Main Street Data, an agriculture data science company founded by OpenAir Equity Partners

Ms. Walker has more than 30 years of experience in the communications industry. Prior to joining OpenAir Equity Partners, Ms. Walker worked in a variety of roles at various subsidiaries of Sprint Corporation from 1985 to 2009, culminating in the position of Chief Information and Chief Network Officer at Sprint Nextel Corporation. She currently serves on the board of directors for SmartHome Ventures, on the Council of Trustees at South Dakota State University, and as the President of the Board of Trustees at Missouri University of Science and Technology.

Position, Principal Occupation, Business Experience and Directorships during Last Five Years, Qualifications to Serve

Ms. Walker is a National Association of Corporate Directors ("NACD") Board Leadership Fellow. The NACD Fellowship is a comprehensive and continuous program of study that empowers directors with the latest insights, intelligence and leading boardroom practices, and Ms. Walker demonstrates a commitment to the highest standards of exemplary board leadership by earning NACD Fellowship – The Gold Standard Director Credential – year after year. Ms. Walker also was elected to the NACD Directorship 100 in 2021 in recognition of her corporate governance expertise.

Mr. Protiva has led ADVA as CEO since co-founding the company in 1994. As the CEO, he is responsible for ADVA's overall strategy, human resources and quality management. Mr. Protiva currently serves as a member of the board of directors of AMS Technologies AG.

Prior to co-founding and leading ADVA, Mr. Protiva served as the managing director of AMS Technologies AG, where he co-managed one of its subsidiaries.

Mr. Theodosopoulos became chairman of the supervisory board of ADVA in January 2015. He also currently serves on the board of directors of Arista Networks Inc., Harmonic, Inc. and the Columbia University Engineering Entrepreneurship Advisory Board.

In September 2012, he founded and currently serves as the managing member of NT Advisors, LLC, a technology consulting firm. Prior to founding NT Advisors, LLC, he was an equity research analyst for 18 years primarily at UBS Group AG, covering the technology sector, where he eventually served as the Global Technology Strategist and the head of U.S. Technology Sector Research. Prior to his career in investment banking, he spent 10 years at AT&T Network Systems International and Bell Laboratories. He holds a Master in Business Administration from New York University, a Master of Science from Stanford University and a Bachelor of Science from Columbia University.

Professor Hey has served on the supervisory board of ADVA since June 2013. She also serves on the supervisory board of the Gothaer Versicherungsbank VVaG and the Gothaer Finanzholding AG, as well as the supervisory boards of the University of Cologne Executive School GmbH and Flossbach von Storch AG.

Professor Johanna Hey is a professor on tax law in Germany. Since 2006, she has been the director of the Institute for Tax Law at the University of Cologne and has served on the Scientific Advisory Board of the Federal Ministry of Finance of Germany. Since the winter term of 2002/2003, Professor Hey has been the chair of corporate law at the Heinrich Heine University in Düsseldorf, Germany. From 2004 to 2012, Professor Hey was a member of the committee and first Vice President of the German Association of University Professors. In 2010, she was announced as the head of science of the Berlin Finance and Taxation Institute and, in the same year, was elected to the Permanent Deputation of the Association of German Jurists. From 2011 to 2016, she was head of the Scientific Advisory Board of German Tax Lawyers. Since 2011, Professor Hey has been a member of the Scientific Advisory Board of the Centre for European Economic Research.

Nikos Theodosopoulos

Brian Protiva

Johanna Hey

After the settlement of the Offer, the directors of Acorn HoldCo can be reached at Acorn HoldCo's principal executive offices: 901 Explorer Boulevard, Huntsville, Alabama, 35806, United States (tel. +1 (256) 963-8000).

15.6.3.2 Director Independence

Listing standards of Nasdaq will require that Acorn HoldCo have a majority of independent directors. Accordingly, because the Acorn HoldCo board of directors is expected to have nine members, Nasdaq will require that five or more of the directors be independent. Nasdaq's listing standards provide that no director will qualify as "independent" for these purposes unless the board of directors affirmatively determines that the director has no relationship with Acorn HoldCo that would interfere with the exercise of the director's independent judgment in carrying out the responsibilities of a director. Additionally, the listing standards set forth a list of relationships that would preclude a finding of independence.

After the settlement of the Offer, the Acorn HoldCo board of directors is expected to determine that each of H. Fenwick Huss, Gregory J. McCray, Balan Nair, Jacqueline H. Rice, Kathryn A. Walker, Nikos Theodosopoulos and Johanna Hey have no material relationship with the Acorn HoldCo (either directly or as a partner, stockholder or officer of an organization that has a relationship with us) and is independent under Acorn HoldCo's director independence standards, Nasdaq's director independence standards, and the SEC independence requirements, as applicable.

15.6.3.3 Committees of the Board of Directors

Upon the settlement of the Offer, the Acorn HoldCo board of directors will initially have the following three committees:

- Audit Committee;
- Compensation Committee; and
- Nomination and Governance Committee.

The Acorn HoldCo board of directors may from time-to-time form other committees as circumstances warrant. Such committees would have the authority and responsibility as delegated by the Acorn HoldCo board of directors. Only members of the Acorn HoldCo board of directors will be able to be members of a committee, and each committee will be required to report its actions to the full Acorn HoldCo board of directors. The Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee will each operate under a written charter adopted by the Acorn HoldCo board of directors.

15.6.3.3.1 Audit Committee

After the settlement of the Offer, the Audit Committee is expected to consist of three directors of the board of directors. The Acorn HoldCo board of directors is expected to determine that each of the Audit Committee members qualifies as independent under applicable Nasdaq listing standards and satisfies the heightened independence standards under SEC rules. Furthermore, in accordance with SEC rules, the Acorn HoldCo board of directors is expected to determine that at least one member is an "audit committee financial expert" as defined by the applicable SEC rules.

The primary duties of the Audit Committee will be to:

- · Review financial reports and other financial information provided by Acorn HoldCo to the public or any governmental body;
- · Review the qualifications, performance and independence of Acorn HoldCo's independent registered public accounting firm;

- Discuss the financial statements and other financial information with Acorn HoldCo's management and independent auditors and review the integrity of Acorn HoldCo's internal and external financial reporting process;
- Review with Acorn HoldCo's management various reports regarding Acorn HoldCo's system of internal controls and consult with Acorn HoldCo's independent auditors regarding internal controls and the accuracy of Acorn HoldCo's financial statements;
- Assist Acorn HoldCo's board of directors in fulfilling its oversight responsibilities with respect to Acorn HoldCo's compliance with legal and regulatory requirements and review its risk assessment and risk management policies;
- Monitor compliance with Acorn HoldCo's code of conduct and review and approve all requests for waivers of the code of conduct;
- Establish and maintain procedures for the receipt, retention and treatment of complaints received by Acorn HoldCo regarding accounting, internal
 accounting controls or auditing matters;
- Review the activities, organizational structure and qualifications of Acorn HoldCo's internal audit department; and
- Review, oversee and approve all related party transactions (as required to be disclosed pursuant to Item 404 of SEC Regulation S-K) in accordance with Acorn HoldCo's code of conduct and its other policies and procedures.

15.6.3.3.2 Compensation Committee

After the settlement of the Offer, the Compensation Committee is expected to consist of three directors of the board of directors. The Acorn HoldCo board of directors is expected to determine that each of the members of the Compensation Committee qualifies as independent under applicable Nasdaq listing standards and satisfies the heightened independence standards under SEC rules.

The primary duties of the Compensation Committee will be to:

- Administer, review and make recommendations to Acorn HoldCo's board of directors regarding Acorn HoldCo's incentive compensation, equity-based and deferred compensation plans;
- Review Acorn HoldCo's incentive compensation arrangements to consider whether they encourage excessive risk-taking and evaluate compensation policies and practices that could mitigate any such risk;
- Review and approve the compensation of Acorn HoldCo's CEO and all executive officers, including the annual performance goals and objectives
 relevant to their compensation, and oversee succession planning for executive positions;
- Review and make recommendations to Acorn HoldCo's board of directors regarding any employment agreements or plans, including any benefits to be provided in connection with a change in control, for the CEO and other executive officers;
- Review and approve all director compensation and benefits for service on Acorn HoldCo's board and board committees and recommend any changes to Acorn HoldCo's board as necessary; and
- Exercise general oversight of Acorn HoldCo's benefit plans.

15.6.3.3.3 Nominating and Corporate Governance Committee

After the settlement of the Offer, the Nominating and Corporate Governance Committee is expected to consist of three directors of the board of directors, each of whom qualifies as independent under applicable Nasdaq listing standards.

The primary duties of the Nominating and Corporate Governance Committee are to:

• Establish criteria for selecting new board members and for the basic structure and membership of the board;

- Consider director nominees submitted by stockholders in accordance with procedures adopted by the committee:
- Make recommendations to Acorn HoldCo's board of directors regarding director nominees for the next annual meeting of stockholders, directors
 to serve on various committees of the board and as chairperson of each committee;
- Review the corporate governance guidelines adopted by Acorn HoldCo's board of directors at least once a year and recommend any changes to the board and review Acorn HoldCo's organizational documents at least once every two years;
- Monitor and evaluate the independence of directors and make recommendations to Acorn HoldCo's board of directors regarding the same;
- Annually administer the performance evaluations of Acorn HoldCo's board and board committees; and
- Oversee with Acorn HoldCo's corporate governance practices and procedures and consult with management and board of directors on matters of
 corporate culture and values.

15.6.3.4 Operational management of Acorn HoldCo after the settlement of the Offer

Pursuant to the Business Combination Agreement, ADTRAN and ADVA have agreed that Thomas R. Stanton, ADTRAN's current CEO and chairman of the ADTRAN board of directors, will serve as the CEO of Acorn HoldCo and chairman of the board of directors of Acorn HoldCo. Michael K. Foliano, ADTRAN's current CFO, will serve as the CFO of Acorn HoldCo. James D. Wilson is expected to become Chief Technical Officer of Acorn HoldCo.

After settlement of the Offer, the operational management of the Company shall consist of the following persons: Thomas R. Stanton (CEO), Michael K. Foliano (CFO), and James D. Wilson (Chief Revenue Officer). For Mr. Stanton's biography, see section "15.6.3.1 Composition of Acorn HoldCo Board of Directors". The term of office of the executive officers will be one year and until their respective successors are elected and qualified.

Name and Title	Other Positions Held Last Five Years
Michael K. Foliano	Mr. Foliano has served as ADTRAN's Senior Vice President of Finance, CFO and Corporate Secretary since
Chief Financial Officer	2019. Previously, Mr. Foliano served as ADTRAN's senior Vice President of Operations from 2006 through 2019.
	Since August 2021, Mr. Foliano has served as director of Acorn HoldCo's board of directors.
James D. Wilson Chief Revenue Officer	Mr. Wilson has served as ADTRAN's Chief Revenue Officer since August 2019. Previously, Mr. Wilson served as ADTRAN's senior Vice President of Tech & Strategy from 2015 through 2019.

After the settlement of the Offer, the members of the operational management of Acorn HoldCo can be reached at Acorn HoldCo's principal executive offices: 901 Explorer Boulevard, Huntsville, Alabama, 35806, United States (tel. +1 (256) 963-8000).

15.6.3.5 Certain Information on the potential future Members of the Board of Directors and the Operational Management of Acorn HoldCo after the settlement of the Offer

During the previous five years, no future member of the board of directors or of the operational management has been convicted of any fraudulent offenses. No future member of the board of directors or of the operational management, acting in the capacity of a member of a management or supervisory entity or as founder of an issuer, has been associated with any bankruptcies and/or insolvencies, receiverships, liquidations or companies put into administration. In addition, no future member of the board of directors or of the operational management has been publicly incriminated or sanctioned by statutory or regulatory authorities (including professional

associations) and no future member of the board of directors or of the operational management has ever been deemed by a court to be unfit for membership in a management or supervisory entity of a company or to be unfit to exercise management duties for or manage the business of an issuer during the previous five years. No family relationships exist among the future members of the board of directors or of the operational management.

Other than mentioned under the sections "15.6.3.1 Composition of Acorn HoldCo Board of Directors" and "15.6.3.4 Operational management of Acorn HoldCo after the settlement of the Offer" above, no future member of the board of directors or of the operational management of Acorn HoldCo has been a member of any administrative, management or supervisory bodies or a partner of a company or partnership outside the Acorn HoldCo Group at any time in the previous five years.

No future member of the board of directors holds a service contract with Acorn HoldCo or any of its current subsidiaries providing for benefits upon termination of employment. No family relationships exist among the future members of the board.

15.6.3.6 Other interests

Regarding the interests and potential conflicts of interest of the potential future members of the Company's board of directors or of the operational management following the settlement of the Offer, please refer to "2.11 Potential interests".

Other than that, there are no conflicts of interest or potential conflicts of interest of the potential future members of Acorn HoldCo board of directors or of the operational management regarding their duties towards Acorn HoldCo, and their private interests or other duties.

15.7 Code of Business Conduct and Ethics

All of the directors, executive officers and employees of Acorn HoldCo will be required to comply with certain policies and protocols concerning business ethics and conduct, or the Code of Business Conduct and Ethics or Code. Acorn HoldCo's Code of Business Conduct and Ethics will require all directors, officers and employees who may have a potential or apparent conflict of interest to fully disclose all the relevant facts to either a personnel supervisor, if applicable, or the Director of Internal Audit. Once a personnel supervisor receives notice of a conflict of interest, he or she will report the relevant facts to the Director of Internal Audit. The Director of Internal Audit will then generally consult with the audit committee, and a determination will be made as to whether the activity is permissible.

15.8 Compensation of Directors and Executive Officers

Acorn HoldCo has not yet paid any compensation to its directors and does not currently have any employees other than the CEO and CFO. The form and amount of the compensation to be paid to each of Acorn HoldCo's directors, as well as executive officers and other managers of the Combined Group will be determined by the Acorn HoldCo board of directors. However, pursuant to the Business Combination Agreement, to the extent members of the senior management team currently have service contracts with ADVA, such service contracts shall be replaced by contracts with Acorn HoldCo. The new service contracts shall have terms (i) no less favorable in all material respects than the current terms with ADVA (as of the date of the Business Combination Agreement), including term and remuneration elements, up to December 31, 2022 and (ii) no less favorable, with respect to such person's new role at Acorn HoldCo, than the terms of the service contracts in place between ADTRAN (or its subsidiaries) and those individuals holding corresponding positions at ADTRAN (or its subsidiaries), adjusted for local market norms.

15.9 Security Ownership of Directors and Executive Officers

Based on information available to Acorn HoldCo and ADVA as of the date of this Prospectus, the following table sets forth the anticipated beneficial ownership of Acorn HoldCo shares, after giving effect to the settlement of the Offer (subject to certain facts and assumptions described below), of:

- each member of the post-closing board of directors of the Company;
- each post-closing executive officer of the Company; and
- all members of the post-closing board of directors and all post-closing executive officers of the Company, taken together.

Beneficial ownership generally includes voting or investment power over securities. The percentage of beneficial ownership as set out below is based on (i) 77,316,803 outstanding Shares immediately following the settlement of the Offer and (ii) the anticipated ownership of ADTRAN shares and ADVA shares immediately following the settlement of the Offer.

Name and Relationship to Company Following the Settlement of the Offer	Number of Shares of Common Stock	Percent of Class
Thomas R. Stanton	<u> </u>	
Chief Executive Officer and Chairman of Board of Directors	543,409(1)	*
Michael K. Foliano		
Chief Financial Officer	109,656(1)	*
James D. Wilson		
Chief Revenue Officer	100,107(1)	*
H. Fenwick Huss		
Lead Director	52,473(1)	*
Gregory J. McCray		
Director	17,699(1)	*
Balan Nair		
Director	70,246 ⁽¹⁾	*
Jacqueline H. Rice		
Director	35,369(1)	*
Kathryn A. Walker		
Director	43,536(1)	*
Brian Protiva		
Director and Vice Chairman of Board of Directors	429,469 ⁽²⁾	*
Nikos Theodosopoulos		
Director	_	*
Johanna Hey		
Director		*
Above directors and executive officers as a group (11 persons)	1,382,603	1.81%

^{*} Represents the anticipated beneficial ownership of less than 1% of the shares of Acorn HoldCo's common stock.

- (1) Beneficial ownership as reported in the table has been determined in accordance with applicable SEC regulations and includes shares of ADTRAN's common stock that may be issued upon the exercise of ADTRAN stock options that are exercisable within 60 days of the the settlement of the Offer as follows: Mr. Stanton 339,146; Mr. Foliano 81,280; Mr. Wilson 63,859 ADTRAN shares.
- (2) Beneficial ownership as reported in the table is based on (i) 424,515 ADVA shares held by Mr. Protiva as of the date of the Prospectus and 96,432 ADVA shares that may be issued upon the exercise of ADVA stock options that exercisable within 60 days of the settlement of the Offer and (ii) the Exchange Ratio.

15.10 Other Aspects of the Acorn HoldCo Governing Documents

For a description of other aspects of the Acorn HoldCo governing documents that will be in effect as of the settlement of the Offer, see section "18 Description of Acorn HoldCo Capital Stock".

15.11 Significant Subsidiaries of Acorn HoldCo

Acorn HoldCo is the sole stockholder of Merger Sub. As of the date of this Prospectus, Acorn HoldCo does not hold any direct equity interest in any other legal entity.

The table below shows the material subsidiaries that will directly and indirectly be held by Acorn HoldCo upon the settlement of the Offer:

Name of the subsidiary	Seat	Share of capital and voting rights (in %)
ADTRAN, Inc.	Delaware, United States	100.00
ADVA Optical Networking SE	Meiningen, Germany	65.43

15.12 Major Shareholders of Acorn HoldCo

As of the date of the Prospectus, ADTRAN, a publicly traded corporation under the laws of Delaware, United States, is the sole shareholder of, and therefore controls, the Company.

The Company is not aware that upon settlement of the Offer it will be directly or indirectly controlled.

Based on the fact that immediately following the settlement of the Offer 77,316,803 Shares will be outstanding⁽¹⁾⁽ⁱⁱⁱ⁾, ^{(1)(iv)}, and the assumptions that (i) the publicly filed holdings of shareholders of ADTRAN and ADVA remained unchanged since June 30, 2022 (the "Latest Practicable Date") (for more information regarding the public filed holdings of ADTRAN and ADVA shareholders, please see "16.7 Major Shareholders of ADTRAN" and "17.7 Major Shareholders of ADVA"), and (iii) all shares of ADVA held by such shareholders of ADVA were tendered in the course of the Offer, it is expected that immediately following the settlement of the Offer, the following persons will directly or indirectly own 3% or more of the Company's total outstanding shares and voting rights and approximately 58.44% of the Company's total outstanding shares will be in free float:

	Anticipated number of Shares	Anticipated ownership percentage ⁽¹⁾
BlackRock, Inc.	$8,140,068^{(2)}$	10.53%
EGORA Holding GmbH	6,147,343(3)	7.95%
The Vanguard Group	5,424,685(4)	7.02%
Dimensional Holdings Inc.	$4,105,790^{(5)}$	5.31%
The Bank of New York Mellon Corp.	3,222,495(6)	4.17%
The Goldman Sachs Group, Inc.	$2,749,198^{(7)}$	3.56%
JPMorgan Chase & Co.	2,344,757(8)	3.03%
Free float	45,182,467	58.44%

- (1) Based on (i) the anticipated holdings in the Company by the ADTRAN shareholders listed in the above table considering the merger consideration of one Share for each outstanding ADTRAN share (other than excluded ADTRAN shares, which will be cancelled for no consideration) (the "Merger Exchange Ratio"), (ii) the anticipated holdings in the Company by the ADVA shareholder listed in the above table considering the Exchange Ratio, (iii) the number of the Shares to settle the Offer determined by multiplying the total number of the tendered ADVA shares as published by the Company on February 17, 2022 and the Exchange Ratio (i.e. 27,994,595 Shares), and (iv) the number of the Shares to settle the Merger by multiplying the anticipated total outstanding ADTRAN shares to be converted into the Shares in the course of the Merger and the Merger Exchange Ratio (i.e. 49,322,208 Shares) (aggregate amount of (iii) and (iv) being the total number of the outstanding Shares immediately following settlement of the Offer).
- (2) Calculated by multiplying the Merger Exchange Ratio and the holdings in ADTRAN as of December 31, 2021, as reported in the SEC Schedule 13G filed by BlackRock, Inc. on February 7, 2022. According to its Schedule 13G, BlackRock, Inc. and certain of its subsidiaries beneficially owned 8,140,068 ADTRAN shares.
- (3) Calculated by multiplying the Exchange Ratio and the holdings in ADVA as of the Latest Practicable Date. Based on a shareholding notification dated December 8, 2017, EGORA Holding GmbH holds 7,456,749 ADVA shares. It is assumed that all 7,456,749 ADVA shares have been tendered in the course of the Offer.
- (4) Calculated by multiplying the Merger Exchange Ratio and the holdings in ADTRAN as of December 31, 2021, as reported in the SEC Schedule 13G filed by The Vanguard Group on February 9, 2022. According to its Schedule 13G, The Vanguard Group and certain of its subsidiaries beneficially owned 5,424,685 ADTRAN shares.
- (5) Based on (i) the anticipated indirect holdings of Dimensional Holdings Inc. calculated by multiplying the Merger Exchange Ratio and the holdings of Dimensional Fund Advisors L.P. in ADTRAN as of December 31, 2021, as reported in the SEC Schedule 13G filed by Dimensional Fund Advisors L.P. on February 8, 2022, and (ii) the anticipated holdings of Dimensional Holdings Inc. calculated by multiplying the Exchange Ratio and the holdings in ADVA beneficially owned by Dimensional Holdings Inc. According to its Schedule 13G, Dimensional Fund Advisors L.P. and certain of its subsidiaries beneficially owned 2,271,552 ADTRAN shares. Pursuant to its voting rights notification dated February 4, 2022, Dimensional Holdings Inc. beneficially owned 2,224,938 voting rights in ADVA.

- (6) Calculated by multiplying the Merger Exchange Ratio and the holdings in ADTRAN as of December 31, 2021, as reported in the SEC Schedule 13G filed by The Bank of New York Mellon Corp. on February 2, 2022. According to its Schedule 13G, The Bank of New York Mellon Corp. and certain of its subsidiaries beneficially owned 3,222,495 ADTRAN shares.
- (7) Calculated by multiplying the Exchange Ratio and the 3,334,787 voting rights and equity-based instruments in ADVA beneficially owned by the Goldman Sachs Group, Inc. pursuant to its voting rights notification dated March 3, 2022.
- (8) Calculated by multiplying the Exchange Ratio and the 2,844,198 voting rights and equity-based instruments in ADVA beneficially owned by JPMorgan Chase & Co. pursuant to its voting rights notification dated June 24, 2022.

16. GENERAL INFORMATION ON ADTRAN

16.1 Legal and Commercial Name, Registered Office and LEI

ADTRAN, Inc. was incorporated as a corporation under the laws of Delaware, United States, on November 18, 1985, and, as of June 30, 2022, had 49,125,601 shares of common stock, par value \$0.01 per share, outstanding, ADTRAN has been formed to have perpetual existence.

The legal name of ADTRAN is ADTRAN, Inc. The commercial name of ADTRAN is ADTRAN.

ADTRAN's registered office is located at Corporate Services Company, 251 Little Falls Drive, Wilmington, New Castle County, Delaware, 19808, United States.

ADTRAN's principal executive offices are located at 901 Explorer Boulevard, Huntsville, Alabama, 35806, United States (Telephone +1 (256) 963-8000). ADTRAN's internet address is https://www.adtran.com. The information on the website of ADTRAN does not form part of this Prospectus unless that information is incorporated into this Prospectus by reference.

ADTRAN is registered with the division of corporations of the state of Delaware, United States, under registration number 2075972. As a corporation incorporated under the laws of Delaware, ADTRAN is subject to the laws of Delaware, United States.

The Legal Entity Identifier (LEI) of ADTRAN is 549300XWTHXJVGKWU616.

16.2 History of the ADTRAN Group

ADTRAN, Inc. was founded in 1985 and commenced operations in 1986, following the breakup and divestiture of the Regional Bell Operating Companies by the AT&T Corporation. Due to restrictions of the Regional Bell Operating Companies that effectively barred their manufacturing of equipment, ADTRAN initially supplied network equipment to both the seven Regional Bell Operation Companies as well as to other new and independent telephone companies in the United States.

In the following years, ADTRAN adapted telephony technology for use in enterprise-wide area networks and became a supplier of local loop access and deployment products for fiber, DS3, T1/E1, wireless T1/E1, digital subscriber line (HDSL, HDSL2, HDSL4, SDSL, SHDSL), Frame Relay, Asynchronous Transfer Mode, Integrated Services Digital Network, and Digital Data Service digital services. ADTRAN also supplies multi-service access platforms and Integrated Access Devices for converged voice and data networks.

In December 2011, ADTRAN announced its plan to acquire the broadband division of Nokia Siemens Networks. The acquisition closed in 2012.

16.3 Financial Year

ADTRAN's financial year is the calendar year.

16.4 Corporate Purpose

Article 3 of the certificate of incorporation (the "Articles of Association") defines ADTRAN's corporate purpose as follows:

"The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware."

16.5 Auditors

ADTRAN has appointed PwC US as independent registered public accounting firm of its consolidated financial statements for the financial year ended December 31, 2021, 2020 and 2019. PwC US conducted its audit of ADTRAN's consolidated financial statements for each of the financial years ended December 31, 2021, 2020 and 2019 in accordance with standards of the PCAOB and issued an English language audit opinion in accordance with PCAOB auditing standards.

PwC US is a public accounting firm registered with the PCAOB.

16.6 Significant Subsidiaries of ADTRAN

ADTRAN is the main operating company and holding company for ADTRAN Group.

The following table shows the significant subsidiaries held directly and indirectly by ADTRAN as of the date of this Prospectus:

Name of the subsidiary	Seat	Share of capital and voting rights (in %)
ADTRAN Networks Pty. Ltd.	Melbourne, Australia	100.00
ADTRAN GmbH	Berlin, Germany	100.00
ADTRAN Europe Limited	Basingstoke, United Kingdom	100.00

16.7 Major Shareholders of ADTRAN

There is no voting rights notification system comparable to Sections 33 *et seq.* of WpHG in the United States. Instead, reporting obligations to the SEC exist only in isolated cases (e.g. so-called Schedule 13G notifications, which are generally only made once a year).

As of the Latest Practicable Date and to the knowledge of ADTRAN, the following entities hold 5% or more of the outstanding ADTRAN shares:

Name and Address of Beneficial Owner	Number of Shares of Common Stock	Percent of Class*
BlackRock, Inc.	8,140,068	16.57%
55 East 52nd Street		
New York, NY 10055		
United States		
The Vanguard Group	5,424,685	11.04%
100 Vanguard Blvd		
Malvern, PA 19355		
United States		
The Bank of New York Mellon Corp	3,222,495	6.56%
240 Greenwich Street		
New York, NY 10007		
United States		

^{*} Percentage of the total outstanding shares of ADTRAN immediately prior to the Merger.

17. GENERAL INFORMATION ON ADVA

17.1 Legal and Commercial Name, Registered Office and LEI

ADVA was incorporated as a European stock corporation (*Societas Europaea*) incorporated under the laws of the European Union and Germany, on July 23, 2012, and, as of June 30, 2022, had an issued share capital of EUR 51,902,500.00 comprising 51,902,500 ordinary bearer shares (*Inhaberaktien*) with no-par value (*Stückaktien*). ADVA has been formed to have indefinite existence.

The legal name of ADVA is ADVA Optical Networking SE. ADVA is the parent company of the ADVA Group. ADVA and the ADVA Group operate under the commercial name "ADVA".

As a European stock corporation (Societas Europaea), ADVA is subject to the Council Regulation (EC) No 2157/2001, the AktG and other German laws.

The registered office of ADVA is Maerzenquelle 1, 98617 Meiningen, Germany. The headquarters of ADVA are Campus Martinsried, Fraunhoferstrasse 9a, 82152 Martinsried/Munich, Germany, telephone: +49 (0)89 89 06 65 0, internet address: https://www.adva.com; the information on the website does not form part of this Prospectus unless that information is incorporated into this Prospectus by reference.

ADVA is registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Jena, Germany, under the registration number HRB 508155.

The Legal Entity Identifier (LEI) of ADVA is 5299001QZNN0TKI9J120.

17.2 History of the ADVA Group

ADVA was founded in 1994 in form of a limited liability company (*Gesellschaft mit beschränkter Haftung*) under the laws of Germany and became a stock corporation (*Aktiengesellschaft*) in 1999. In 2012, ADVA converted into an SE (*Societas Europaea*) legal entity, a public limited-liability company under European law. In 2014, ADVA acquired Oscilloquartz and all its network timing expertise. In 2016, ADVA acquired Overture Networks, Inc., a networking and equipment manufacturer headquartered in North Carolina, the United States, to expand its cloud access solution portfolio and increase its footprint in North America. In 2017, ADVA completed its acquisition of MRV Communications, Inc., a communications equipment and services company based in Chatsworth, California, United States. This acquisition enabled ADVA to strengthen its cloud access portfolio and increase its North American and Asian footprint.

17.3 Financial Year

ADVA's financial year is the calendar year.

17.4 Corporate Purpose

Article 2 of the articles of association of ADVA defines ADVA's corporate purpose as follows:

"The object of the company is the development, production, marketing and distribution of optical, opto-electronic and electronic devices, software and systems as well as the provision of services in this regard."

17.5 Auditors

ADVA has appointed PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, Bernhard-Wicki-Strasse 8, 80636 Munich, Germany, ("PwC DE") as auditor of its consolidated financial statements for the financial years ended December 31, 2021, 2020 and 2019. PwC DE conducted its audit of the German language consolidated financial statements in accordance with Section 317 of the German Commercial Code (*Handelsgesetzbuch*) and German generally accepted standards for financial statement audits promulgated by the Institute of Public Auditors in Germany (*Institut der Wirtschaftsprüfer*) and issued German language unqualified independent auditor's reports (*uneingeschränkte Bestätigungsvermerke des unabhängigen Abschlussprüfers*) thereon.

PwC DE is a member of the German Chamber of Auditors (deutsche Wirtschaftsprüferkammer) and a member of the Institute of Public Auditors in Germany (Institut der Wirtschaftsprüfer).

17.6 Significant Subsidiaries of ADVA

ADVA is the main operating company and holding company for the ADVA Group.

The following table shows the significant subsidiaries held directly and indirectly by ADVA as of the date of this Prospectus:

Name of the subsidiary	Seat	Share of capital and voting rights (in %)
ADVA Optical Networking North America, Inc.	Norcross/Atlanta, Georgia, United States	100.00
ADVA Optical Networking Ltd.	York, United Kingdom	100.00
Oscilloquartz SA	Saint-Blaise, Switzerland	100.00

17.7 Major Shareholders of ADVA

The following table sets forth the direct and indirect shareholders of ADVA as of the Latest Practicable Date based on ADVA's best knowledge and, in particular, on the voting rights notifications received by ADVA in accordance with the WpHG.

The following persons hold more than 3% of ADVA's shares and/or more than 5% of instruments pursuant to Section 38 WpHG and/or an aggregate of more than 5% of ADVA's shares and instruments pursuant to Section 39 WpHG as of the Latest Practicable Date:(1)

Name of Shareholder (ultimate controlling person)	Shareholdings(2)	Instruments(3)	Total
EGORA Holding GmbH ⁽⁴⁾	14.99%	_	14.99%
The Goldman Sachs Group, Inc. (5)	0.57%	5.92%	6.48%
JPMorgan Chase & Co. ⁽⁶⁾	5.28%	0.22%	5.50%
UBS Group AG ⁽⁷⁾	5.45%	_	5.45%
Samson Rock Capital LLP ⁽⁸⁾	5.02%	_	5.02%
Janus Henderson Group Plc ⁽⁹⁾	4.47%	_	4.47%
Dimensional Holdings Inc. (10)	4.32%	_	4.32%

- (1) The percentage of voting rights and instruments is derived from the relevant shareholder notifications and has been calculated on the basis of ADVA's total number of voting rights (as published pursuant to Section 41 WpHG) as of the date of the relevant shareholder notification.
- (2) Includes direct and indirect shareholdings pursuant to Sections 33 and 34 WpHG.
- (3) Includes directly and indirectly held instruments pursuant to Section 38 WpHG.
- (4) Based on the voting rights notification from EGORA dated December 8, 2017.
- (5) Based on the voting rights notification from The Goldman Sachs Group, Inc. dated March 3, 2022.
- (6) Based on the voting rights notification from JPMorgan Chase & Co. dated June 24, 2022.
- (7) Based on the voting rights notification from UBS Group AG dated January 14, 2022.
- (8) Based on the voting rights notification from Samson Rock Capital LLP dated March 7, 2022.
- (9) Based on the voting rights notification from Janus Henderson Group Plc dated July 7, 2021.
- (10) Based on the voting rights notification from Dimensional Holdings Inc. dated February 4, 2022.

18. DESCRIPTION OF ACORN HOLDCO CAPITAL STOCK

In connection with the Business Combination, Acorn HoldCo will adopt a new certificate of incorporation and bylaws. The following description is a summary of certain material terms of the capital stock of Acorn HoldCo and is qualified in its entirety by reference to the applicable provisions of the DGCL, and to the certificate of incorporation and the bylaws of Acorn HoldCo.

18.1 Authorized Shares; Outstanding Shares; Employee Shares

As of the date of its inception, on August 10, 2021, Acorn HoldCo issued 1,000 shares of common stock, par value \$0.01, which are outstanding as of the date of this Prospectus. As at the effective time of and as a result of the Merger, the 1,000 shares will be canceled. Acorn HoldCo does not hold treasury shares as of the date of this Prospectus.

Upon the Merger becoming effective, Acorn HoldCo will be authorized to issue (i) up to 200 million shares of common stock, par value \$0.01 per share, and (ii) 50 million shares of preferred stock, par value \$0.01 per share. None of the authorized shares of preferred stock will be issued or outstanding immediately after the settlement of the Offer.

Based on the number of Shares that will be outstanding as of completion of the Merger, the Company intends to issue 49,322,208 Shares to the former shareholders of ADTRAN. Based on the number of 33,957,538 ADVA shares tendered in the Offer and the Exchange Ratio, the Company intends to issue 27,994,595 Shares to the former shareholders of ADVA on completion of the Offer.

In addition to the Transaction Shares, up to 9,842,032 Employee Shares will be reserved for issuance under stock option plans pursuant to a resolution of the board of directors of the Company, expected to be adopted on or around July 7, 2022. The issuance of the Employee Shares is not expected to occur on or immediately after the settlement of the Offer (For more information regarding the Employee Shares, please see *source not found*. *Employee Shares* source not found.).

18.2 Acorn HoldCo Common Stock

18.2.1 Dividends

Holders of Acorn HoldCo common stock will be entitled to receive proportionately any dividends as may be declared by the Acorn HoldCo board of directors out of funds legally available therefor, subject to any statutory or contractual restrictions on the payment of dividends and to any restrictions on the payment of dividends imposed by the terms of any outstanding preferred stock.

18.2.2 Voting Rights; Amendments to the Certificate of incorporation

The holders of Acorn HoldCo common stock will be entitled to one vote for each share upon all matters presented to the shareholders.

Under the DGCL, the affirmative vote of a majority of the outstanding shares entitled to vote thereon and a majority of the outstanding stock of each class entitled to vote thereon is generally required to amend a corporation's certificate of incorporation. Additionally, the holders of the outstanding shares of a class of Acorn HoldCo's capital stock are entitled to vote as a class upon a proposed amendment, whether or not entitled to vote thereon by the certificate of incorporation, if the amendment would increase or decrease the aggregate number of authorized shares of such class; increase or decrease the par value of the shares of such class; or alter or change the powers, preferences or special rights of the shares of such class so as to affect them adversely. Acorn HoldCo's certificate of incorporation will not alter this default amendment process.

18.2.3 Meetings of Stockholders

The annual meeting of the stockholders of Acorn HoldCo will be held at such place, if any, or by means of remote communication, and on such date and at such time as Acorn HoldCo's board of directors may fix by resolution and as set forth in the notice of the meeting. Special meetings of stockholders will be held on such date and at such time and at such place, if any, either within or without the State of Delaware, United States, as shall be designated in the notice of meeting or by means of remote communication. Unless otherwise prescribed by law,

special meetings of stockholders may only be called at any time by the chairman of the board, CEO, or the president or by order of the board of directors. Except as otherwise required by law, Acorn HoldCo stockholders will not entitled to call special meetings of stockholders.

Except as otherwise prescribed by law, Acorn HoldCo will provide a notice of each meeting of stockholders, in the form of a writing or electronic transmission, not more than sixty (60) nor less than ten (10) days before the date of such meeting. The notice will include the place, if any; date and time of the meeting; the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present and vote at such meeting; the record date for determining the stockholders entitled to vote at the meeting, if such date is different from the record date for determining stockholders entitled to notice of the meeting; and, in the case of a special meeting, the purpose or purposes for which the meeting is called.

18.2.4 Conversion Rights

No conversion, redemption or sinking fund provisions will apply to Acorn HoldCo common stock, and the holders of Acorn HoldCo common stock will not be subject to calls or assessments by Acorn HoldCo.

18.2.5 Pre-emptive Rights

Holders of Acorn HoldCo common stock will not entitled to preemptive or subscription rights with respect to any sale, exchange, offering or issuance of shares or other securities of Acorn HoldCo.

18.2.6 Cumulative Voting

Holders of Acorn HoldCo common stock will not be entitled to cumulative voting.

18.2.7 Existing Quotation

Acorn HoldCo shares of common stock are not currently listed or traded on any exchange.

18.2.8 Transferability

Acorn HoldCo common stock will be transferable in accordance with applicable law. As of the settlement of the Offer, and subject to applicable law, trading of Acorn HoldCo common stock will not be subject to any prohibitions on disposals or any restrictions with respect to the transferability of the Acorn HoldCo common stock.

18.2.9 Transfer Agent; Paying Agent and Registrar

The transfer agent and registrar for Acorn HoldCo common stock will be American Stock Transfer and Trust Company, LLC. The address and telephone number of American Stock Transfer and Trust Company, LLC are: 6201 15th Ave Ste 3K, Brooklyn, NY 11219, United States; Tel.: +1 (800) 937-5449.

18.3 Authorized but Unissued Preferred Stock

The authorized but unissued shares of Acorn HoldCo preferred stock will be available for future issuance without stockholder approval except as required by law or by any stock exchange on which Acorn HoldCo's common stock may be listed. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, acquisitions and employee benefit plans. Any issuance of preferred stock and their respective terms (including any potential subscription rights for shareholders of Acorn HoldCo) will be determined by Acorn HoldCo's board of directors on a case-by-case basis. No preferred stock will be issued or outstanding immediately after the settlement of the Offer.

18.4 Exercise of Shareholder Rights via the Central Registration Office

In order to facilitate the exercise of shareholders' rights, in particular voting rights and participation in meetings of stockholders of Acorn HoldCo via Clearstream, Acorn HoldCo has concluded an agreement with ADEUS Aktienregister-Services-GmbH, Königinstrasse 28, 80802 Munich, Germany, which will act as the central registration office ("Central Registration Office") following the settlement of the Offer. The tasks of the Central

Registration Office will include the publication of all relevant information required by shareholders to exercise their rights in the German Federal Gazette (*Bundesanzeiger*), as well as the assumption of administrative tasks within the logistics of participation and voting rights at general meetings of shareholders. Acorn HoldCo will maintain the Central Registration Office or a comparable service provider during the entire period of its listing at the Frankfurt Stock Exchange.

18.5 General Provisions Governing a Change in Authorized Share Capital; Issuance of Common Stock

The DGCL provides that the authorized number of shares of a Delaware corporation must be set forth in the certificate of incorporation. Under the DGCL, Acorn HoldCo stockholders may authorize an additional number of shares by approving an amendment to the certificate of incorporation as described under "18.2.2 Voting Rights; Amendments to the Certificate of incorporation".

Delaware law does not require stockholder approval for any issuance of authorized shares. However, the listing requirements of Nasdaq, which would apply as long as Acorn HoldCo common stock is listed on Nasdaq, require stockholder approval of certain issuances equal to or exceeding 20% of the combined voting power of its common stock. These additional shares may be used for a variety of corporate purposes, including future public offerings to raise additional capital, acquisitions and employee benefit plans.

The existence of unissued and unreserved common stock may enable the Acorn HoldCo board of directors to issue shares to persons friendly to current management, which could render more difficult or discourage an attempt to obtain control of Acorn HoldCo by means of a merger, tender offer, proxy contest or otherwise, and could thereby protect the continuity of its management and possibly deprive stockholders of opportunities to sell their shares of common stock at prices higher than prevailing market prices.

18.6 General Provisions Governing a Liquidation of Acorn HoldCo; Liquidation and Distributions

Upon the liquidation, dissolution or winding up, any business combination or a sale or disposition of all or substantially all of Acorn HoldCo's assets, the assets legally available for distribution to Acorn HoldCo stockholders will be distributable ratably among the holders of the common stock, subject to prior satisfaction of all outstanding debts and other liabilities and the payment of liquidation preferences, if any, on any outstanding preferred stock.

18.7 Reporting Requirements for Stockholders, Directors and Officers

Holders of Acorn HoldCo common stock shall be subject to certain reporting requirements under the Exchange Act.

Stockholders owning more than 5 percent of any class of equity securities registered pursuant to Section 12 of the Exchange Act must comply with disclosure obligations under Section 13 of the Exchange Act. Sections 13(d) and 13(g) of the Exchange Act require any person or group of persons who owns or acquires beneficial ownership of more than 5 percent of certain classes of equity securities to file ownership reports with the SEC on either Schedule 13D or (for passive investors) the short form Schedule 13G.

If the stockholder is required to file a report on Schedule 13D, such a report must include information on, inter alia, the acquisition of securities by which the stockholder exceeded the 5 percent threshold and be filed within 10 days after the acquisition. The schedule is filed with the SEC and is provided to the issuer, as well as to each stock exchange on which the security is traded. Schedule 13D is often filed in connection with a tender offer. Any material changes in the facts contained in the schedule necessitates the prompt filing of an amendment. Schedule 13G is a shorter alternative to Schedule 13D, which is available to beneficial owners of more than 5 percent of a class of securities that are considered passive investors. Generally, passive investors are investors that do not intend to control or change the control of a company. A Schedule 13G filing has different information and timing requirements than a Schedule 13D filing.

A filer must, among other things, amend a Schedule 13G promptly upon acquiring beneficial ownership of more than 10 percent of a registered class of equity securities and must thereafter promptly amend the Schedule 13G upon increasing or decreasing its beneficial ownership by more than 5 percent of the class. A Schedule 13G filer must change to filing Schedule 13D within 10 days after beneficial ownership first equals or exceeds 20 percent of the class and is prohibited from voting or acquiring additional securities of the class until 10 days after the Schedule 13D is filed. Directors and officers of the issuer are not eligible to use Schedule 13G.

Directors and officers of the issuer with a registered class of equity securities, and any person or group that has beneficial ownership of more than 10 percent of such class, face additional requirements regarding the disclosure of ownership and equity trading. Each such director, officer, person or group will be considered an insider under Section 16(a) of the Exchange Act and the rules and regulations promulgated thereunder. Insiders must make an initial filing on Form 3 within 10 days after the filer's becoming an insider and must disclose beneficial ownership of all securities of the issuer. Insiders must also file Form 4 reports disclosing transactions resulting in a change in beneficial ownership within two business days following the execution date of the transaction, except for limited types of transactions eligible for deferred reporting on Form 5. In addition, insiders are required to report on Form 5 within 45 days after the issuer's financial year-end any transactions or holdings that should have been, but were not, reported on Form 3 or 4 during the issuer's most recent financial year and any transactions eligible for deferred reporting.

After the shares of Acorn HoldCo common stock are admitted to trading on the Frankfurt Stock Exchange, Acorn HoldCo will be subject to the provisions of the WpHG applicable to German domestic issuers (*Inlandsemittenten*) governing disclosure requirements for shareholdings. The WpHG obliges any person to give notification if certain thresholds of voting interests in a corporation are reached, exceeded or fallen below. Those thresholds are 3, 5, 10, 15, 20, 25, 30, 50 and 75 percent. The notification must be given in writing to the issuer and BaFin, as the competent authority, without undue delay, but no later than within four trading days. The voting interest relevant for the disclosure thresholds also includes attributed shares. Shares will, inter alia, be attributed (i) if a person controls a third party holding the shares, and (ii) if a third party holds shares on behalf of the other person. Further, anyone holding, directly or indirectly, instruments either (i) giving their holder the unconditional right or discretion to acquire already issued shares of Acorn HoldCo to which voting rights are attached, or (ii) relating to such shares and having a similar economic effect, whether or not conferring a right to a physical settlement, must, without undue delay, but in any event within four trading days, simultaneously notify the issuer and BaFin if the above mentioned thresholds have been reached, exceeded or fallen below. Acorn HoldCo must publish these notifications without undue delay, but in any event within three trading days of receiving them. Acorn HoldCo must also, without undue delay but not before publication, file the notification with the companies register (*Unternehmensregister*) and simultaneously report the publication to BaFin. Once the issuer receives a notification must be reported to BaFin.

18.8 Anti-Takeover Effects of Delaware Law, Acorn HoldCo's Certificate of Incorporation and Bylaws

Certain provisions of Delaware law, Acorn HoldCo's certificate of incorporation and bylaws could make the acquisition of Acorn HoldCo more difficult and could delay, defer or prevent a tender offer or other takeover attempt that a stockholder might consider to be in its best interest, including takeover attempts that might result in the payment of a premium to stockholders over the market price for their shares. These provisions also may promote the continuity of its management by making it more difficult for a person to remove or change the incumbent members of its board of directors.

18.8.1 Authorized but unissued preferred stock

The authorized but unissued shares of Acorn HoldCo preferred stock will be available for future issuance without stockholder approval except as required by law or by any stock exchange on which Acorn HoldCo's common stock may be listed. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, acquisitions and employee benefit plans. The existence of authorized but unissued shares of preferred stock may enable Acorn HoldCo's board of directors to render more difficult or to discourage an attempt to obtain control of Acorn HoldCo by means of a merger, tender offer, proxy contest or otherwise.

18.8.2 No cumulative voting

Acorn HoldCo's certificate of incorporation will not permit stockholders to cumulate votes in the election of directors.

18.8.3 Special meetings of stockholders

The bylaws will provide that, except as otherwise required by law, special meetings of stockholders can only be called by the chairman of the board, the chief executive officer, the president or Acorn HoldCo's board of directors.

18.8.4 Stockholder Action by written Consent

The bylaws will provide that any action required to be taken at any annual or special meeting of the stockholders may be taken without a meeting, without prior notice and without a vote if a consent or consents in writing, setting forth the action so taken and bearing the dates of the stockholders who signed the consent, is signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares of its stock entitled to vote thereon were present and voted, unless its certificate of incorporation provides otherwise. Such written consent must be delivered by hand or by certified or registered mail, return receipt requested and no written consent shall be effective to take the corporate action referred to therein unless, within 60 days of the earliest dated written consent received in accordance with the bylaws, a written consent or consents signed by a sufficient number of holders to take such action are delivered to Acorn HoldCo. Prompt notice of the taking of such action without a meeting and by less than unanimous written consent shall be given to those stockholders who have not consented in writing.

18.8.5 Advance Notice Requirements for Stockholder Proposals and Nomination of Directors

The bylaws will require stockholders seeking to bring business before an annual meeting of stockholders, or to nominate individuals for election as directors at an annual or special meeting of stockholders, to provide timely notice in writing. To be timely, a stockholder's notice must be properly furnished to Acorn HoldCo, in the case of an annual meeting, not later than the close of business on the ninetieth (90th) day, nor earlier than the close of business on the one hundred twentieth (120th) day, prior to the first anniversary of the preceding year's annual meeting; provided, however, that subject to the immediately following sentence, in the event that the annual meeting is convened more than thirty (30) days before or more than seventy (70) days after such anniversary date, or if no annual meeting was held in the preceding year, notice by the stockholder must be so received no earlier than the close of business on the one hundred twentieth (120th) day prior to such annual meeting and not later than the close of business on the later of the ninetieth (90th) day prior to such annual meeting or the tenth (10th) day following the day on which public announcement of the date of such meeting is first made by Acorn HoldCo. The bylaws also specify requirements as to the form and content of a stockholder's notice. These provisions may preclude Acorn HoldCo stockholders from bringing matters before the annual meeting of stockholders or from making nominations for directors at meetings of stockholders. These provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the potential acquirer's own slate of directors or otherwise attempting to obtain control of Acorn HoldCo.

18.8.6 Removal of Directors; Vacancies

Subject to Acorn HoldCo's director resignation policy, any director or the entire board of directors may be removed, with or without cause, by the holders of a majority of the shares of Acorn HoldCo capital stock then entitled to vote in an election of directors, except as otherwise provided by applicable law. In addition, any newly created directorship on its board of directors that results from an increase in the number of directors and any vacancy occurring in its board of directors may only be filled by a majority of the directors then in office, although less than a quorum, or by a sole remaining director (and not by the stockholders).

18.8.7 Director Resignations

Director candidates must agree to tender, promptly following the annual meeting at which they are to be elected or re-elected as director, an irrevocable resignation in writing, which shall become effective only if (i) the director fails to receive a sufficient number of votes for an election in an uncontested election of directors and (ii) the board accepts their resignation in accordance with Acorn HoldCo's director resignation policy. Once an incumbent director fails to receive a sufficient number of votes for election in an uncontested election, Acorn HoldCo's Nominating and Corporate Governance Committee will consider on an expedited basis such director's tendered resignation and make a recommendation to the board concerning the acceptance or rejection of such resignation (or any potential alternatives, including the rejection of the resignation coupled with a commitment to seek to address and cure the underlying reasons believed by the Nominating and Corporate Governance

Committee in good faith to have substantially resulted in such director failing to receive the requisite votes). The board of directors will then expeditiously take formal action following the certification of the election results from the stockholders' meeting at which the election occurred.

18.8.8 Delaware Business Combination Statue

Section 203 of the DGCL provides that, subject to certain stated exceptions, a corporation may not engage in a business combination with any "interested stockholder" (as defined below) for a period of three years following the time that such stockholder became an interested stockholder, unless:

- prior to such time the board of directors of the corporation approved either the business combination or transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding shares owned by persons who are directors and also officers and employee stock plans in which participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to such time, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent by the affirmative vote of 66 % (2/3) of the outstanding voting stock which is not owned by the interested stockholder.

An "interested stockholder" is, subject to certain exceptions, any person (other than the corporation and any direct or indirect majority-owned subsidiary) who owns 15% or more of the outstanding voting stock of the corporation or is an affiliate or associate of the corporation and was the owner of 15% or more of the outstanding voting stock of the corporation at any time within the three-year period immediately prior to the date of determination, and the affiliates and associates of such person.

A Delaware corporation may "opt out" of these provisions with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or bylaws resulting from a stockholders' amendment approved by at least a majority of the outstanding voting shares. Acorn HoldCo will not opt out of Section 203 of the DGCL and will be subject to the provisions therein.

18.9 Exclusion of Minority Shareholders

Under Section 253 of the DGCL, if a corporation owns at least 90% of the outstanding shares of each class of stock of its subsidiary that are entitled to vote on a merger, the parent's board of directors is authorized to merge itself into the subsidiary or to merge the subsidiary corporation into the parent without the approval of either corporation's stockholders and without the approval of the subsidiary's board of directors; provided that one of the companies involved in such merger is a Delaware corporation, while the other is either a Delaware corporation or a corporation organized in a domestic or alien jurisdiction that permits a corporation of such jurisdiction to merge with a corporation of another jurisdiction.

When completing a short form merger under the DGCL, where all of the shares of the subsidiary corporation are not owned by the parent corporation, a company has a statutory duty to send the target stockholders a copy of Section 262 of the DGCL, Delaware's appraisal statute, and a notice informing them about the approval of the merger, the effective date of the merger and such stockholder's right to seek appraisal.

18.10 Exclusive Forum

Upon the settlement of the Offer, Acorn HoldCo's amended and restated certificate of incorporation will provide that, unless it consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will, to the fullest extent permitted by law, be the sole and exclusive forum for: (i) any derivative action or proceeding brought on Acorn HoldCo's behalf; (ii) any action asserting a breach of fiduciary duty owed by any of Acorn HoldCo's directors, officers, other employees or stockholders to it or its stockholders, creditors or other constituents, or a claim of aiding and abetting any such breach of fiduciary duty; (iii) any action asserting a claim against Acorn HoldCo or its directors or officers arising pursuant to any provision of the DGCL or Acorn HoldCo's certificate of incorporation or the bylaws (as either may be amended and/or restated from time to time) or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware; (iv) any action

to interpret, apply, enforce or determine the validity of Acorn HoldCo's certificate of incorporation or bylaws (as either may be amended and/or restated from time to time); (v) any action asserting a claim against Acorn HoldCo or its directors or officers that is governed by the internal affairs doctrine; or (vi) any action asserting an "internal corporate claim" as that term is defined in Section 115 of the DGCL; provided, however, that, in the event that the Court of Chancery of the State of Delaware lacks subject matter jurisdiction over any such action or proceeding, any other state court of the State of Delaware, or if no state court of the State of Delaware has subject matter jurisdiction, the federal district court for the District of Delaware, will be the forum.

To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, Acorn HoldCo's amended and restated certificate of incorporation will provide that, unless it consents in writing to the selection of an alternative forum, the federal district courts of the U.S. will, to the fullest extent permitted by law, be the sole and exclusive forum for the resolution of any complaint asserting a cause of action arising under the federal securities laws.

Any person or entity that acquires Acorn HoldCo shares shall be deemed to have notice of and to have consented to the forum provisions in the certificate of incorporation.

19. WARNING ON TAX CONSEQUENCES

The tax legislation of the country of residence of an investor of shares in Acorn HoldCo or of a jurisdiction in which an investor is subject to taxation, as well as the tax legislation of the country of residence of Acorn HoldCo, may affect the income received from shares in Acorn HoldCo.

Prospective investors in Acorn HoldCo are advised to consult with their own tax advisor regarding the tax consequences of investing in, holding and disposing of shares.

20. FINANCIAL INFORMATION

Audited Consolidated Financial Statements of Acorn HoldCo, Inc. prepared in accordance with U.S. GAAP as of December 31, 2021 and for the period from August 10, 2021 (inception) to December 31, 2021	F-2.1
Unaudited Condensed Consolidated Financial Statements of ADTRAN, Inc. prepared in accordance with U.S. GAAP as of and for the three-month period ended March 31, 2022	F-3.1
Audited Consolidated Financial Statements of ADTRAN, Inc. prepared in accordance with U.S. GAAP as of and for the financial years ended December 31, 2021, 2020 and 2019	F-3.28
Audited Consolidated Financial Statements of ADVA Optical Networking SE prepared in accordance with IFRS as of and for the financial year ended December 31, 2021	F-4.1
Audited Consolidated Financial Statements of ADVA Optical Networking SE prepared in accordance with IFRS as of and for the financial year ended December 31, 2020	F-4.80
Audited Consolidated Financial Statements of ADVA Optical Networking SE prepared in accordance with IFRS as of and for the financial year ended December 31, 2019	F-4.168

21. GLOSSARY ADSL refers to "Asymmetric Digital Subscriber Line", a type of digital subscriber line technology that enables faster data transmission over copper lines than a conventional voiceband modem can provide. AktG refers to the German Stock Corporation Act (Aktiengesetz). **APPs** refers to the Australian Privacy Principles. **ATM** refers to "Asynchronous Transfer Mode", a telecommunications standard defined by the American National Standards Institute and the ITU Telecommunicatinon Standardization Sector for digital transmission of multiple types of traffic, including telephony (voice), data and video signals in one network without the use of separate overlay networks. AWGrefers to the German Foreign Trade Act (Außenwirtschaftsgesetz). AWVrefers to the German Foreign Trade Regulation (Außenwirtschaftsverordnung). BaFin refers to the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht). **BBF** refers to "Broadband Forum", a non-profit industry consortium dedicated to developing broadband network specifications. Bill 64 refers to the "Act to modernize legislative provisions as regards the protection of personal information" of Ouebec, Canada. Bill C-11 refers to the Digital Charter Implementation Act, 2020 of Canada. **BMWK** refers to the German Federal Ministry for Economic Affairs and Climate Action (Bundesministerium für Wirtschaft und Klimaschutz). **CCPA** refers to the California Consumer Privacy Act. CDP refers to Carbon Disclosure Project, an international non-profit organization based in the United Kingdom, Japan, India, China, Germany and the United States of America that helps companies and cities disclose their environmental impact. **CDPA** refers to the Consumer Data Protection Act of Virginia, United States. CE refers to "Carrier Ethernet", a term for extensions to Ethernet for communications service providers that utilize Ethernet technology in their networks. **CHF** refers to the currency "Swiss franc", the local currency of the Swiss Confederation. **CFIUS** refers to the Committee on Foreign Investment in the United States. CMArefers to the U.K. Competition and Markets Authority.

CPE refers to "fiber customer-premises equipment", i.e. any terminal and associated equipment located at a

subscriber's premises and connected with a carrier's telecommunication circuit at the demarcation point.

CPPA refers to the Consumer Privacy Protection Act of Canada.

CPRA refers to the California Privacy Rights and Enforcement Act.

DCI

C-TPAT refers to "Customs-Trade Partnership Against Terrorism", a voluntary supply-chain security program led by

the U.S. Customs and Border Protection focused on improving the security of private companies' supply

chains with respect to terrorism.

refers to "data center interconnect", a segment of the networking market that focuses on the technology used

to link two or more data centers so the facilities can share resources.

DevOps refers to "development and operations", a set of practices that combines software development (Dev) and IT

operations (Ops).

DGLC refers to Delaware General Corporation Law.

DOCSIS refers to "Data Over Cable Service Interface Specification", an international telecommunications standard

that permits the addition of high-bandwidth data transfer to an existing cable television (CATV) system.

DPU refers to channel controller, a programmable specialized electronic circuit with hardware acceleration of

data processing for data-centric computing.

DSOs refers to "days sales outstanding", i.e. the average number of days between invoicing and receipt of

payment.

EMS refers to "electronics manufacturing services", a term used for companies that design, manufacture, test,

distribute and provide return/repair services for electronic components and assemblies for original

equipment manufacturers (OEMs).

EPON refers to "Ethernet Passive Optical Network" a type of passive optical network technology that runs on the

Ethernet protocol.

ERP refers to "Enterprise Resource Planning", the integrated management of main business processes, often in

real time and mediated by software and technology.

EUR refers to the currency "euro", the official currency of 19 of the 27 EU member countries which together

constitute the Eurozone.

Exchange Act refers to the U.S. Securities and Exchange Act of 1934.

FATA refers to the Foreign Acquisitions and Takeovers Act 1975 of Australia.

FCO refers to the German Federal Cartel Office (*Bundeskartellamt*).

FCPA refers to the U.S. Foreign Corrupt Practices Act.

FIRB refers to the Australian Foreign Investment Review Board.

Foreign Trade Regulationrefers to the German Foreign Trade Regulation (Auβenwirtschaftsverordnung).Fraunhoferrefers to the "Fraunhofer Heinrich Hertz Institute" based in Berlin, Germany.

FTTdp refers to "fiber to the distribution point", which is an optical connection technology in which the optical

fiber is routed to a flexibly placeable distribution box, the cable branch.

FTTN refers to "Fiber to the Node", a technology for delivering broadband that uses fiber to bring data to a node

and uses copper to bring the date into the home.

Gbit/s refers to "Gigabits per second", a data-transfer rate in the telecommunications sector.

GBP refers to the currency "pound sterling", the official currency of the United Kingdom.

GDPR refers to the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on

the protection of natural persons with regard to the processing of personal data and on the free movement of

such data, and repealing Directive 95/46/EC (General Data Protection Regulation), as amended.

Gfast is a digital subscriber line (DSL) protocol standard for local loops shorter than 500 meters, with

performance targets between 100 Mbit/s and 1 Gbit/s, depending on loop length.

GNSS refers to "global navigation satellite systems", a general term describing any satellite constellation that

provides positioning, navigation, and timing (PNT) services on a global or regional basis.

GPON refers to "Gigabit Passive Optical Network", a standard for passive optical networks (PON) published by

the ITU Telecommunications Standardization Sector.

GWB refers to the German Act against Restraints of Competition (Gesetz gegen Wettbewerbsbeschränkungen).

HDSL refers to "High Data Rate Digital Subscriber Line", a telecommunications protocol to use higher frequency

spectrum over copper, twisted pair cables.

HSR Act refers to the Hart–Scott–Rodino Antitrust Improvements Act of United States of America.

ICPs refers to "internet content providers", a website or organization that handles the distribution of online

content such as blogs, videos, music or files.

ILEC refers to "Incumbent Local Exchange Carriers", a local telephone company which held the regional

monopoly on landline service before the market was opened to competitive local exchange carriers, or the

corporate successor of such a firm.

IoT refers to "internet of things", which describes physical objects (or groups of such objects) that are embedded

with sensors, processing ability, software, and other technologies that connect and exchange data with other

devices and systems over the Internet or other communications networks.

IRS refers to the Internal Revenue Service of the United States of America.

ISU refers to "Investment Security Unit", an operational unit within the Department for Business, Energy and

Industrial Strategy of the United Kingdom.

ITU-T refers to the "International Telecommunication Union - Telecommunication Standardization Sector".

LAN refers to "Local Area Network", a collection of devices connected together in one physical location, such as

a building, office or home.

Log4j2.x refers to the upgrade to Log4j that provides significant improvements over its predecessor, Log4j 1.x, and

provides many of the improvements available in Logback while fixing some inherent problems in Logback's architecture. Log4j is a Java-based logging utility originally written by Ceki Gülcü. It is part of the Apache Logging Services, a project of the Apache Software Foundation. Log4j is one of several Java

logging frameworks.

LTE refers to "long term evolution", a telecommunications standard for wireless broadband communication for

mobile devices and data terminals.

Market Abuse Regulation refers to Regulation (EU) No 596/2014 of the European Parliament and of the Council of 16 April 2014 on

market abuse and repealing Directive 2003/6/EC of the European Parliament and of the Council and

Commission Directives 2003/124/EC, 2003/125/EC and 2004/72/EC.

MiFID II Directive refers to the Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on

markets in financial instruments and amending Directive 2002(92/EC and Directive 2011/61/EU.

MSAN refers to "multi-service access node", a device typically installed in a telephone exchange which connects customers' telephone lines to the core network, to provide telephone, IDSN, and broadband all from a single

platform.

MSO refers to "multiple system operator", an operator of multiple cable or direct-broadcast satellite television

systems.

NFV refers to "network function virtualization". i.e. the replacement of network application.

NG-PON2 refers to "Next-Generation Passive Optical Network 2", a telecommunications network standard for passive

optical network (PON).

NS&I Act refers to the National Security and Investment Act 2021 of the United Kingdom.

ODM refers to "Original Design Manufacturer", a company that designs and manufactures a product, as specified,

that is eventually rebranded by another firm for sale.

OEM refers to "Original Equipment Manufacturer", a company that produces parts and equipment that may be

marketed by another manufacturer.

OLS refers to the "open line system", an optical transmission system basically consisting of two main

components. The terminal generates and receives the optical signals. The line system bundles wavelengths and amplifies the signal power. In an open system architecture, terminals and line systems can be deployed

independently and openly combined with third-party equipment.

OLT refers to "optical line terminal", a device which serves as the service provider endpoint of a passive optical

network.

ONT refers to the "optical network terminal", a network interface device which converts incoming optical signals

into electrical signals at the location of the end user for passive optical networks (PON).

OPC refers to the Office of the Privacy Commissioner in Canada.

OTT refers to "Over-The-Top", a media service offered directly to viewers via the internet.

PCAOB refers to the Public Company Accounting Oversight Board (United States).

PIPEDA refers to the Personal Information Protection and Electronic Documents Act of Canada.

PIPL refers to the Personal Information Protection Law.

PON refers to "Passive Optical Network", a fiber-optic telecommunications technology for delivering broadband

network access to end-customers. Its architecture implements a point-to-multipoint topology in which a single optical fiber serves multiple endpoints by using unpowered (passive) fiber optic splitters to divide the

fiber bandwidth among the endpoints.

Privacy Act refers to the Australian Federal Privacy Act 1988.

Prospectus Regulation refers to Regulation (EU) 2017/1129 of the European Parliament and of the Council of June 14, 2017 on the

prospectus to be published when securities are offered to the public or admitted to trading on a regulated

market and repealing Directive 2003/71/EC

Quebec Private Sector Act refers to the Act Respecting the Protection of Personal Information in the Private Sector of Quebec, Canada.

RDOF refers to "Rural Digital Opportunity Fund".

REACH refers to the Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH),

establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive

 $76/769/EEC \ and \ Commission \ Directives \ 91/155/EEC, \ 93/67/EEC, \ 93/105/EC \ and \ 2000/21/EC.$

RFoG refer to "radio frequency over glass", a fiber-deep network design in which the coaxial portion of an HFC

(hybrid fiber coaxial) network is replaced by a PON architecture.

RoHS refers to Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the

restriction of the use of certain hazardous substances in electrical and electronic equipment.

Sarbanes-Oxley Act refers to Section 404 of the United States Sarbanes-Oxley Act of 2002.

SBTI refers to "Science-Based Targets Initiative".

SDN refers to "software Defined Networking".

SDO refers to "Standards Developing Organizations".

SDX refers to "software-defined everything".

SGD refers to the currency "Singapore dollar".

SI refers to "system integrators".

SSUs refers to "synchronization supply units".

Tbit/s refers to "Terabits per second".

TDM refers to "Time-Division Multiplexing".

UK refers to the United Kingdom.

United States refers to the United States of America.

USD refers to the currency "United States dollar".

VAR refers to "Value-Added Reseller".

WAN refers to "Wide Area Network".

WDM refers to "wavelength division multiplexing".

WEEE refers to the Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on

waste electrical and electronic equipment.

Wi-Fi refers to family of wireless network protocols, based on the IEEE 802.11 family of standards, which are

commonly used for local area networking of devices and Internet access.

WpÜG refers to the German Securities Acquisition and Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz*).

 WpHG
 refers to the German Securities Trading Act (Wertpapierhandelsgesetz).

 xDSL
 refers to the sum total of digital subscriber line (DSL) technologies.

XGS-PON refers to "10 Gigabit Symmetrical Passive Optical Network".

10G EPON refers to "10 Gbit/s Ethernet Passive Optical Network".

22. RECENT DEVELOPMENTS

22.1 Formation of Certain Companies in Preparation of the Business Combination

On August 10, 2021, ADTRAN formed Acorn HoldCo under the laws of Delaware, United States as its wholly-owned subsidiary. Immediately following its formation, Acorn HoldCo formed Merger Sub, a Delaware corporation, as a wholly-owned subsidiary on August 10, 2021. Upon effectiveness of the Merger, Merger Sub will merge with and into ADTRAN, with ADTRAN surviving the Merger as a direct wholly-owned subsidiary of Acorn HoldCo. Immediately prior to the effective time of the Merger, Acorn HoldCo will change its legal name to ADTRAN Holdings, Inc. As of the date of this Prospectus, neither Acorn HoldCo nor Merger Sub has conducted any material activities other than those incidental to their formation and the matters contemplated by the Business Combination Agreement.

Therefore, there have been no other significant changes in the financial performance of Acorn HoldCo since December 31, 2022.

22.2 Business Combination Agreement

On August 30, 2021, Acorn HoldCo, ADTRAN, Merger Sub and ADVA entered into the Business Combination Agreement, pursuant to which ADTRAN and ADVA have agreed to combine their businesses under Acorn HoldCo. The effect of the Business Combination will be that ADTRAN will become a direct wholly-owned subsidiary of Acorn HoldCo through the merger of Merger Sub, with and into ADTRAN, and ADVA will become a direct subsidiary of Acorn HoldCo through the Offer contemplated by this Prospectus. Immediately after the signing of the Business Combination Agreement, Acorn HoldCo published in Germany its decision regarding the launch of the Offer, ADTRAN published the offer announcement in the U.S. on a press release, which was attached as an exhibit to ADTRAN's Form 8-K filed with the SEC on August 30, 2021, ADVA published an ad hoc announcement pursuant to Article 17 para. 1 of the Regulation (EU) 596/2014 and ADVA, Acorn HoldCo and ADTRAN published a joint press release in respect of the transaction.

22.3 Negotiations on DPLTA

As of July 6, 2022, Acorn HoldCo and ADVA agreed to enter into negotiations regarding the conclusion of a domination agreement or a DPLTA within the meaning of Section 291(1) AktG between ADVA as the dominated entity and Acorn HoldCo (or a subsidiary of Acorn HoldCo yet to be established) as dominating entity.

22.4 Recent Developments Relating to ADTRAN

Since March 31, 2022 until the date of this Prospectus, no significant changes in the financial performance of the ADTRAN Group have occurred.

For a description of developments during the three-month period ended March 31, 2022, see section "8 Management's Discussion and Analysis of Financial Condition and Results of Operations of ADTRAN".

22.5 Recent Developments Relating to ADVA

Since December 31, 2021 until the date of this Prospectus, no significant changes in the financial performance of the ADVA Group have occurred.

For a description of developments during the year ended December 31, 2021, see section "9 Management's Discussion and Analysis of Financial Condition and Results of Operations of ADVA".

22.6 Outlook

22.6.1 ADTRAN

In the first quarter of 2022, ADTRAN experienced strong demand for its solutions and achieved significant year-over-year bookings growth. The increase in demand comes from service providers planning to deploy ADTRAN's fiber access platforms, in-home service delivery platforms and SaaS applications. ADTRAN expects this growth to accelerate.

ADTRAN has experienced a significant impact to the supply chain given the COVID-19 pandemic and the related global semiconductor chip shortage, including delays in supply chain deliveries, extended lead times and shortages of some key components, some raw material cost increases and slowdowns at certain production

facilities. ADTRAN expects that the supply chain constraints and semiconductor shortage will continue to affect its operating results through the end of 2022. Against this background, ADTRAN expects its outlook to continue to strengthen given the record demand for its products and the expectation of an improving supply chain over the long-term.

22.6.2 ADVA

In view of the global semiconductor crisis, ADVA's management believes that the issue of supply chains will not improve within in the remainder of the year 2022. With respect to the COVID-19 pandemic, it remains to be seen whether the crisis will lessen over the course of the year, as some economic and health experts assume, and the new lockdowns in several major cities in China will lead to further tightening of supply chains.

Nonetheless, ADVA believes that the macro environment will remain positive. The realization that communications infrastructure is a valuable asset has prompted a mind change in politics and business. Furthermore, the expansion of 5G and its associated industrial applications has led to technology with supposedly insecure origins being viewed very critically. In many industrialized nations of the western world, dependence on large Chinese network equipment suppliers, particularly Huawei, is perceived as a serious threat. After the United States, the affected network operators in Europe are now also working on concepts to become less dependent and ADVA therefore sees significant opportunities in this macroeconomic environment.

The digitization of ecosystems and the expansion of communication networks is progressing and is supported by public funding programs in many regions and countries. This environment will continue to have a positive impact on demand for ADVA's products for the foreseeable future. Investments in innovation in recent years have laid the foundation for a differentiated portfolio of solutions with which ADVA intends to continue expanding its market share. Furthermore, with the investments made in recent years, ADVA believes that its technological set-up is well prepared for the transformation of networks with respect to cloud, mobility, 5G, automation and security. In addition to the high-quality performance features of optical data transmission, precise network synchronization technology and programmable cloud access solutions, the service portfolio also provides increasing added value. ADVA develops, manufactures and supplies communication technology for the digital future. ADVA expects to continue to selectively invest in product development, technology and revenue-generating opportunities.

22.6.3 The Combined Group

The Business Combination brings together two companies with complementary strengths, broadens and diversifies the geographic footprint of the two companies, diversifies the client base of ADTRAN and ADVA by providing greater access to an international client network, and allowing the Combined Group to be more competitive in growing global markets, which offers both ADTRAN and ADVA opportunities which are currently not available.

ADTRAN and ADVA have complementary portfolios addressing metro edge, aggregation, access, connected home and enterprise connectivity use cases paired with an enhanced SaaS and orchestration offering. The broader portfolio of the Combined Group is expected to enhance the offerings of both companies to customers and solidify the position of the Combined Group as a fully integrated, end-to-end fiber access and transport portfolio under a modern, SDN-controlled architecture and enable the acceleration of software-based recurring revenue streams.

Following the consummation of the Business Combination, the Combined Group also intends to address the near-term market opportunity and to achieve greater go-to-market scale across multiple sales channels and key partners and expand its product offering in high-growth markets, which is, in turn, expected to strengthen the Combined Group's position as a global innovation powerhouse and increase its cross-selling opportunities, enabling it to offer customers differentiated, end-to-end fiber networking solutions spanning metro edge, aggregation, access and subscriber connectivity.

Assuming that the expected benefits of the Business Combination would be realized, the Business Combination is expected to create significant value for the shareholders of both companies, with approximately \$52 million in pre-tax annual cost synergies realized within two years following the consummation of the Business Combination, driven by identified supply chain efficiencies and operating model optimization.