

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549**

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2020

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number: 000-24612

ADTRAN, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

901 Explorer Boulevard

Huntsville, Alabama

(Address of principal executive offices)

63-0918200

(I.R.S. Employer
Identification No.)

35806-2807

(Zip Code)

Registrant's telephone number, including area code: (256) 963-8000

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock, Par Value \$0.01 per share	ADTN	The NASDAQ Global Select Market

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

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.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of November 5, 2020, the registrant had 47,956,220 shares of common stock, \$0.01 par value per share, outstanding.

ADTRAN, Inc.

Quarterly Report on Form 10-Q
For the Three and Nine Months Ended September 30, 2020

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

The Private Securities Litigation Reform Act of 1995 provides a safe harbor for forward-looking statements made by or on behalf of ADTRAN, Inc. (“ADTRAN”, the “Company”, “we”, “our” or “us”). ADTRAN and its representatives may from time to time make written or oral forward-looking statements, including statements contained in this report, our other filings with the Securities and Exchange Commission (the “SEC”) and other communications with our stockholders. Any statement that does not directly relate to a historical or current fact is a forward-looking statement. Generally, the words, “believe”, “expect”, “intend”, “estimate”, “anticipate”, “will”, “may”, “could” and similar expressions identify forward-looking statements. We caution you that any forward-looking statements made by us or on our behalf are subject to uncertainties and other factors that could affect the accuracy of such statements. The following are some of the risks that could affect our financial performance or could cause actual results to differ materially from those expressed or implied in our forward-looking statements:

- Our operating results may fluctuate in future periods, which may adversely affect our stock price.
- Our revenues for a particular period can be difficult to predict, and a shortfall in revenue may harm our operating results.
- General economic conditions may reduce our revenues and harm our operating results, financial condition and cash flows.
- The ongoing COVID-19 pandemic could adversely affect our business, results of operations and financial condition, including possible disruptions in our supply chain, workforce and/or customer demand.
- Our exposure to the credit risks of our customers and distributors may make it difficult to collect accounts receivable and could adversely affect our operating results, financial condition and cash flows.
- We expect gross margins to vary over time, and our levels of product and services gross margins may not be sustainable.
- We must continue to update and improve our products and develop new products to compete and to keep pace with improvements in communications technology.
- Our products may not continue to comply with evolving regulations governing their sale, which may harm our business.
- We are subject to complex and evolving U.S. and foreign laws and regulations regarding privacy, data protection and other matters. Violations of these laws and regulations may harm our business.
- Failure to comply with the U.S. Foreign Corrupt Practices Act and similar laws associated with our global activities could subject us to penalties or other adverse consequences.
- Our operating results may be adversely affected due to uncertain global economic and financial market conditions.
- Our failure or the failure of our contract manufacturers to comply with applicable environmental regulations could adversely impact our results of operations.
- If our products do not interoperate with our customers’ networks, installations may be delayed or cancelled, which could harm our business.
- The lengthy sales and approval process required by service providers for new products could result in fluctuations in our revenue.
- Although we engage in research and development activities to develop new, innovative solutions and improve the application of developed technologies, we may miss certain market opportunities enjoyed by larger companies with substantially greater research and development resources.
- We depend heavily on sales to certain customers; the loss of any of these customers would significantly reduce our revenues and net income.
- If we are unable to integrate acquisitions successfully, it could adversely affect our operating results, financial condition and cash flow.
- Our strategy of outsourcing a portion of our manufacturing requirements to subcontractors located in various international regions may result in us not meeting our cost, quality or performance standards.
- Our dependence on a limited number of suppliers for certain raw materials and key components may prevent us from delivering our products on a timely basis, which could have a material adverse effect on customer relations and operating results.
- We compete in markets that have become increasingly competitive, which may result in reduced gross profit margins and market share.
- A material weakness in our internal control over financial reporting could result in a loss of investor confidence in the reliability of our financial statements, which in turn could negatively affect the price of our common stock.
- Our 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 our estimates change, the liability for warranty obligations may be increased or decreased, impacting future cost of goods sold.
- Managing our inventory is complex and may include write-downs of excess or obsolete inventory.
- The continuing growth of our international operations could expose us to additional risks, increase our costs and adversely affect our operating results, financial condition and cash flow.
- We may be adversely affected by fluctuations in currency exchange rates.
- Our success depends on our ability to reduce the selling prices of succeeding generations of our products.
- Breaches in our information systems and cyber-attacks could compromise our intellectual property and cause significant damage to our business and reputation.

- Our failure to maintain rights to intellectual property used in our business could adversely affect the development, functionality and commercial value of our products.
- Software under license from third parties for use in certain of our products may not continue to be available to us on commercially reasonable terms.
- Our use of open source software could impose limitations on our ability to commercialize our products.
- We may incur liabilities or become subject to litigation that may have a material effect on our business.
- We depend on distributors who maintain inventories of our products. If the distributors reduce their inventories of these products, our sales could be adversely affected.
- If we are unable to successfully develop and maintain relationships with system integrators, service providers and enterprise value-added resellers, our sales may be negatively affected.
- If we fail to manage our exposure to worldwide financial and securities markets successfully, our operating results and financial statements could be materially impacted.
- New or revised tax regulations, changes in our effective tax rate or assessments arising from tax audits may have an adverse impact on our results.
- We are required to periodically evaluate the value of our deferred tax assets and long-lived assets, including the value of our intangibles and goodwill resulting from business acquisitions. Any future valuation allowances or impairment charges required may adversely affect our operating results.
- We may not fully realize the anticipated benefits of our restructuring plans. Our restructuring efforts may adversely affect our business and our operating results.
- Our success depends on attracting and retaining key personnel.
- Regulatory and potential physical impacts of climate change and other natural events may affect our customers and our production operations, resulting in adverse effects on our operating results.
- The price of our common stock has been volatile and may continue to fluctuate significantly.

The foregoing list of risks is not exclusive. For a more detailed description of the risk factors associated with our business, see Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 25, 2020 (the “2019 Form 10-K”), as well as the risk factors set forth in Part II, Item 1A of this Quarterly Report on Form 10-Q. We caution investors that other factors may prove to be important in the future in affecting our operating results. New factors emerge from time to time, and it is not possible for us to predict all of these factors, nor can we assess the impact each factor, or a combination of factors, may have on our business.

You are further cautioned not to place undue reliance on these forward-looking statements because they speak only of our views as of the date that the statements were made. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

GLOSSARY OF SELECTED TERMS

Below are certain acronyms, concepts and defined terms commonly used in our industry and in this Quarterly Report on Form 10-Q, along with their meanings:

Acronym/Concept/ Defined Term	Meaning
carrier	An entity that provides voice, data or video services to consumers and businesses
CPE	Customer-Premises Equipment
CSP	Communication Service Provider
DSO	Days Sales Outstanding
FCC	Federal Communications Commission
FTTN	Fiber to the Node
FTTP	Fiber to the Premises
Gfast	A digital subscriber line protocol standard for local loops (telephone lines) shorter than 500 meters with performance targets between 100 Mbps (as defined below) and one gigabit per second, depending on loop length
LAN	Local Area Network
MSO	Multiple System Operator
PON	Passive Optical Network
RDOF	Rural Digital Opportunity Fund
SD-Access	Software Defined Access
SP	Service Provider
U.S.	United States
WAN	Wide Area Network

PART I. FINANCIAL INFORMATION
ITEM 1. FINANCIAL STATEMENTS

ADTRAN, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)
(In thousands, except per share amounts)

	September 30, 2020	December 31, 2019
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 71,081	\$ 73,773
Restricted cash	322	—
Short-term investments	6,180	33,243
Accounts receivable, less allowance for doubtful accounts of \$38 as of September 30, 2020 and December 31, 2019	100,223	90,531
Other receivables	22,899	16,566
Inventory	120,260	98,305
Prepaid expenses and other current assets	8,374	7,892
Total Current Assets	329,339	320,310
Property, plant and equipment, net	64,353	68,086
Deferred tax assets, net	7,865	7,561
Goodwill	6,968	6,968
Intangibles, net	24,465	27,821
Other assets	20,409	19,883
Long-term investments	78,016	94,489
Total Assets	\$ 531,415	\$ 545,118
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Accounts payable	\$ 59,886	\$ 44,870
Bonds payable	—	24,600
Unearned revenue	13,379	11,963
Accrued expenses and other liabilities	13,173	13,876
Accrued wages and benefits	17,228	13,890
Income tax payable, net	3,346	3,512
Total Current Liabilities	107,012	112,711
Non-current unearned revenue	6,694	6,012
Pension liability	16,282	15,886
Deferred compensation liability	22,957	21,698
Other non-current liabilities	8,877	8,385
Total Liabilities	161,822	164,692
Commitments and contingencies (see Note 18)		
Stockholders' Equity		
Common stock, par value \$0.01 per share; 200,000 shares authorized; 79,652 shares issued and 47,956 shares outstanding as of September 30, 2020 and 79,652 shares issued and 48,020 shares outstanding as of December 31, 2019	797	797
Additional paid-in capital	279,688	274,632
Accumulated other comprehensive loss	(12,678)	(16,417)
Retained earnings	788,294	806,702
Treasury stock at cost: 31,565 and 31,636 shares at September 30, 2020 and December 31, 2019, respectively	(686,508)	(685,288)
Total Stockholders' Equity	369,593	380,426
Total Liabilities and Stockholders' Equity	\$ 531,415	\$ 545,118

See accompanying notes to condensed consolidated financial statements.

ADTRAN, INC.
CONDENSED CONSOLIDATED STATEMENTS OF INCOME (LOSS)
(Unaudited)
(In thousands, except per share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Sales				
Network Solutions	\$ 115,229	\$ 94,018	\$ 323,924	\$ 359,007
Services & Support	17,914	20,074	52,457	55,267
Total Sales	133,143	114,092	376,381	414,274
Cost of Sales				
Network Solutions	62,795	56,444	178,492	207,353
Services & Support	11,386	11,317	33,855	34,963
Total Cost of Sales	74,181	67,761	212,347	242,316
Gross Profit	58,962	46,331	164,034	171,958
Selling, general and administrative expenses	27,205	30,912	84,624	99,663
Research and development expenses	27,223	31,835	85,794	95,546
Asset impairments	—	3,872	65	3,872
Gain on contingency	—	—	—	(1,230)
Operating Income (Loss)	4,534	(20,288)	(6,449)	(25,893)
Interest and dividend income	344	610	1,031	1,893
Interest expense	—	(128)	(1)	(382)
Net investment gain (loss)	2,844	(216)	1,819	8,195
Other income (expense), net	(1,679)	1,616	(2,307)	2,266
Income (Loss) Before Income Taxes	6,043	(18,406)	(5,907)	(13,921)
Income tax (expense) benefit	(562)	(27,717)	2,171	(27,437)
Net Income (Loss)	\$ 5,481	\$ (46,123)	\$ (3,736)	\$ (41,358)
Weighted average shares outstanding – basic	47,957	47,824	47,957	47,803
Weighted average shares outstanding – diluted	48,424	47,824	47,957	47,803
Earnings (loss) per common share – basic	\$ 0.11	\$ (0.96)	\$ (0.08)	\$ (0.87)
Earnings (loss) per common share – diluted	\$ 0.11	\$ (0.96)	\$ (0.08)	\$ (0.87)

See accompanying notes to condensed consolidated financial statements.

ADTRAN, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Unaudited)
(In thousands)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Net Income (Loss)	\$ 5,481	\$ (46,123)	\$ (3,736)	\$ (41,358)
Other Comprehensive Income (Loss), net of tax				
Net unrealized gains (losses) on available-for-sale securities	(45)	(15)	445	277
Defined benefit plan adjustments	244	90	576	361
Foreign currency translation	2,469	(2,486)	2,718	(3,113)
Other Comprehensive Income (Loss), net of tax	2,668	(2,411)	3,739	(2,475)
Comprehensive Income (Loss), net of tax	\$ 8,149	\$ (48,534)	\$ 3	\$ (43,833)

See accompanying notes to condensed consolidated financial statements.

ADTRAN, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(Unaudited)
(In thousands)

	Common Shares	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
Balance as of January 1, 2020	79,652	\$ 797	\$ 274,632	\$ 806,702	\$ (685,288)	\$ (16,417)	\$ 380,426
Net loss	—	—	—	(9,969)	—	—	(9,969)
Other comprehensive loss, net of tax	—	—	—	—	—	(1,392)	(1,392)
Dividend payments (\$0.09 per share)	—	—	—	(4,328)	—	—	(4,328)
Dividends accrued on unvested PSUs	—	—	—	(32)	—	—	(32)
Deferred compensation adjustments, net of tax	—	—	—	—	(2,758)	—	(2,758)
PSUs, RSUs and restricted stock vested	—	—	—	(1,524)	1,501	—	(23)
Stock-based compensation expense	—	—	1,791	—	—	—	1,791
Balance as of March 31, 2020	79,652	\$ 797	\$ 276,423	\$ 790,849	\$ (686,545)	\$ (17,809)	\$ 363,715
Net income	—	—	—	752	—	—	752
Other comprehensive income, net of tax	—	—	—	—	—	2,463	2,463
Dividend payments (\$0.09 per share)	—	—	—	(4,337)	—	—	(4,337)
Dividends accrued on unvested PSUs	—	—	—	(28)	—	—	(28)
Deferred compensation adjustments, net of tax	—	—	—	—	(24)	—	(24)
PSUs, RSUs and restricted stock vested	—	—	—	(16)	14	—	(2)
Stock-based compensation expense	—	—	1,655	—	—	—	1,655
Balance as of June 30, 2020	79,652	\$ 797	\$ 278,078	\$ 787,220	\$ (686,555)	\$ (15,346)	\$ 364,194
Net income	—	—	—	5,481	—	—	5,481
Other comprehensive income, net of tax	—	—	—	—	—	2,668	2,668
Dividend payments (\$0.09 per share)	—	—	—	(4,328)	—	—	(4,328)
Dividends accrued on unvested PSUs	—	—	—	(12)	—	—	(12)
Deferred compensation adjustments, net of tax	—	—	—	—	(12)	—	(12)
PSUs, RSUs and restricted stock vested	—	—	—	(67)	59	—	(8)
Stock-based compensation expense	—	—	1,610	—	—	—	1,610
Balance as of September 30, 2020	79,652	\$ 797	\$ 279,688	\$ 788,294	\$ (686,508)	\$ (12,678)	\$ 369,593

See accompanying notes to condensed consolidated financial statements.

ADTRAN, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(Unaudited)
(In thousands)

	Common Shares	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
Balance as of January 1, 2019	79,652	\$ 797	\$ 267,670	\$ 883,975	\$ (691,747)	\$ (14,416)	\$ 446,279
Net income	—	—	—	770	—	—	770
Adoption of new accounting standards	—	—	—	(381)	—	385	4
Other comprehensive loss, net of tax	—	—	—	—	—	(854)	(854)
Dividend payments (\$0.09 per share)	—	—	—	(4,301)	—	—	(4,301)
Dividends accrued on unvested PSUs	—	—	—	(18)	—	—	(18)
PSUs, RSUs and restricted stock vested	—	—	—	(865)	857	—	(8)
Purchases of treasury stock	—	—	—	—	(184)	—	(184)
Stock-based compensation expense	—	—	1,859	—	—	—	1,859
Balance as of March 31, 2019	79,652	\$ 797	\$ 269,529	\$ 879,180	\$ (691,074)	\$ (14,885)	\$ 443,547
Net income	—	—	—	3,995	—	—	3,995
Other comprehensive income, net of tax	—	—	—	—	—	790	790
Dividend payments (\$0.09 per share)	—	—	—	(4,303)	—	—	(4,303)
Dividends accrued on unvested PSUs	—	—	—	(34)	—	—	(34)
Stock options exercised	—	—	—	(208)	734	—	526
Stock-based compensation expense	—	—	1,454	—	—	—	1,454
Balance as of June 30, 2019	79,652	\$ 797	\$ 270,983	\$ 878,630	\$ (690,340)	\$ (14,095)	\$ 445,975
Net loss	—	—	—	(46,123)	—	—	(46,123)
Other comprehensive loss, net of tax	—	—	—	—	—	(2,411)	(2,411)
Dividend payments (\$0.09 per share)	—	—	—	(4,304)	—	—	(4,304)
Dividends accrued on unvested PSUs	—	—	—	42	—	—	42
PSUs, RSUs and restricted stock vested	—	—	—	(462)	367	—	(95)
Stock-based compensation expense	—	—	1,871	—	—	—	1,871
Balance as of September 30, 2019	79,652	\$ 797	\$ 272,854	\$ 827,783	\$ (689,973)	\$ (16,506)	\$ 394,955

See accompanying notes to condensed consolidated financial statements.

ADTRAN, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)
(In thousands)

	Nine Months Ended September 30,	
	2020	2019
Cash flows from operating activities:		
Net loss	\$ (3,736)	\$ (41,358)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation and amortization	12,525	13,315
Asset impairments	65	3,872
Amortization of net premium on available-for-sale investments	90	(86)
Net gain on long-term investments	(1,819)	(8,195)
Net loss on disposal of property, plant and equipment	105	58
Gain on contingency	—	(1,230)
Gain on life insurance proceeds	—	(1,000)
Stock-based compensation expense	5,056	5,184
Deferred income taxes	(1)	30,421
Changes in operating assets and liabilities:		
Accounts receivable, net	(9,131)	7,603
Other receivables	(6,224)	17,645
Inventory	(21,170)	(5,998)
Prepaid expenses and other assets	(672)	(10,071)
Accounts payable, net	14,204	(5,569)
Accrued expenses and other liabilities	5,618	10,564
Income taxes payable	(227)	(5,073)
Net cash provided by (used in) operating activities	(5,317)	10,082
Cash flows from investing activities:		
Purchases of property, plant and equipment	(5,082)	(6,008)
Proceeds from sales and maturities of available-for-sale investments	86,145	38,561
Purchases of available-for-sale investments	(42,641)	(37,223)
Acquisition of note receivable	(523)	—
Life insurance proceeds received	—	1,000
Acquisition of business	—	13
Net cash provided by (used in) investing activities	37,899	(3,657)
Cash flows from financing activities:		
Dividend payments	(12,993)	(12,908)
Repayment of bonds payable	(24,600)	—
Proceeds from stock option exercises	—	526
Purchases of treasury stock	—	(184)
Net cash used in financing activities	(37,593)	(12,566)
Net decrease in cash, cash equivalents and restricted cash	(5,011)	(6,141)
Effect of exchange rate changes	2,641	(2,956)
Cash, cash equivalents and restricted cash, beginning of period	73,773	105,504
Cash, cash equivalents and restricted cash, end of period	\$ 71,403	\$ 96,407

Supplemental disclosure of non-cash investing activities:

Purchases of property, plant and equipment included in accounts payable	\$ 442	\$ 135
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See accompanying notes to condensed consolidated financial statements.

ADTRAN, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements of ADTRAN® Inc. and its subsidiaries (“ADTRAN”, the “Company”, “we”, “our” or “us”) have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (the “SEC”) applicable to interim financial information presented in Quarterly Reports on Form 10-Q. Accordingly, certain information and notes required by generally accepted accounting principles in the United States of America (“U.S. GAAP”) for complete financial statements are not included herein. The Condensed Consolidated Balance Sheet as of December 31, 2019 is derived from audited financial statements but does not include all disclosures required by U.S. GAAP.

In the opinion of management, all adjustments necessary to fairly state these interim statements have been recorded and are of a normal and recurring nature. The results of operations for an interim period are not necessarily indicative of the results for the full year. The interim financial statements should be read in conjunction with the consolidated financial statements and notes thereto included in ADTRAN’s Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 25, 2020.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expense during the reporting period. The more significant estimates include excess and obsolete inventory reserves, warranty reserves, customer rebates, determination and accrual of deferred revenue components of multi-element sales agreements, estimated costs to complete obligations associated with deferred and accrued revenues and network installations, estimated income tax provision and income tax contingencies, fair value of stock-based compensation, assessment of goodwill and other intangibles for impairment, estimated lives of intangible assets, estimated pension liability and fair value of investments. Actual amounts could differ significantly from these estimates.

We assessed certain accounting matters that generally require consideration of forecasted financial information in context with the information reasonably available to us and the unknown future impacts of the novel coronavirus (“COVID-19”) as of September 30, 2020 and through the date of this report. The accounting matters assessed included, but were not limited to, the allowance for doubtful accounts, current estimated credit losses, stock-based compensation, excess and obsolete inventory reserves, carrying value of goodwill, intangibles and other long-lived assets, financial assets, valuation allowances for tax assets and revenue recognition. While there was not a material impact to our condensed consolidated financial statements as of and for the three and nine month periods ended September 30, 2020 resulting from these assessments, future conditions related to the magnitude and duration of the COVID-19 pandemic, as well as other factors, could result in material impacts to our consolidated financial statements in future reporting periods.

Correction of Immaterial Misstatements

During the three months ended June 30, 2019, the Company determined that there was an immaterial misstatement of its excess and obsolete inventory reserves in its previously issued annual and interim financial statements. The Company corrected this misstatement by recognizing a \$0.8 million out-of-period adjustment during the three months ended June 30, 2019, which increased its excess and obsolete inventory reserve and cost of goods sold for the period. For the six months ended June 30, 2019, the out-of-period adjustment was a cumulative \$0.2 million reduction in its excess and obsolete inventory reserve and cost of goods sold. In addition, the Company determined that a \$1.0 million cash inflow related to an insurance recovery was incorrectly classified as a cash flow from operations instead of a cash flow from investing activities within the unaudited Condensed Consolidated Statement of Cash Flows for the three months ended March 31, 2019. The Company corrected this misstatement in the Unaudited Condensed Consolidated Statement of Cash Flows for the nine months ended September 30, 2019 to correctly reflect the \$1.0 million insurance recovery as a cash inflow from investing activities. Management determined that these misstatements were not material to any of its previously issued financial statements on both a quantitative and qualitative basis.

During the first quarter of 2020, it was determined that certain investments held in the Company's stock for a deferred compensation plan accounted for as a Rabbi trust were incorrectly classified as long-term investments with the fair value of such investments incorrectly marked to market at each period end rather than classified as treasury stock held at historical cost. This plan has been in existence since 2011. The Company corrected this misstatement as an out-of-period adjustment in the three months ended March 31, 2020 by remeasuring the investment assets to their historical cost basis through the recording of a net investment gain of \$1.5 million in the unaudited Condensed Consolidated Statement of Income (Loss) and then correcting the classification by decreasing the long-term investment balance at its remeasured cost basis of \$2.8 million to treasury stock in the unaudited Condensed Consolidated Balance Sheet as of March 31, 2020. Management has determined that this misstatement was not material to any of its previously issued financial statements and that correction of the misstatement is also not expected to be material to the 2020 annual financial results on either a quantitative or qualitative basis.

Recently Adopted Accounting Pronouncements

During 2020, we adopted the following accounting standards, which had the following impacts on our consolidated financial statements:

In June 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. ASU 2016-13 requires the measurement and recognition of expected credit losses for financial instruments held at amortized cost. In November 2018, the FASB issued ASU 2018-19, *Codification Improvements to Topic 326 Financial Instruments – Credit Losses*, which clarifies that receivables arising from operating leases are not within the scope of the credit losses standard, but rather should be accounted for in accordance with the standard for leases. In April 2019, the FASB issued ASU 2019-04, *Codification Improvements to Topic 326, Financial Instruments–Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments*, which clarifies the accounting for transfers between classifications of debt securities and clarifies that entities should include expected recoveries on financial assets in the calculation of the current expected credit loss allowance. In addition, renewal options that are not unconditionally cancelable should be considered in the determination of expected credit losses. In May 2019, the FASB issued ASU 2019-05, *Financial Instruments – Credit Losses (Topic 326): Targeted Transition Relief*, which amends ASU 2016-13 to allow companies, upon adoption, to elect the fair value option on financial instruments that were previously recorded at amortized cost if they meet certain criteria. In November 2019, the FASB issued ASU 2019-11, *Codification Improvements to Topic 326, Financial Instruments – Credit Losses*, which makes various narrow-scope amendments to the new credit losses standard, such as providing disclosure relief for accrued interest receivables. All of these ASUs were codified as part of Accounting Standards Codifications ("ASC") Topic 326 and were effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. The Company adopted this standard on January 1, 2020, using a modified-retrospective approach and, therefore, elected to carry forward legacy disclosures for comparative periods and did not adjust the comparative period financial information. Additionally, the Company made an accounting policy election, at the class of financing receivable, not to measure the allowance for credit losses for accrued interest receivables, as the Company writes off the uncollectable accrued interest receivable by reversing any previously recorded interest income in a timely manner (as soon as these amounts are determined to be uncollectable). The adoption of this standard did not have a material effect on our consolidated financial statements. See Note 19 for additional information.

In January 2017, the FASB issued ASU 2017-04, *Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*. ASU 2017-04 simplifies the measurement of goodwill by eliminating step 2 of the goodwill impairment test. Under ASU 2017-04, entities are required to compare the fair value of a reporting unit to its carrying amount and recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. ASU 2017-04 was effective for annual or interim impairment tests performed in fiscal years beginning after December 15, 2019. The Company adopted ASU 2017-04 on January 1, 2020, and the amendments were applied prospectively. The adoption of this standard did not have a material effect on our consolidated financial statements.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement*, which changes the fair value measurement disclosure requirements of ASC 820, *Fair Value Measurement*. The amendments in this ASU are the result of a broader disclosure project, *Concepts Statement No. 8 – Conceptual Framework for Financial Reporting – Chapter 8 – Notes to Financial Statements*, which the FASB finalized on August 28, 2018. The FASB used the guidance in the Concepts Statement to improve the effectiveness of ASC 820's disclosure requirements. ASU 2018-13 provides users of financial statements with information about assets and liabilities measured at fair value in the statement of financial position or disclosed in the notes to the financial statements. More specifically, ASU 2018-13 requires disclosures about the valuation techniques and inputs that are used to arrive at measures of fair value, including judgments and assumptions that are made in determining fair value. In addition, ASU 2018-13 requires disclosures regarding the uncertainty in the fair value measurements as of the reporting date and how changes in fair value measurements affect performance and cash flows. The Company adopted ASU 2018-13 on January 1, 2020, and the adoption of this standard did not have a material effect on our consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, *Intangibles – Goodwill and Other – Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*. ASU 2018-15 clarifies certain aspects of ASU 2015-05, *Customer’s Accounting for Fees Paid in a Cloud Computing Arrangement*. Specifically, ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementations costs incurred to develop or obtain internal use software. The Company adopted ASU 2018-15 on January 1, 2020, retrospectively. The adoption of this standard resulted in a reclassification of \$5.6 million from property, plant and equipment to other assets for certain previously capitalized costs related to information technology implementation projects that had not yet been placed in service on the Condensed Consolidated Balance Sheets as of September 30, 2020 and December 31, 2019. There was no impact to previously reported net cash provided by (used in) operations on the statement of cash flows and no impact to the statements of income (loss) as no portion of the capitalized asset was depreciated in prior periods.

The following table illustrates the impact of adoption of ASU 2018-15 on the Condensed Consolidated Balance Sheet as of December 31, 2019:

<i>(In thousands)</i>	As of December 31, 2019		
	Pre-Adoption	Effect of Adoption	As Presented Now
Condensed Consolidated Balance Sheet			
Property, plant and equipment, net	\$ 73,708	\$ (5,622)	\$ 68,086
Other assets	\$ 14,261	\$ 5,622	\$ 19,883

There was no impact upon adoption of ASU 2018-15 on the Condensed Consolidated Statement of Loss for the three and nine months ended September 30, 2019 and the Condensed Consolidated Statement of Cash Flows for nine months ended September 30, 2019 as outlined in the following tables:

<i>(In thousands)</i>	Three months ended September 30, 2019		
	Pre-Adoption	Effect of Adoption	As Presented Now
Condensed Consolidated Statement of Loss			
Net loss	\$ (46,123)	\$ —	\$ (46,123)

<i>(In thousands)</i>	Nine months ended September 30, 2019		
	Pre-Adoption	Effect of Adoption	As Presented Now
Condensed Consolidated Statement of Loss			
Net loss	\$ (41,358)	\$ —	\$ (41,358)
Condensed Consolidated Statement of Cash Flows			
Net cash provided by operating activities	\$ 10,082	\$ —	\$ 10,082

The following table presents the capitalized implementation costs incurred with hosting arrangements, included in other assets on the Condensed Consolidated Balance Sheet, as of September 30, 2020:

<i>(In thousands)</i>	September 30, 2020
Implementation costs - hosting arrangements	\$ 10,455
Less: accumulated amortization	—
Implementation costs - hosting arrangements, net	\$ 10,455

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, which simplifies the accounting for income taxes by removing various exceptions, such as the exception to the incremental approach for intra-period tax allocation when there is a loss from continuing operations and income or a gain from other items. The amendments in this update also simplify the accounting for income taxes related to income-based franchise taxes and require that an entity reflect enacted tax laws or rates in the annual effective tax rate computation in the interim period that includes the enactment date. The Company early adopted ASU 2019-12 on April 1, 2020, which was applied on a prospective basis as if the Company adopted the standard on January 1, 2020. The Company early adopted the standard to take advantage of the simplification of rules for income taxes on intra-period tax allocations. Specifically, the adoption of this standard resulted in the recognition of approximately \$0.1 million of tax benefit in other comprehensive income (loss), that otherwise would have been recognized in continuing operations had the intra-period tax allocation been completed. There were no other impacts from this standard on the Condensed Consolidated Balance Sheets, Condensed Consolidated Statements of Income (Loss) or Condensed Consolidated Statements of Cash Flows.

Recent Accounting Pronouncements Not Yet Adopted

In August 2018, the FASB issued ASU 2018-14, *Compensation – Retirement Benefits – Defined Benefit Plans – General (Subtopic 715-20): Disclosure Framework – Changes to the Disclosure Requirements for Defined Benefit Plans*, which makes changes to and clarifies the disclosure requirements related to defined benefit pension and other postretirement plans. ASU 2018-14 requires additional disclosures related to the reasons for significant gains and losses affecting the benefit obligation and an explanation of any other significant changes in the benefit obligation or plan assets that are not otherwise apparent in other disclosures required by ASC 715. ASU 2018-14 also clarifies the guidance in ASC 715 to require disclosure of the projected benefit obligation (“PBO”) and fair value of plan assets for pension plans with PBOs in excess of plan assets and the accumulated benefit obligation (“ABO”) and fair value of plan assets for pension plans with ABOs in excess of plan assets. ASU 2018-14 is effective for public business entities for fiscal years ending after December 15, 2020. The Company is currently evaluating the impact this guidance will have on its related disclosures.

2. CASH, CASH EQUIVALENTS AND RESTRICTED CASH

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the Condensed Consolidated Balance Sheet that sum to the total of the same such amounts shown in the Condensed Consolidated Statement of Cash Flows:

<i>(In thousands)</i>	September 30, 2020
Cash and cash equivalents	\$ 71,081
Restricted cash	322
Cash, cash equivalents and restricted cash	\$ 71,403

The Company did not have any restricted cash as of December 31, 2019.

See Note 18 for additional information regarding restricted cash.

3. REVENUE

The following is a description of the principal activities from which revenue is generated by 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.

Services & Support - Includes maintenance, network implementation, solutions integration and managed services, which include hosted cloud services and subscription services.

Sales by Category

In addition to our reportable segments, revenue is also reported for the following three categories – Access & Aggregation, Subscriber Solutions & Experience and Traditional & Other Products.

The following tables disaggregate revenue by reportable segment and revenue category for the three and nine months ended September 30, 2020 and 2019:

<i>(In thousands)</i>	Three Months Ended					
	September 30, 2020			September 30, 2019		
	Network Solutions	Services & Support	Total	Network Solutions	Services & Support	Total
Access & Aggregation	\$ 71,919	\$ 13,504	\$ 85,423	\$ 48,902	\$ 16,212	\$ 65,114
Subscriber Solutions & Experience	40,843	2,282	43,125	40,382	2,094	42,476
Traditional & Other Products	2,467	2,128	4,595	4,734	1,768	6,502
Total	\$ 115,229	\$ 17,914	\$ 133,143	\$ 94,018	\$ 20,074	\$ 114,092

<i>(In thousands)</i>	Nine Months Ended					
	September 30, 2020			September 30, 2019		
	Network Solutions	Services & Support	Total	Network Solutions	Services & Support	Total
Access & Aggregation	\$ 194,695	\$ 39,470	\$ 234,165	\$ 230,837	\$ 43,476	\$ 274,313
Subscriber Solutions & Experience	118,907	6,790	125,697	113,545	6,186	119,731
Traditional & Other Products	10,322	6,197	16,519	14,625	5,605	20,230
Total	\$ 323,924	\$ 52,457	\$ 376,381	\$ 359,007	\$ 55,267	\$ 414,274

Revenue allocated to remaining performance obligations represents contract revenue that have not yet been recognized for contracts with a duration of greater than one year. As of September 30, 2020, we did not have any significant performance obligations related to customer contracts that had an original expected duration of one year or more, other than maintenance services, which are satisfied over time. As a practical expedient, for certain contracts we recognize revenue equal to the amounts that we are entitled to invoice, which correspond to the value of completed performance obligations to date. The amount related to these performance obligations was \$16.5 million and \$13.6 million as of September 30, 2020 and December 31, 2019, respectively. The Company expects to recognize 59% of the \$16.5 million as of September 30, 2020 over the next 12 months, with the remainder to be recognized thereafter.

The following table provides information about receivables, contract assets and unearned revenue from contracts with customers:

<i>(In thousands)</i>	September 30, 2020		December 31, 2019	
Accounts receivable, net	\$	100,223	\$	90,531
Contract assets ⁽¹⁾	\$	1,015	\$	2,812
Unearned revenue	\$	13,379	\$	11,963
Non-current unearned revenue	\$	6,694	\$	6,012

⁽¹⁾ Included in other receivables on the Condensed Consolidated Balance Sheets.

Of the outstanding unearned revenue balances as of December 31, 2019 and December 31, 2018, \$1.5 million and \$1.2 million were recognized as revenue during the three months ended September 30, 2020 and 2019 and \$9.6 million and \$11.7 million were recognized as revenue during the nine months ended September 30, 2020 and 2019, respectively.

4. INCOME TAXES

Our effective tax rate decreased from an expense of 150.6% of pre-tax loss for the three months ended September 30, 2019 to an expense of 9.3% of pre-tax income for the three months ended September 30, 2020 and decreased from an expense of 197.1% of pre-tax loss for the nine months ended September 30, 2019 to a benefit of 36.8% of pre-tax loss for the nine months ended September 30, 2020. The change in the effective tax rate for the three months ended September 30, 2020 was impacted by tax expense in our international operations, offset by additional changes in the valuation allowance related to our domestic operations of \$1.0 million and by additional benefits recognized during the quarter of \$0.4 million as a result of the Coronavirus Aid, Relief, and Economic Security (“CARES”) Act signed into law on March 27, 2020 in conjunction with the Internal Revenue Service’s release of its final Global Intangible Low Tax Income (“GILTI”) regulations on July 9th, 2020. The change in the effective tax rate for the three and nine months ended September 30, 2019 was primarily driven by the establishment of the valuation allowance against our domestic deferred tax assets in the amount of \$37.1 million, with tax expense being offset by a 7.1% rate reduction related to a transfer pricing study completed during the second quarter of 2019 that resulted in the assignment of operating expenditures to specific company locations, and the effective income tax rates among the respective jurisdictions. The decrease in the effective tax rate for the nine months ended September 30, 2020 was primarily driven by a tax benefit of \$7.8 million recognized during the nine months ended September 30, 2020 as a result of the CARES Act, which allowed for the carryback of federal net operating losses, partially offset with tax expense in our international operations and changes in our valuation allowance related to our domestic operations. An increase in the valuation allowance against our domestic deferred tax assets was recorded in the amount of \$2.6 million during the nine months ended September 30, 2020.

The Company 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 recognized in accordance with ASC 740, *Income Taxes*. As of September 30, 2020, the Company had deferred tax assets totaling \$59.1 million, and a valuation allowance totaling \$51.2 million had been established against those deferred tax assets. The remaining \$7.9 million in deferred tax assets not offset by a valuation allowance is located in various foreign jurisdictions where the Company believes it is more likely than not we will realize these deferred tax assets. Our assessment of the realizability of our deferred tax assets includes the evaluation of evidence, some of which requires significant judgement, including historical operating results, the evaluation of our three-year cumulative income position, future taxable income projections and tax planning strategies. Should management's conclusion change in the future and additional valuation allowance or a partial or full release of the valuation allowance is necessary, it could have a material effect on our consolidated financial statements.

Supplemental balance sheet information related to deferred tax assets as of September 30, 2020 and December 31, 2019 is as follows:

<i>(In thousands)</i>	September 30, 2020		
	Deferred Tax Assets	Valuation Allowance	Deferred Tax Assets, net
Domestic	\$ 49,212	\$ (49,212)	\$ —
International	9,892	(2,027)	7,865
Total	\$ 59,104	\$ (51,239)	\$ 7,865

<i>(In thousands)</i>	December 31, 2019		
	Deferred Tax Assets	Valuation Allowance	Deferred Tax Assets, net
Domestic	\$ 46,266	\$ (46,266)	\$ —
International	9,911	(2,350)	7,561
Total	\$ 56,177	\$ (48,616)	\$ 7,561

5. PENSION BENEFIT PLAN

The following table summarizes the components of net periodic pension cost related to a defined benefit pension plan covering employees in certain foreign countries for the three and nine months ended September 30, 2020 and 2019:

<i>(In thousands)</i>	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2020	2019	2020	2019
Service cost	\$ 325	\$ 366	\$ 942	\$ 1,109
Interest cost	113	158	329	479
Expected return on plan assets	(429)	(346)	(1,246)	(1,049)
Amortization of actuarial losses	248	198	720	600
Net periodic pension cost	\$ 257	\$ 376	\$ 745	\$ 1,139

The components of net periodic pension cost, other than the service cost component, are included in other income (expense), net in the Condensed Consolidated Statements of Income (Loss). Service cost is included in cost of sales, selling, general and administrative expenses and research and development expenses in the Condensed Consolidated Statements of Income (Loss).

6. STOCK-BASED COMPENSATION

The following table summarizes stock-based compensation expense related to stock options, performance stock units (“PSUs”), restricted stock units (“RSUs”) and restricted stock for the three and nine months ended September 30, 2020 and 2019:

<i>(In thousands)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Stock-based compensation expense included in cost of sales	\$ 101	\$ 83	\$ 303	\$ 272
Selling, general and administrative expense	953	1,142	2,999	2,867
Research and development expense	556	646	1,754	2,045
Stock-based compensation expense included in operating expenses	1,509	1,788	4,753	4,912
Total stock-based compensation expense	1,610	1,871	5,056	5,184
Tax benefit for expense associated with stock options, PSUs, RSUs and restricted stock	(384)	(446)	(1,205)	(1,235)
Total stock-based compensation expense, net of tax	\$ 1,226	\$ 1,425	\$ 3,851	\$ 3,949

PSUs, RSUs and Restricted Stock

The following table summarizes PSUs, RSUs and restricted stock outstanding as of December 31, 2019 and September 30, 2020 and the changes that occurred during the nine months ended September 30, 2020.

	Number of Shares (in thousands)	Weighted Avg. Grant Date Fair Value (per share)
Unvested PSUs, RSUs and restricted stock outstanding, December 31, 2019	1,891	\$ 14.58
PSUs, RSUs and restricted stock granted	399	\$ 8.21
PSUs, RSUs and restricted stock vested	(15)	\$ 12.76
PSUs, RSUs and restricted stock forfeited	(586)	\$ 18.24
Unvested PSUs, RSUs and restricted stock outstanding, September 30, 2020	1,689	\$ 11.83

During the nine months ended September 30, 2020, the Company issued 0.3 million performance-based PSUs under the ADTRAN, Inc. 2015 Employee Stock Incentive Plan (the “2015 Employee Plan”) to its executive officers and certain employees. The grant-date fair value of these performance-based awards is based on the closing price of the Company’s stock on the date of grant. Subject to the grantee’s continued employment, the grantee has the ability to earn shares in a range of 0% to 142.8% of the awarded number of PSUs based on the achievement of a defined performance target at the end of a three-year period. If the Company achieves the performance target at the end of the first or second year during the vesting period, the grantee will be entitled to the target number of performance shares, which will not be issued until the end of the three-year period. Equity-based compensation expense with respect to these awards will be adjusted over the vesting period to reflect the probability of achievement of the performance target defined in the award agreements.

The fair value of RSUs and restricted stock is equal to the closing price of our stock on the date of grant. The fair value of PSUs with market conditions is calculated using a Monte Carlo simulation valuation method.

As of September 30, 2020, total unrecognized compensation expense related to unvested market-based PSUs, RSUs and restricted stock was approximately \$10.6 million, which will be recognized over the remaining weighted-average period of 2.3 years. In addition, there was \$2.3 million of unrecognized compensation expense related to unvested 2020 performance-based PSUs, which will be recognized over the remaining requisite service period of 2.3 years if achievement of the performance obligation becomes probable. Unrecognized compensation expense will be adjusted for actual forfeitures.

At the annual meeting of stockholders held on May 13, 2020, the Company’s stockholders approved, upon recommendation of the Board of Directors, the adoption of the ADTRAN, Inc. 2020 Employee Stock Incentive Plan (the “2020 Employee Plan”) as well as the ADTRAN, Inc. 2020 Directors Stock Plan (the “2020 Directors Plan”). No additional awards will be granted under the 2015 Employee Plan or the 2010 Directors Stock Plan subsequent to the stockholders’ approval of these new stock plans. Outstanding awards granted under the 2015 Employee Plan and the 2010 Directors Stock Plan will remain subject to the terms of such plans, and shares underlying awards granted under such plans that are cancelled or forfeited will be available for issuance under the 2020 Employee Plan or the 2020 Directors Plan, as applicable.

Under the 2020 Employee Plan, the Company is authorized to issue 2.8 million shares of common stock to certain employees, key service providers and advisors through incentive stock options and non-qualified stock options, stock appreciation rights, RSUs and restricted stock, any of which may be subject to performance-based conditions. Stock options, RSUs and restricted stock granted under the 2020 Employee Plan reduce the shares authorized for issuance under the 2020 Employee Plan by one share of common stock for each share underlying the award. Forfeitures, cancellations or expirations of awards granted under the 2015 Employee Plan increase the shares authorized for issuance under the 2020 Employee Plan, with forfeitures, cancellations or expirations of RSUs and restricted stock increasing the shares authorized for issuance by 2.5 shares of common stock for each share underlying the award. Forfeitures, cancellations or expirations of stock options from the 2015 Employee Plan increase the shares authorized for issuance under the 2020 Employee Plan by one share of common stock for each share underlying the award. RSUs and restricted stock granted under the 2020 Employee Plan will typically vest pursuant to a four-year vesting schedule beginning on the first anniversary of the grant date. Stock options granted under the 2020 Employee Plan will typically become exercisable beginning after one year of continued employment, normally pursuant to a four-year vesting schedule beginning on the first anniversary of the grant date and have a ten-year contractual term.

Under the 2020 Directors Plan, the Company is authorized to issue 0.4 million shares of common stock through stock options, restricted stock and RSUs to non-employee directors. Stock awards issued under the 2020 Directors Plan typically will become vested in full on the first anniversary of the grant date. Stock options issued under the 2020 Directors Plan will have a ten-year contractual term. Stock options, restricted stock and RSUs granted under the 2020 Directors Plan reduce the shares authorized for issuance under the 2020 Directors Plan by one share of common stock for each share underlying the award. Forfeitures, cancellations and expirations of awards granted under the 2010 Directors Stock Plan increase the shares authorized for issuance under the 2020 Directors Plan by one share of common stock for each share underlying the award.

As of September 30, 2020, 3.6 million shares, including forfeitures to date under the 2015 Employee Plan and the 2010 Directors Stock Plan, were available for issuance under stockholder-approved equity plans.

Stock Options

The following table summarizes stock options outstanding as of December 31, 2019 and September 30, 2020 and the changes that occurred during the nine months ended September 30, 2020:

	Number of Stock Options (in thousands)	Weighted Avg. Exercise Price (per share)	Weighted Avg. Remaining Contractual Life (in years)	Aggregate Intrinsic Value (in thousands)
Stock options outstanding, December 31, 2019	3,572	\$ 22.88	3.4	\$ —
Stock options exercised	—	\$ —		
Stock options forfeited	—	\$ —		
Stock options expired	(352)	\$ 21.48		
Stock options outstanding, September 30, 2020	3,220	\$ 22.94	2.7	\$ —
Stock options exercisable, September 30, 2020	3,217	\$ 22.95	2.7	\$ —

As of September 30, 2020, total unrecognized compensation expense related to unvested stock options was approximately \$1 thousand, which will be recognized over the remaining weighted-average period of 0.1 years. Unrecognized compensation expense will be adjusted for actual forfeitures.

There were no stock options granted during the three and nine months ended September 30, 2020 and 2019. All of the options were previously issued at exercise prices that approximated fair market value at the date of grant.

The aggregate intrinsic value of stock options represents the total pre-tax intrinsic value (the difference between ADTRAN's closing stock price on the last trading day of the quarter and the exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their options on September 30, 2020. The amount of aggregate intrinsic value will change based on the fair market value of the Company's stock and was zero as of September 30, 2020. The total pre-tax intrinsic value of options exercised during the nine months ended September 30, 2020 was zero.

7. INVESTMENTS

Debt Securities and Other Investments

As of September 30, 2020, the following debt securities and other investments were included on the Condensed Consolidated Balance Sheet and recorded at fair value:

(In thousands)	Amortized Cost	Gross Unrealized		Fair Value
		Gains	Losses	
Corporate bonds	\$ 12,861	\$ 149	\$ —	\$ 13,010
Municipal fixed-rate bonds	3,093	32	(1)	3,124
Asset-backed bonds	8,472	115	—	8,587
Mortgage/Agency-backed bonds	10,964	127	(11)	11,080
U.S. government bonds	7,096	174	—	7,270
Foreign government bonds	1,032	3	—	1,035
Commercial paper	324	1	—	325
Variable-rate demand notes	—	—	—	—
Other	442	—	—	442
Available-for-sale debt securities held at fair value	\$ 44,284	\$ 601	\$ (12)	\$ 44,873

As of December 31, 2019, the following debt securities and other investments were included on the Condensed Consolidated Balance Sheet and recorded at fair value:

(In thousands)	Amortized Cost	Gross Unrealized		Fair Value
		Gains	Losses	
Corporate bonds	\$ 9,304	\$ 80	\$ —	\$ 9,384
Municipal fixed-rate bonds	930	—	—	930
Asset-backed bonds	6,867	26	(3)	6,890
Mortgage/Agency-backed bonds	6,944	26	(8)	6,962
U.S. government bonds	12,311	21	(9)	12,323
Foreign government bonds	372	—	(1)	371
Variable-rate demand notes	800	—	—	800
Available-for-sale debt securities held at fair value	\$ 37,528	\$ 153	\$ (21)	\$ 37,660

As of September 30, 2020, contractual maturities related to debt securities and other investments were as follows:

(In thousands)	Corporate bonds	Municipal fixed-rate bonds	Asset- backed bonds	Mortgage/ Agency- backed bonds	U.S. government bonds	Foreign government bonds	Commercial paper	Other
Less than one year	\$ 2,900	\$ 737	\$ 696	\$ 208	\$ 500	\$ 75	\$ 325	\$ 442
One to two years	3,752	1,183	956	1,256	826	463	—	—
Two to three years	6,122	908	615	2,775	5,492	497	—	—
Three to five years	236	296	4,817	1,079	452	—	—	—
Five to ten years	—	—	946	1,507	—	—	—	—
More than ten years	—	—	557	4,255	—	—	—	—
Total	\$ 13,010	\$ 3,124	\$ 8,587	\$ 11,080	\$ 7,270	\$ 1,035	\$ 325	\$ 442

Actual maturities may differ from contractual maturities as some borrowers have the right to call or prepay obligations with or without call or prepayment penalties.

Realized gains and losses on sales of debt securities are computed under the specific identification method. The following table presents gross realized gains and losses related to our debt securities:

<i>(In thousands)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Gross realized gains on debt securities	\$ 70	\$ 36	\$ 303	\$ 85
Gross realized losses on debt securities	(6)	(7)	(45)	(40)
Total gain recognized, net	\$ 64	\$ 29	\$ 258	\$ 45

The Company's investment policy provides limitations for issuer concentration, which limits, at the time of purchase, the concentration in any one issuer to 5% of the market value of the total investment portfolio. The Company did not purchase any available-for-sale debt security with credit deterioration during the three and nine months ended September 30, 2020.

Marketable Equity Securities

Our marketable equity securities consist of publicly traded stock, funds and certain other investments measured at fair value or cost, where appropriate.

During the three months ended March 31, 2019, an outstanding note receivable of \$4.3 million was repaid and reissued in the form of debt and equity. Of the outstanding \$4.3 million, \$3.4 million was issued as an equity investment, which represented a non-cash investing activity. We elected to record this equity investment that does not have a readily determinable fair value using the measurement alternative. Under the measurement alternative, equity investments that do not have a readily determinable fair value can be recorded at cost less impairment, if any, adjusted for observable price changes for an identical or similar investment. The carrying value of this investment under the measurement alternative was \$3.4 million as of December 31, 2019. During the nine months ended September 30, 2020, an impairment charge of \$1.6 million was recorded related to this equity investment, which is included in net investment gain (loss) on the Condensed Consolidated Statement of Income (Loss). As a result, the carrying value of this investment was \$1.8 million as of September 30, 2020. The remaining amount, \$0.9 million of the original \$4.3 million note receivable, was reissued as a new note receivable, which is included in long-term investments on the Condensed Consolidated Balance Sheets as of September 30, 2020 and December 31, 2019, and represented a non-cash investing activity during the nine months ended September 30, 2019. No impairment charge was recognized related to the note receivable as it is a secured loan.

Realized and unrealized gains and losses related to marketable equity securities for the three and nine months ended September 30, 2020 and 2019 were as follows:

<i>(In thousands)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Realized gains (losses) on equity securities sold	\$ 623	\$ (20)	\$ (1,485)	\$ (83)
Unrealized gains (losses) on equity securities held	2,157	(225)	3,046	8,233
Total gain (loss) recognized, net	\$ 2,780	\$ (245)	\$ 1,561	\$ 8,150

U.S. GAAP establishes a three-level valuation hierarchy based upon observable and unobservable inputs for fair value measurement of financial instruments:

- Level 1 – Observable outputs; values based on unadjusted quoted prices for identical assets or liabilities in an active market;
- Level 2 – Significant inputs that are observable; values based on quoted prices in markets that are not active or model inputs that are observable either directly or indirectly;
- Level 3 – Significant unobservable inputs; values based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement; inputs could include information supplied by investees.

The Company's cash equivalents and investments held at fair value are categorized into this hierarchy as follows:

(In thousands)	Fair Value Measurements as of September 30, 2020 Using			
	Fair Value	Quoted Prices in Active Market for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash equivalents				
Money market funds	\$ 636	\$ 636	\$ —	\$ —
U.S. government securities	300	300	—	—
Available-for-sale debt securities				
Corporate bonds	13,010	—	13,010	—
Municipal fixed-rate bonds	3,124	—	3,124	—
Asset-backed bonds	8,587	—	8,587	—
Mortgage/Agency-backed bonds	11,080	—	11,080	—
U.S. government bonds	7,270	7,270	—	—
Foreign government securities	1,035	—	1,035	—
Commercial paper	325	—	325	—
Variable-rate demand notes	—	—	—	—
Other	442	—	—	442
Marketable equity securities				
Marketable equity securities – various industries	13,590	13,590	—	—
Deferred compensation plan assets	21,595	21,595	—	—
Other investments	1,276	1,276	—	—
Total	\$ 82,270	\$ 44,667	\$ 37,161	\$ 442

(In thousands)	Fair Value Measurements as of December 31, 2019 Using			
	Fair Value	Quoted Prices in Active Market for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash equivalents				
Money market funds	\$ 1,309	\$ 1,309	\$ —	\$ —
Available-for-sale debt securities				
Corporate bonds	9,384	—	9,384	—
Municipal fixed-rate bonds	930	—	930	—
Asset-backed bonds	6,890	—	6,890	—
Mortgage/Agency-backed bonds	6,962	—	6,962	—
U.S. government bonds	12,323	12,323	—	—
Foreign government bonds	371	—	371	—
Variable-rate demand notes	800	—	800	—
Marketable equity securities				
Marketable equity securities – various industries	35,501	35,501	—	—
Equity in escrow	298	298	—	—
Deferred compensation plan assets	21,698	21,698	—	—
Other investments	2,442	2,442	—	—
Total	\$ 98,908	\$ 73,571	\$ 25,337	\$ —

The fair value of our Level 2 securities is calculated using a weighted average market price for each security. Market prices are obtained from a variety of industry standard data providers, large financial institutions and other third-party sources. These multiple market prices are used as inputs into a distribution-curve-based algorithm to determine the daily market value of each security.

The fair value of Level 3 securities is calculated based on unobservable inputs. Quantitative information with respect to unobservable inputs consists of third-party valuations performed in accordance with ASC 820 – *Fair Value Measurement*. Inputs used in preparing the third-party valuation included the following assumptions, among others: estimated discount rates and fair market yields.

8. INVENTORY

As of September 30, 2020 and December 31, 2019, inventory consisted of the following:

<i>(In thousands)</i>	September 30, 2020	December 31, 2019
Raw materials	\$ 43,418	\$ 36,987
Work in process	1,787	1,085
Finished goods	75,055	60,233
Total inventory	\$ 120,260	\$ 98,305

Inventory reserves are established 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 market conditions. As of September 30, 2020 and December 31, 2019, inventory reserves were \$38.0 million and \$34.1 million, respectively.

9. PROPERTY, PLANT AND EQUIPMENT

At September 30, 2020 and December 31, 2019, property, plant and equipment consisted of the following:

<i>(In thousands)</i>	September 30, 2020	December 31, 2019
Land	\$ 4,575	\$ 4,575
Building and land improvements	35,105	34,797
Building	68,160	68,157
Furniture and fixtures	19,981	19,959
Computer hardware and software	70,766	68,777
Engineering and other equipment	132,672	130,430
Total property, plant and equipment	331,259	326,695
Less: accumulated depreciation	(266,906)	(258,609)
Total property, plant and equipment, net	\$ 64,353	\$ 68,086

Long-lived assets used in operations are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable and the undiscounted cash flows estimated to be generated by the asset are less than the asset's carrying value. Due to the current economic environment, particularly related to COVID-19, the Company assessed impairment triggers related to long-lived assets during the third quarter of 2020. Based on this assessment, no triggers occurred to perform an impairment test, and no impairment losses of long-lived assets were recorded.

Depreciation expense was \$3.1 million for both the three months ended September 30, 2020 and 2019, and \$9.1 million and \$9.3 million for the nine months ended September 30, 2020 and 2019 respectively, which is recorded in cost of sales, selling, general and administrative expenses and research and development expenses in the Condensed Consolidated Statements of Income (Loss).

10. GOODWILL

Goodwill was \$7.0 million as of September 30, 2020 and December 31, 2019, of which \$6.6 million and \$0.4 million was allocated to our Network Solutions and Services & Support reportable segments, respectively.

The Company evaluates the carrying value of goodwill during the fourth quarter of each year and between annual evaluations if events occur or circumstances change that could more likely than not reduce the fair value of the reporting unit below its carrying amount. Qualitative factors are assessed to determine whether the fair value of the reporting unit to which the goodwill is assigned is less than its carrying amount and recognize an impairment charge for the amount by which the carrying value exceeds the fair value of the reporting unit, if applicable. Due to the current economic environment, particularly related to COVID-19, the Company performed a triggering event assessment, in which no triggers were identified. Therefore, no interim impairment test of goodwill was performed as of September 30, 2020, and no impairment of goodwill was recorded during the three and nine months ended September 30, 2020.

11. INTANGIBLE ASSETS

Intangible assets as of September 30, 2020 and December 31, 2019 consisted of the following:

<i>(In thousands)</i>	September 30, 2020			December 31, 2019		
	Gross Carrying Amount	Accumulated Amortization	Net Book Value	Gross Carrying Amount	Accumulated Amortization	Net Book Value
Customer relationships	\$ 20,931	\$ (7,369)	\$ 13,562	\$ 22,356	\$ (7,233)	\$ 15,123
Developed technology	8,200	(2,262)	5,938	10,170	(3,379)	6,791
Licensed technology	5,900	(1,666)	4,234	5,900	(1,174)	4,726
Supplier relationships	2,800	(2,800)	—	2,800	(2,508)	292
Licensing agreements	560	(134)	426	560	(79)	481
Patents	500	(277)	223	500	(226)	274
Trade names	210	(128)	82	310	(176)	134
Total	\$ 39,101	\$ (14,636)	\$ 24,465	\$ 42,596	\$ (14,775)	\$ 27,821

The Company evaluates the carrying value of intangible assets whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable and the undiscounted cash flows estimated to be generated by the asset are less than the asset's carrying value. Due to the current economic environment, particularly related to COVID-19, the Company assessed impairment triggers related to intangible assets during the third quarter of 2020. Based on this assessment, no triggers occurred to perform an impairment test, and no impairment losses of intangible assets were recorded during the three and nine months ended September 30, 2020.

Amortization expense was \$1.0 million and \$1.3 million for the three months ended September 30, 2020 and 2019, respectively, and \$3.4 million and \$4.0 million for the nine months ended September 30, 2020 and 2019, respectively, and was included in cost of sales, selling, general and administrative expenses and research and development expenses in the Condensed Consolidated Statements of Income (Loss).

As of September 30, 2020, estimated future amortization expense of intangible assets was as follows:

<i>(In thousands)</i>	
2020	\$ 1,041
2021	4,107
2022	3,482
2023	3,330
2024	3,236
Thereafter	9,269
Total	\$ 24,465

12. LEASES

Operating Leases

The Company's operating leases consist of office space, automobiles and various other equipment in the U.S. and in certain international locations in which we do business. Other contracts, such as manufacturing agreements and service agreements, are reviewed to determine if they contain any embedded leases. As of September 30, 2020, the Company's operating leases had remaining lease terms of one month to five years, some of which include options to extend the leases for up to nine years, and some of which include options to terminate the leases within three months. As of September 30, 2020 and December 31, 2019, the Company's operating lease assets and operating lease liabilities were as follows:

<i>(In thousands)</i>	Classification	September 30, 2020	December 31, 2019
Assets			
Operating lease asset	Other assets	\$ 5,503	\$ 8,452
Total lease asset		\$ 5,503	\$ 8,452
Liabilities			
Current operating lease liability	Accrued expenses	\$ 1,731	\$ 2,676
Non-current operating lease liability	Other non-current liabilities	3,788	5,818
Total lease liability		\$ 5,519	\$ 8,494

Lease expense related to short-term leases (initial term of less than 12 months) was \$6 thousand and \$0.1 million for the three months ended September 30, 2020 and 2019, respectively, and was \$20 thousand and \$0.3 million for the nine months ended September 30, 2020 and 2019, respectively, and was included in cost of sales, selling, general and administrative expenses and research and development expenses in the Condensed Consolidated Statements of Income (Loss). Lease expense related to variable lease payments that do not depend on an index or rate, such as real estate taxes and insurance reimbursements, was \$0.1 million and \$0.3 million for the three months ended September 30, 2020 and 2019, respectively and was \$0.4 million and \$0.7 million for the nine months ended September 30, 2020 and 2019, respectively.

Components of lease expense included in the Condensed Consolidated Statements of Income (Loss) for the three and nine months ended September 30, 2020 and 2019 were as follows:

<i>(In thousands)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Cost of sales	\$ 21	\$ 16	\$ 68	\$ 49
Selling, general and administrative expenses	265	352	863	1,050
Research and development expenses	368	847	1,044	1,731
Total operating lease expense	\$ 654	\$ 1,215	\$ 1,975	\$ 2,830

As of September 30, 2020 and December 31, 2019, operating lease liabilities included on the Condensed Consolidated Balance Sheets by future maturity were as follows:

<i>(In thousands)</i>	September 30, 2020	December 31, 2019
2020	\$ 518	\$ 2,856
2021	1,744	2,412
2022	1,514	1,705
2023	1,180	1,160
2024	499	482
Thereafter	276	264
Total lease payments	5,731	8,879
Less: Interest	(212)	(385)
Present value of lease liabilities	\$ 5,519	\$ 8,494

Future operating lease payments include \$0.3 million related to options to extend lease terms that are reasonably certain of being exercised. There are no legally binding leases that have not yet commenced.

An incremental borrowing rate is used based on information available at the commencement date in determining the present value of lease payments. The incremental borrowing rate was determined on a portfolio basis by grouping leases with similar terms as well as grouping leases based on a U.S. dollar or Euro functional currency. The actual rate is then determined based on a credit spread over LIBOR as well as the Bloomberg Curve Matrix for the U.S. Communications section. The following table provides information about the weighted average lease terms and weighted average discount rates as of September 30, 2020 and December 31, 2019:

	<u>As of September 30, 2020</u>	<u>As of December 31, 2019</u>
Weighted average remaining lease term (in years)		
Operating leases with USD functional currency	2.6	2.6
Operating leases with Euro functional currency	3.8	4.4
Weighted average discount rate		
Operating leases with USD functional currency	4.50%	4.02%
Operating leases with Euro functional currency	1.81%	1.84%

Supplemental cash flow information related to operating leases is as follows:

<i>(In thousands)</i>	<u>Three Months Ended</u>		<u>Nine Months Ended</u>	
	<u>September 30,</u>		<u>September 30,</u>	
	<u>2020</u>	<u>2019</u>	<u>2020</u>	<u>2019</u>
Cash paid for amounts included in the measurement of operating lease assets / liabilities				
Cash used in operating activities related to operating leases	\$ 582	\$ 775	\$ 2,059	\$ 2,383
Right-of-use assets obtained in exchange for lease obligations	\$ 138	\$ 11,022	\$ 231	\$ 21,418

Net Investment in Sales-Type Leases

We are the lessor in sales-type lease arrangements for network equipment, which have initial terms of up to five years, and consisted of the following as of September 30, 2020 and December 31, 2019:

<i>(In thousands)</i>	<u>September 30, 2020</u>		<u>December 31, 2019</u>	
Current minimum lease payments receivable ⁽¹⁾	\$ 811	\$ 811	\$ 1,201	\$ 1,201
Non-current minimum lease payments receivable ⁽²⁾	450	450	889	889
Total minimum lease payments receivable	1,261	1,261	2,090	2,090
Less: Current unearned revenue	235	235	365	365
Less: Non-current unearned revenue	70	70	163	163
Net investment in sales-type leases	\$ 956	\$ 956	\$ 1,562	\$ 1,562

⁽¹⁾ Included in other receivables on the Condensed Consolidated Balance Sheets.

⁽²⁾ Included in other assets on the Condensed Consolidated Balance Sheets.

Components of gross profit related to sales-type leases recognized at the lease commencement date and interest and dividend income included in the Condensed Consolidated Statements of Income (Loss) for the three and nine months ended September 30, 2020 and 2019 were as follows:

<i>(In thousands)</i>	<u>Three Months Ended</u>		<u>Nine Months Ended</u>	
	<u>September 30,</u>		<u>September 30,</u>	
	<u>2020</u>	<u>2019</u>	<u>2020</u>	<u>2019</u>
Sales - Network Solutions	\$ 22	\$ 47	\$ 72	\$ 1,668
Less: Cost of sales - Network Solutions	9	25	29	660
Gross profit	\$ 13	\$ 22	\$ 43	\$ 1,008
Interest and dividend income	\$ 10	\$ 92	\$ 34	\$ 278

13. ALABAMA STATE INDUSTRIAL DEVELOPMENT AUTHORITY FINANCING AND ECONOMIC INCENTIVES

In conjunction with the 1995 expansion of our Huntsville, Alabama facility, we were 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 the Company. 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 outstanding as of December 31, 2019 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 the Company. This certificate of deposit, which totaled \$25.6 million, was included in short-term investments on the Condensed Consolidated Balance Sheet as of December 31, 2019.

14. STOCKHOLDERS' EQUITY

Stock Repurchase Program

Since 1997, the Company's Board of Directors has approved multiple share repurchase programs that have authorized repurchases of its common stock, which are implemented through open market or private purchases from time to time as conditions warrant. During the nine months ended September 30, 2020, we did not repurchase shares of our common stock. As of September 30, 2020, we had the authority to purchase an additional 2.5 million shares of our common stock under the current authorization of up to 5.0 million shares.

Accumulated Other Comprehensive Income (Loss)

The following tables present the changes in accumulated other comprehensive income (loss), net of tax, by component for the three months ended September 30, 2020 and 2019:

<i>(In thousands)</i>	Three Months Ended September 30, 2020				
	Unrealized Gains (Losses) on Available-for-Sale Securities	Defined Benefit Plan Adjustments	Foreign Currency Adjustments	ASU 2018-02 Adoption (1)	Total
As of June 30, 2020	\$ 206	\$ (8,894)	\$ (7,043)	\$ 385	\$ (15,346)
Other comprehensive income before reclassifications	494	—	2,469	—	2,963
Amounts reclassified from accumulated other comprehensive income (loss)	(539)	244	—	—	(295)
Net current period other comprehensive income	(45)	244	2,469	—	2,668
As of September 30, 2020	<u>\$ 161</u>	<u>\$ (8,650)</u>	<u>\$ (4,574)</u>	<u>\$ 385</u>	<u>\$ (12,678)</u>

<i>(In thousands)</i>	Three Months Ended September 30, 2019				
	Unrealized Gains (Losses) on Available-for-Sale Securities	Defined Benefit Plan Adjustments	Foreign Currency Adjustments	ASU 2018-02 Adoption (1)	Total
As of June 30, 2019	\$ (271)	\$ (7,770)	\$ (6,439)	\$ 385	\$ (14,095)
Other comprehensive income before reclassifications	(39)	—	(2,486)	—	(2,525)
Amounts reclassified from accumulated other comprehensive income (loss)	24	90	—	—	114
Net current period other comprehensive income	(15)	90	(2,486)	—	(2,411)
As of September 30, 2019	<u>\$ (286)</u>	<u>\$ (7,680)</u>	<u>\$ (8,925)</u>	<u>\$ 385</u>	<u>\$ (16,506)</u>

- (1) With the adoption of ASU 2018-02 on January 1, 2019, stranded tax effects related to the Tax Cuts and Jobs Act of 2017 were reclassified to retained earnings.

The following tables present the changes in accumulated other comprehensive income (loss), net of tax, by component for the nine months ended September 30, 2020 and 2019:

	Nine Months Ended September 30, 2020				
<i>(In thousands)</i>	Unrealized Gains (Losses) on Available- for-Sale Securities	Defined Benefit Plan Adjustments	Foreign Currency Adjustments	ASU 2018-02 Adoption ⁽¹⁾	Total
As of December 31, 2019	\$ (284)	\$ (9,226)	\$ (7,292)	\$ 385	\$ (16,417)
Other comprehensive income (loss) before reclassifications	444	—	2,718	—	3,162
Amounts reclassified from accumulated other comprehensive income	1	576	—	—	577
Net current period other comprehensive income	445	576	2,718	—	3,739
As of September 30, 2020	<u>\$ 161</u>	<u>\$ (8,650)</u>	<u>\$ (4,574)</u>	<u>\$ 385</u>	<u>\$ (12,678)</u>

	Nine Months Ended September 30, 2019				
<i>(In thousands)</i>	Unrealized Gains (Losses) on Available- for-Sale Securities	Defined Benefit Plan Adjustments	Foreign Currency Adjustments	ASU 2018-02 Adoption ⁽¹⁾	Total
As of December 31, 2018	\$ (563)	\$ (8,041)	\$ (5,812)	\$ —	\$ (14,416)
Other comprehensive income (loss) before reclassifications	372	—	(3,113)	—	(2,741)
Amounts reclassified from accumulated other comprehensive income (loss)	(95)	361	—	—	266
Amounts reclassified to retained earnings ⁽¹⁾	—	—	—	385	385
Net current period other comprehensive income (loss)	277	361	(3,113)	385	(2,090)
As of September 30, 2019	<u>\$ (286)</u>	<u>\$ (7,680)</u>	<u>\$ (8,925)</u>	<u>\$ 385</u>	<u>\$ (16,506)</u>

(1) With the adoption of ASU 2018-02 on January 1, 2019, stranded tax effects related to the Tax Cuts and Jobs Act of 2017 were reclassified to retained earnings.

The following tables present the details of reclassifications out of accumulated other comprehensive income (loss) for the three months ended September 30, 2020 and 2019:

	Three Months Ended September 30, 2020	
<i>(In thousands)</i>	Amount Reclassified from Accumulated Other Comprehensive Income (Loss)	Affected Line Item in the Statement Where Net Income Is Presented
Unrealized gains (losses) on available-for-sale securities:		
Net realized gains on sales of securities	\$ 728	Net investment gain (loss)
Defined benefit plan adjustments – actuarial losses	(354)	(1)
Total reclassifications for the period, before tax	374	
Tax expense	(79)	
Total reclassifications for the period, net of tax	\$ 295	

(1) Included in the computation of net periodic pension cost. See Note 5.

	Three Months Ended September 30, 2019	
<i>(In thousands)</i>	Amount Reclassified from Accumulated Other Comprehensive Income (Loss)	Affected Line Item in the Statement Where Net Income Is Presented
Unrealized gains (losses) on available-for-sale securities:		
Net realized losses on sales of securities	\$ (32)	Net investment gain (loss)
Defined benefit plan adjustments – actuarial losses	(130)	(1)
Total reclassifications for the period, before tax	(162)	
Tax benefit	48	
Total reclassifications for the period, net of tax	\$ (114)	

(1) Included in the computation of net periodic pension cost. See Note 5.

The following tables present the details of reclassifications out of accumulated other comprehensive loss for the nine months ended September 30, 2020 and 2019:

	Nine Months Ended September 30, 2020	
<i>(In thousands)</i>	Amount Reclassified from Accumulated Other Comprehensive Income (Loss)	Affected Line Item in the Statement Where Net Income Is Presented
Unrealized gains (losses) on available-for-sale securities:		
Net realized losses on sales of securities	\$ (1)	Net investment gain (loss)
Defined benefit plan adjustments – actuarial losses	(835)	(1)
Total reclassifications for the period, before tax	(836)	
Tax benefit	259	
Total reclassifications for the period, net of tax	\$ (577)	

(1) Included in the computation of net periodic pension cost. See Note 5.

Nine Months Ended September 30, 2019

<i>(In thousands)</i>	Amount Reclassified from Accumulated Other Comprehensive Income (Loss)	Affected Line Item in the Statement Where Net Income Is Presented
Unrealized gains on available-for-sale securities:		
Net realized gains on sales of securities	\$ 128	Net investment gain (loss)
Defined benefit plan adjustments – actuarial losses	(523)	(1)
Total reclassifications for the period, before tax	(395)	
Tax benefit	129	
Total reclassifications for the period, net of tax	\$ (266)	

(1) Included in the computation of net periodic pension cost. See Note 5.

The following table presents the tax effects related to the change in each component of other comprehensive loss for the three months ended September 30, 2020 and 2019:

<i>(In thousands)</i>	Three Months Ended September 30, 2020			Three Months Ended September 30, 2019		
	Before-Tax Amount	Tax (Expense) Benefit	Net-of-Tax Amount	Before-Tax Amount	Tax (Expense) Benefit	Net-of-Tax Amount
Unrealized gain on available-for-sale securities	\$ 668	\$ (174)	\$ 494	\$ (53)	\$ 14	\$ (39)
Reclassification adjustment for amounts related to available-for-sale investments included in net income (loss)	(728)	189	(539)	32	(8)	24
Reclassification adjustment for amounts related to defined benefit plan adjustments included in net income (loss)	354	(110)	244	130	(40)	90
Foreign currency translation adjustment	2,469	—	2,469	(2,486)	—	(2,486)
Total Other Comprehensive Income (Loss)	\$ 2,763	\$ (95)	\$ 2,668	\$ (2,377)	\$ (34)	\$ (2,411)

The following table presents the tax effects related to the change in each component of other comprehensive income (loss) for the nine months ended September 30, 2020 and 2019:

<i>(In thousands)</i>	Nine Months Ended September 30, 2020			Nine Months Ended September 30, 2019		
	Before-Tax Amount	Tax (Expense) Benefit	Net-of-Tax Amount	Before-Tax Amount	Tax (Expense) Benefit	Net-of-Tax Amount
Unrealized gain (loss) on available-for-sale securities	\$ 600	\$ (156)	\$ 444	\$ 503	\$ (131)	\$ 372
Reclassification adjustment for amounts related to available-for-sale investments included in net income (loss)	1	—	1	(128)	33	(95)
Reclassification adjustment for amounts related to defined benefit plan adjustments included in net income (loss)	835	(259)	576	523	(162)	361
Foreign currency translation adjustment	2,718	—	2,718	(3,113)	—	(3,113)
Total Other Comprehensive Income (Loss)	\$ 4,154	\$ (415)	\$ 3,739	\$ (2,215)	\$ (260)	\$ (2,475)

15. EARNINGS (LOSS) PER SHARE

A summary of the calculation of basic and diluted earnings (loss) per share for the three and nine months ended September 30, 2020 and 2019 is as follows:

<i>(In thousands, except per share amounts)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Numerator				
Net income (loss)	\$ 5,481	\$ (46,123)	\$ (3,736)	\$ (41,358)
Denominator				
Weighted average number of shares – basic	47,957	47,824	47,957	47,803
Effect of dilutive securities				
PSUs, RSUs and restricted stock	467	—	—	—
Weighted average number of shares – diluted	48,424	47,824	47,957	47,803
Earnings (loss) per share – basic	\$ 0.11	\$ (0.96)	\$ (0.08)	\$ (0.87)
Earnings (loss) per share – diluted	\$ 0.11	\$ (0.96)	\$ (0.08)	\$ (0.87)

For the three months ended September 30, 2020 and 2019, 18 thousand and 0.1 million shares, respectively, and for the nine months ended September 30, 2020 and 2019, 0.1 million shares, of unvested or unearned, as applicable, PSUs, RSUs and restricted stock were excluded from the calculation of diluted earnings per share due to their anti-dilutive effect.

For the three months ended September 30, 2020 and 2019, 3.4 million and 3.9 million stock options, respectively, and for the nine months ended September 30, 2020 and 2019, 4.3 million and 2.8 million stock options, respectively, were outstanding but were not included in the computation of diluted earnings per share. These stock options were excluded because their exercise prices were greater than the average market price of the common shares during the quarter, making them anti-dilutive under the treasury stock method.

16. SEGMENT INFORMATION

The chief operating decision maker regularly reviews the Company's financial performance based on two reportable segments: (1) Network Solutions and (2) Services & Support. 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. Services & Support includes a portfolio of maintenance, network implementation and solutions integration and managed services, which include hosted cloud services and subscription services.

The performance of our segments is evaluated based on gross profit; therefore, selling, general and administrative expenses, research and development expenses, interest and dividend income, interest expense, net investment gain (loss), other income (expense) and income tax (expense) benefit are reported on a Company-wide basis only. There is no inter-segment revenue. Asset information by reportable segment is not produced and, therefore, is not reported.

The following tables present information about the sales and gross profit of our reportable segments for the three and nine months ended September 30, 2020 and 2019.

<i>(In thousands)</i>	Three Months Ended			
	September 30, 2020		September 30, 2019	
	Sales	Gross Profit	Sales	Gross Profit
Network Solutions	\$ 115,229	\$ 52,434	\$ 94,018	\$ 37,574
Services & Support	17,914	6,528	20,074	8,757
Total	\$ 133,143	\$ 58,962	\$ 114,092	\$ 46,331

<i>(In thousands)</i>	Nine Months Ended			
	September 30, 2020		September 30, 2019	
	Sales	Gross Profit	Sales	Gross Profit
Network Solutions	\$ 323,924	\$ 145,432	\$ 359,007	\$ 151,654
Services & Support	52,457	18,602	55,267	20,304
Total	\$ 376,381	\$ 164,034	\$ 414,274	\$ 171,958

Sales by Category

In addition to our reportable segments, revenue is also reported for the following three categories – Access & Aggregation, Subscriber Solutions & Experience and Traditional & Other Products.

The table below presents sales information by category for the three and nine months ended September 30, 2020 and 2019:

<i>(In thousands)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Access & Aggregation	\$ 85,423	\$ 65,114	\$ 234,165	\$ 274,313
Subscriber Solutions & Experience	43,125	42,476	125,697	119,731
Traditional & Other Products	4,595	6,502	16,519	20,230
Total	\$ 133,143	\$ 114,092	\$ 376,381	\$ 414,274

Sales by Geographic Area

The following table presents sales information by geographic area for the three and nine months ended September 30, 2020 and 2019:

<i>(In thousands)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
United States	\$ 92,838	\$ 83,144	\$ 256,287	\$ 230,960
International	40,305	30,948	120,094	183,314
Total	\$ 133,143	\$ 114,092	\$ 376,381	\$ 414,274

17. LIABILITY FOR WARRANTY RETURNS

Our products generally include warranties of 90 days to five years for product defects. Warranty returns are accrued at the time revenue is recognized based on an estimate of the cost to repair or replace the defective products. We engage in extensive product quality programs and processes, including actively monitoring and evaluating the quality of our component suppliers. Products continue to become more complex in both size and functionality as many of our product offerings migrate from line card applications to total systems. The increasing complexity of products will cause warranty incidences, when they arise, to be more costly. 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 actual experience relative to these factors be worse than estimated, additional warranty expense will be incurred. Alternatively, if actual costs incurred are less than estimated, a portion of the warranty reserves will be reversed in future periods. The liability for warranty obligations totaled \$7.2 million and \$8.4 million as of September 30, 2020 and December 31, 2019, respectively, and are included in accrued expenses and other liabilities in the accompanying Condensed Consolidated Balance Sheets.

A reconciliation of warranty expense and related write-off activity for the three and nine months ended September 30, 2020 and 2019 is as follows:

<i>(In thousands)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Balance at beginning of period	\$ 7,294	\$ 8,972	\$ 8,394	\$ 8,623
Plus: Amounts charged to cost and expenses	632	816	970	3,796
Less: Deductions	(734)	(1,131)	(2,172)	(3,762)
Balance at end of period	\$ 7,192	\$ 8,657	\$ 7,192	\$ 8,657

18. COMMITMENTS AND CONTINGENCIES

Securities Class Action Lawsuit

On October 17, 2019, a purported stockholder class action lawsuit, captioned *Burbridge v. ADTRAN, Inc. et al.*, Docket No. 19-cv-09619, was filed in the United States District Court for the Southern District of New York against the Company, two of its current executive officers and one of its former executive officers. The complaint alleges violations of federal securities laws and seeks unspecified compensatory damages on behalf of purported purchasers of ADTRAN securities between February 28, 2019 and October 9, 2019. The lawsuit claims that the defendants made materially false and misleading statements regarding, and/or failed to disclose material adverse facts about, the Company's business, operations and prospects, specifically relating to the Company's internal control over financial reporting, excess and obsolete inventory reserves, financial results and demand from certain customers. The lawsuit was transferred to the U.S. District Court for the Northern District of Alabama on January 7, 2020, and co-lead plaintiffs have been appointed to represent the putative class. The plaintiffs filed an amended complaint on April 30, 2020. The defendants filed a motion to dismiss the amended complaint on June 17, 2020. The plaintiffs filed an opposition brief to the defendants' motion to dismiss on July 17, 2020. The defendants filed a reply to the plaintiffs' brief on August 17, 2020. The motion to dismiss remains under review by the Court. We deny the allegations in the complaint, as amended, and intend to vigorously defend against this lawsuit. At this time, we are unable to predict the outcome of or estimate the possible loss or range of loss, if any, associated with this lawsuit.

Shareholder Derivative Lawsuit

On March 31, 2020, a shareholder derivative suit, captioned *Johnson (Derivatively on behalf of ADTRAN) v. T. Stanton, M. Foliano, R. Shannon, and Board of Directors*, case no. 5:20-cv-00447, was filed in the U.S. District Court of Northern Alabama against two of the Company's current executive officers, one of its former executive officers and its Board of Directors. The derivative suit, which is purportedly brought on behalf of ADTRAN, makes similar allegations as the shareholder class action and accuses the directors and officers of breaches of fiduciary duty in connection with those allegations. On June 7, 2020, the Court entered an order staying the derivative litigation pending resolution of the motion to dismiss in the securities class action. The Company and its defendants disagree with the claims made in the complaint, and the defendants intend to vigorously defend against this lawsuit. At this time, we are unable to predict the outcome of or estimate the possible loss or range of loss, if any, associated with this lawsuit.

Other Legal Matters

In addition to the litigation described above, from time to time we are subject to or otherwise involved in various lawsuits, claims, investigations and legal proceedings that arise out of or are incidental to the conduct of our 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 any legal matter, including in a patent dispute, could require the Company to pay damages, entitle claimants to other relief, such as royalties, or could prevent the Company from selling some of its products in certain jurisdictions. While the Company cannot predict with certainty the results of the Legal Matters in which it is currently involved, the Company does not expect that the ultimate outcome of such Legal Matters will individually or in the aggregate have a material adverse effect on its business, results of operations, financial condition or cash flows.

Performance Bonds

Certain contracts, customers and jurisdictions in which we do business require us to provide various guarantees of performance such as bid bonds, performance bonds and customs bonds. As of September 30, 2020 and December 31, 2019, we had commitments related to these bonds totaling \$12.0 million and \$9.3 million, respectively, which expire at various dates through August 2024. Although the triggering events vary from contract to contract, in general we would only be liable for the amount of these guarantees in the event of default under each contract, the probability of which we believe is remote.

In June 2020, the Company entered into a letter of credit with a bank to guarantee performance obligations under a contract with a certain customer. The obligations under the customer contract will be performed over multiple years. As of September 30, 2020, the Company was required to maintain a minimum collateral value of \$4.5 million. The letter of credit was secured by a pledge of a portion of the Company's fixed-income securities, which totaled \$5.9 million as of September 30, 2020, of which \$0.3 million is included in restricted cash and \$5.6 million is included in long-term investments on the Condensed Consolidated Balance Sheet. This pledged collateral value will fluctuate as the Company changes the mix of the pledged collateral between restricted cash and investments, with an expected maximum value between \$13.0 million and \$15.0 million. On October 8, 2020, the Company entered into an amendment to the letter of credit, which increased the minimum collateral value to \$9.0 million. The minimum collateral value is expected to continue to increase as the Company reaches certain milestones through the first quarter of 2021 as outlined in the customer contract. Any shortfalls in the minimum collateral value are required to be restored by the Company 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 September 30, 2020, the Company was in compliance with all contractual requirements under the letter of credit.

Investment Commitment

We have committed to invest up to an aggregate of \$5.0 million in a private equity fund, of which \$4.9 million has been contributed as of September 30, 2020.

19. CURRENT EXPECTED CREDIT LOSSES

Under ASC 326 – *Financial Instruments – Credit Losses*, the Company estimates credit losses for the contractual life of assets that are measured at amortized cost and are within the scope of this guidance, which includes accounts receivable, net investment in sales-type leases, contract assets under the revenue recognition model and outstanding notes receivable. Where appropriate, the Company pools assets if similar risk characteristics exist. Additionally, the Company analyzes its available-for-sale debt securities for impairment and records a credit loss allowance as needed.

Assets Measured at Amortized Cost

Accounts Receivable

The Company records accounts receivable in the normal course of business as products are shipped or services are performed and invoiced, but payment has not yet been remitted by the customer. As of January 1, 2020 and September 30, 2020, the Company's outstanding accounts receivable balance was \$90.5 million and \$100.2 million, respectively. The Company assessed the need for an allowance for credit losses related to its outstanding accounts receivable as of September 30, 2020 and January 1, 2020 using the historical loss-rate method as well as assessing asset-specific risks. The Company's historical losses related to accounts receivable have been immaterial as evidenced by its historical allowance and write-offs due to uncollectability. The assessment of asset-specific risks included the evaluation of relevant available information, from internal and external sources, relating to current conditions that may affect a customer's ability to pay, such as the customer's current financial condition, credit rating by geographic location, as provided by a third party and/or by customer, if needed, and overall macro-economic conditions in which the customer operates. The Company pooled assets by geographic location to determine if an allowance should be applied to its accounts receivable balance, assessing the specific country risk rating and overall economics of that particular country. If elevated risk existed, or customer specific risk indicated the accounts receivable balance was at risk, the Company further analyzed the need for an allowance related to specific accounts receivable balances. Additionally, the Company determined that significant changes to customer country risk rating from period-to-period and from the end of the prior year to the end of the current quarter would require further review and analysis by the Company.

Accounts receivable balances are considered past due when payment has not been received by the date indicated on the relevant invoice or based on agreed upon terms between the customer and the Company.

No allowance for credit loss was recorded on January 1, 2020 (the "implementation date") or during the three and nine months ended September 30, 2020 related to accounts receivable. The Company's allowance for credit losses related to accounts receivable was \$38 thousand as of September 30, 2020 and December 31, 2019, all of which was expensed prior to January 1, 2020.

Contract Assets

The Company records contract assets when it has recognized revenue but has not yet billed the customer. As of January 1, 2020 and September 30, 2020, the Company's outstanding contract asset balance was \$2.8 million and \$1.0 million, respectively, which is included in other receivables on the Condensed Consolidated Balance Sheets as of December 31, 2019 and September 30, 2020. The Company assessed the need for an allowance for credit losses related to its outstanding contract assets as of September 30, 2020 and January 1, 2020 using the historical loss-rate method as well as asset-specific risks. The Company's historical losses related to contract assets receivable have been immaterial as evidenced by historical write-offs due to uncollectability. Asset-specific risk included the evaluation of relevant available information, from internal and external sources, relating to current conditions that may affect a customer's ability to pay once invoiced, such as the customer's financial condition, credit rating by geographic location as provided by a third party and/or by customer, if needed, and overall macro-economic conditions in which the customer operates. The Company pooled assets by geographic location to determine if an allowance should be applied to its contract asset balance, assessing the specific country risk rating and overall economics of that particular country. If elevated risk existed, or customer specific risk indicated the contract balance was at risk, the Company further analyzed the need for an allowance related to specific customer balances. Additionally, the Company determined that significant changes to customer country risk rating from period-to-period and from the end of the prior year to the end of the current quarter would be subject to further review and analysis by the Company.

No allowance for credit loss was recorded on the implementation date or during the three and nine months ended September 30, 2020 related to contract assets.

Net Investment in Sales-Type Leases

The Company is the lessor in sales-type lease arrangements for network equipment. As of January 1, 2020 and September 30, 2020, the Company's outstanding net investment in sales-type leases was \$1.6 million and \$1.0 million, respectively, which is included in other receivables and other assets on the Condensed Consolidated Balance Sheets as of December 31, 2019 and September 30, 2020. The Company assessed the need for an allowance for credit losses related to future receivables under its outstanding sales-type leases as of September 30, 2020 and January 1, 2020 using the historical loss-rate method as well as asset-specific risks. The Company's historical losses related to contract assets receivable have been immaterial as evidenced by historical write-offs due to uncollectability. Asset-specific risk included the evaluation of relevant available information, from internal and external sources, relating to current conditions that may affect a customer's ability to pay once invoiced, such as the customer's financial condition, credit rating by geographic location as provided by a third party and/or by customer, if needed, and overall macro-economic conditions in which the customer operates.

The following table presents amortized cost basis in sales-type leases based on payment activity:

<i>(In thousands)</i>	Sales-Type Leases Amortized Cost Basis by Origination Year						
	2020	2019	2018	2017	2016	Prior	Total
Payment performance							
Performing	\$ 58	\$ 227	\$ 426	\$ 153	\$ 89	\$ 3	\$ 956
Non-performing	—	—	—	—	—	—	—
Total	<u>\$ 58</u>	<u>\$ 227</u>	<u>\$ 426</u>	<u>\$ 153</u>	<u>\$ 89</u>	<u>\$ 3</u>	<u>\$ 956</u>

Sales-type lease receivables are considered past due when payment has not been received based on agreed upon terms between the customer and the Company. No allowance for credit loss was recorded on the implementation date or during the three and nine months ended September 30, 2020 related to sales-type leases.

Secured Loan Receivable

The Company has a secured loan receivable totaling \$0.9 million as of January 1, 2020 and September 30, 2020, which originated in February 2019, and is included in long-term investments on the Condensed Consolidated Balance Sheets as of September 30, 2020 and December 31, 2019. The Company assessed the need for an allowance for credit loss related to its secured loan receivable as of September 30, 2020 and January 1, 2020 using the historical loss-rate method as well as asset-specific risks. There have been no historical losses related to this receivable. Asset-specific risks included the evaluation of relevant available information, from internal and external sources, relating to current conditions that may affect the customer's ability to repay the loan upon maturity, such as the customer's current financial condition, credit rating specific to the customer as determined by a third party and current overall economic conditions, as well as a Company valuation prepared by a third party which was based on reasonable and supportable forecasts as provided by management. Accrued interest receivable on the secured loan receivable, which is included in other receivables on the Condensed Consolidated Balance Sheets as of September 30, 2020 and December 31, 2019, totaled \$24 thousand and \$0 as of January 1, 2020 and September 30, 2020, respectively, and was excluded from the estimate of credit losses for both periods based on the Company's accounting policy election.

No allowance for credit loss was recorded on the implementation date or during the three and nine months ended September 30, 2020 related to the secured loan receivable.

Off-Balance Sheet Arrangements

The Company did not have any off-balance sheet arrangements as of January 1, 2020 or September 30, 2020.

Available-for-Sale Debt Securities

As of January 1, 2020 and September 30, 2020, the Company's available-for-sale debt securities totaled \$37.7 million and \$44.9 million, respectively. These securities were analyzed at the individual investment level, by CUSIP, to limit credit losses, if applicable, to reflect only the amount by which the fair value of the security was less than its amortized cost. The Company noted that, as of January 1, 2020 and September 30, 2020, there was no intent to sell any of its available-for-sale debt securities before maturity, and, therefore, the Company assessed the need for an allowance for each of its available-for-sale debt securities in which the fair value was less than its amortized cost as of January 1, 2020 and September 30, 2020. Accrued interest receivable on available-for-sale debt securities, which is included in other receivables on the Condensed Consolidated Balance Sheets as of September 30, 2020 and December 31, 2019, totaled \$0.1 million as of January 1, 2020 and September 30, 2020, and was excluded from the estimate of credit losses for both periods based on the Company's accounting policy election. Income generated from available-for-sale debt securities was recorded as interest and dividend income in the Condensed Consolidated Statements of Income (Loss).

The Company had 45 positions in available-for-sale debt securities that were in an unrealized loss position as of September 30, 2020, which are presented in the table below:

<i>(In thousands)</i>	Continuous Unrealized Loss Position for Less than 12 Months		Continuous Unrealized Loss Position for 12 Months or Greater		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Corporate bonds	—	—	—	—	—	—
Municipal fixed-rate bonds	394	(1)	—	—	394	(1)
Asset-backed bonds	396	—	—	—	396	—
Mortgage/Agency-backed bonds	3,199	(11)	—	—	3,199	(11)
U.S. government bonds	800	—	—	—	800	—
Foreign government bonds	75	—	—	—	75	—
Total	\$ 4,864	\$ (12)	\$ —	\$ —	\$ 4,864	\$ (12)

The following table outlines the available-for-sale debt securities in an unrealized loss position as of January 1, 2020:

<i>(In thousands)</i>	Continuous Unrealized Loss Position for Less than 12 Months		Continuous Unrealized Loss Position for 12 Months or Greater		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Corporate bonds	203	—	—	—	203	—
Municipal fixed-rate bonds	930	—	—	—	930	—
Asset-backed bonds	797	(3)	—	—	797	(3)
Mortgage/Agency-backed bonds	2,594	(6)	136	(2)	2,730	(8)
U.S. government bonds	4,070	(9)	—	—	4,070	(9)
Foreign government bonds	371	(1)	—	—	371	(1)
Total	\$ 8,965	\$ (19)	\$ 136	\$ (2)	\$ 9,101	\$ (21)

For those available-for-sale debt securities whose fair value was less than its amortized cost basis, the Company analyzed additional criteria such as adverse conditions specifically related to the security, an industry or geographic area, failure of the issuer of the security to make scheduled interest or principal payments, if applicable, and any changes to the rating of the security by a rating agency to determine if a credit loss existed. The Company used information provided by its investment manager to determine if any scheduled interest or principal payments had not been received and used a third party to determine if any changes to credit ratings had occurred. The Company noted that all principal and interest payments had been received as scheduled and that there had been no changes in credit ratings year-over-year or period-over-period that warranted further review.

No allowance for credit loss was recorded on the implementation date or during the three and nine months ended September 30, 2020 related to the Company's available-for-sale debt securities.

20. RESTRUCTURING

During the second half of 2019, the Company implemented a restructuring plan to realign its expense structure with the reduction in revenue experienced in recent years and overall Company objectives. Management assessed the efficiency of operations and, in turn, consolidated locations and personnel, among other things, where possible. As part of this restructuring plan, the Company announced plans to reduce its overall operating expenses, both in the U.S. and internationally.

In February 2019, the Company announced the restructuring of a certain portion of its workforce predominantly in Germany, which included the closure of the Company's office location in Munich, Germany accompanied by relocation or severance benefits for the affected employees. Voluntary early retirement was offered to certain other employees and was announced in March 2019 and again in August 2020.

A reconciliation of the beginning and ending restructuring liability, which is included in accrued wages and benefits on the Condensed Consolidated Balance Sheets as of September 30, 2020 and December 31, 2019, is as follows:

<i>(In thousands)</i>	Three Months Ended September 30, 2020	Nine Months Ended September 30, 2020
Balance at beginning of period	\$ 358	\$ 1,568
Plus: Amounts charged to expense	1,903	3,648
Less: Amounts paid	(542)	(3,497)
Balance as of September 30, 2020	\$ 1,719	\$ 1,719

<i>(In thousands)</i>	December 31, 2019
Balance as of December 31, 2018	\$ 185
Plus: Amounts charged to expense	6,014
Less: Amounts paid	(4,631)
Balance as of December 31, 2019	\$ 1,568

Restructuring expenses included in the Condensed Consolidated Statements of Income (Loss) were as follows:

<i>(In thousands)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Cost of sales	232	62	288	747
Selling, general and administrative expenses	\$ 1,050	\$ 531	\$ 1,622	\$ 2,078
Research and development expenses	621	602	1,738	1,833
Total restructuring expenses	\$ 1,903	\$ 1,195	\$ 3,648	\$ 4,658

The following table represents the components of restructuring expenses by geographic area:

<i>(In thousands)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Domestic	\$ 448	\$ 1,116	\$ 2,191	\$ 1,941
International	1,455	79	1,457	2,717
Total restructuring expenses	\$ 1,903	\$ 1,195	\$ 3,648	\$ 4,658

The cumulative amount of restructuring expenses incurred as of September 30, 2020 for the restructuring plans announced in 2019 and 2020 was \$9.7 million.

21. SUBSEQUENT EVENTS

On November 2, 2020, the Company announced that its Board of Directors declared a quarterly cash dividend of \$0.09 per common share to be paid to the Company's stockholders of record as of the close of business on November 17, 2020. The payment date will be December 1, 2020 in the aggregate amount of approximately \$4.3 million.

On November 4, 2020, the Company, as borrower, entered into a Revolving Credit and Security Agreement and related Promissory Note (together, the "Revolving Credit Agreement") with Cadence Bank, N.A., as lender (the "Lender"). The Revolving Credit Agreement provides the Company with a new \$10 million secured revolving credit facility. Loans under the 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 the Lender from time to time; provided, however, that in no event shall the applicable rate of interest under the 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 Revolving Credit Agreement, at a maximum loan-to-value ratio of 75% determined by dividing the full commitment amount under the Revolving Credit Agreement on the date of testing, determined by the Lender each fiscal quarter, by the market value of the collateral. The Revolving Credit Agreement matures on November 4, 2021, subject to earlier termination upon the occurrence of certain events of default. The Company has not made any draws under the Revolving Credit Agreement to date.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with the consolidated financial statements and the related notes that appear in Part I, Item 1 of this document. In addition, the following discussion should be read in conjunction with our audited consolidated financial statements for the year ended December 31, 2019, Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, Part I, Item 1, Business, and Item 1A, Risk Factors, included in our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 25, 2020 (the "2019 Form 10-K").

This discussion is designed to provide the reader with information that will assist in understanding our condensed consolidated financial statements, the changes in certain key items 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 our condensed consolidated financial statements. See "Cautionary Note Regarding Forward-Looking Statements" on page 3 of this report for a description of important factors that could cause actual results to differ from expected results. See also Part I, Item 1A, Risk Factors, of the 2019 Form 10-K and Part II, Item 1A, Risk Factors, of this Form 10-Q.

OVERVIEW

ADTRAN is a leading global provider of networking and communications solutions focused on the access market, serving a diverse domestic and international customer base in multiple countries that includes Tier-1, -2 and -3 service providers, cable/MSOs and distributed enterprises. Our innovative solutions and services enable voice, data, video and internet communications across a variety of network infrastructures and are currently in use by millions worldwide. We support our customers through our direct global sales organization and our distribution networks. Our success depends upon our ability to increase unit volume and market share through the introduction of new products and succeeding generations of products having lower selling prices and increased functionality as compared to both the prior generation of a product and to the products of competitors. In order to service our customers and grow revenue, we are continually conducting research and development of new products addressing customer needs and testing those products for the specific requirements of the particular customers. We are focused on being a top global supplier of access infrastructure and related value-added solutions from the cloud edge to the subscriber edge. We offer 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 our corporate headquarters in Huntsville, Alabama, we have research and development facilities in strategic global locations.

An important part of our strategy is to reduce the cost of each succeeding product generation and then lower the product's selling price based on the cost savings achieved in order to gain market share and/or improve gross margins. As a part of this strategy, we seek to be a high-quality and low-cost provider of products in our markets. Our success to date is attributable in large measure to our ability to design our products initially with a view to their subsequent redesign, allowing both increased functionality and reduced manufacturing costs in each succeeding product generation. This strategy enables us to sell succeeding generations of products to existing customers, while increasing our market share by selling these enhanced products to new customers.

We ended the third quarter of 2020 with an increase in revenue of 16.7% for the three months ended September 30, 2020 as compared to the three months ended September 30, 2019, mainly driven by the increase in shipments to regional service providers in the U.S., alternative network operators in Europe and initial sales to a European Tier-1 operator. Additionally, in the third quarter of 2020, we had two 10% revenue domestic customers. Our domestic revenue grew 11.7% during the three months ended September 30, 2020 compared to the same quarter in the prior year, which was driven by growth in both Tier-3 and Tier-2 carrier categories due to additional fiber access deployments in both access equipment and CPE. Internationally, our revenue grew 30.2% compared to the same quarter in the prior year, primarily driven by an increase in spending from a Tier-1 customer. In the Asia Pacific region, we experienced growth driven by the acceleration of access network builds. Additionally, fiber access continues to experience revenue growth, and, during the first three quarters of 2020, we announced multiple long-term Tier-1 next-generation fiber access deals in Europe and the U.S., positioning us well for the next access network upgrade investment cycle.

In March 2020, the World Health Organization declared the outbreak of COVID-19 a pandemic. During the nine months ended September 30, 2020, there was a downturn in the global financial markets followed by a gradual rebound and a slowdown in the global economy due to the COVID-19 pandemic. COVID-19 continues to spread throughout the U.S. and the world and has resulted in authorities implementing numerous measures to contain the virus, including travel bans and restrictions, quarantines, shelter-in-place orders, and business limitations and shutdowns. While we are unable to accurately predict the full impact that COVID-19 will have on our results of operations, financial condition, liquidity and cash flows due to numerous uncertainties, including the duration and severity of the pandemic and containment measures, our compliance with these measures has impacted our day-to-day operations and could disrupt our business and operations, as well as that of our key customers, suppliers and other counterparties, for an indefinite period of time. We have experienced some impact to our supply chain, including a slowdown in supply chain deliveries, extended lead times on some key components and some raw material cost increases. We have also had to increase our volume of inventory to ensure supply continuity during the pandemic. In addition, we have experienced significant increases in freight-related costs. While throughout the pandemic, we have 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, it is possible that we could experience some slowdown in demand and further supply chain issues as the pandemic continues. Even after the COVID-19 pandemic has subsided, we may continue to experience adverse impacts to our business as a result of any economic recession that has occurred or may occur in the future.

Among our customers, we made progress with our fiber and fiber-extension solutions, including PON and Gfast, while also continuing to engage various Services & Support opportunities that we expect will contribute to sales in 2020 and beyond. In addition, we believe that we are at the beginning of a significant investment cycle for fiber deployment driven by technology advancements and regulatory influences. The transition to next-generation network architectures is beginning, and we are seeing demand for our next-generation SD-Access solutions. In 2021, we anticipate that payments to service providers under government funding programs such as the FCC RDOF will begin.

In addition to classifying our operations into two reportable segments, we report revenue across three categories of products and services – (1) Access & Aggregation, (2) Subscriber Solutions & Experience and (3) Traditional & Other Products.

Our Access & Aggregation solutions are used by 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 the best technology and economy based on subscriber density and environmental conditions.

Our 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.

Our 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.

Our operating results have fluctuated, and may continue to fluctuate, on a quarterly basis due to a number of factors, including customer order activity and backlog. A substantial portion of our 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 require delivery within a few days. These factors normally result in a varying order backlog and limited order flow visibility. Additionally, backlog levels may vary because of seasonal trends, the timing of customer projects, and other factors that affect customer order lead times. Because many of our customers require prompt delivery of products, we are required to maintain sufficient inventory levels to satisfy anticipated customer demand. If near-term demand for our products declines, or if potential sales in any quarter do not occur as anticipated, our financial results could be adversely affected. Operating expenses are relatively fixed in the short term; therefore, a shortfall in quarterly revenues could significantly impact our financial results in a given quarter.

Our operating results may also fluctuate 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, timing differences between price decreases and product cost reductions, product warranty returns, expediting costs, tariffs and announcements of new products by us or our competitors. Additionally, maintaining sufficient inventory levels to assure prompt delivery of our products increases the amount of inventory that may become obsolete and increases the risk that the obsolescence of this inventory may have an adverse effect on our business and operating results. Also, not maintaining sufficient inventory levels to assure prompt delivery of our products may cause us to incur expediting costs to meet customer delivery requirements, which may negatively impact our operating results in a given quarter. During 2019 and 2020, the Company implemented restructuring plans to realign its expense structure with the reduction in revenue experienced in recent years and with overall Company objectives. Management assessed the efficiency of our operations and consolidated locations and personnel, among other things, and has implemented certain cost savings initiatives, where possible. We expect to continue to see a reduction in our operating expenses and cost of sales, both in the U.S. and internationally, as a result of our implementation of these restructuring plans.

Our historical financial performance is not necessarily a meaningful indicator of future results, and, in general, management expects that our financial results may vary from period to period. Factors that could materially affect our business, financial condition or operating results are included in Part I, Item 1A of the 2019 Form 10-K and in Part II, Item 1A of this Form 10-Q.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

There have been no material changes to our critical accounting policies and estimates from those disclosed in our 2019 Form 10-K.

EFFECT OF RECENT ACCOUNTING PRONOUNCEMENTS

See Note 1 of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this report 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.

RESULTS OF OPERATIONS – THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2020 COMPARED TO THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2019

The following table presents selected financial information derived from our Condensed Consolidated Statements of Income (Loss) expressed as a percentage of sales for the periods indicated. Amounts may not foot due to rounding.

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2020	2019	2020	2019
Sales				
Network Solutions	86.5 %	82.4 %	86.1 %	86.7 %
Services & Support	13.5	17.6	13.9	13.3
Total Sales	100.0	100.0	100.0	100.0
Cost of Sales				
Network Solutions	47.2	49.5	47.4	50.1
Services & Support	8.6	9.9	9.0	8.4
Total Cost of Sales	55.7	59.4	56.4	58.5
Gross Profit	44.3	40.6	43.6	41.5
Selling, general and administrative expenses	20.4	27.1	22.5	24.1
Research and development expenses	20.4	27.9	22.8	23.1
Asset impairments	—	3.4	—	0.9
Gain on contingency	—	—	—	(0.3)
Operating Income (Loss)	3.4	(17.8)	(1.7)	(6.3)
Interest and dividend income	0.3	0.5	0.3	0.5
Interest expense	—	(0.1)	—	(0.1)
Net investment gain (loss)	2.1	(0.2)	0.5	2.0
Other income (expense), net	(1.3)	1.4	(0.6)	0.5
Income (Loss) Before Income Taxes	4.5	(16.1)	(1.6)	(3.4)
Income tax (expense) benefit	(0.4)	(24.3)	0.6	(6.6)
Net Income (Loss)	4.1 %	(40.4) %	(1.0) %	(10.0) %

SALES

Our sales increased 16.7% from \$114.1 million for the three months ended September 30, 2019 to \$133.1 million for the three months ended September 30, 2020 and decreased 9.1% from \$414.3 million for the nine months ended September 30, 2019 to \$376.4 million for the nine months ended September 30, 2020. The increase in sales for the three months ended September 30, 2020 was primarily attributable to a \$20.3 million increase in Access & Aggregation sales and a \$0.6 million increase in Subscriber Solutions & Experience sales, partially offset by a decrease of \$1.9 million in Traditional & Other Products. The decrease in sales for the nine months ended September 30, 2020 was primarily attributable to a \$40.1 million decrease in Access & Aggregation sales and a \$3.7 million decrease in Traditional & Other Products sales, partially offset by a \$6.0 million increase in Subscriber Solutions & Experience sales.

Network Solutions segment sales increased 22.6% from \$94.0 million for the three months ended September 30, 2019 to \$115.2 million for the three months ended September 30, 2020 and decreased 9.8% from \$359.0 million for the nine months ended September 30, 2019 to \$323.9 million for the nine months ended September 30, 2020. The increase in sales for the three months ended September 30, 2020 was primarily attributable to an increase in shipments to regional service providers in the U.S., alternative network operators in Europe and initial sales to a European Tier-1 operator. For the three months ended September 30, 2020, sales in the Access & Aggregation and Subscriber Solutions & Experience categories increased, while sales in the Traditional & Other Products categories decreased. The increase in Access & Aggregation sales for the three months ended September 30, 2020 was primarily attributable to increased volume in sales of FTTP solutions and our Mosaic software. The increase in Subscriber Solutions & Experience sales for the three months ended September 30, 2020 was primarily attributable to increased volume in residential gateways partially offset by decreased volume of SP Business CPE sales. The decrease in sales for the nine months ended September 30, 2020 was primarily attributable to the slowdown in shipments to two Tier-1 customers. For the nine months ended September 30, 2020, sales in the Access & Aggregation and Traditional & Other Products categories decreased, while sales in the Subscriber Solutions & Experience categories increased. The decrease in Access & Aggregation sales for the nine months ended September 30, 2020 was primarily attributable to decreased volume in sales of FTTN products. The increase in Subscriber Solutions & Experience sales for the nine months ended September 30, 2020 was primarily attributable to an increased volume of network termination and Fiber CPE. While we expect that revenue from Traditional & Other Products will continue to decline over time, this revenue may fluctuate and continue for years because of the time required for our customers to transition to newer technologies.

Services & Support segment sales decreased 10.8% from \$20.1 million for the three months ended September 30, 2019 to \$17.9 million for the three months ended September 30, 2020 and decreased 5.1% from \$55.3 million for the nine months ended September 30, 2019 to \$52.5 million for the nine months ended September 30, 2020. The decrease in sales for the three and nine months ended September 30, 2020 was primarily attributable to decreased volume of FTTN products.

International sales, which are included in the amounts for both the Network Solutions and Services & Support segments discussed above, increased 30.2% from \$30.9 million for the three months ended September 30, 2019 to \$40.3 million for the three months ended September 30, 2020 and decreased 34.5% from \$183.3 million for the nine months ended September 30, 2019 to \$120.1 million for the nine months ended September 30, 2020. International sales, as a percentage of total sales, increased from 27.1% for the three months ended September 30, 2019 to 30.3% for the three months ended September 30, 2020 and decreased from 44.2% for the nine months ended September 30, 2019 to 31.9% for the nine months ended September 30, 2020. The increase in sales for the three months ended September 30, 2020 was primarily attributable to increased shipments to European Tier-1 operators as well as alternative network operators in Europe. The decrease in sales for the nine months ended September 30, 2020, was primarily attributable to the reduction in shipments to two international Tier-1 customers.

Our international revenue is largely focused on broadband infrastructure and is affected by the decisions of our customers as to timing for installation of new technologies, expansion of their networks and/or network upgrades. Our international customers 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. The competitive landscape in certain international markets is also affected by the increased presence of Asian manufacturers that seek to compete aggressively on price. Our revenue and operating income in some international markets have been, and may continue to be, negatively impacted by a strengthening U.S. dollar, adverse changes in trade policy and disruptions in international trade due to the COVID-19 pandemic. Consequently, while we expect the global trend towards deployment of more robust broadband speeds and access to continue creating additional market opportunities for us in the long-run, the factors described above may result in negative pressure on revenue and operating income.

COST OF SALES

As a percentage of sales, cost of sales decreased from 59.4% for the three months ended September 30, 2019 to 55.7% for the three months ended September 30, 2020 and decreased from 58.5% for the nine months ended September 30, 2019 to 56.4% for the nine months ended September 30, 2020. For the three months ended September 30, 2020, the decrease was primarily attributable to changes in customer and product mix as well as a decrease in fixed personnel costs as a result of our restructuring program initiated in 2019, partially offset by higher freight-related charges and expedite premiums. For the nine months ended September 30, 2020, the decrease was primarily attributable to changes in customer and product mix, a regional revenue shift, changes in services and support mix and a decrease in fixed personnel costs as a result of our restructuring program initiated in 2019.

Network Solutions cost of sales, as a percentage of that segment's sales, decreased from 60.0% for the three months ended September 30, 2019 to 54.5% for the three months ended September 30, 2020 and decreased from 57.8% for the nine months ended September 30, 2019 to 55.1% for the nine months ended September 30, 2020. The decrease in cost of sales as a percentage of sales for the three and nine months ended September 30, 2020 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 our restructuring program initiated in 2019.

An important part of our strategy is to reduce the cost of each succeeding generation of product and then lower the product's selling price based on the cost savings achieved in order to gain market share and/or improve gross margins. This may cause variations in our gross profit percentage due to timing differences between the recognition of cost reductions and the lowering of product selling prices.

Services & Support cost of sales, as a percentage of that segment's sales, increased from 56.4% for the three months ended September 30, 2019 to 63.6% for the three months ended September 30, 2020 and increased from 63.3% for the nine months ended September 30, 2019 to 64.5% for the nine months ended September 30, 2020. The increase in cost of sales as a percentage of sales for the three and nine months ended September 30, 2020 was primarily attributable to changes in services and support mix and volume.

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 our other services, such as maintenance, support and cloud-based management services, our 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.

As our network planning and implementation revenue grew to become the largest component of our Services & Support segment business, our Services & Support segment gross margins decreased versus those reported when maintenance and support comprised the majority of the business. Further, because the growth in our network planning and implementation services has resulted in our Services & Support segment revenue comprising a large percentage of our overall revenue, and because our Services & Support segment gross margins are generally below those of the Network Solutions segment, our overall corporate gross margins have declined as that business has continued to grow. Within the Services & Support segment, we do expect variability in gross margins from quarter to quarter based on the mix of the services recognized.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

As a percentage of sales, selling, general and administrative expenses decreased from 27.1% for the three months ended September 30, 2019 to 20.4% for the three months ended September 30, 2020 and decreased from 24.1% for the nine months ended September 30, 2019 to 22.5% for the nine months ended September 30, 2020. Selling, general and administrative expenses as a percentage of sales will generally fluctuate whenever there is a significant fluctuation in revenue for the periods being compared.

Selling, general and administrative expenses decreased 12.0% from \$30.9 million for the three months ended September 30, 2019 to \$27.2 million for the three months ended September 30, 2020 and decreased 15.1% from \$99.7 million for the nine months ended September 30, 2019 to \$84.6 million for the nine months ended September 30, 2020. The decrease in selling, general and administrative expenses for the three months ended September 30, 2020 was primarily attributable to lower travel-related expenses and lower labor expense mainly due to our restructuring program initiated in 2019 and the capitalization of certain costs related to an enterprise resource planning implementation project, partially offset by market driven increases in our deferred compensation investment portfolios. The decrease in selling, general and administrative expenses for the nine months ended September 30, 2020 was primarily attributable to lower labor expense partially due to our restructuring program initiated in 2019 and the capitalization of certain costs related to an enterprise resource planning implementation project, market driven decreases in our deferred compensation investment portfolio and reduced travel-related expenses, partially offset by increased contract services related to an enterprise resource planning implementation project.

RESEARCH AND DEVELOPMENT EXPENSES

As a percentage of sales, research and development expenses decreased from 27.9% for the three months ended September 30, 2019 to 20.4% for the three months ended September 30, 2020 and decreased from 23.1% for the nine months ended September 30, 2019 to 22.8% for the nine months ended September 30, 2020. Research and development expenses as a percentage of sales will fluctuate whenever there are incremental product development activities or significant fluctuations in revenue for the periods being compared.

Research and development expenses decreased 14.5% from \$31.8 million for the three months ended September 30, 2019 to \$27.2 million for the three months ended September 30, 2020 and decreased 10.2% from \$95.5 million for the nine months ended September 30, 2019 to \$85.8 million for the nine months ended September 30, 2020. The decrease in research and development expenses for the three and nine months ended September 30, 2020 was primarily attributable to lower labor expense and other expenses which were mainly the result of our restructuring program initiated in 2019, partially offset by increased contract services costs.

We expect to continue to incur research and development expenses in connection with our new and existing products. We continually evaluate new product opportunities and engage in significant research and product development efforts, which provides for new product development, enhancement of existing products and product cost reductions. We may incur significant research and development expenses prior to the receipt of revenue from a major new product group.

ASSET IMPAIRMENTS

Asset impairments, which were \$0 and \$3.9 million for the three months ended September 30, 2020 and 2019, respectively, and \$0.1 million and \$3.9 million for the nine months ended September 30, 2020 and 2019, respectively, relate to the abandonment of certain information technology projects in which we had previously capitalized costs.

GAIN ON CONTINGENCY

Gain on contingency, which was \$1.2 million for the nine months ended September 30, 2019, relates to the reversal of unearned contingent liabilities which were initially recognized upon the acquisition of SmartRG in the fourth quarter of 2018. There was no gain on contingency recognized during the three and nine months ended September 30, 2020, or during the three months ended September 30, 2019.

INTEREST AND DIVIDEND INCOME

Interest and dividend income decreased 43.6% from \$0.6 million for the three months ended September 30, 2019 to \$0.3 million for the three months ended September 30, 2020 and decreased 45.5% from \$1.9 million for the nine months ended September 30, 2019 to \$1.0 million for the nine months ended September 30, 2020. The decrease in interest and dividend income was primarily attributable to a decrease in interest income as a result of a decline in our investment balances mainly due to the maturity of our certificate of deposit which served as collateral for our taxable revenue bonds. Our total investments decreased from \$119.4 million as of September 30, 2019 to \$84.2 million as of September 30, 2020.

INTEREST EXPENSE

Interest expense, which related to our taxable revenue bonds, decreased by \$0.1 million for the three months ended September 30, 2020 compared to the three months ended September 30, 2019 and decreased by \$0.4 million for the nine months ended September 30, 2020 compared to the nine months ended September 30, 2019. The decrease was due to the fact that the outstanding principal balance of the taxable revenue bonds was paid off upon maturity in January 2020. See “Liquidity and Capital Resources” below for additional information on our revenue bond.

NET INVESTMENT GAIN (LOSS)

We recognized a net investment loss of \$0.2 million and a net investment gain of \$2.8 million for the three months ended September 30, 2019 and September 30, 2020, respectively, and a net investment gain of \$8.2 million and \$1.8 million for the nine months ended September 30, 2019 and September 30, 2020, respectively. The fluctuations in our net investments were primarily attributable to the sale of equity securities as well as changes in the fair value of our securities recognized during the period. During the nine months ended September 30, 2020, our 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 in the second and third quarters of 2020. We expect that any future market volatility, whether from COVID-19 or other factors, will result in continued volatility in our investment portfolio. See Note 7 of the Notes to Condensed Consolidated Financial Statements, included in Part I, Item 1 of this report, and “Investing Activities” in “Liquidity and Capital Resources” below for additional information.

OTHER INCOME (EXPENSE), NET

Other income (expense), net decreased from income of \$1.6 million for the three months ended September 30, 2019 to expense of \$1.7 million for the three months ended September 30, 2020 and decreased from income of \$2.3 million for the nine months ended September 30, 2019 to expense of \$2.3 million for the nine months ended September 30, 2020. For the three and nine months ended September 30, 2020, other expense, net consisted mainly of gains and losses on foreign currency transactions. For the three and nine months ended September 30, 2019, other income, net consisted mainly of the receipt of one-time insurance proceeds from a life insurance policy and gains and losses on foreign currency transactions.

INCOME TAX EXPENSE (BENEFIT)

Our effective tax rate decreased from an expense of 150.6% of pre-tax loss for the three months ended September 30, 2019 to an expense of 9.3% of pre-tax income for the three months ended September 30, 2020 and decreased from an expense of 197.1% of pre-tax loss for the nine months ended September 30, 2019 to an benefit of 36.8% of pre-tax loss for the nine months ended September 30, 2020. The change in the effective tax rate for the three months ended September 30, 2020 was impacted by tax expense in our international operations, offset by additional changes in the valuation allowance related to our domestic operations of \$1.0 million and by additional benefits recognized during the quarter of \$0.4 million as a result of the Coronavirus Aid, Relief, and Economic Security Act (“CARES”) signed into law on March 27, 2020 in conjunction with the Internal Revenue Service’s release of its final Global Intangible Low Tax Income (“GILTI”) regulations on July 9th, 2020. The change in the effective tax rate for the three and nine months ended September 30, 2019 was primarily driven by the establishment of the valuation allowance against our domestic deferred tax assets in the amount of \$37.1 million, with tax expense being offset by a 7.1% rate reduction related to a transfer pricing study completed during the second quarter of 2019 that resulted in the assignment of operating expenditures to specific company locations, and the effective income tax rates among the respective jurisdictions. The decrease in the effective tax rate for the nine months ended September 30, 2020 was primarily driven by a tax benefit of \$7.8 million recognized during the nine months ended September 30, 2020 as a result of the CARES Act, which allowed for the carryback of federal net operating losses, partially offset with tax expense in our international operations and changes in our valuation allowance related to our domestic operations. An increase in the valuation allowance against our domestic deferred tax assets was recorded in the amount of \$2.6 million during the nine months ended September 30, 2020. See Note 4 of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this report for additional information.

NET INCOME (LOSS)

As a result of the above factors, net income (loss) increased from a net loss of \$46.1 million for the three months ended September 30, 2019 to net income of \$5.5 million for the three months ended September 30, 2020, and net loss decreased from a net loss of \$41.4 million for the nine months ended September 30, 2019 to a net loss of \$3.7 million for the nine months ended September 30, 2020.

LIQUIDITY AND CAPITAL RESOURCES

Liquidity

We have historically financed, and we currently expect to continue to finance, our ongoing business with existing cash, investments and cash flow from operations. We have used, and expect 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 our existing products and develop new products, expansion of our sales and marketing activities and capital expenditures. We believe that our cash and cash equivalents, investments and cash generated from operations will be adequate to meet our operating and capital needs for at least the next 12 months.

As of September 30, 2020, cash on hand was \$71.1 million and short-term investments were \$6.2 million, which resulted in available short-term liquidity of \$77.3 million, of which \$55.7 million was held by our 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 our foreign subsidiaries. Generally, we intend to permanently reinvest funds held outside the U.S., except to the extent that any of these funds can be repatriated without withholding tax. The decrease in short-term liquidity from December 31, 2019 to September 30, 2020 was primarily attributable to the maturity of a certificate of deposit of \$25.6 million that served as collateral for our revenue bond, which matured in January 2020.

On November 4, 2020, the Company entered into a Revolving Credit and Security Agreement and related Promissory Note (together, the “Revolving Credit Agreement”) with Cadence Bank, N.A., as lender (the “Lender”). The Revolving Credit Agreement provides the Company with a new \$10 million secured revolving credit facility. Loans under the 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 the Lender from time to time; provided, however, that in no event shall the applicable rate of interest under the 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 Revolving Credit Agreement, at a maximum loan-to-value ratio of 75% determined by dividing the full commitment amount under the Revolving Credit Agreement on the date of testing, determined by the Lender each fiscal quarter, by the market value of the collateral. The Revolving Credit Agreement matures on November 4, 2021, subject to earlier termination upon the occurrence of certain events of default. The Company entered into the Revolving Credit Agreement in order to increase the flexibility and management of its short-term liquidity. To date, the Company has not made any draws under the Revolving Credit Agreement. See Part II, Item 5 of this Form 10-Q for additional information on the Revolving Credit Agreement.

Operating Activities

Our working capital, defined as current assets less current liabilities, increased 7.1% from \$207.6 million as of December 31, 2019 to \$222.3 million as of September 30, 2020, and our current ratio, defined as current assets divided by current liabilities, increased from 2.84 as of December 31, 2019 to 3.08 as of September 30, 2020. The increase in our current ratio was primarily attributable to increases in inventory, accounts receivable and other receivables, partially offset by a decrease in short-term investments, which consisted of a certificate of deposit related to our taxable revenue bond and the related bonds payable. The quick ratio, defined as cash, cash equivalents, short-term investments and net accounts receivable, divided by current liabilities, decreased from 1.75 as of December 31, 2019 to 1.66 as of September 30, 2020. The decrease in the quick ratio was primarily attributable to the payment of our bond payable upon maturity in January 2020, partially offset by a decrease in cash and cash equivalents along with an increase in accounts payable.

Net accounts receivable increased 10.7% from \$90.5 million as of December 31, 2019 to \$100.2 million as of September 30, 2020. Our allowance for doubtful accounts was \$38 thousand as of December 31, 2019 and September 30, 2020. The increase in net accounts receivable was due to an increase in sales volume in the third quarter of 2020 as compared to the fourth quarter of 2019. Quarterly accounts receivable DSO decreased from 72 days as of December 31, 2019 to 69 days as of September 30, 2020. The decrease in DSO was due to the timing of product shipments and customer mix.

Other receivables increased 38.2% from \$16.6 million as of December 31, 2019 to \$22.9 million as of September 30, 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.

Quarterly inventory turnover decreased from 2.7 turns as of December 31, 2019 to 2.6 turns as of September 30, 2020. Inventory increased 22.3% from \$98.3 million as of December 31, 2019 to \$120.3 million as of September 30, 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. We expect inventory levels to fluctuate as we attempt to maintain sufficient inventory in response to COVID-19 uncertainties related to supply chain and supply, seasonal cycles of our business and ensuring competitive lead times while managing the risk of inventory.

Accounts payable increased 33.5% from \$44.9 million as of December 31, 2019 to \$59.9 million as of September 30, 2020. Accounts payable will fluctuate due to variations in the timing of the receipt of supplies, inventory and services and our subsequent payments for these purchases.

Investing Activities

Capital expenditures totaled approximately \$5.1 million and \$6.0 million for the nine months ended September 30, 2020 and 2019, respectively. These expenditures were primarily used to purchase manufacturing and test equipment, software, computer hardware and building improvements.

Our combined short-term and long-term investments decreased \$43.5 million from \$127.7 million as of December 31, 2019 to \$84.2 million as of September 30, 2020. This decrease reflects the maturity of a certificate of deposit which served as collateral for our revenue bond and the sale of certain equity investments for working capital and other purposes.

We typically invest all available cash not required for immediate use in operations, primarily in securities that we believe bear minimal risk of loss. See Note 7 of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this report for additional information. As of September 30, 2020, our corporate bonds, municipal bonds, asset-backed bonds, mortgage/agency bonds, U.S. government bonds, other government bonds and variable-rate demand notes were classified as available-for-sale and had a combined duration of 1.6 years with an average Standard & Poor's credit rating of AA. Because our investment portfolio has a high-quality rating and contractual maturities of short duration, we are 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.

Our long-term investments decreased 17.4% from \$94.5 million as of December 31, 2019 to \$78.0 million as of September 30, 2020. Our investments include various marketable equity securities classified as long-term investments with a fair market value of \$13.6 million and \$35.8 million as of September 30, 2020 and December 31, 2019, respectively. Long-term investments as of September 30, 2020 and December 31, 2019 also included \$21.6 million and \$21.7 million, respectively, related to our deferred compensation plans, and \$0.2 million and \$0.3 million as of September 30, 2020 and December 31, 2019, respectively, of other investments, consisting of interests in a private equity fund.

Financing Activities

Dividends

In July 2003, our Board of Directors elected to begin declaring quarterly dividends on our common stock considering the tax treatment of dividends and adequate levels of Company liquidity. During the nine months ended September 30, 2020 and 2019, we paid dividends totaling \$13.0 million and \$12.9 million, respectively. The continued payment of dividends is at the discretion of the Company's Board of Directors and is subject to general business conditions and ongoing financial results of the Company.

Debt

In conjunction with the 1995 expansion of our Huntsville, Alabama, facility, we were 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 and loaned the proceeds from the sale of these taxable revenue bonds to the Company. Further advances on the taxable revenue bonds were made by the Authority, bringing the total amount outstanding to \$50.0 million. The bonds matured on January 1, 2020, and the outstanding balance of \$24.6 million was repaid in full on January 2, 2020. The Company had no outstanding debt as of September 30, 2020.

Stock Repurchase Program

Since 1997, our Board of Directors has approved multiple share repurchase programs that have authorized repurchases of our common stock, which are implemented through open market or private purchases from time to time as conditions warrant. We currently have authorization to repurchase an additional 2.5 million shares of our common stock under the current authorization of up to 5.0 million shares. During the nine months ended September 30, 2020, there were no common stock repurchases. During the nine months ended September 30, 2019, we repurchased 13,000 shares of our common stock for \$0.2 million at an average price of \$14.06 per share.

Off-Balance Sheet Arrangements

We do not have off-balance sheet financing arrangements and have 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.

Contractual Obligations

Certain contracts, customers and jurisdictions in which we do business require us to provide various guarantees of performance such as bid bonds, performance bonds and customs bonds. As of September 30, 2020 and December 31, 2019, we had commitments related to these bonds totaling \$12.0 million and \$9.3 million, respectively, which expire at various dates through August 2024. Although the triggering events vary from contract to contract, in general we would only be liable for the amount of these guarantees in the event of default under each contract, the probability of which we believe is remote.

In June 2020, the Company entered into a letter of credit with a bank to guarantee performance obligations under a contract with a certain customer. The obligations under the customer contract will be performed over multiple years. As of September 30, 2020, the Company was required to maintain a minimum collateral value of \$4.5 million. The letter of credit was secured by a pledge of a portion of the Company's fixed-income securities, which totaled \$5.9 million as of September 30, 2020, of which \$0.3 million is included in restricted cash and \$5.6 million is included in long-term investments on the Condensed Consolidated Balance Sheet. This pledged collateral value will fluctuate as the Company changes the mix of the pledged collateral between restricted cash and investments, with an expected maximum value between \$13.0 million and \$15.0 million. On October 8, 2020, the Company entered into an amendment to the letter of credit, which increased the minimum collateral value to \$9.0 million. The minimum collateral value is expected to continue to increase as the Company reaches certain milestones through the first quarter of 2021 as outlined in the customer contract. Any shortfalls in the minimum collateral value are required to be restored by the Company 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 September 30, 2020, the Company was in compliance with all contractual requirements under the letter of credit.

We have committed to invest up to an aggregate of \$5.0 million in a private equity fund of which \$4.9 million has been contributed as of September 30, 2020.

During the nine months ended September 30, 2020, there have been no other material changes in contractual obligations and commercial commitments out of the normal course of business from those discussed in the 2019 Form 10-K.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to financial market risks, including changes in foreign currency rates and prices of marketable equity and fixed-income securities. In addition, the ongoing global pandemic has caused an economic downturn and volatility in financial markets. The primary objective of the large majority of our 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 our marketable securities are investment grade, fixed-rate bonds and municipal money market instruments denominated in U.S. dollars. Our investment policy provides limitations for issuer concentration, which limits, at the time of purchase, the concentration in any one issuer to 5% of the market value of our total investment portfolio.

We maintain depository investments with certain financial institutions. Although these depository investments may exceed government insured depository limits, we have evaluated the credit-worthiness of these financial institutions and determined the risk of material financial loss due to exposure of such credit risk to be minimal. As of September 30, 2020, \$68.2 million of our cash and cash equivalents, primarily certain domestic money market funds and foreign depository accounts, were in excess of government provided insured depository limits.

As of September 30, 2020, approximately \$45.9 million of our cash and investments may be directly affected by changes in interest rates. As of September 30, 2020, we held \$5.0 million of cash and variable-rate investments where a change in interest rates would impact our interest income. A hypothetical 50 basis point decline in interest rates as of September 30, 2020, assuming all other variables remain constant, would reduce annualized interest income on our cash and investments by approximately \$17 thousand. In addition, we held \$40.9 million of fixed-rate bonds whose fair values may be directly affected by a change in interest rates. A hypothetical 50 basis point increase in interest rates as of September 30, 2020, assuming all other variables remain constant, would reduce the fair value of our fixed-rate bonds by approximately \$0.3 million.

We are exposed to changes in foreign currency exchange rates to the extent that such changes affect our revenue and gross margin on revenue derived from some international customers, expenses, and assets and liabilities held in non-functional currencies related to our foreign subsidiaries. Our primary exposures to foreign currency exchange rate movements are with our German subsidiary, whose functional currency is the Euro, and our Australian subsidiary, whose functional currency is the Australian dollar. Our revenue is primarily denominated in the respective functional currency of the subsidiary and paid in that subsidiary's functional currency or certain other local currency, our global supply chain predominately invoices us in the respective functional currency of the subsidiary and is paid in U.S. dollars and some of our operating expenses are invoiced and paid in certain local currencies (approximately 12% and 11% of total operating expense for the three and nine months ended September 30, 2020, respectively). Therefore, our revenues, gross margins, operating expenses and operating income are all subject to foreign currency fluctuations. As a result, changes in currency exchange rates could cause variations in our operating income.

We have certain customers and suppliers who are invoiced or pay in a non-functional currency. Changes in the monetary exchange rates used to invoice such customers versus the functional currency of the entity billing such customers may adversely affect our results of operations and financial condition. To manage the volatility relating to these typical business exposures, we may enter into various derivative transactions, when appropriate. We do not hold or issue derivative instruments for trading or other speculative purposes. All non-functional currencies billed would result in a combined hypothetical gain or loss of \$2.3 million if the U.S. dollar weakened or strengthened 10% against the billing currencies. This change represents an increase in the amount of hypothetical gain or loss compared to prior periods and is mainly due to an increase in U.S. dollar denominated billings in a non-U.S. dollar denominated subsidiary. Although we do not currently hold any derivative instruments, any gain or loss would be partially mitigated by any derivative instruments held.

As of September 30, 2020, we had certain material contracts subject to currency revaluation, including accounts receivable, accounts payable and lease liabilities, denominated in foreign currencies. As of September 30, 2020, we did not have any forward contracts outstanding.

For further information about the fair value of our investments as of September 30, 2020, see Note 7 of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this report.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to provide reasonable assurance that the information required to be disclosed by us in reports that we file or submit under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), is recorded, processed, summarized and reported within the time periods specified in the rules and forms promulgated by the SEC, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Because of the inherent limitations to the effectiveness of any system of disclosure controls and procedures, no evaluation of disclosure controls and procedures can provide absolute assurance that all control issues, if any, with a company have been prevented or detected on a timely basis. Even disclosure controls and procedures determined to be effective can only provide reasonable assurance that their objectives are achieved.

As of the end of the period covered by this report, an evaluation was carried out by management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Exchange Act. Based on that evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting.

There were no changes in our internal control over financial reporting that occurred during the fiscal quarter ended September 30, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

Securities Class Action Lawsuit

As previously disclosed, on October 17, 2019, a purported stockholder class action lawsuit, captioned *Burbridge v. ADTRAN, Inc. et al.*, Docket No. 19-cv-09619, was filed in the United States District Court for the Southern District of New York against the Company, two of its current executive officers and one of its former executive officers. The complaint alleges violations of federal securities laws and seeks unspecified compensatory damages on behalf of purported purchasers of ADTRAN securities between February 28, 2019 and October 9, 2019. The lawsuit claims that the defendants made materially false and misleading statements regarding, and/or failed to disclose material adverse facts about, the Company's business, operations and prospects, specifically relating to the Company's internal control over financial reporting, excess and obsolete inventory reserves, financial results and demand from certain customers. The lawsuit was transferred to the U.S. District Court for the Northern District of Alabama on January 7, 2020, and co-lead plaintiffs have been appointed to represent the putative class. The plaintiffs filed an amended complaint on April 30, 2020. The defendants filed a motion to dismiss the amended complaint on June 17, 2020. The plaintiffs filed an opposition brief to the defendants' motion to dismiss on July 17, 2020. The defendants filed a reply to the plaintiffs' brief on August 17, 2020. The motion to dismiss remains under review by the Court. We deny the allegations in the complaint, as amended, and intend to vigorously defend against this lawsuit. At this time, we are unable to predict the outcome of or estimate the possible loss or range of loss, if any, associated with this lawsuit.

Shareholder Derivative Lawsuit

As previously disclosed, on March 31, 2020, a shareholder derivative suit, captioned *Johnson (Derivatively on behalf of ADTRAN) v. T. Stanton, M. Foliano, R. Shannon, and Board of Directors*, case no. 5:20-cv-00447, was filed in the U.S. District Court of Northern Alabama against two of the Company's current executive officers, one of its former executive officers and its Board of Directors. The derivative suit, which is purportedly brought on behalf of ADTRAN, makes similar allegations as the shareholder class action and accuses the directors and officers of breaches of fiduciary duty in connection with those allegations. On June 7, 2020, the Court entered an order staying the derivative litigation pending resolution of the motion to dismiss in the securities class action. The Company and its defendants disagree with the claims made in the complaint, and the defendants intend to vigorously defend against this lawsuit. At this time, we are unable to predict the outcome of or estimate the possible loss or range of loss, if any, associated with this lawsuit.

ITEM 1A. RISK FACTORS

A list of factors that could materially affect our business, financial condition or operating results is described in Part I, Item 1A, "Risk Factors" in the 2019 Form 10-K. There have been no material changes to our risk factors from those disclosed in Part I, Item 1A, "Risk Factors" in the 2019 Form 10-K, other than as described in the risk factors below.

The ongoing COVID-19 pandemic could adversely affect our business, results of operations and financial condition.

In March 2020, the World Health Organization declared the outbreak of COVID-19 a pandemic. COVID-19 continues to spread throughout the U.S. and the world and has resulted in authorities implementing numerous measures to contain the virus, including travel bans and restrictions, quarantines, shelter-in-place orders, and business limitations and shutdowns. While we are unable to accurately predict the full impact that COVID-19 will have on our results from operations, financial condition, liquidity and cash flows due to numerous uncertainties, including the duration and severity of the pandemic and containment measures, our compliance with these measures has impacted, and may continue to impact, our day-to-day operations and could continue to disrupt our business and operations, as well as that of our customers, suppliers (including contract manufacturers) and other counterparties, for an indefinite period of time. We have experienced, and may continue to experience, disruptions in our supply chain, including a slow-down in supply chain deliveries and some raw material and freight-related cost increases as a result of the pandemic.

To support the health and well-being of our employees, customers, partners and communities, a majority of our employees are working remotely as of November 4, 2020. In addition, many of our customers, suppliers and other counterparties are working remotely, which may delay the timing of some orders and expected deliveries. The disruptions to our operations caused by COVID-19 may result in inefficiencies, delays and additional costs in our product development, sales, marketing and customer service efforts that we cannot fully mitigate through remote or other alternative work arrangements. These additional costs may be partially offset by reduced travel expenses as a result of travel restrictions that we have in place, as well as lower marketing-related costs.

More generally, the global pandemic has caused a significant economic downturn and volatility in financial markets, which could affect demand for our products and services and impact our results and financial condition even after the pandemic is contained and the shelter-in-place orders are lifted. For example, we may be unable to collect receivables from those customers significantly impacted by COVID-19. Also, a decrease in orders could negatively affect our revenues in future periods, particularly if experienced on a sustained basis.

Although we expect that current cash and cash equivalent balances and cash flows that are generated from operations will be sufficient to meet our domestic and international working capital needs and other capital and liquidity requirements for at least the next 12 months, if our access to capital is restricted or our borrowing costs increase as a result of the COVID-19 pandemic, our operations and financial condition could be adversely impacted.

Moreover, the impacts of the COVID-19 pandemic may exacerbate other pre-existing risks, such as political, regulatory, social, financial, operational and cybersecurity risks, and those associated with global economic conditions, any of which could have a material adverse effect on our business.

We will continue to evaluate the nature and extent of the impact of COVID-19 on our business.

We are subject to complex and evolving U.S. and foreign laws and regulations regarding privacy, data protection and other matters. Violations of these laws and regulations may harm our business.

A wide variety of provincial, state, national and international laws and regulations apply to the collection, use, retention, protection, disclosure, transfer and other processing of data, including personal data. Foreign data protection, privacy and other laws and regulations, including the EU's General Data Protection Regulation (the "GDPR"), are often more restrictive than those in the U.S. These data protection and privacy-related laws and regulations are varied, evolving, can be subject to significant change, may be augmented or replaced by new or additional laws and regulations and may result in ever-increasing regulatory and public scrutiny and escalating levels of enforcement and sanctions. For example, California's Consumer Privacy Act became effective in January 2020, providing new data privacy rights for consumers and new operational requirements for companies, and, on July 16, 2020, the Court of Justice of the European Union issued a decision that invalidated the EU-U.S. Privacy Shield framework as a basis for transfers of personal data from the EU to the U.S., resulting in uncertainty and potential additional compliance obligations to ensure that a valid basis under the GDPR exists for these data transfers. New and changing laws, regulations and industry practices regarding our employees' and users' data could require us to modify our business, products or services offered, potentially in a material manner, and may limit our ability to develop new products, services and features. There is also a risk that we, directly or as the result of a third-party service provider we use, could be found to have failed to comply with the laws and regulations applicable in a jurisdiction regarding the collection, consent, handling, transfer or disposal of personal data. If we violate these laws and regulations, governmental authorities in the U.S., the EU and elsewhere could seek to impose civil and/or criminal fines and penalties which could have an adverse effect on our reputation, as well as, our results of operations, financial condition and cash flows.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

The following table sets forth repurchases of our common stock for the months indicated:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs⁽¹⁾	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
July 1, 2020 – July 31, 2020	—	\$ —	—	2,545,430
August 1, 2020 – August 31, 2020	—	\$ —	—	2,545,430
September 1, 2020 – September 30, 2020	—	\$ —	—	2,545,430
Total	—		—	

- (1) Since 1997, the Company’s Board of Directors has approved multiple share repurchase programs that have authorized open market repurchase transactions of the Company’s common stock, which are implemented through open market or private purchases from time to time as conditions warrant. We currently have authorization to repurchase an additional 2.5 million shares of our common stock under the current authorization of up to 5.0 million shares.

ITEM 5. OTHER INFORMATION

The information set forth below is included herein for the purpose of providing disclosure under Item 1.01 (Entry into a Material Definitive Agreement) and Item 2.03 (Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant) of Form 8-K.

On November 4, 2020, the Company, as borrower, entered into a Revolving Credit and Security Agreement and related Promissory Note (together, the “Revolving Credit Agreement”) with Cadence Bank, N.A, as lender (the “Lender”). The Revolving Credit Agreement provides the Company with a new \$10 million secured revolving credit facility.

Maturity. The Revolving Credit Agreement matures on November 4, 2021, subject to earlier termination upon the occurrence of certain events of default as set forth in the Revolving Credit Agreement.

Interest Rates. Loans under the 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 the Lender from time to time; provided, however, that in no event shall the applicable rate of interest under the Revolving Credit Agreement be less than 1.50% per annum.

Use of Proceeds. Borrowings under the Revolving Credit Agreement may be used solely for ongoing working capital and general corporate purposes and to pay related fees and expenses.

Collateral. Loans under the Revolving Credit Agreement are secured by all of the cash, securities, securities entitlements and investment property in a certain bank custody account (the “Account”), as outlined in the Revolving Credit Agreement. In connection with the Revolving Credit Agreement, the Company entered into (i) a security agreement with the Lender, dated November 4, 2020 (the “Security Agreement”), pursuant to which the Company pledges to the Lender all of the cash, securities, securities entitlements and investment property from time to time in the Account and all proceeds therefrom; and (ii) a control agreement with the Lender and the Account bank (the “Bank”), dated November 4, 2020 (the “Control Agreement”), pursuant to which the Bank and the Company grant to the Lender the ability to exercise certain elements of control over the Account.

Restrictive Covenants, Representations and Warranties. The Company made certain representations and warranties to the Lender in the Revolving Credit Agreement that are customary for credit arrangements of this type. The Company also agreed to maintain a maximum “Loan to Value” of 75%, determined by dividing the full commitment amount under the Revolving Credit Agreement on the date of testing, determined by the Lender during each fiscal quarter, by the market value of the collateral described in the Security Agreement. The Company also agreed to certain negative covenants that are customary for credit arrangements of this type, including, among other things, restrictions on the Company’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 the Company, which negative covenants are subject to certain exceptions.

Events of Default. The Revolving Credit Agreement contains customary events of default that include, among other things (subject to any applicable cure periods and a materiality qualifier), non-payment of principal, interest or fees, defaults under related agreements with the Lender, cross-defaults under agreements for other indebtedness, violation of covenants, inaccuracy of representations and warranties, bankruptcy and insolvency events, certain events under ERISA and material judgments. Upon the occurrence of an event of default, the Lender may terminate all loan commitments, declare all outstanding indebtedness owing under the Revolving Credit Agreement and related documents to be immediately due and payable, and exercise its other rights and remedies provided for under the Revolving Credit Agreement.

The foregoing descriptions of the Revolving Credit and Security Agreement, the Promissory Note, the Security Agreement and the Control Agreement do not purport to be complete and are qualified in their entirety by reference to the full text of the Revolving Credit and Security Agreement, the Promissory Note, the Security Agreement and the Control Agreement, copies of which are attached to this Quarterly Report on Form 10-Q as Exhibits 10.1, 10.2, 10.3 and 10.4, respectively, and are incorporated herein by reference.

Copies of the Revolving Credit and Security Agreement, the Promissory Note, the Security Agreement and the Control Agreement have been included as exhibits to this Quarterly Report on Form 10-Q to provide investors with information regarding their respective terms. They are not intended to provide any other factual information about the Company or any of its subsidiaries or affiliates. The representations, warranties and covenants contained in the Revolving Credit and Security Agreement, the Promissory Note, the Security Agreement and the Control Agreement were made only for purposes of such agreements and as of the specific date of such agreements; were made solely for the benefit of the parties to such agreements; may be subject to limitations agreed upon by the contracting parties, including being qualified by information that may modify, qualify or create exceptions to the representations and warranties set forth in such agreements; may not have been intended to be statements of fact, but rather, as a method of allocating contractual risk and governing the contractual rights and relationships between the parties to such agreements; and may be subject to standards of materiality applicable to contracting parties that differ from those applicable to investors. Investors should not rely on the representations, warranties and covenants or any descriptions thereof as characterizations of the actual state of facts or condition of the Company or any of its subsidiaries or affiliates. Moreover, information concerning the subject matter of the representations, warranties and covenants may change after the date of such agreements, which subsequent information may or may not be fully reflected the Company's public disclosures.

ITEM 6. EXHIBITS

Exhibits.

Exhibit No.	Description
3.1	Certificate of Incorporation, as amended (Exhibit 3.1 to ADTRAN's Registration Statement on Form S-1, No. 33-81062) (P)
3.2	Bylaws, as Amended, of ADTRAN, Inc. (Exhibit 3.1 to ADTRAN's Form 8-K filed July 23, 2020)
10.1*+	Revolving Credit and Security Agreement, dated as of November 4, 2020 between ADTRAN, Inc., as borrower, and Cadence Bank, N.A., as lender
10.2*	Promissory Note, dated as of November 4, 2020, between ADTRAN, Inc., as borrower, and Cadence Bank, N.A., as lender
10.3*+	Security Agreement, dated as of November 4, 2020, between ADTRAN, Inc., as pledgor, and Cadence Bank, N.A., as secured party
10.4*	Control Agreement, dated as of November 4, 2020, between ADTRAN, Inc., as pledgor, Cadence Bank, N.A., as secured party, and US Bank, N.A., as intermediary
31*	Rule 13a-14(a)/15d-14(a) Certifications
32*	Section 1350 Certifications
101*	The following financial statements from the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020, formatted in Inline XBRL: (i) Condensed Consolidated Balance Sheets as of September 30, 2020 and December 31, 2019; (ii) Condensed Consolidated Statements of Income (Loss) for the three and nine months ended September 30, 2020 and 2019; (iii) Condensed Consolidated Statements of Comprehensive Income (Loss) for the three and nine months ended September 30, 2020 and 2019; (iv) Condensed Consolidated Statements of Changes in Stockholders' Equity for the three and nine months ended September 30, 2020 and 2019; (v) Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2020 and 2019; and (vi) Notes to Consolidated Financial Statements
104*	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Filed herewith.

+ Schedules and exhibits omitted pursuant to Item 601(a)(5) of Regulation S-K. The Company agrees to furnish a copy of any omitted schedule or exhibit to the SEC upon request.

(P) Indicates a paper filing with the SEC.

SIGNATURE

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, thereunto duly authorized.

ADTRAN, Inc.
(Registrant)

Date: November 6, 2020

/s/ Michael Foliano
Michael Foliano
Senior Vice President of Finance and
Chief Financial Officer
(Duly Authorized Officer and Principal Financial Officer)

REVOLVING CREDIT AND SECURITY AGREEMENT

By and Between

CADENCE BANK, N.A.

and

ADTRAN, INC.

November 4, 2020

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REVOLVING CREDIT AND SECURITY AGREEMENT

This REVOLVING CREDIT AND SECURITY AGREEMENT (as may be amended, this “**Agreement**”) is executed and delivered this 4th day of November, 2020, by and between **ADTRAN, INC.**, a Delaware corporation (“**Borrower**”), with its chief executive office and its principal place of business at 901 Explorer Boulevard, Huntsville, Alabama 35806, and **CADENCE BANK, N.A.** (“**Bank**”), with its principal place of business at 2100 Third Avenue North, Suite 1100, Birmingham, Alabama 35203. Borrower has applied to Bank for a revolving line of credit not to exceed an aggregate principal amount at any one time outstanding the sum of **TEN MILLION AND NO/100 DOLLARS (\$10,000,000.00)** (as may be amended, the “**Loan**”) to be evidenced by a Promissory Note (as may be amended, the “**Note**”) in such amount and to be secured by a security interest in all of the Collateral (as defined herein) on the terms hereinafter set forth.

Bank is willing to extend the Loan to Borrower up to an aggregate principal amount not in excess of the amount set forth above upon the security of the Collateral on the terms and subject to the conditions hereinafter set forth to provide Borrower with ordinary working capital for general corporate purposes and to pay for related fees and expenses.

Accordingly, Borrower and Bank, in consideration of the premises, the credit to be extended hereunder, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, agree as follows:

SECTION 1. **Definitions.**

1.1 “**Account**” shall mean and include all accounts (as defined in the UCC), accounts receivable, notes, notes receivable, contracts, contract rights, retail installment sales contracts, drafts, documents, documents of title, warehouse receipts, bills of lading, title retention and lien instruments, security agreements, acceptances, instruments, conditional sales contracts, chattel mortgages, chattel paper, general intangibles, and other forms of obligation and rights to payment and receivables whether or not yet earned by performance, including, without limitation, state and federal tax refunds.

1.2 Intentionally omitted.

1.3 “**Account Debtor**” shall mean the party who is obligated on or under any Account.

1.4 “**Borrower’s Loan Account**” shall mean the account on the books of Bank in which Bank will record loans and other advances made by Bank to or on behalf of Borrower pursuant to the Agreement, payments received on such loans and advances and other appropriate debits and credits as provided by the Agreement or any of the other Loan Documents.

1.5 “**Code**” shall mean the Internal Revenue Code of 1986, as amended, and applicable U.S. Department of Treasury regulations issued pursuant thereto in temporary or final form.

1.6 “**Collateral**” shall mean any and all property in which Bank acquired, now has, by this Agreement or any of the other Loan Documents (as defined herein) acquires, or hereafter acquires a security interest or other rights or interests as security for the Liabilities (as defined herein) and without limiting the foregoing expressly includes the property described in Section 4 of the Agreement.

1.7 Intentionally omitted.

1.8 Intentionally omitted.

1.9 Intentionally omitted.

1.10 “**ERISA**” shall mean the Employee Retirement Income Security Act of 1974, as amended, and any applicable regulations or guidance promulgated thereunder or Section 4975 of the Code.

1.11 “**ERISA Affiliate**” shall mean any corporation which is a member of the same controlled group of corporations (within the meaning of Section 414(b) of the Code) as Borrower or any trade or business which is under common control (within the meaning of Section 414(c) of the Code) with Borrower or any organization which is required to be treated as a single employer with Borrower under Section 414(m) or 414(o) of the Code.

1.12 “**Insolvency**” of Borrower or any other person or entity shall mean that there shall have occurred with respect to Borrower or such other person or entity one or more of the following events: dissolution, termination of existence, liquidation, Borrower’s liabilities exceeds Borrower’s assets, Borrower is unable to pay its liabilities as they come due, business failure, appointment of a receiver of any part of the property of, assignment for the benefit of creditors by or against Borrower or such other person or entity, or institution of any action or proceeding with respect to Borrower or such other person or entity under or pursuant to any insolvency laws relating to the relief of debtors by or against Borrower or such other person or entity, institution of proceedings in bankruptcy or with respect to the readjustment of indebtedness, reorganization, composition or extension by or against Borrower or such other person or entity (including, without limitation, under or pursuant to the United States Bankruptcy Code, as amended, or under any similar law at any time enacted), or if any action shall be taken for the purpose of effecting any of the foregoing.

1.13 “**Inventory**” shall mean all of Borrower’s (or other entities’, as applicable) inventory (as defined in the Uniform Commercial Code as enacted in the State of Alabama, or in any other jurisdiction) and all finished goods, other goods, merchandise and other personal property now owned or hereafter acquired by Borrower which are held for sale, lease, or rental or are furnished or to be furnished under a contract of service and all raw materials, work in process, component parts, materials or supplies used or to be used, or consumed or to be consumed, in Borrower’s business, and related products and all goods represented thereby, wherever located, and all such goods that may be reclaimed or repossessed from or returned by Borrower’s customers, and all shipping and packaging materials relating to any of the foregoing.

1.14 “**Liabilities**” shall mean any and all obligations, indebtedness and liabilities of Borrower to Bank or any affiliate of Bank of every kind and description, whether direct or indirect, absolute or contingent, joint or several, due or to become due, liquidated or unliquidated, now existing or hereafter arising, and all extensions, modifications, renewals, and refinancings thereof, regardless of how such Liabilities arise or by what agreement or instrument (if any) they may be evidenced and include obligations to perform acts and refrain from taking actions as well as obligations to pay money. Without limiting the foregoing, Liabilities shall specifically include all liabilities and obligations of Borrower hereunder and the obligation to repay the indebtedness evidenced by the Note. Without limiting the foregoing, Liabilities also shall include all obligations heretofore, now or hereafter incurred by Borrower under any agreement between Borrower and Bank or any affiliate of Bank, including but not limited to an ISDA Master Agreement whether now existing or hereafter entered into, which provides for an interest rate, currency, equity, credit or commodity swap, cap, floor or collar, spot or foreign currency exchange transaction, cross currency rate swap, currency option, any combination of, or option with respect to, any of the foregoing or similar transactions, for the purpose of hedging Borrower’s exposure to fluctuations in interest rates, exchange rates, currency, stock, portfolio or loan valuations or commodity prices. Without limiting the foregoing, Liabilities shall specifically include all liabilities and obligations of Borrower evidenced by or arising under or in connection with (a) this Agreement; and (b) the Note and any related promissory notes, documents, instruments and agreements as hereafter may be amended, renewed, substituted, replaced, modified and/or extended.

1.15 “**Loan Documents**” shall mean and include the Note, this Agreement, , and any subordination agreements, intercreditor agreements and other agreements, documents and instruments now or hereafter evidencing, securing, guaranteeing or relating to the Loan or any of the other Liabilities, obligations or indebtedness of Borrower to Bank, as the same may be amended.

1.16 “**Maturity Date**” shall mean the date shown in Section 2.1 of this Agreement or such other date as agreed to by Bank in writing.

1.17 “**Multiemployer Plan**” shall mean any plan defined as such in Section 3(37) of ERISA.

1.18 “**Net Income**”, “**Net Worth**” and “**Current Maturities of Long Term Debt**” shall be defined and calculated in accordance with generally accepted accounting principles consistently applied as of the date hereof.

1.19 “**OFAC**” shall mean the U.S. Department of the Treasury’s Office of Foreign Assets Control.

1.20 “**Pension Plan**” shall mean any employee pension benefit plan within the meaning of Section 3(2) of ERISA with respect to which Borrower or any ERISA Affiliate at any relevant time has liability or an obligation to contribute.

1.21 “**Permitted Liens**” shall mean any of the following (but only to the extent the same do not or could not, in Bank’s reasonable opinion, jeopardize Bank’s rights or priority in or to any Collateral):

- (a) liens of carriers, warehousemen, landlords, mechanics, laborers and materialmen arising by law for sums which are (i) not yet due or (ii) being diligently contested in good faith and with respect to which Borrower has set aside sufficient reserves with Bank;
- (b) liens for taxes which are (i) not yet due or (ii) being diligently contested in good faith by appropriate proceedings and with respect to which Borrower has set aside sufficient reserves with Bank;
- (c) security interests in Borrower’s equipment provided that they are limited to those securing a portion of the purchase price of said equipment; and
- (d) pledges or deposits in connection with or to secure worker’s compensation or unemployment insurance.

1.22 “**Plan**” shall mean, with respect to any ERISA matter, any “plan” as defined in Section 3(3) of ERISA that is subject to any provision of Title I of ERISA and any plan as defined in Section 4975 of the Code that is subject to any provision of such section.

1.23 “**Proceeds**” shall mean all cash proceeds, non-cash proceeds and all forms of payment and other property received or due from the sale, lease, rental, transfer, disposition, licensing, collection, use or exchange of property constituting Collateral hereunder and any and all claims against any third party for loss of or damage to any Collateral, including insurance, contract and tort claims, and further, without limiting the generality of the foregoing, Proceeds shall include all Accounts, checks, cash, money orders, drafts, chattel paper, general intangibles, instruments, notes and other documents evidencing payment and payment obligations to Borrower for the sale, lease, rental, transfer, disposition, licensing, collection, use or exchange of Collateral.

1.24 “**Sanctioned Country**” shall mean a country subject to a sanctions program identified on the list maintained by OFAC and available at <http://www.treas.gov/offices/enforcement/ofac/programs/index.shtml>, or as otherwise published from time to time.

1.25 “**Sanctioned Person**” shall mean (i) a person named on the list of Specially Designated Nationals or Blocked Persons maintained by OFAC available at <http://www.treas.gov/offices/enforcement/ofac/sdn/>, or as otherwise published from time to time, or (ii) (A) an agency of the government of a Sanctioned Country, (B) an organization controlled by a Sanctioned Country, or (C) a person resident in a Sanctioned Country, to the extent subject to a sanctions program administered by OFAC.

1.26 **Intentionally omitted.**

1.27 “**Subordinated Debt**” shall mean all such debts, obligations or indebtedness owing from Borrower to others which have been and remain subordinated to all Liabilities owing from Borrower to Bank pursuant to Subordination Agreement(s) in form and substance acceptable to Bank.

1.28 Intentionally omitted.

1.29 “Total Debt” shall mean all of Borrower’s indebtedness and liabilities owing to Bank or any other person or entity, as described on Borrower’s current balance sheet which is prepared according to generally accepted accounting principles, including, without limitation, the Liabilities.

Any terms used to describe Bank’s security interest under the Agreement not specifically defined in the Agreement shall have the meanings and definitions given those terms under the Uniform Commercial Code of Alabama as may be amended.

SECTION 2. Bank’s Agreement to Make Advances.

2.1 Loan. From the date hereof until **November 4, 2021**, subject to the terms and conditions of this Agreement and Borrower’s and all guarantor’s (as applicable) performance of and compliance with each of the Loan Documents, and so long as no Event of Default (including, without limitation, the breach of any warranty or representation) hereunder or under any of the other Loan Documents shall have occurred, be continuing or would result, Bank agrees to extend to Borrower an open-end credit line (also referred to as the Loan). It is expressly understood and agreed that Bank shall have no obligation to make an advance under the Loan if (i) Borrower does not provide to Bank an investment statement from Met Life or its successors and/or assigns responsible for managing the Collateral (such entity, the “**Portfolio Manager**”) acceptable to Bank in its sole discretion with each request for an advance and (ii) the amount of such advance together with the amount outstanding under the Loan exceeds or would exceed \$10,000,000.00 (the “**Maximum Available Amount**”). Within such limits and subject to the terms of this Agreement, Borrower may borrow, repay without penalty or premium, and re-borrow hereunder, from the date of this Agreement until the Maturity Date.

2.1.1 Intentionally omitted.

2.1.2 If at any time Borrower is not entitled to any advances by the terms of this Agreement, Bank may, in its sole discretion, make requested advances; however, it is expressly acknowledged and agreed that, in such event, Bank shall have the right, in its sole discretion, to decline to make any requested advance and to require any payment required under the terms of this Agreement without prior notice to Borrower and the making of any such advances shall not be construed as a waiver of such right by Bank.

2.2 Intentionally omitted.

2.3 Evidence that Advance Does Not Cause Excess. If requested by Bank, prior to any request for an advance hereunder, Borrower shall submit to Bank such information and documents as Bank shall reasonably request to establish to Bank’s satisfaction that, if approved, the requested advance will not cause the amount of funds outstanding to Borrower hereunder to exceed the Loan to Value requirement set forth in Section 6.9 of this Agreement. Bank shall have no obligation to make any advance for which Borrower is unable to establish the foregoing to Bank’s satisfaction.

2.4 Borrower’s Loan Account. All borrowings/advances under the Loan shall be evidenced by the Note and by entering such borrowings/advances as debits to Borrower’s Loan Account. Bank shall also record in Borrower’s Loan Account all other charges, expenses and items properly chargeable to Borrower hereunder (which shall also be evidenced by the Note), all payments made by Borrower on account of indebtedness under the Loan and other appropriate debits and credits. The debit balance of Borrower’s Loan Account shall also be evidenced by the Note and shall reflect the amount of Borrower’s indebtedness to Bank from time to time hereunder.

2.5 Exceeding Maximum Available Amount. If at any time the outstanding balance of Borrower’s Loan Account exceeds the Maximum Available Amount, then Borrower shall not be entitled to any additional advances under the Loan while such excess exists and shall immediately remit to Bank immediately available funds sufficient to eliminate such excess and, if Bank requests, deliver to Bank additional collateral of a value and character satisfactory to Bank.

2.6 Discretionary Advances. In the event that the availability of the Loan hereunder expires by the terms of this Agreement, or by the terms of any agreement extending the Maturity Date of the Loan, Bank may, in its sole discretion, make requested advances; however, it is expressly acknowledged and agreed that, in such event, Bank shall have the right, in its sole discretion, to decline to make any requested advance and may require payment in full of Borrower's Loan Account at any time without prior notice to Borrower and the making of any such advances shall not be construed as a waiver of such right by Bank.

2.7 Use of Proceeds. The Loan is being made and shall be used solely for working capital and general corporate purposes and to pay related fees and expenses.

SECTION 3. Borrower's Representations and Warranties.

To induce Bank to enter into this Agreement, Borrower represents and warrants to Bank as follows:

3.1 Organization, Licenses, Qualifications, Etc. Borrower (a) is a duly organized corporation, validly existing, and in good standing under the laws of the State of Delaware; (b) has all requisite power and authority and all requisite third party and governmental, licenses, authorizations, consents and approvals to (i) own or lease its assets and conduct its business as now conducted or presently proposed to be conducted, and (ii) execute, deliver and perform its obligations under the Loan Documents; (c) has no subsidiaries; and (d) is duly qualified and in good standing (and will remain so qualified and in good standing) in every jurisdiction in which it is or shall be doing business or in which the failure to so qualify and remain in good standing would or could have an adverse effect on its business or properties, the Collateral or Bank.

3.2 Power and Authority; Enforceability. The execution, delivery and performance of the Loan Documents are within Borrower's powers, have been duly and validly authorized by all requisite action, including, without limitation, any necessary shareholder approval and are not in contravention of the law or the terms of Borrower's organizational and operating documents, or of any indenture, agreement, or undertaking or any law, regulation or order to which Borrower is a party or by which it or any of its properties is or may be bound. Upon execution and delivery of the Loan Documents, the Loan Documents will be a valid and binding obligation of Borrower enforceable in accordance with their terms. This Agreement, the Note and all other Loan Documents executed by Borrower have been validly executed and delivered by Borrower and constitute legal, valid, and binding obligations of Borrower enforceable against Borrower in accordance with their respective terms, except as limited by applicable bankruptcy, insolvency, reorganization, moratorium, or similar laws at the time in effect affecting the rights of creditors generally.

3.3 Liens. Except for the Permitted Liens and the security interests granted to Bank hereby or by any of the other Loan Documents in favor of Bank, Borrower is and will be the sole and exclusive owner of the Borrower's assets free from any lien, claim, charge, security interest, mortgage, secondary financing or encumbrance, and Borrower will defend the Collateral and all Proceeds and products thereof against all claims and demands of all persons at any time claiming the same or any interest therein adverse to the interests of Bank.

3.4 No Restrictions. The execution, delivery and performance of the Loan Documents, the borrowings hereunder and the use of the proceeds thereof will not violate any governmental, licenses, authorizations, consents and approvals applicable to Borrower or any contractual obligation between Borrower and a third party and will not result in, or require, the creation or imposition of any lien on any of the Collateral or assets of Borrower pursuant to any governmental requirements or any such third party contract (other than the security interests and liens created by the Loan Documents).

3.5 Payment of Taxes, Charges, Etc. Borrower will promptly pay all taxes or charges levied on or with respect to, and will at all times keep the Collateral, free and clear of all liens, claims, charges, security interests, mortgages, secondary financing and encumbrances whatsoever, other than the Permitted Liens and the security interests granted to Bank hereby or by any of the other Loan Documents. Borrower agrees to take all actions that Bank may request to establish and maintain a valid title and security interest in the Collateral, free and clear of all other liens, claims, charges, security interests, mortgages, secondary financing and encumbrances whatsoever (other

than the Permitted Liens), including, without limitation, the payment of any amounts, taxes, assessments, fees and/or charges necessary to perfect and note Bank's interest in the same. If such amounts, taxes, assessments, fees and/or charges remain unpaid after the date fixed for the payment of same, or if any lien, claim, charge, security interest, mortgage, secondary financing or encumbrance shall arise, or be claimed or asserted with respect to the Collateral, Bank may, without notice to Borrower, pay such taxes, assessments, charges or claims, or take any and all other actions (including the payment of money) deemed desirable by Bank to remove any such lien, claim, charge, security interest, mortgage, secondary financing or encumbrance, and Borrower agrees that the amounts thereof, along with any amounts necessary to perfect and note Bank's interest in any Collateral, shall be charged to Borrower's Loan Account described herein and shall bear interest at the rate of interest borne by Borrower's obligations under the Note.

3.6 Intentionally omitted.

3.7 Intentionally omitted.

3.8 Location of Collateral. All tangible Collateral has always been, is and will continue to be kept at Borrower's principal place of business as noted on the first page of this Agreement.

3.9 Location of Records. All records of Borrower pertaining to Accounts, general intangibles and contract rights have always been, are and will continue to be kept at Borrower's principal place of business as noted on the first page of this Agreement.

3.10 Additional Representations Regarding Financial Statements. Subject to any limitations stated therein or in connection therewith, all balance sheets, earnings statements and other financial data which have been or may hereafter be furnished to Bank to induce it to enter into this Agreement, to extend credit from time to time hereunder, or otherwise furnished in connection herewith, do or will fairly represent the financial condition of Borrower (or other persons or entities, as applicable) as of the dates and results of operations for the periods for which the same are furnished in accordance with generally accepted accounting principles consistently applied, and all other information, reports and other papers and data furnished to Bank shall be accurate, as of the relevant date, and correct in all material respects and complete insofar as completeness may be necessary to give Bank a true and accurate knowledge of the subject matter. Further, there has not been any material adverse change in the condition, business or operations of Borrower since the date of the balance sheets, earnings statements and other financial data referenced in this Section 3.10.

3.11 Possession of Equipment. With respect to any and all equipment which may now or hereafter constitute Collateral hereunder, Borrower will maintain possession of same and keep the same in good repair.

3.12 Borrower's Names and Offices. Borrower's name, chief executive office and principal place of business are, and at all times during the term of the Loan shall be, as set forth on the first page of this Agreement, except as otherwise disclosed in writing to Bank. Borrower will promptly advise Bank in writing sixty (60) days prior to any change in Borrower's name, place of organization, organizational identification number, chief executive office or principal place of business.

3.13 No Defaults Under Other Agreements. Borrower is not now and will not be in default under any agreement evidencing an obligation for the payment of money, performance of a service or delivery of goods, demand for performance under which, or acceleration of the maturity of which would render Borrower insolvent or unable to meet its other debts as they become due or conduct its business as usual.

3.14 Patents, Copyrights, Trademarks and Licenses. None of the Collateral is patented, copyrighted, copyrightable, licensed or trademarked by Borrower or incorporates or is subject, in whole or part, to any copyright, license, patent or trademark in favor of Borrower or any of its affiliates. Prior to the time any Collateral is copyrighted, licensed, patented or trademarked or incorporates or is subjected, in whole or in part, to any copyright, license, patent or trademark, Borrower shall notify Bank and shall take (or cause to be taken) all actions necessary to preserve the perfection and priority of Bank's security interest in such Collateral.

3.15 Judgments/Actions. There are no judgments, actions, suits, claims, proceedings or investigations existing, outstanding, pending, or to the best of Borrower's knowledge after due inquiry, threatened or in prospect, before any court, agency or tribunal, or governmental authority against or involving Borrower or any guarantor which do or could materially affect the business, properties, prospects, financial condition, earnings, results of operations or earnings capacity of Borrower or any guarantor, which impair Borrower's ability to perform its obligations arising under the Loan Documents, or which question the validity of the Loan or any of the Loan Documents, or any action or instrument contemplated by any of them.

3.16 Pari Passu. The Liabilities of Borrower arising under the Loan Documents are at least *pari passu* in repayment with all other obligations of Borrower, if any such other obligations are permitted hereunder.

3.17 Margin Stock; Investment Company. Borrower is not engaged in the business of extending credit for the purpose of purchasing or carrying "margin" stock within the meaning of Regulation U of the Board of Governors of the Federal Reserve System (12 C.F.R. Part 221), as amended from time to time ("**Regulation U**"). No part of the Loan is secured by margin stock. No part of the proceeds of any advance under the Loan shall be used directly or indirectly for the purpose of purchasing, acquiring, carrying, financing or refinancing the purchase of any "margin stock" as defined in and contemplated by Regulation U or for any other purpose which would constitute "purpose credit" under Regulation U. Borrower is not an "investment company" or a company "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940, as amended. Upon request of Lender, Borrower shall register, or at Lender's election, provide "shelf" registration for, any securities pledged hereunder with respect to which, in Lender's sole judgment, registration is necessary or desirable. Borrower shall and does hereby grant to Lender a continuing irrevocable power of attorney coupled with an interest exercisable after any Event of Default, and shall and does hereby make, constitute and appoint Lender as Borrower's true and lawful attorney-in-fact for Borrower and in Borrower's name, place and stead and on Borrower's behalf and for Borrower's use and benefit, to complete, execute, and file one or more Forms 144 under SEC Rule 144 or any notices under any similar rule or regulation of any securities authority, with full power and authority to do, take and perform all and every act and thing whatsoever requisite, proper or necessary to be done in the exercise of the rights and powers herein granted as fully and to all intents and purposes as Borrower might or could do if personally present. Upon request by Lender, Borrower shall (i) complete and execute one or more SEC Forms 144 in respect of the securities, or cooperate fully with Lender in complying with SEC Rule 144; and (ii) cooperate fully with Lender in the preparation of any securities disclosure or registration documents deemed necessary or desirable by Lender in connection with Lender's sale of the securities including without limitation providing Lender all information requested by Lender relating to the securities or the issuer of the securities. Except as may be set forth on Schedule 3.15 hereto, Borrower is not an "affiliate" of the issuer of the securities and the securities do not constitute "restricted" or "control" securities under applicable state or federal securities laws or regulations. Borrower has been the beneficial owner of any "restricted" or "control" securities constituting Collateral for at least ___ years and the purchase price for such securities has been fully paid for at least ___ years, such periods being calculated by excluding any period during which Borrower had a "short position" in, or option to sell, any such securities. Upon request by Lender, Borrower shall provide to Lender copies of all filings of any issuer of such securities and any correspondence with any securities authority, together with such other financial and other information regarding Borrower, the issuer(s) of all such securities and their respective businesses, affairs and conditions as Lender may from time to time request.

3.18 No Untrue Statements or Omissions. Neither this Agreement, nor any document, certificate, or statement furnished (or to be furnished) to Bank by or on behalf of Borrower pursuant to or in connection with this Agreement contains (or will contain) any untrue statement of a material fact or omits (or will omit) to state a material fact necessary to make the statements contained herein and therein not misleading. All of Borrower's balance sheets and other financial data delivered to Bank list all material liabilities of Borrower. There is no fact known to Borrower that materially and adversely affects, or will materially and adversely affect, the assets, business, operations, or condition of Borrower that has not been specifically set forth in this Agreement or otherwise disclosed by Borrower to Bank in writing.

3.19 Bankruptcy. Borrower is and at all times shall remain solvent as defined under applicable Alabama state law and the federal bankruptcy code and is not now and has not been in the past three (3) years a debtor under any title of the United States Bankruptcy Code, 11 U.S.C. §§ 101, *et seq.*

3.20 Business Purpose. The Loan is being obtained and the Collateral is being used, held or acquired for business purposes.

3.21 ERISA. Borrower hereby represents and warrants that (i) none of its assets are, for purposes of ERISA, considered assets of a Plan; (ii) no Pension Plan sponsored, maintained or contributed to by Borrower or any of its ERISA Affiliates has an accumulated funding deficiency (whether or not waived) under Section 412 of the Code or Section 302 of ERISA; and (3) neither Borrower nor any ERISA Affiliate has any unsatisfied liability for withdrawal liability with respect to any Pension Plan which is a Multiemployer Plan.

3.22 OFAC. Neither the Borrower nor any affiliate of the Borrower is a Sanctioned Person, (i) has assets in Sanctioned Countries, or (ii) derives its operating income from investments in, or transactions with Sanctioned Persons or Sanctioned Countries. The proceeds of the Loan will not be used and have not been used to fund any operations in, finance any investments or activities in or make any payments to, a Sanctioned Person or a Sanctioned Country.

3.23 Organizational Identification Number. The number assigned by the State of Delaware as Borrower's organizational identification number is **2075972** (however, if such State does not assign organizational identification numbers, Borrower has indicated that by inserting the words "none assigned" in the blank); and Borrower understands that the organizational identification number above is not Borrower's federal or state tax or employer identification number.

SECTION 4. Security Interest of Bank in Collateral.

4.1 Collateral. As security for the payment and performance of all Liabilities, Bank shall have and Borrower hereby assigns to Bank and grants to Bank a continuing lien on, security interest in and right of set-off against the property and rights more particularly described in that certain Security Agreement executed by Borrower in favor of Bank contemporaneously herewith (as amended, the "**Security Agreement**"); and proceeds of, for and to the foregoing, whether now or hereafter owned, existing, created, arising or acquired.

4.2 Security Interest in Collateral Created/Acquired Hereafter. No submission by Borrower to Bank of any schedule or other particular identification of Collateral shall be necessary to vest in Bank a security interest in each and every item of Collateral now existing or hereafter created or acquired, but rather, such security interest shall vest in Bank immediately upon the creation or acquisition of any item of Collateral, without the necessity for any other or further action by Borrower or Bank; provided, however, that Borrower shall execute such other and additional documents, instruments and agreements as requested by Bank to evidence the security interests contemplated hereby.

4.3 Preservation of Perfection and Priority. Borrower (at Borrower's expense) shall take such steps and execute, deliver and file (as applicable) (or cause the execution, delivery and filing (as applicable) of) such financing statements, continuation statements, agreements (including, without limitation, security agreements and landlord, creditor and mortgagee subordination agreements), documents, and papers (all in form and substance acceptable to Bank) as Bank may from time to time request to perfect or preserve the perfection and priority of Bank's security interests granted hereby or by any of the other Loan Documents. Without limiting any of Bank's rights and remedies under law or any other provisions of this Agreement or any of the other Loan Documents, Borrower authorizes the filing by Bank of any and all financing statements in any and all jurisdictions Bank deems necessary or appropriate to perfect Bank's security interest in the Collateral and/or any other property.

If, by reason of location of Borrower, the Collateral or otherwise, the creation, validity, or perfection of security interests provided for herein are governed by law other than the Uniform Commercial Code of Alabama,

Borrower shall take such steps and execute and deliver such documents, agreements, papers and financing statements as Bank may from time to time request to comply with the Uniform Commercial Code, the Uniform Trust Receipts Act, the Factors Lien Act, or other laws of Alabama or other states or jurisdictions. Borrower hereby appoints and empowers Bank, or any employee of Bank which Bank may designate for the purpose, as its attorney-in-fact, to execute and/or endorse (and file, as appropriate) on its behalf any documents, agreements, papers, checks, financing statements and other documents which, in Bank's sole judgment, are necessary to be executed, endorsed and/or filed in order to (i) perfect or preserve the perfection and priority of Bank's security interests granted hereby or by any of the other Loan Documents and (ii) collect or realize upon the Collateral or otherwise exercise its rights and remedies under any of the Loan Documents or applicable law. Bank shall not be required to take any action of any kind to preserve, collect, or protect Bank's or Borrower's rights in the Collateral or any other security granted to Bank.

4.4 Intentionally omitted.

4.5 Power of Attorney. Borrower hereby appoints and empowers Bank, or any employee of Bank which Bank may designate for the purpose, as its attorney-in-fact, to execute and/or endorse (and file, as appropriate) on its behalf any documents, agreements, papers, checks, financing statements and other documents which, in Bank's sole judgment, are necessary to be executed, endorsed and/or filed in order to (i) perfect or preserve the perfection and priority of Bank's security interests granted hereby or by any of the other Loan Documents and (ii) collect or realize upon the Collateral or otherwise exercise its rights and remedies under any of the Loan Documents or applicable law.

4.6 Other Collateral. Collateral securing other loans with Bank may also secure the Loan. To the extent collateral previously has been given to Bank by any person that may secure the Loan, whether directly or indirectly, it is specifically agreed that, to the extent prohibited by law, all such collateral consisting of household goods will not secure the Loan. In addition, if any collateral requires the giving of a right of rescission under the Truth in Lending Act for the Loan, such collateral also will not secure the Loan unless and until all required notices of that right have been given.

SECTION 5. Intentionally Deleted.

SECTION 6. Affirmative Covenants.

6.1 Financial Statements. Borrower shall submit or cause to be submitted to Bank (i) Borrower's internally prepared quarterly financial statements within forty-five (45) days after the close of the first three (3) quarters in each fiscal year including a balance sheet as of the close of such period, an income statement, and such other statements containing financial information which Bank reasonably may require, prepared and analyzed in accordance with generally accepted accounting principles and attested to by an authorized officer of Borrower; (ii) Borrower's audited fiscal year-end financial statements (in form, preparation and substance acceptable to Bank) within ninety (90) days after the close of each of its fiscal years, including a balance sheet as of the close of such period, an income statement, reconciliation of stockholders' equity, a statements of cash flows, all certified by an independent certified public accountant acceptable to Bank and analyzed in accordance with generally accepted accounting principles; (iii) together with each delivery of financial statements required above, the certificate of Borrower substantially in the form of **Exhibit A** hereto signed by the president of Borrower stating, among other things, that no event has occurred which constitutes an Event of Default or would constitute an Event of Default but for the requirement that notice be given, or time elapse or both, under any loans, notes, debentures, bonds, leases, or other obligations of Borrower then outstanding, including, but not limited to, this Agreement (such certificate shall publish the accounting calculations used to determine compliance or noncompliance with Borrower's financial obligations and financial covenants, including those provided in this Agreement), or, if any such Event of Default or defaults exists, specifying the nature thereof; (iv) copies of Borrower's annual budget within sixty (60) days following each fiscal year end; (v) monthly investment account statements from Portfolio Manager within thirty (30) days of each month end; and (vi) such other financial and related information when and

as requested by Bank regarding Borrower, the Collateral and any endorser, guarantor or surety of any of the Liabilities of Borrower to Bank.

6.2 Insurance. Borrower shall (i) maintain insurance (written by insurance companies acceptable to Bank) in form, amount and substance acceptable to Bank, including, without limitation, extended multi-peril hazard, worker's compensation, general liability insurance and insurance upon Borrower's property, all facets of its businesses and, if reasonably available, all the Collateral; (ii) furnish to Bank, upon request, a statement of the insurance coverage; (iii) use its best efforts to protect and preserve the Collateral and shall obtain other or additional insurance promptly, upon request of Bank, to the extent that such insurance may be available; and (iv) cause Bank to be named as an additional insured on all liability insurance and lender loss payee as to all casualty insurance covering Collateral, pursuant to endorsements in form and substance acceptable to Bank. All insurance proceeds, payments and other amounts paid to or received by Bank under or in connection with any and all such policies may be retained by Bank in whole or part as additional Collateral for the Liabilities and/or, at Bank's option, be applied in whole or part to the payment of such of the Liabilities as shall then be due and/or, at Bank's option, be held (in a remittance or other special account in which neither Borrower nor any guarantor shall have an interest) for application to Liabilities not yet due and be applied to such Liabilities as and when the same shall come due, in such order as Bank may determine in its sole discretion. All insurance policies shall provide for a minimum of ten (10) days' written cancellation notice to Bank and, at Bank's request, all such policies shall be delivered to and held by Bank. In the event of failure to provide and maintain insurance required by this Agreement, Bank may, at its option, provide such insurance and charge the costs and expenses incurred to Borrower's Loan Account. Bank is hereby made attorney-in-fact for Borrower to (i) obtain, adjust, and settle, in its sole discretion, such insurance, and (ii) endorse any drafts or checks issued in connection with such insurance.

6.3 Compliance with Laws. Borrower does and shall at all times while any Liabilities remain unsatisfied comply with all applicable laws, ordinances, rules and regulations of any governmental authority or entity governing or affecting Borrower, any of its property, the Collateral or any part thereof, and shall immediately notify Bank of any and all actual, alleged or asserted violations of any such laws, ordinances, rules or regulations. Without limitation to the generality of the foregoing, Borrower shall comply, and cause to be complied, with all laws, governmental standards and regulations applicable to Borrower or any Collateral in respect of occupational health and safety, toxic and hazardous waste and substances and environmental matters. Borrower promptly shall notify Bank of receipt of any notice of any actual, alleged or asserted violation of any such law, standard or regulation. Borrower hereby agrees to indemnify, defend and hold Bank harmless from all loss, cost, damage, claim and expense incurred by Bank on account of Borrower's breach of any representation, warranty or requirement of this Section, Borrower's failure to perform the obligations of this Section, and/or Borrower's or any Collateral's violating any applicable laws, ordinances, rules or regulations, including, without limitation, any environmental or occupational health and safety laws or regulations. This indemnification shall survive the closing of the Loan, payment of the Loan and the exercise of any right or remedy under any of the Loan Documents. Borrower represents that there are no pending claims or threats of claims by private or governmental or administrative authorities relating to environmental impairment, conditions, or regulatory requirements involving Borrower or any Collateral.

6.4 Maintenance of Existence; Maintenance of Authorizations. Borrower shall (i) preserve, renew and maintain in full force and effect its corporate or organizational existence and (ii) take all reasonable action to maintain all authorizations, approvals, rights, privileges and franchises necessary or desirable in the normal conduct of its business, except, in each case, as otherwise permitted under the Loan Documents.

6.5 Fees. In consideration of Bank's commitment to make advances on the Loan and Bank's incurring certain administrative expenses, Borrower agrees to and shall pay to Bank on the date hereof in good and immediately available funds, a non-refundable \$25,000.00 origination fee. Borrower further agrees to pay any fee imposed by Bank pursuant to the Loan Documents including, but not limited to the fees set forth in Section 11 or Section 12 herein.

6.6 Notification of Defaults, Suits, Etc. Promptly after the same shall have become known to Borrower, Borrower shall notify Bank in writing of (i) any default or event of default under any of the Loan

Documents, (ii) any material change in Borrower's financial condition and/or prospects and/or (iii) any action, suit or proceeding at law or in equity or by or before any governmental instrumentality or other agency which, if adversely determined, might impair the ability of Borrower to perform its obligations under the Loan Documents, impair the ability of Borrower to carry on its business substantially as now conducted, or which might materially affect the business, operations, properties, assets or condition, financial or otherwise, of Borrower.

6.7 Intentionally omitted.

6.8 Intentionally omitted.

6.9 Loan to Value. To be tested at any time by Bank, but at least quarterly, there shall be a maximum Loan to Value of seventy-five percent (75%) determined by dividing the full commitment amount of the Loan on the date of testing by the market value of the Collateral described in that certain Security Agreement.

6.10 Intentionally omitted.

6.11 Deposit Account. Borrower shall establish and maintain a deposit account with Bank.

6.12 Intentionally omitted.

6.13 Intentionally omitted.

6.14 Intentionally omitted.

6.15 Indemnification. In the event (a) any of Borrower's warranties or representations shall prove to be false or misleading; (b) any Account Debtor in judicial proceeding, shall assert against Bank or any of its officers, employees, directors, managers or agents a claim or defense arising out of any transaction between the Account Debtor and Borrower; or (c) Borrower or any other person or entity shall assert against Bank or any of its officers, employees, directors, managers or agents a claim or defense arising out of or relating to any of the Collateral, the Liabilities or any of the Loan Documents, Borrower agrees to indemnify and hold Bank harmless from and against any liability, judgment, cost, attorneys' fees or other expense whatsoever arising therefrom.

6.16 ERISA Covenants. Borrower hereby covenants and agrees that: (i) in addition to the prohibitions set forth in the Loan Documents, and not in limitation thereof, Borrower shall not assign, sell, pledge, encumber, transfer, hypothecate or otherwise dispose of its interest or rights in any of the Loan Documents or in the Collateral, or attempt to do any of the foregoing or suffer any of the foregoing, if such proposed action will result in a prohibited transaction under ERISA or the Code; and (ii) Borrower shall take and cause to be taken all necessary actions so that at all times the assets of Borrower shall not be considered for any purpose of ERISA or Section 4975 of the Code to be assets of a Plan.

Borrower shall indemnify and hold Bank free and harmless from and against all loss, costs (including reasonable attorneys' fees and expenses), taxes, damages and expenses Bank may suffer by reason of the investigation, defense and settlement of claims, and in obtaining any prohibited transaction exemption under ERISA necessary in Bank's reasonable judgment, by reason of the inaccuracy of the foregoing representations and warranties of Borrower or a breach of the foregoing covenants of Borrower of this Section. The obligations of Borrower under this Section shall survive the payment in full of the Liabilities or other satisfaction thereof.

6.17 Inspection of Records; Further Assurance. Borrower shall at reasonable times and from time to time allow Bank, by or through any of its officers, managers, agents, employees, attorneys or accountants to (i) examine, inspect and make extracts from Borrower's books and records; (ii) analyze Borrower's financial statements; and (iii) inspect, review and audit the Collateral at any time during normal business hours, without prior notice to Borrower. Borrower shall allow, do, make, execute and deliver all such additional and further acts, things, deeds, assurances, agreements and instruments which Bank may require more completely to vest in and assure to

Bank its rights hereunder and to assure that Borrower's Loan Account balance does not exceed Borrower's availability hereunder.

6.18 USA Patriot Act. The USA Patriot Act of 2001 (Public Law 107-56) and federal regulations issued with respect thereto require all financial institutions to obtain, verify and record certain information that identifies individuals or business entities which open an "account" with such financial institution. Consequently, Bank may from time-to-time request, and Borrower shall provide to Bank, Borrower's name, address, tax identification number and/or such other identification information as shall be necessary for Bank to comply with federal law. An "account" for this purpose may include, without limitation, a deposit account, cash management service, a transaction or asset account, a credit account, a loan or other extension of credit, and/or other financial services product.

SECTION 7. Negative Covenants.

7.1 Liens. Borrower shall not create or permit the creation of any lien upon any of the Collateral except for Permitted Liens and the security interests granted to Bank under the Loan Documents.

7.2 Intentionally omitted.

7.3 Intentionally omitted.

7.4 Intentionally omitted.

7.5 Intentionally omitted.

7.6 Dissolution, Mergers, Change in Nature. Borrower shall not (i) liquidate, discontinue or materially reduce its normal operations; (ii) cause, allow or suffer to occur (a) the merger or consolidation of or involving Borrower with or into any corporation, partnership, or other entity, where Borrower is not the continuing or surviving entity, or (b) the sale, lease, transfer or other disposal of all or any substantial part of its assets, or any of its Accounts; or (iii) cause, allow, or suffer to occur any change in the ownership, nature, control, corporate structure of Borrower, or operations without the prior written consent of Bank.

7.7 Subordinated Debt. Borrower shall not make any payment upon any Subordinated Debt described in any subordination agreement delivered to Bank.

7.8 Intentionally omitted.

7.9 Restrictions on Transfer of Collateral. Borrower shall be permitted sell, transfer, lease, assign, convey or otherwise dispose of the Collateral, any portion thereof, or any interest therein (or any of the Proceeds thereof, including, without limitation, money, checks, money orders, drafts, notes, instruments, documents, chattel paper, Accounts, returns or repossessions), without Bank's prior written consent so long as the Loan to Value requirement set forth in Section 6.9 of this Agreement is maintained.

7.10 Restrictions on Pledging, Mortgaging Collateral. Except for the Permitted Liens, Borrower shall not pledge, mortgage, or create or suffer to exist a security interest in any of the Collateral or any Proceeds or products thereof in favor of any person other than Bank unless such security interest is expressly subordinated to Bank's security interest therein and Bank has approved in writing the existence and status of such security interest.

7.11 Material Adverse Change. Borrower shall not suffer a material adverse change in the condition or affairs (financial or otherwise) of Borrower which impairs Borrower's ability to perform its obligations under the Loan Documents.

SECTION 8.**Events of Default.**

Any of the following shall constitute an “**Event of Default**”:

- (a) default in the payment or performance, when due or payable, of any of the Liabilities of Borrower or any liability or obligation (whether now or hereafter existing, arising or incurred, direct or indirect, conditional or unconditional) of any endorser, guarantor, or surety for any of the Liabilities of Borrower to Bank;
- (b) failure by Borrower, any guarantor or any other person or entity, as applicable, to (i) pay or perform any act or obligation imposed hereby or by any of the other Loan Documents, or (ii) comply with any of the terms, conditions, warranties, covenants or requirements contained or referenced herein or in one or more of the other Loan Documents;
- (c) failure of Borrower or any other person or entity, as applicable, to pay when due (i) any tax or (ii) any premium on any (a) insurance policy assigned to Bank, or (b) any insurance covering any Collateral;
- (d) if any warranty or representation contained herein shall prove false or misleading or if Borrower or any endorser, guarantor or surety for any of the Liabilities of Borrower to Bank made or makes any other misrepresentation to Bank for the purpose of obtaining credit or any extension of credit;
- (e) failure of Borrower or any endorser, guarantor, or surety for any of the Liabilities of Borrower to Bank to furnish financial information or to permit the inspection of the books or records or Collateral of Borrower or of any endorser, guarantor or surety for any of the Liabilities of Borrower to Bank;
- (f) issuance of an injunction or attachment against property of, the general assignment by, judgment against or filing of a petition in bankruptcy by or against Borrower or any endorser, guarantor or surety for any of the Liabilities of Borrower to Bank; the filing of an application in any court for a receiver for Borrower or any endorser, guarantor or surety for any of the Liabilities of Borrower to Bank; any guarantor for any of the Liabilities of Borrower to Bank ceases to be an owner or employee of the Borrower; or the death, dissolution, incapacity or liquidation of Borrower or of any endorser, guarantor or surety for any of the Liabilities of Borrower to Bank;
- (g) calling of a meeting of creditors, appointment of a committee of creditors or liquidation agents, or offering of a composition or extension to creditors by, for or of Borrower or by, for or of any endorser, guarantor or surety for any of the Liabilities of Borrower to Bank;
- (h) bankruptcy or Insolvency of Borrower or of any of Borrower’s owners, or of any endorser, guarantor or surety for any of the Liabilities of Borrower to Bank;
- (i) occurrence or continuation of any default or event of default by or attributable to Borrower under or in connection with any mortgage, lease, security agreement, note, bond, indenture, loan agreement or similar instrument or agreement to which Borrower is now or may hereafter be a party or by which Borrower or any of its property (including, without limitation, the Collateral) is now or may hereafter be bound or affected;
- (j) fraud or misrepresentation by or on behalf of Borrower or any guarantor in its transactions with Bank;
- (k) such a change in the condition or affairs (financial or otherwise) of Borrower or of any endorser, guarantor or surety for any of the Liabilities of Borrower to Bank or of the Collateral or any other

source of repayment of or security for any of the Liabilities which, in the opinion of Bank, impairs Bank's security or increases its risk;

- (l) any breach or violation of or failure to abide by any warranty, covenant, term or provision of this Agreement, the Note or any of the other Loan Documents; Bank's not obtaining or maintaining a first perfected security interest in any of the Collateral;
- (m) the termination, cancellation or revocation of any of the Loan Documents without Bank's consent or the determination by Bank that any of the Loan Documents is void, voidable or unenforceable;
- (n) a final judgment against Borrower remaining unpaid, unstayed or undismissed for a period of more than five (5) days;
- (o) Borrower discontinuing doing business for more than five (5) consecutive calendar days during any year for any reason;
- (p) failure of Borrower to timely submit the financial statements and any applicable additional documentation as required by Section 6.1 of this Agreement, which failure continues for fifteen (15) days or more following Borrower's receipt of Bank's notice regarding the same; or
- (q) any default or event of default under the Note or any of the other Loan Documents.

In addition, the occurrence of an Event of Default under the Loan shall constitute a default under all of the other Liabilities.

SECTION 9. Remedies; Power to Sell or Collect Collateral. In addition to and without limiting any other rights and remedies of Bank in the Loan Documents, Bank shall have the following remedies:

9.1 Remedies. If any Event of Default occurs, Bank may take any or all of the following actions:

- (a) declare the obligation of Bank to make advances hereunder or otherwise provide credit to Borrower to be terminated;
- (b) declare any or all of the obligations, indebtedness and liabilities of Borrower to Bank, including, without limitation, the Liabilities, to be, at the option of Bank and notwithstanding any time or credit allowed by any of the Loan Documents or any other document, agreement or instrument evidencing any of the Liabilities, immediately due and payable without declaration, notice or demand; and
- (c) exercise all rights and remedies available to Bank under the Loan Documents or applicable laws, including but not limited to the following:
 - (1) the remedies of a secured party under the Uniform Commercial Code of Alabama (regardless of whether the Uniform Commercial Code has been enacted in the jurisdiction where rights or remedies are asserted), including, without limitation, the right to take possession and dispose of the Collateral, and for that purpose Bank may, so far as Borrower can give authority therefor, enter upon any premises on which the Collateral may be situated and remove the same therefrom or take possession of same and/or store the same on such premises for a reasonable time pending disposition under the terms of this Agreement or applicable law. Bank may require Borrower to assemble the Collateral and make it available to Bank at a place designated by Bank which is reasonably convenient to both parties.
 - (2) Unless the Collateral is perishable or is of a type customarily sold on a recognized market, Bank shall give to Borrower at least ten (10) days prior written notice of the time and place

of any public sale of Collateral or of the time after which any private sale or any other intended disposition is to be made. Any notice to Borrower of sale, disposition or other intended action by Bank, required by law to be given to Borrower, sent to Borrower at the address of Borrower shown on the first page of this Agreement or at such other address of Borrower as may from time to time be shown on Bank's records, at least ten (10) days prior to such action, shall constitute reasonable notice to Borrower.

- (3) Bank may, at any time, in its discretion, transfer any securities or other property constituting Collateral into its own name or that of its nominee and receive the income therefrom and hold the same as security for the Liabilities or apply it on principal, interest, charges or expenses due on Liabilities in any manner deemed appropriate by Bank.
- (4) Bank may demand, collect, receipt for, settle, compromise, adjust, sue for, foreclose or realize upon Collateral as Bank may determine, whether or not Liabilities or Collateral are then due.
- (5) Bank may receive, open and dispose of mail addressed to Borrower and sign and endorse notes, checks, drafts, money orders, certificates and documents of title and related forms or other evidences of payment, shipment or storage or any form of Collateral on behalf of and in the name of Borrower as Borrower's attorney-in-fact for such purpose.
- (6) Bank may apply Collateral and the Proceeds from any Collateral against the Liabilities secured hereby in any manner deemed appropriate by Bank.
- (7) Bank may resort to any security given by this Agreement or to any other security now existing or hereafter given to secure the payment of Borrower's Liabilities, in whole or in part, and in such portions and in such order as may seem best to Bank in its sole discretion, and any such action shall not in any way be considered as a waiver of any of the rights, benefits, or security interests evidenced by this Agreement or any of the other Loan Documents.
- (8) Bank may, at all times, proceed directly against Borrower to enforce payment of Borrower's Liabilities and shall not be required first to enforce its rights in the Collateral or any other security granted to it;

provided, however, that upon the occurrence or commencement of an action described in any of subsections 8 (f), (g), or (h) above, all of the Liabilities shall become automatically due and payable without declaration, notice or demand by Bank to or upon Borrower and any commitment to make advances hereunder or otherwise extend credit to Borrower pursuant to this Agreement shall automatically terminate; provided, further, that, if Bank shall continue to make advances hereunder or otherwise extend credit to Borrower pursuant to this Agreement after an automatic termination of the Bank's obligation to make advances hereunder by reason of the commencement of an action described in any of subsections 8 (f), (g) or (h) above, Borrower acknowledges and agrees that such advances and other credit shall nevertheless be governed by this Agreement and enforceable against and recoverable from Borrower as if such action had never been instituted.

The enumeration of the foregoing rights is not intended to be exhaustive, and the exercise of any right shall not preclude the exercise of any other rights, all of which shall be cumulative. All rights and remedies of Bank with respect to Liabilities or Collateral, whether evidenced hereby, by any of the other Loan Documents or by any other instrument or paper, shall be cumulative and may be exercised singularly or concurrently.

SECTION 10. Set Off.

Bank and any participant and any holder of all or any part of the Liabilities are given hereby as additional security for all Liabilities a continuing lien and security interest in and upon any and all moneys, securities and other property of

Borrower and the Proceeds thereof, now or hereafter held or received by or in transit to Bank (or such participant or holder) from or for Borrower, whether for safekeeping, custody, pledge, transmission, collection or otherwise, and also upon any and all deposit balances (general or special) and credits of Borrower with, and any and all claims of Borrower against Bank (or such participant or holder) at any time existing, and upon the occurrence of an Event of Default hereunder, Bank (or such participant or holder) may apply or set off the same against the Liabilities secured hereby or by any of the other Loan Documents in any manner deemed appropriate by Bank (or such participant or holder). Borrower agrees that any other person or entity purchasing a participation from Bank may exercise all its rights of payment (including the right of set-off) with respect to such participation as fully as if such person or entity were the direct creditor of Borrower in the amount of such participation.

SECTION 11. Waivers.

Borrower waives demand, presentment, protest, notice of protest, notice of intent to accelerate, notice of acceleration, notice of acceptance of this Agreement, and notice of advances and loans made, credit extended, Collateral received or delivered or other action taken in reliance hereon and all other demands and notices of any description. With respect both to the Liabilities and Collateral, Borrower assents to any extension or postponement of the time of payment or any other indulgence, to any substitution, exchange or release of any or all of the Collateral, to the addition or release of any party or person primarily or secondarily liable, to the acceptance of partial payments thereon and the settlement, compromising or adjusting of any thereof, all in such manner and at such time or times as Bank may deem advisable. Bank shall have no duty as to the collection or protection of any or all of the Collateral or any income therefrom, nor as to the preservation of any rights against prior parties, nor as to the preservation of any rights pertaining thereto beyond the safe custody of Collateral in its possession. Bank may exercise its rights with respect to Collateral without resorting or regard to other Collateral or sources of reimbursement for the Liabilities. Bank shall not be deemed to have waived any of its rights upon or under any of the Liabilities or Collateral unless such waiver be in writing and signed by Bank. No course of dealing and no delay or omission on the part of Bank in exercising any right shall operate as a waiver of such right or any other right. A waiver on any one occasion shall not be construed as a bar to or waiver of any right on any future occasion. Bank reserves the right to assess and collect a fee in connection with any agreement by Bank to waive the violation of any covenant contained in the Loan Documents or to waive or forego its rights and remedies upon the occurrence of an Event of Default. This section shall not in any respect obligate Bank to waive the violation of any covenant or to forego its rights and remedies upon the occurrence of an Event of Default, which Bank may or may not do in its sole discretion. As against the obligations secured hereby, Borrower hereby expressly waives all claims and all rights to claim any exemptions, both as to personal and real property, allowed or allowable under the Constitution or laws of the United States, the State of Alabama or any other jurisdiction.

SECTION 12. Expenses; Proceeds of Collateral.

Irrespective of whether the proceeds of the Loan are disbursed, Borrower shall pay all fees and expenses, including, without limitation, legal fees and expenses, filing fees, insurance premiums and expenses, appraisal fees, recording costs and taxes (except taxes measured by Bank's income) incurred by Bank or Borrower from time to time in connection with the preparation and closing, filing, administration, amendment and modification of the Loan and the Loan Documents and those documents and instruments associated with the perfection and creation of the security interests and other rights granted pursuant hereto or pursuant to any of the other Loan Documents and Bank's selling, negotiating, documenting and/or enforcing participations in the Loan and the Loan Documents. Borrower shall pay to Bank on demand any and all such fees and expenses incurred or paid by Bank, together with any and all fees, expenses and costs (a) of collection or (b) otherwise incurred or paid by Bank in protecting, enforcing or realizing its rights upon or with respect to any of the Liabilities, the Loan Documents or the Collateral (including, without limitation, reasonable counsel fees, including, without limitation, those incurred in connection with any appeal or any bankruptcy proceedings). After deducting all of said fees and expenses, the residue of any proceeds of collection or sale of Liabilities or Collateral shall be applied to the Liabilities and interest, charges and expenses constituting or related to the Liabilities in such order of preference as Bank may determine, proper allowance for Liabilities not then due being made, and, to the extent allowed by law, without limiting any of Borrower's or any guarantor's obligations or any of Bank's rights under the Loan Documents, Borrower and guarantors shall remain liable for any deficiency. Borrower hereby authorizes Bank to debit such and all other taxes, charges and expenses provided for in this Agreement to Borrower's Loan Account.

SECTION 13. Continuing Agreement.

This Agreement shall be a continuing agreement in every respect. It is expressly agreed that this Agreement shall survive the maturity or termination of the Loan in all respects necessary for Bank to exercise its rights and remedies hereunder and with respect to the Collateral. The maturity or termination of the Loan shall in no way affect any transactions entered into or rights created or obligations incurred prior to such maturity or termination; rather, such rights and obligations shall be fully operative until the same are fully disposed of, concluded and/or liquidated. Without limitation to the generality of the foregoing, such maturity or termination shall not release nor diminish any of (i) Borrower's obligations and agreements, or (ii) Bank's rights and remedies arising hereunder or in connection herewith until full and final payment and performance of all of the Liabilities. All representations and warranties of Borrower herein, and all covenants and agreements of Borrower herein, in the other Loan Documents, or in any other document delivered hereunder or in connection herewith, shall survive the execution of this Agreement and shall be deemed continuing representations, warranties, covenants and agreements.

SECTION 14. General.

14.1 Notice. Any demand upon or notice to Borrower that Bank may give shall be effective (i) upon delivery if such notice is given personally, or (ii) upon the third day following the date of dispatch if deposited in the mails, addressed to Borrower at the address noted on the first page of this Agreement or, if Borrower has notified Bank in writing of a change of address, to Borrower's last address so notified, or (iii) upon receipt if by facsimile or telecopy. Demands or notices addressed to Borrower's address at which Bank customarily communicates with Borrower shall also be effective. All notices provided to Bank by Borrower under or related to any of the Loan Documents, the Liabilities or the Collateral, including, without limitation, under any one or more of Section 9A-208, 9A-209, 9A-210, 9A-513 or 9A-616 of the Alabama Uniform Commercial Code, shall be sent to the address of Bank noted on the first page of this Agreement, Attention: _____, with a copy to _____; no notice sent to Bank shall be effective until received by Bank

14.2 Transfer of Liabilities. This Agreement and each of the other Loan Documents are binding upon Borrower, its successors and assigns, and inure to the benefit of Bank, its successors and assigns. If at any time or times by assignment or otherwise Bank transfers any of the Liabilities (either separately or together with the Collateral therefor), such transfer shall carry with it Bank's powers and rights under this Agreement and the other Loan Documents with respect to the Liabilities and/or Collateral transferred, and the transferee shall become vested with said powers and rights whether or not they are specifically referred to in the transfer. If and to the extent Bank retains any of the Liabilities or Collateral, Bank will continue to have the rights and powers herein set forth with respect thereto. Borrower may not assign or delegate any of its rights or obligations under the Loan, this Agreement or any of the other Loan Documents.

14.3 Jurisdiction and Venue. **THE NOTE, THIS AGREEMENT AND ALL OF THE OTHER LOAN DOCUMENTS, AND ALL RIGHTS AND OBLIGATIONS HEREUNDER AND THEREUNDER, INCLUDING MATTERS OF CONSTRUCTION, VALIDITY AND PERFORMANCE, SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE INTERNAL LAWS OF THE STATE OF ALABAMA, EXCEPT THAT ANY CONFLICT OF LAWS RULE OF SUCH JURISDICTION THAT WOULD REQUIRE REFERENCE TO THE LAWS OF SOME OTHER JURISDICTION SHALL BE DISREGARDED. ANY SUITS, CLAIMS OR CAUSES OF ACTION ARISING DIRECTLY OR INDIRECTLY FROM THIS AGREEMENT, THE NOTE, THE OTHER LOAN DOCUMENTS OR ANY OTHER AGREEMENTS OR INSTRUMENTS BETWEEN BANK AND BORROWER RELATING TO SUCH DOCUMENTS MAY BE BROUGHT IN A COURT OF APPROPRIATE JURISDICTION IN JEFFERSON COUNTY, ALABAMA AND OBJECTIONS TO VENUE AND PERSONAL JURISDICTION IN SUCH FORUM ARE HEREBY EXPRESSLY WAIVED. THIS AGREEMENT HAS BEEN NEGOTIATED AND IS BEING EXECUTED AND DELIVERED IN THE STATE OF ALABAMA, OR IF EXECUTED BY BORROWER ELSEWHERE, SHALL BECOME EFFECTIVE UPON BANK'S RECEIPT AND ACCEPTANCE OF THE EXECUTED ORIGINAL OF THIS AGREEMENT IN THE STATE OF ALABAMA; PROVIDED, HOWEVER, THAT BANK SHALL HAVE NO OBLIGATION TO**

GIVE, NOR SHALL BORROWER BE ENTITLED TO RECEIVE ANY NOTICE OF SUCH RECEIPT AND ACCEPTANCE FOR THIS AGREEMENT TO BECOME A BINDING OBLIGATION OF BORROWER. IT IS INTENDED, AND BORROWER AND BANK SPECIFICALLY AGREE, THAT THE LAWS OF THE STATE OF ALABAMA GOVERNING INTEREST SHALL APPLY TO THIS TRANSACTION. BORROWER HEREBY ACKNOWLEDGES THAT (I) THE NEGOTIATION, EXECUTION, AND DELIVERY OF THE LOAN DOCUMENTS CONSTITUTE THE TRANSACTION OF BUSINESS WITHIN THE STATE OF ALABAMA, (II) ANY CAUSE OF ACTION ARISING UNDER ANY OF SAID LOAN DOCUMENTS WILL BE A CAUSE OF ACTION ARISING FROM SUCH TRANSACTION OF BUSINESS, AND (III) BORROWER UNDERSTANDS, ANTICIPATES, AND FORESEES THAT ANY ACTION FOR ENFORCEMENT OF PAYMENT OF THE LOAN OR THE LOAN DOCUMENTS MAY BE BROUGHT AGAINST IT IN THE STATE OF ALABAMA. TO THE EXTENT ALLOWED BY LAW, BORROWER HEREBY SUBMITS TO JURISDICTION IN THE STATE OF ALABAMA FOR ANY ACTION OR CAUSE OF ACTION ARISING OUT OF OR IN CONNECTION WITH THE LOAN OR THE LOAN DOCUMENTS AND WAIVES ANY AND ALL RIGHTS UNDER THE LAWS OF ANY STATE OR JURISDICTION TO OBJECT TO JURISDICTION OR VENUE WITHIN JEFFERSON COUNTY, ALABAMA; NOTWITHSTANDING THE FOREGOING, NOTHING CONTAINED IN THIS PARAGRAPH SHALL PREVENT BANK FROM BRINGING ANY ACTION OR EXERCISING ANY RIGHTS AGAINST BORROWER, ANY GUARANTOR, ANY SECURITY FOR THE LOAN OR ANY OF BORROWER'S OR ANY GUARANTOR'S PROPERTIES IN ANY OTHER COUNTY, STATE, OR JURISDICTION. INITIATING SUCH ACTION OR PROCEEDING OR TAKING ANY SUCH ACTION IN ANY OTHER STATE OR JURISDICTION SHALL IN NO EVENT CONSTITUTE A WAIVER BY BANK OF ANY OF THE FOREGOING.

14.4 No Partnership. Nothing contained herein, or in any of the documents contemplated hereby, shall be deemed to render Bank on the one hand, and Borrower on the other hand, partners or venturers for any purpose.

14.5 Seal. This Agreement is intended to take effect as a sealed instrument.

14.6 Construction of Documents. In the event of actual conflict in the terms and provisions of this Agreement and any of the other Loan Documents or any other document, instrument or agreement executed in connection with this Agreement or described or referred to in this Agreement, the terms and provisions most favorable to Bank shall control. This Agreement and each of the other Loan Documents shall be deemed to be drafted by all parties hereto and shall not be construed against any party hereto. The table of contents hereto and the headings of the sections, paragraphs and subdivisions of this Agreement are for convenience of reference only, are not to be considered a part hereof, and shall not limit or otherwise affect any of the terms hereof.

14.7 No Modification. No modification, consent, amendment or waiver of any provision of this Agreement or any of the other Loan Documents, nor consent to any departure by Borrower therefrom, shall be effective unless the same shall be in writing and signed by Bank, and then shall be effective only in the specific instance and for the purpose for which given.

14.8 Severability. In the event any one or more of the terms or provisions contained in this Agreement, in any of the other Loan Documents or in any other instrument or agreement referred to herein or executed in connection with or as security for the Liabilities, or any application thereof to any person or circumstances, shall be declared prohibited, illegal, invalid or unenforceable to any extent in any jurisdiction, as determined by a court of competent jurisdiction, such term or provision, in that jurisdiction, shall be ineffective only to the extent of such prohibition, illegality, invalidity or unenforceability, or as applied to such persons or circumstances, without invalidating or rendering unenforceable the remaining terms or provisions hereof or thereof or affecting the validity or enforceability of such term or provision in any other jurisdiction or as to other persons or circumstances in such jurisdiction, unless such would effect a substantial deviation from the general intent and purpose of the parties, make a significant change in the economic effect of the transactions contemplated herein on Bank, or impair the validity or perfection of Bank's security interest in any Collateral or the validity of any guaranty or other security

for the Liabilities, in which event a substitute provision shall be supplied by the court in order to provide Bank with the benefits intended by such invalid term or provision.

14.9 Disclosure to Participants. Borrower hereby expressly acknowledges and agrees that Bank may share with and disclose to any participant and any of Borrower's other creditors information regarding Borrower, the Liabilities and the Collateral as and when Bank determines is necessary or convenient to establish and confirm to Bank's and any participant's and any other creditor's satisfaction Bank's rights against Borrower and rights and priority in the Collateral.

14.10 Waiver of Trial by Jury. BANK AND BORROWER HEREBY KNOWINGLY, VOLUNTARILY AND INTENTIONALLY, TO THE EXTENT PERMITTED BY APPLICABLE LAW, WAIVE ANY RIGHTS THEY MAY HAVE TO TRIAL BY JURY IN RESPECT OF ANY LITIGATION BASED HEREON OR ARISING OUT OF, UNDER, OR IN CONNECTION WITH THIS AGREEMENT, THE LOAN, THE LIABILITIES, ALL OTHER DOCUMENTS GIVEN TO EVIDENCE OR SECURE THE LOAN AND/OR THE LIABILITIES, OR ANY COURSE OF CONDUCT, COURSE OF DEALING OR STATEMENTS RELATED THERETO (WHETHER VERBAL OR WRITTEN).

14.11 Electronic Signatures. Delivery of an executed counterpart of a signature page of this Agreement by telecopy, emailed .pdf or any other electronic means that reproduces an image of the actual executed signature page or otherwise includes an electronic or digital signature shall be effective as delivery of a manually executed counterpart of this Agreement. The words "execution," "signed," "signature," "delivery," and words of like import in or relating to any document to be signed in connection with this Agreement and the transactions contemplated hereby or thereby shall be deemed to include electronic signatures, deliveries or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature, physical delivery thereof or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act or any other similar state laws consisting of or based on the Uniform Electronic Transactions Act.

[Signatures appear on following page.]

IN WITNESS WHEREOF, the parties hereto have hereunder set their hands and seals on this 4th day of November, 2020.

BORROWER:

ADTRAN, INC., a Delaware corporation

By: /s/ Michael Foliano [SEAL]

Printed Name: Michael Foliano

Title: CFO

STATE OF Alabama

COUNTY OF Madison

I, Ashley Jackson, a notary public in and for said county in said state, hereby certify that Michael Foliano, whose name as CFO of **ADTRAN, INC.**, a Delaware corporation, is signed to the foregoing instrument and who is known to me, acknowledged before me on this day that, being informed of the contents of such instrument, he, as such officer and with full authority, executed the same voluntarily for and as the act of said corporation.

Given under my hand and official seal this 2nd day of November, 2020.

/s/ Ashley Michelle Jackson
Notary Public

[NOTARIAL SEAL]

My Commission Expires: 4/23/23

[Signatures continue on following page.]

BANK:

CADENCE BANK, N.A.

By: /s/ Brian Heslop [SEAL]

Printed Name: Brian Heslop

Title: EVP

STATE OF Alabama
COUNTY OF Jefferson

I, Jennifer Uhlich Miller, a notary public in and for said county in said state, hereby certify that Brian Heslop whose name as EVP of **CADENCE BANK, N.A.**, an Alabama banking corporation, is signed to the foregoing instrument and who is known to me, acknowledged before me on this day that, being informed of the contents of such instrument, he, as such officer and with full authority, executed the same voluntarily for and as the act of said corporation.

Given under my hand and official seal this 28 day of October, 2020.

/s/ Jennifer Uhlich Miller
Notary Public

[NOTARIAL SEAL]

My Commission Expires: May 16, 2024

[End of signatures.]

SCHEDULE 3.8

LOCATION OF COLLATERAL

EXHIBIT A
CERTIFICATE

Reference is made to that certain Revolving Credit and Security Agreement (the "Agreement") executed by **ADTRAN, INC., a Delaware corporation** ("Borrower") in favor of **CADENCE BANK, N.A.** ("Bank"), on or about November 4, 2020. Capitalized terms used but not defined herein shall have the meaning attributed to the same in the Agreement. Borrower hereby represents, warrants and covenants to and in favor of Bank as follows:

- (1) no default or event of default (or any event that would constitute an event of default but for the requirement that notice be given or time elapse or both) has occurred or is continuing under the Agreement or any of the other Loan Documents or under any other loans, notes, debentures, bonds, leases or other obligations of Borrower now outstanding;
- (2) all representations, warranties and covenants contained in the Agreement and the other Loan Documents are expressly reaffirmed and restated as of the date hereof;
- (3) neither Borrower nor, to the best of Borrower's knowledge, any other party has any matured or unmatured claim, offset or cause of action against Bank or its officers, agents or affiliates arising under or in connection with the Loan Documents or the Liabilities;
- (4) all financial statements, reports and other documents delivered to Bank on or before the date hereof under or in connection with the Loan Documents are, as of the relevant date, complete and accurate and may be relied upon by Bank; and
- (5) Borrower has not exceeded the Loan to Value requirement set forth in Section 6.9 of the Agreement as evidenced by the calculations shown in Exhibit "A" attached hereto and incorporated herein.

BORROWER:

ADTRAN, INC., a Delaware corporation

By: /s/ Michael Foliano [SEAL]
Printed Name: Michael Foliano
Title: CFO
Date: November 4, 2020

EXHIBIT "A"
TO COMPLIANCE CERTIFICATE

Loan to Value Calculations

A.	Loan Amount	\$10,000,000.00
B.	Market Value of Collateral as of the date of this Compliance Certificate	\$33,856,363.69
C.	Loan to Value (A divided by B)	29.54%

PROMISSORY NOTE

\$10,000,000.00

November 4, 2020
Birmingham, Alabama

FOR VALUE RECEIVED, the undersigned **ADTRAN, INC., a Delaware corporation** (the “**Borrower**”), hereby promises to pay to the order of **CADENCE BANK, N.A.** (the “**Lender**”), at its office at 2100 Third Avenue North, Suite 1100, Birmingham, Alabama 35203, or at such other place as Lender may direct, in lawful money of the United States of America constituting legal tender in payment of all debts and dues, public and private, together with interest thereon calculated at the rate and in the manner set forth herein, the principal amount of **TEN MILLION AND NO/100 DOLLARS (\$10,000,000.00)**, or so much thereof as may be advanced and outstanding hereunder. Lender, from time to time, shall make advances and re-advances as may be requested by Borrower and accept payments, all in accordance with and subject to the provisions of this Note (as defined herein) and the Loan Documents (as defined herein). The amount outstanding under this Note may vary from time to time by increases of up to the maximum principal amount stated above plus accrued interest, charges and expenses, and decreases down to no outstanding principal or accrued interest, charges or expenses. Payment of principal and interest under this Promissory Note (the “**Note**”) shall be in accordance with the following provisions:

1. Interest Rate. The per annum interest rate to be applied to the unpaid principal balance of this Note will be 150 basis points (1.50%) over the Screen Rate (as defined below); provided, that in no event shall the applicable rate of interest under this Note be less than 1.50% per annum (the “**Floor Rate**”); and, provided further, that Lender may waive or reinstate the Floor Rate as to all or any part of the indebtedness evidenced by this Note from time to time at Lender’s sole discretion and in no event shall the applicable rate of interest under this Note exceed the maximum rate allowed by law.

The interest rate on this Note is subject to change from time to time based on changes in an independent index which is the “LIBOR.” The term “LIBOR” means, as of any date of determination, the London Interbank Offered Rate, as determined by ICE Benchmark Administration Limited (ICE) (or any successor or substitute therefor) for U.S. dollar deposits for a one-month period as obtained by Lender from Reuter’s, Bloomberg or another commercially available source as may be designated by Lender from time to time (the “**Screen Rate**”), as of the date that is two (2) Business Days before each Payment Date, as adjusted from time to time in Lender’s sole discretion for then-applicable reserve requirements, deposit insurance assessment rates and other regulatory costs. If the Screen Rate is less than zero, the Screen Rate shall be deemed to be zero. The Screen Rate shall be adjusted on each Payment Date; provided, however, that the initial Screen Rate shall be determined as if the date on which funds are first advanced under this Note were a Payment Date. Any change in LIBOR shall be effective from and including the effective date of such change as set forth herein. Notwithstanding anything to the contrary contained herein, if for any reason adequate and reasonable means do not exist for ascertaining LIBOR as described above, it becomes illegal for Lender to maintain the Loan based on LIBOR or Lender determines that LIBOR will not adequately and fairly reflect its cost of making or maintaining the Loan, then upon notice to Borrower and until Lender gives notice that such conditions no longer exist, Lender shall have the right to substitute for LIBOR an alternative index rate (including any applicable upward or downward adjustment to an underlying published rate and the imposition of a zero floor).

The term “**Business Day**” means a day other than a Saturday, Sunday or a day on which Lender is closed for business; provided that, for the purposes of determining LIBOR, the term “Business Day” shall also exclude any day on which commercial banks are not open for dealings in U.S. dollar deposits in the London interbank market.

The term “**Payment Date**” means the first Business Day of each quarter in a calendar year.

2. **Payment.** Borrower promises to pay interest quarterly, on or before the Payment Date, accrued on the principal amount owing hereunder from time to time, computed daily, calculated as set forth below, with the first such interest payment to be due and payable on **December 1, 2020**. All accrued and unpaid interest, all outstanding principal and all other charges relating to this Note shall be due and payable on **November 4, 2021** (the “**Maturity Date**”).

3. **Additional Provisions Regarding Interest.** Interest on all principal amounts outstanding from time to time hereunder shall be calculated on the basis of a 360-day year applied to the actual number of days upon which principal is outstanding, by multiplying the product of the principal amount and the applicable rate set forth herein by the actual number of days elapsed, and dividing by 360. At the option of Lender and without any requirement of notice to Borrower, any principal amounts outstanding hereunder after maturity, earlier acceleration of this Note, or an Event of Default, shall bear interest at a floating rate of three hundred basis points (3.00%) in excess of the per annum rate of interest otherwise applicable under this Note.

It is the intention of Lender and Borrower to conform strictly to any applicable usury laws. Accordingly, if the transactions contemplated hereby would be usurious under any applicable law, then, in that event, notwithstanding anything to the contrary in this Note or any other agreement entered into in connection with or as security for or guaranteeing this Note, it is agreed as follows: (i) the aggregate of all consideration which constitutes interest under applicable law that is contracted for, taken, reserved, charged, or received by Lender under this Note or under any other agreement entered into in connection with or as security for or guaranteeing this Note shall under no circumstances exceed the Highest Lawful Rate (as defined below), and any excess shall be canceled automatically and, if theretofore paid, shall, at the option of Lender, be credited by Lender on the principal amount of any indebtedness owed to Lender by Borrower or refunded by Lender to Borrower, and (ii) in the event that the payment of this Note is accelerated or in the event of any required or permitted prepayment, then such consideration that constitutes interest under law applicable to Lender may never include more than the Highest Lawful Rate and excess interest, if any, to Lender provided for in this Note or otherwise shall be canceled automatically as of the date of such acceleration or prepayment and, if theretofore paid, shall, at the option of Lender, be credited by Lender on the principal amount of any indebtedness owed to Lender by Borrower or refunded by Lender to Borrower.

The term “**Highest Lawful Rate**” means the maximum non-usurious interest rate (computed on the basis of a year of 365 or 366 days, as applicable) that at any time or from time to time may be contracted for, taken, reserved, charged, or received on amounts due to Lender, under laws applicable to Lender with regard to this Note that are presently in effect or, to the extent allowed by law, under such applicable laws that allow a higher maximum non-usurious rate than applicable laws now allow.

4. **Prepayment.** This Note may be prepaid, in whole or in part, at any time, provided, that if any payment of any part of the principal amount of this Note which is subject to an Adjusted Libor Rate occurs on a date which is not the last day of an applicable Libor Adjustment Period, Borrower shall upon demand by Bank indemnify Bank for all costs incurred by Bank resulting therefrom, including, without limitation, any loss in liquidating or employing deposits acquired to fund or maintain such an Adjusted Libor Rate loan amount.

5. **Application of Prepayments.** Borrower agrees that all loan fees and other prepaid charges are earned fully as of the date of this Note and will not be subject to refund, except as required by law. Subject to any prepayment fee and other conditions provided herein, Borrower may pay all or a portion of the amount owed before it is due. Prepayment in full shall consist of payment of the remaining unpaid principal balance together with all accrued and unpaid interest and all other amounts, costs and expenses for which Borrower is responsible under this Note or any other agreement with Lender pertaining to this loan before such amounts are due, whether such prepayment arises from a voluntary or involuntary

prepayment, acceleration of maturity, or any other cause or reason. Prepayment in part shall consist of payment of any portion of the unpaid principal balance before it is due, whether such prepayment arises from a voluntary or involuntary prepayment, acceleration of maturity, or any other cause or reason.

6. Loan Documents. The indebtedness evidenced hereby is secured by, among other things, the Revolving Credit and Security Agreement (as amended from time to time, the “**Security Agreement**”) executed by the Borrower in favor of the Lender in connection herewith and the other Loan Documents as defined in the Security Agreement (collectively and as amended from time to time, the “**Loan Documents**”). The proceeds of the loan evidenced by this Note are to be disbursed by the Lender in accordance with the Security Agreement. This Note is included in the indebtedness referred to in the Loan Documents and is entitled to the benefits of those documents, but neither this reference to those documents nor any provisions thereof shall affect or impair the absolute and unconditional obligations of the Borrower to pay the principal of, interest on and charges and expenses related to this Note when due.

7. Events of Default. The occurrence of any one or more of the following shall constitute an event of default hereunder (each an “**Event of Default**”):

(a) Default in the payment of the principal of, interest on, or charges and expenses related to this Note as and when due;

(b) Failure by Borrower or any guarantor to pay or perform any other loan, indebtedness, liability or obligation to Lender as and when due;

(c) Failure by Borrower, any guarantor or any other person or entity to observe or comply with any covenant, obligation or provision contained or referenced in this Note or in any of the Loan Documents or in any other document, agreement or instrument executed in connection with or securing this Note; or

(d) The occurrence or continuation of any default or event of default contained, specified or referenced in any of the Loan Documents or in any other document, agreement or instrument executed in connection with or securing this Note.

8. Rights and Remedies Upon Event of Default. Upon the occurrence of an Event of Default, then, or at any time thereafter, Lender may, with or without notice to Borrower or any other person, refuse to make further advances under this Note, declare this Note to be forthwith due and payable, as to principal and interest and related charges and expenses, and/or exercise any and all rights and remedies available to Lender under applicable law and the Loan Documents, all without presentment, demand, protest, or other notice of any kind, all of which are hereby expressly waived, anything contained herein or in any of the Loan Documents or in any other instrument executed in connection with or securing this Note to the contrary notwithstanding.

The Lender is not required to rely on any collateral for the payment of this Note upon the occurrence of an Event of Default by the Borrower, but may proceed directly against the maker, endorsers, or guarantors, if any, in such manner as it deems desirable. None of the rights and remedies of the Lender are to be waived or affected by failure to exercise them or by delay in exercising them. All remedies conferred on the Lender by this Note or any other instrument or agreement shall be cumulative, and none is exclusive. Such remedies may be exercised concurrently or consecutively at the then holder's option.

9. Late Fee. Any scheduled payment of principal and/or interest which is not paid within ten (10) days from the date due will be subject to a late charge of five percent (5%) of such scheduled payment.

10. Waivers. Borrower hereby waives demand, presentment for payment, notice of dishonor, protest, and notice of protest and diligence in collection or bringing suit and agrees that the Lender may accept partial payment, or release or exchange security or collateral, without discharging or releasing any unreleased collateral or the obligations evidenced hereby. Borrower further waives any and all rights of exemption, both as to personal and real property, under the constitution or laws of the United States, the State of Alabama or any other state.

11. Attorneys' Fees. Borrower agrees to pay reasonable attorneys' fees and costs incurred by the Lender in collecting or attempting to collect this Note, whether by suit or otherwise.

12. Notices. Any notices required or permitted under this Note shall be given in accordance with the Security Agreement.

13. Waiver of Trial by Jury. **LENDER AND BORROWER HEREBY KNOWINGLY, VOLUNTARILY AND INTENTIONALLY, TO THE EXTENT PERMITTED BY APPLICABLE LAW, WAIVE ANY RIGHTS THEY MAY HAVE TO TRIAL BY JURY IN RESPECT OF ANY LITIGATION BASED HEREON OR ARISING OUT OF, UNDER, OR IN CONNECTION WITH THIS NOTE, ALL OTHER DOCUMENTS GIVEN TO EVIDENCE OR SECURE THIS NOTE, OR ANY COURSE OF CONDUCT, COURSE OF DEALING OR STATEMENTS RELATED THERETO (WHETHER VERBAL OR WRITTEN).**

14. Miscellaneous. As used herein, the terms "Borrower" and "Lender" shall be deemed to include their respective successors, legal representatives and assigns, whether by voluntary action of the parties or by operation of law.

This Note and the other Loan Documents, and the rights and obligations of the parties hereunder and thereunder, shall be governed by and be construed in accordance with the internal laws of the State of Alabama, except that any conflict of laws rule of such jurisdiction that would require reference to the laws of some other jurisdiction shall be disregarded. It is intended, and the Borrower and the Lender hereof specifically agree, that the internal laws of the State of Alabama (without regard to choice of law considerations), including, without limitation, applicable usury laws, shall apply to this Note and to this transaction. Borrower acknowledges that the negotiation of the provisions of this Note and the other Loan Documents took place in the State of Alabama, and that all such documents are being executed in the State of Alabama, or if executed elsewhere, will become effective only upon Lender's receipt and acceptance thereof in said State; provided, however, that Lender shall have no obligation to give, nor shall Borrower or any other person be entitled to receive, any notice of such receipt and acceptance in order for said Loan Documents to become effective, valid and binding obligations of the Borrower.

Borrower acknowledges further that all of such documents were or will be executed and delivered to Lender to induce Lender to make the Loan to Borrower. Borrower acknowledges further that it is foreseeable that the negotiation, execution, and delivery of the Loan Documents and the making of the Loan materially affect a bank located in the State of Alabama and will have material economic effects in such State. To the extent that Borrower's actions have not already done so, and to the extent permitted by law, Borrower hereby submits itself to and/or does not object to jurisdiction in the State of Alabama for any action or cause of action arising out of or in connection with this Note, the Loan or the Loan Documents, agrees (to the extent permitted by law) that venue for any such action shall be in Jefferson County, Alabama, and (to the extent permitted by law) waives any and all rights under the laws of any state to object to jurisdiction or venue within Jefferson County, Alabama; provided, that with respect to the exercise and enforcement of foreclosure rights against any of the collateral or the mortgaged property, the laws of the state where the Collateral or the mortgaged property is located shall govern. Notwithstanding the foregoing, nothing contained in this section shall prevent Lender from bringing any action or exercising any rights

against Borrower, any guarantor, any security for the Loan, or any of Borrower's properties in any other county, state or jurisdiction. Initiating such action or proceeding or taking any such action in any other state shall in no event constitute a waiver by Lender of any of the foregoing. Nothing herein shall be deemed to have the effect of limiting the jurisdiction of any court.

This Note is given under the seal of all parties hereto, and it is intended that this Note is and shall constitute and have the effect of a sealed instrument according to law. This Note may not be modified except by written agreement signed by the Borrower and the Lender hereof, or by their respective successors or assigns.

[SIGNATURES APPEAR ON FOLLOWING PAGE.]

IN WITNESS WHEREOF, Borrower has caused this Note to be executed, sealed and delivered as of the date first set forth above.

BORROWER:

ADTRAN, INC., a Delaware corporation

By: /s/ Michael Foliano (SEAL)

Name: Michael Foliano

Title: CFO

STATE OF Alabama

COUNTY OF Madison

I, Ashley Jackson, a notary public in and for said County, in said State, hereby certify that Michael Foliano, whose name as CFO of ADTRAN, INC., a Delaware corporation, is signed to the foregoing instrument, and who is known to me, acknowledged before me on this day, that being informed of the contents of said instrument, he, as such officer, and with full authority, executed the same voluntarily for and as the act of said corporation.

Given under my hand this the 2nd day of November, 2020.

/s/ Ashley Michelle Jackson

Notary Public

{SEAL}

My Commission Expires: 4/23/23

SECURITY AGREEMENT
(Pledge of Investment Property)

THIS SECURITY AGREEMENT is made and entered into as of this 4th day of November, 2020, by and between **ADTRAN, INC., a Delaware corporation (“Pledgor”)**, whose address is 901 Explorer Boulevard, Huntsville, Alabama 35806, and **CADENCE BANK, N.A. (“Secured Party”)**, with banking offices at 2100 Third Avenue North, Suite 1100, Birmingham, Alabama 35203.

WITNESSETH:

WHEREAS, pursuant to the terms and conditions of the Promissory Note dated November 4, 2020, by Pledgor, as “Borrower” thereunder, in favor of Secured Party (as may be renewed, restated, replaced, modified, rearranged, increased, and extended from time to time, the “**Note**”), Secured Party has made a certain \$10,000,000 revolving line of credit (the “**Loan**”) to the Pledgor as provided for therein; and

WHEREAS, Pledgor has agreed to pledge all of the cash, securities, securities entitlements and investment property from time to time in its US Bank Account Number _____ (the “**Account**”) and the proceeds of the Account (the current holdings of the Account as of the latest statement date being described in **Exhibit “A”** attached hereto) as security for the Loan; and

NOW, THEREFORE, for and in consideration of the premises and the agreements herein contained and for other good and valuable consideration, the receipt and sufficiency of all of which are hereby acknowledged, Pledgor hereby agrees with Secured Party as follows:

ARTICLE 1

GENERAL TERMS

1.1 **Terms Defined Above.** As used in this Security Agreement, the terms “Pledgor,” “Loan,” “Secured Party,” and “Account” have the meanings indicated above.

1.2 **Additional Defined Terms.** As used herein, each of the following terms shall have the following meanings:

“**Account Cash**” shall mean any and all amounts in the Account in the form of cash.

“**Code**” shall mean the Uniform Commercial Code as presently in effect in the State of Alabama.

“**Collateral**” shall mean all property, including without limitation, cash or other proceeds, in which Secured Party shall have a security interest pursuant to Section 2.1 of this Security Agreement.

“**Default**” shall mean any failure of Pledgor to abide by the terms of this Security Agreement or a default under and as defined in the documents and instruments governing the Loans.

“**Entitlement Holder**” shall have the meaning assigned to such term in Section 7-8-102(a)(7) of the Code.

“**Financial Assets**” shall have the meaning assigned to such term in Section 7-8-102(a)(9) of the Code.

“**Investment Property**” shall have the meaning assigned to such term in Section 7-9A-102(a)(49) of the Code.

“**Obligations**” shall have the meaning indicated in Section 2.2 hereof.

“**Pledged Securities**” shall mean all Financial Assets in the Account, specifically including but not limited to the securities listed on the Client Statement attached hereto as **Exhibit “A”**.

“**Security Agreement**” shall mean this Security Agreement, as it may from time to time be amended or supplemented.

“**Security Entitlement**” shall have the meaning assigned to such term in Section 7-8-102(a)(17) of the Code.

1.3 Terms Defined in Code. All terms used herein which are defined in the Code shall have the same meaning herein unless the context otherwise requires.

ARTICLE 2

SECURITY INTEREST

2.1 Grant of Security Interest. Pledgor hereby assigns, transfers, and delivers (or causes to be transferred and delivered) to Secured Party and grants to Secured Party a security interest in and a general lien upon all of Pledgor’s right, title and interest in and to the following described property.

- (a) The Account;
- (b) the Pledged Securities, and all rights comprising any of the foregoing;
- (c) All Security Entitlements related or credited to the Pledged Securities and all rights comprising any of the foregoing;

(d) All of Pledgor's right, title, and interest in and to any Investment Property related to or arising in connection with the Pledged Securities;

(e) Any and all substitutions for, or additions to, the Collateral;

(f) Any and all stock, bonds, mutual funds, government obligations, dividends (other than cash dividends), cash equivalents, or other property, whether certificated or uncertificated, which Pledgor is or may hereafter become entitled to receive on account of the Collateral (or any substitutions therefor or additions thereto); and

(g) The proceeds of any and all property described in subparagraphs (a)-(f) (including, without limitation, cash or cash equivalents received from the sale of the Collateral).

2.2 Obligations Secured. The assignment, transfer, and delivery of the Collateral and the security interest in, general lien upon, and right of set-off against the Collateral is granted to secure (a) the payment and performance by the Pledgor of the Loan and its other obligations under and with respect to the Note, and (b) the payment and performance by Pledgor of Pledgor's obligations under this Security Agreement (obligations referred to in clauses (a) and (b) are sometimes collectively referred to herein as the "**Obligations**").

2.3 Release of Securities to Pledgor. The Secured Party agrees that, upon the repayment in full of the Note and the expiration of any time period during which such payment could be rescinded or set aside under any bankruptcy or other applicable law, and provided that no Event of Default has then occurred and is continuing, the Secured Party shall release the liens and security interests granted herein in the Pledged Securities and other Collateral at the request and expense of Pledgor, without recourse or warranty. Notwithstanding anything in this Agreement to the contrary other than section 4.1(I), trades, withdrawals, transfers, etc., are permitted on the Account as long as they comply with the terms and conditions governing the Account.

ARTICLE 3

REPRESENTATIONS AND WARRANTIES

3.1 Representations and Warranties. In order to induce Secured Party to accept this Security Agreement, Pledgor represents and warrants to Secured Party that:

(a) At all times, the Pledged Securities shall have been duly authorized, validly issued, and shall be validly outstanding, fully paid, and nonassessable and shall not have been issued in violation of the preemptive rights of any person or entity or of any agreement by which the Pledgor or any issuer of such Collateral is bound;

(b) No information, exhibit, or report furnished by the Pledgor to the Secured Party in connection with the negotiation of this Security Agreement contained or contains any material misstatement of fact, or omitted to state a material fact or any fact necessary to make the statements contained herein not misleading;

(c) Except for the security interest in favor of the Secured Party, the Pledgor owns and shall own good and marketable title to the Collateral free and clear of any other security interests, pledges, encumbrances, liens, adverse claims, or options, and the Pledgor has full right, power, and authority to sell, convey, transfer, assign, pledge, grant a security interest in, and deliver the Pledged Securities and the other Collateral to the Secured Party in the manner provided herein;

(d) This Security Agreement creates a valid and binding first-priority security interest in the Collateral and constitutes the legal, valid, and binding obligation of the Pledgor, enforceable against the Pledgor in accordance with its terms;

(e) The Pledgor is not engaged principally, or as one of its important activities, in the business of extending or obtaining credit for the purpose of purchasing or carrying margin stock (within the meaning of Regulations T, U, or X (or any successor regulation thereto) of the Board of Governors of the Federal Reserve System). No part of the proceeds of any extension of credit under the documents and instruments governing the Loan have been or will be used to purchase or carry any such margin stock or to extend credit to others for the purpose of purchasing or carrying any such margin stock. No transaction contemplated by and described in this Security Agreement is in violation of any regulations promulgated by the Board of Governors of the Federal Reserve System, including, without limitation, Regulations T, U, or X (or any successor regulation thereto);

(f) At all times, the Pledged Securities shall have been properly issued, drawn, made and/or accepted and shall be genuine; the issuer, drawer, maker, and/or acceptor thereof shall have no defenses (including, without limitation, defenses of any party which would be available in an action on a simple contract and the defenses of want or failure of consideration, non-performance of any condition precedent, non-delivery, or delivery for a special purpose), right of set-off or claims to the Pledged Securities; Pledgor's transfer of the Pledged Securities to Secured Party as provided herein is effective and rightful; Pledgor does not know of any fact which might impair the validity of the Pledged Securities; and

(g) (i) The execution and delivery by Pledgor of this Security Agreement does not cause Pledgor to become insolvent or unable to pay Pledgor's

debts as they become due, and (ii) the execution and delivery of this Security Agreement by Pledgor has benefitted, and does benefit, Pledgor, directly and indirectly, in an amount in excess of the value of the Obligations.

ARTICLE 4

COVENANTS AND AGREEMENTS

4.1 Covenants and Agreements. A deviation from the provisions of this Article 4 shall not constitute a Default under this Security Agreement if such deviation is consented to in writing by Secured Party. Without the prior written consent of Secured Party, Pledgor will at all times comply with the following covenants from the date hereof and for so long as any part of the Obligations are outstanding:

(a) The Pledgor will pay, prior to delinquency, all taxes, charges, liens, and assessments against the Collateral and the Pledged Securities, including, without limitation, any federal income tax liability arising from any dividends or distributions paid with regard to any of the Pledged Securities;

(b) The Pledgor shall provide, or cause to be provided, to the Secured Party all now or hereafter existing certificates directly evidencing the Pledged Securities;

(c) After the occurrence of a Default, any and all

(i) dividends paid or payable, other than in cash, and all instruments and other property received, receivable, or otherwise distributed in respect of or in exchange for any Collateral or Pledged Securities,

(ii) dividends and other distributions paid or payable in cash in respect of any Collateral or Pledged Securities in connection with a partial or total liquidation or dissolution or in connection with a reduction of capital, capital surplus, or paid-in surplus, and

(iii) cash paid, payable, or otherwise distributed in respect of principal of, in redemption of, or in exchange for any Collateral or Pledged Securities,

shall be forthwith delivered to the Secured Party and, if received by the Pledgor, be received in trust for the benefit of the Secured Party, be segregated from the other property or funds of the Pledgor, and be forthwith delivered to the Secured Party in the same form as so received (with any necessary endorsement);

(d) Pledgor will not pledge, mortgage, otherwise encumber, create, or suffer a lien or security interest to exist in any of the Collateral (other than in favor of Secured Party) or sell, assign, exchange, margin, or otherwise transfer any of the Collateral to or in favor of any person or entity other than Secured Party. Pledgor will not file or permit to be filed or recorded any financing statement or other security instrument with respect to the Collateral other than in favor of Secured Party;

(e) Pledgor agrees to pay prior to delinquency all taxes, charges, liens, security interests, and assessments against the Collateral and, upon the failure of Pledgor to do so, Secured Party at its option may pay any of them and will be the sole judge of the legality or validity thereof and of the amount necessary to discharge the same;

(f) Secured Party shall be deemed to have possession of any of the Collateral in transit to it;

(g) Pledgor will sign, execute, deliver, and file, alone or with Secured Party, any financing statements, security agreements, or other documents or procure any instruments or documents as may be requested by Secured Party from time to time to confirm, perfect, and preserve the security interests intended to be granted hereby, and in addition, Pledgor hereby authorizes Secured Party to execute and deliver on behalf of Pledgor and to file such financing statements, security agreements, agreement with Broker, and other documents without the signature of Pledgor either in Secured Party's name or in the name of Pledgor and as agent and attorney-in-fact for Pledgor. Pledgor will do all such additional and further acts or things, give such assurances, and execute such documents or instruments as Secured Party requires to vest more completely in and assure to Secured Party its rights under this Security Agreement;

(h) At the option of Secured Party, a carbon, photographic, or other reproduction of this Security Agreement or of a financing statement covering the Collateral will be sufficient as a financing statement and may be filed as a financing statement;

(i) Pledgor will transmit to Secured Party promptly all information that Pledgor may have or receive (i) with respect to the Collateral and (ii) with respect to issuers or obligors in respect of the Collateral which might in any way affect the value of the Collateral or Secured Party's rights or remedies with respect thereto. Further, Pledgor will cause monthly reports and account statements, in form satisfactory to Secured Party, relating to the Account and the value of the Collateral contained or held therein to be sent by Investment Advisor to Secured Party in a manner acceptable to Secured Party;

(j) Pledgor agrees to pay to Secured Party at Secured Party's banking quarters, all reasonable advances, charges, costs and expenses (including reasonable attorneys' fees and legal expenses) incurred by Secured Party in connection with confirming, perfecting, and preserving the security interest created under this Security Agreement, in connection with protecting Secured Party against the claims or interests of any person or entity against the Collateral, and in exercising any right, power or remedy conferred by this Security Agreement or by law or in equity (including, but not limited to, reasonable attorneys' fees and legal expenses incurred by Secured Party in the collection of instruments deposited with or purchased by Secured Party and amounts incurred in connection with the operation, maintenance or foreclosure of any or all of the Collateral). The amount of all such advances, charges, costs and expenses will be due and payable by Pledgor to Secured Party upon demand, together with interest thereon at the highest rate permitted to be charged under applicable law; and

(k) THE FORECLOSURE, RESALE, OR LIQUIDATION OF THE PLEDGED SECURITIES BY SECURED PARTY WILL NOT REQUIRE REGISTRATION UNDER ANY STATE OR FEDERAL SECURITIES LAWS. TO THE EXTENT THAT SUCH SECURITIES LAWS NOW OR HEREAFTER APPLY TO THE PLEDGED SECURITIES, PLEDGOR WILL INDEMNIFY AND REIMBURSE SECURED PARTY FOR ALL OF ITS COSTS AND EXPENSES RELATING TO THE REGISTRATION OF THE SHARES AND THE COMPLIANCE BY SECURED PARTY WITH ALL APPLICABLE LAWS AND REGULATIONS.

ARTICLE 5

RIGHTS, REMEDIES AND DEFAULT

5.1 Default Remedies. Upon the happening and during the continuance of any Default, Secured Party may then:

(a) Receive, endorse, collect by legal proceedings or otherwise, and demand payment directly from the makers, drawers, acceptors, issuers and/or obligors of the Collateral and receipt for all sums and amounts now or hereafter payable on or with respect to the Collateral (including, without limitation, notifying Broker to make all payments relating to the Collateral directly to Secured Party, without the necessity of joinder by Pledgor); provided that all such sums so paid to and received by Secured Party shall be applied on the Obligations as provided herein;

(b) From time to time extend the time of payment, arrange for payment in installation or otherwise modify the terms of or enter into any other agreement in any way relating to or affecting the Collateral, and in connection therewith may

deposit or surrender control of any security held therefor, accept other property in exchange for any security held therefor and take such action as it may deem proper, and any money or property received in exchange for any security held therefor shall be applied on the Obligations or thereafter held by Secured Party pursuant to the provisions hereof;

(c) Make any compromise or settlement Secured Party deems desirable with respect to the Collateral;

(d) Insure, process, and preserve the Collateral

(e) Demand, sue for, or receive any money or property at any time payable or receivable on account of or in exchange for Collateral;

(f) Transfer equitable and legal title to the Account to Secured Party (without the necessity of consent thereto by Pledgor), and/or register in the name of Secured Party any of the Pledged Securities and other Collateral and whether or not the Pledged Securities constituting a part of the Collateral are so transferred or registered to exchange any of the Pledged Securities for other property upon reorganization, recapitalization or other readjustment and in connection therewith to deposit any of the Pledged Securities with any committee or depository upon such terms as Secured Party may determine; all without notice and without liability except to account for property actually received by Secured Party; and

(g) In its discretion, sell for cash and assign and deliver all or any part of the Collateral then covered by this Security Agreement in a commercially reasonable manner at public or private sale without notice or advertisement other than as required under the Code, or may cause all or any part of the Collateral to be sold at judicial sale after judgment in any court of competent jurisdiction, and may bid and become purchaser at any such public sale or judicial sale. If notice to Pledgor is required by the Code of public or private sale of all or any part of the Collateral, the Secured Party may give written notice five (5) days prior to the date of the public sale of all or any part of the Collateral or prior to the date after which private sale of all or any part of the Collateral will be made, by mailing such notice to Pledgor as provided in Section 6.8 of this Security Agreement (it being agreed and stipulated that all of the Pledged Securities constituting a part of the Collateral currently may be sold on a recognized market or redeemed by the issuer thereof upon request). For this purpose, in addition to the security interests granted in this Security Agreement and irrespective of the validity and continuing effectiveness of such security interests, Pledgor hereby designates and appoints the Secured Party his true and lawful attorney and agent to sell, or cause to be sold, any or all of the Collateral provided by such Pledgor and apply the proceeds of such sale in accordance with the provisions of this Security Agreement and the Code. Pledgor agrees that such designation of authority is coupled with an interest and until

termination of this Security Agreement shall be irrevocable. The proceeds of sale of all or any part of the Collateral, either in respect of the security interests granted by this Security Agreement, or of the power of attorney hereinabove granted, shall be utilized first to pay costs and expenses of such sale, including, without limitation, attorneys' fees, and the entire remainder of such proceeds shall be applied against the unpaid Obligations. Any excess after the payment of all Obligations shall be allocated to Pledgor.

5.2 Voting Rights, Dividends, Etc. After Default. Upon the occurrence and during the continuance of a Default:

(a) at the option of the Secured Party, with notice to the Pledgor, all rights of the Pledgor to exercise the voting and other consensual rights which he would otherwise be entitled to exercise pursuant to and with respect to the Pledged Securities, shall be transferred to and vested in the Secured Party, who shall thereupon have the sole right to exercise such voting and other consensual rights; and

(b) all dividends relating to the Pledged Securities which are received by the Pledgor after the occurrence of a Default shall be received in trust for the benefit of the Secured Party, shall be segregated from other funds of the Pledgor, and shall be forthwith paid over to the Secured Party as Collateral in the same form as so received (with any necessary endorsement).

5.3 Proceeds. After the happening of a Default, the proceeds of any sale or other disposition of the Collateral and all sums received or collected by Secured Party from or on account of the Collateral shall be applied by Secured Party in the manner set forth in § 7-9A-615 of the Code (all such proceeds applied to the Obligations shall, subject to the Code, be applied in a manner determined by Secured Party, exercising its sole discretion).

5.4 Secured Party's Duties. The powers conferred upon Secured Party by this Security Agreement are solely to protect its interest in the Collateral and shall not impose any duty upon Secured Party to exercise any such powers. Secured Party shall be under no duty whatsoever to make or give any presentment, demand for performance, notice of non-performance, protest, notice of protest, notice of dishonor, or other notice or demand in connection with any Collateral or the Obligations, or to take any steps necessary to preserve any rights against prior parties. Secured Party shall not be liable for failure to collect or realize upon any or all of the Obligations or Collateral, or for any delay in so doing, nor shall Secured Party be under any duty to take any action whatsoever with regard thereto. The Secured Party's duty with reference to the Collateral (and only to the extent it is in possession of Secured Party) shall be solely to use reasonable care in the custody and preservation of Collateral in the Secured Party's possession. The Secured Party need not take any steps to keep the Collateral identifiable and under no circumstance whatsoever is Secured Party required to sell, or cause to be sold, or consent to any request to sell, exchange, or liquidate any of the Collateral in the event the value of any such Collateral has declined or is

anticipated to decline in the future. **THE SECURED PARTY SHALL NOT BE RESPONSIBLE IN ANY WAY FOR ANY DEPRECIATION IN THE VALUE OF THE COLLATERAL, NOR SHALL THE SECURED PARTY BE UNDER ANY DUTY TO SELL OR DISPOSE OF THE COLLATERAL, OR ALLOW THE COLLATERAL TO BE SOLD OR DISPOSED OF BY ANY PARTY OTHER THAN PLEDGOR IN THE EVENT THAT THE COLLATERAL IS PROJECTED TO, OR DOES, DECLINE IN VALUE.** Secured Party shall have no duty to comply with any recording, filing, or other legal requirements necessary to establish or maintain the validity, priority or enforceability of, or Secured Party's rights in or to, any of the Collateral.

5.6 Secured Party's Actions. Pledgor waives any rights to require Secured Party to proceed against any person or entity, exhaust any Collateral or pursue any other remedy in Secured Party's power; waives any and all notice of acceptance of this Security Agreement or of creation, modification, renewal or extension for any period of any of the Obligations from time to time; and waives any defense arising by reason of any disability or other defense of any other person to entity. All dealings between Pledgor and Secured Party, whether or not resulting in the creation of Obligations, shall conclusively be presumed to have been had or consummated in reliance upon this Security Agreement. Pledgor authorizes Secured Party, without notice or demand and without any reservation of rights against Pledgor and without affecting Pledgor's liability hereunder or on the Obligations, from time to time, to (a) take and hold any other property as collateral, other than the Collateral, for any or all of the Obligations, and exchange, enforce, waive and release any or all of the Collateral or such other property; (b) apply the Collateral or such other property and direct the order or manner of sale thereof as Secured Party in its discretion may determine; (c) renew, extend for any period, accelerate, modify, amend, or supplement any of the provisions of any of the instruments and agreements now or hereafter securing or otherwise pertaining to any of the Obligations; and (e) release or substitute Pledgor. It is further agreed by all the parties hereto that:

(i) Demand, notice, protest, and all demands and notices of any action taken (and notices of intent to take any action) by the Secured Party under this Security Agreement, or in connection with the Obligations are hereby waived, and any indulgence of the Secured Party, substitution for, exchange of or release of Collateral, in whole or in part, or addition or release of any person or entity liable on the Obligations, or any of them, or the Collateral is hereby consented to;

(ii) Pledgor agrees to pay prior to delinquency all taxes, charges, broker's fees, liens, and assessments against the Collateral delivered by or for the account of Pledgor, and upon Pledgor's failure to do so the Secured Party at its option may pay any of them and shall be the sole judge of the legality or validity thereof and the amount necessary to discharge the same (all taxes relating to the Account and other Collateral shall at all times be the responsibility of Pledgor). Such payment shall become part of the Obligations secured by this Security Agreement and shall be paid to the Secured Party by Pledgor immediately and

without demand, with interest thereon at the highest rate of interest permitted by applicable law;

(iii) PLEDGOR AGREES TO INDEMNIFY AND SAVE AND HOLD SECURED PARTY HARMLESS FROM AND AGAINST ANY CLAIM OF ANY THIRD PERSON TO ANY COLLATERAL AND ANY CLAIM BY ANY OTHER PARTY OR ENTITY ARISING (INCLUDING, WITHOUT LIMITATION, A BANKRUPTCY TRUSTEE), DIRECTLY OR INDIRECTLY, AS A RESULT OF SECURED PARTY'S ENTERING INTO THIS SECURITY AGREEMENT AND/OR PURSUING ANY OF ITS RIGHTS AND REMEDIES HEREUNDER, PROVIDED THAT PLEDGOR SHALL HAVE NO OBLIGATION UNDER THIS PROVISION TO SECURED PARTY WITH RESPECT TO LIABILITIES OF OR CLAIMS AGAINST SECURED PARTY THAT ARE DETERMINED BY A COURT OF COMPETENT JURISDICTION BY FINAL AND NON-APPEALABLE JUDGMENT TO HAVE RESULTED FROM THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF SECURED PARTY OR FROM THE BREACH BY SECURED PARTY OF ITS OBLIGATIONS UNDER THIS SECURITY AGREEMENT; AND

(iv) Pledgor will, at any time and from time to time, execute and deliver such further instruments, make such filings and take such further action as may reasonably be requested by Secured Party in order to cure any defects in the execution and delivery of, or to comply with or accomplish the covenants and agreements contained in, this Security Agreement or to preserve, perfect, or protect the security interests granted to Secured Party herein.

ARTICLE 6

MISCELLANEOUS

6.1 Transfer of Obligations and Collateral. Secured Party may transfer any or all of the Obligations, and upon any such transfer Secured Party may transfer any or all of the Collateral and shall be fully discharged thereafter from all liability with respect to the Collateral so transferred, and the transferee shall be vested with all rights, powers and remedies of Secured party hereunder with respect to Collateral so transferred; but with respect to any Collateral not so transferred Secured Party shall retain all rights, powers and remedies hereby given. Secured Party may at any time deliver any or all of the Collateral to Pledgor whose receipt shall be a complete and full acquittance for the Collateral so delivered, and Secured Party shall thereafter be discharged from any liability therefor.

6.2 Continuing Agreement. This is a continuing Security Agreement and the grant of a security interest hereunder shall remain in full force and effect and all the rights, powers and remedies of Secured Party hereunder shall continue to exist until the Obligations are paid in full as the same become due and payable; and until Secured Party has no further obligation to

advance monies to Pledgor under the documents and instruments governing the Loans or otherwise and until Secured Party, upon request of Pledgor, has executed a written termination statement, reassigned to Pledgor, without recourse, the Collateral and all rights conveyed hereby and returned possession of the Collateral to Pledgor.

6.3 Cumulative Rights. The rights, powers and remedies of Secured Party hereunder shall be in addition to all rights, powers and remedies given by statute or rule of law and are cumulative. The exercise of any one or more of the rights, powers and remedies provided herein shall not be construed as a waiver of any other rights, powers and remedies of Secured Party. Furthermore, regardless of whether or not the Uniform Commercial Code is in effect in the jurisdiction where such rights, powers and remedies are asserted, Secured Party shall have the rights, powers and remedies of a secured party under the Code.

6.4 Exercise of Rights, Etc. Time shall be of the essence for the performance of any act under this Security Agreement or the Obligations by Pledgor, but neither Secured Party's acceptance of partial or delinquent payments nor any forbearance, failure or delay by Secured Party in exercising any right, power or remedy shall be deemed a waiver of any obligation of Pledgor or of any right, power or remedy of Secured Party or preclude any other or further exercise thereof; and no single or partial exercise of any right, power or remedy shall preclude any other or further exercise thereof, or the exercise of any other right, power or remedy.

6.5 Remedy and Waiver. Secured Party may remedy any Default and may waive any default without waiving the Default remedied or waiving any prior or subsequent Default.

6.6 Non-Judicial Remedies. Secured Party may enforce its rights hereunder without prior judicial process or judicial hearing, and Pledgor expressly waives, renounces and knowingly relinquishes any and all legal rights which might otherwise require Secured Party to enforce its rights by judicial process. In so providing for non-judicial remedies, Pledgor recognizes and concedes that such remedies are consistent with the usage of the trade, are responsive to commercial necessity, and are the result of bargaining at arm's length. Nothing herein is intended to prevent Secured Party or Pledgor from resorting to judicial process at either party's option.

6.7 Preservation of Liability. Neither this Security Agreement nor the exercise by Secured Party of (or the failure to so exercise) any right, power or remedy conferred herein or by law shall be construed as relieving any person or entity liable on the Obligations (whether directly or by guaranty or otherwise) from liability on the Obligations and for any deficiency thereon. Further, all covenants, agreements, representations, and warranties made and agreed to by Pledgor in this Security Agreement are made jointly and severally, whether or not specifically described herein.

6.8 Notices. Any notice or demand under this Security Agreement or in connection with this Security Agreement shall be in writing and shall be mailed, postage prepaid,

to the addresses set forth on the first page of this Security Agreement, but actual notice, however given or received, shall always be effective.

6.9 Construction. THIS SECURITY AGREEMENT HAS BEEN MADE IN AND THE CONVEYANCE, ASSIGNMENT, TRANSFER AND DELIVERY HAS BEEN MADE IN AND THE SECURITY INTEREST GRANTED HEREBY IS GRANTED IN AND EACH SHALL BE GOVERNED BY THE LAWS OF THE STATE OF ALABAMA, AND OF THE UNITED STATES OF AMERICA, AS APPLICABLE, IN ALL RESPECTS, INCLUDING MATTERS OF CONSTRUCTION, VALIDITY, ENFORCEMENT AND PERFORMANCE.

6.10 Amendment and Waiver. This Security Agreement may not be amended, except in writing and signed by Pledgor and Secured Party.

6.11 Invalidity. If any provision of this Security Agreement is rendered or declared invalid, illegal or unenforceable by reason of any existing or subsequently enacted legislation or by a judicial decision which shall have become final, Pledgor and Secured Party shall promptly meet and negotiate substitute provisions for those rendered invalid, illegal or unenforceable, but all of the remaining provisions shall remain in full force and effect.

6.12 Survival of Agreements. All representations and warranties of Pledgor herein, and all covenants and agreements herein not fully performed before the effective date of this Security Agreement, shall survive such date.

6.13 Successors and Assigns. The covenants and agreements herein contained by or on behalf of Pledgor will bind Pledgor, Pledgor's heirs, legal representatives, successors, and assigns and shall inure to the benefit of Secured Party and its successors and assigns.

6.14 Titles of Articles, Sections and Subsections. All titles or headings to articles, sections, subsections or other divisions of this Security Agreement are only for the convenience of the parties and shall not be construed to have any effect or meaning with respect to the other content of such articles, sections, subsections or other divisions, such other content being controlling as to the agreement between the parties hereto.

6.15 Counterparts. This Security Agreement may be executed in two or more counterparts, and it shall not be necessary that the signatures of all parties hereto be contained on any one counterpart hereof; each counterpart shall be deemed an original, but all of which together shall constitute one and the same instrument. This Security Agreement shall be binding on all whose signatures are affixed hereto.

6.16 Final Agreement. THIS SECURITY AGREEMENT REPRESENTS THE FINAL AGREEMENT BETWEEN THE PARTIES AND MAY NOT BE CONTRADICTED BY EVIDENCE OF PRIOR, CONTEMPORANEOUS, OR SUBSEQUENT ORAL AGREEMENTS OF THE PARTIES. THERE ARE NO ORAL AGREEMENTS BETWEEN THE PARTIES.

6.17 **Sealed Instrument.** This Security Agreement is intended to take effect as a sealed instrument.

6.18 **Waiver of Trial by Jury.** PLEDGOR AND SECURED PARTY HEREBY KNOWINGLY, VOLUNTARILY AND INTENTIONALLY, TO THE EXTENT PERMITTED BY APPLICABLE LAW, WAIVE ANY RIGHTS THEY MAY HAVE TO TRIAL BY JURY IN RESPECT OF ANY LITIGATION BASED HEREON OR ARISING OUT OF, UNDER, OR IN CONNECTION WITH THIS AGREEMENT, THE LOAN DOCUMENTS, THE OBLIGATIONS, ALL OTHER DOCUMENTS GIVEN TO EVIDENCE OR SECURE THE OBLIGATIONS, OR ANY COURSE OF CONDUCT, COURSE OF DEALING OR STATEMENTS RELATED THERETO (WHETHER VERBAL OR WRITTEN).

[SIGNATURES APPEAR ON FOLLOWING PAGE.]

[SIGNATURE PAGE TO SECURITY AGREEMENT]

IN WITNESS WHEREOF, Pledgor has caused this Security Agreement to be duly executed as of the date first above written.

PLEDGOR:

ADTRAN, INC., a Delaware corporation

By: /s/ Michael Foliano [SEAL]

Name: Michael Foliano

Title: CFO

[Signatures continue on following page.]

IN WITNESS WHEREOF, Secured Party has caused this Security Agreement to be duly executed as of the date first above written.

SECURED PARTY:

CADENCE BANK, N.A.

By: /s/ Brian Heslop [SEAL]

Name: Brian Heslop

Title: Executive Vice President

[End of signatures.]

EXHIBIT "A"

Client Statement showing Pledged Securities

Exhibit 10.4

THIS DOCUMENT IS A STANDARD AGREEMENT FOR USE WITH A U.S. BANK NATIONAL ASSOCIATION CUSTODY ACCOUNT (AND NOT, FOR EXAMPLE, WITH A U.S. BANK NATIONAL ASSOCIATION TRUST ACCOUNT), BUT NOT WHERE U.S. BANK NATIONAL ASSOCIATION IS THE SECURED PARTY.

CONTROL AGREEMENT

This Control Agreement (the "Agreement") is among **ADTRAN, Inc.** (legal name of entity), a **corporation** (legal form of entity) organized under the laws of the **State of Delaware** ("Pledgor"); **CADENCE BANK, N.A.** (legal name of entity), a banking corporation (legal form of entity) organized under the laws of the State of Alabama ("Secured Party"); and U.S. Bank National Association, a national banking association organized under the laws of the United States with offices in Minneapolis, Minnesota ("Intermediary").

WHEREAS, Pledgor and Intermediary are the only parties to a fully-executed custody agreement, as may be amended from time to time, pursuant to which Intermediary maintains U.S. Bank Custody Account No. _____ (SEI account number) entitled **ADTRAN, Inc. - LCP** (SEI long name) for Pledgor's assets (the "Account") (such agreement, the "Custody Agreement");

WHEREAS, Pledgor hereby directs Intermediary to enter into this Agreement;

NOW, THEREFORE, the parties hereby agree as follows:

1. **Collateral; Account Control.** Pledgor and Secured Party hereby represent and warrant that they are parties to a separate agreement pursuant to which Pledgor has granted to Secured Party a security interest in all of Pledgor's right, title and interest in, to, and with respect to any assets held as of the date of this Agreement or hereafter in the Account, together with any securities, instruments, financial assets, investment property, and any other property issued in replacement of or in substitution or exchange for any of the foregoing, any securities entitlements in and to any of the foregoing, any books and records relating thereto, and any proceeds of the foregoing (including any cash interest, income, or dividends with respect to the foregoing) (collectively, the "Collateral").
2. **UCC.** Intermediary is a "*securities intermediary*" with respect to the Account, and the Account is a "*securities account*", within the meaning of Uniform Commercial Code Article 8 as adopted in Minnesota, Minn. Stat. Ch. 336, Article 8 ("Article 8"). Notwithstanding anything in this Agreement to the contrary, (i) Minnesota is Intermediary's jurisdiction for the purposes of Article 8 and (ii) nothing in this Agreement will constitute a waiver of any of Intermediary's rights as a securities intermediary under Minn. Stat. §336.9-206.
3. **Assets Held in the Account.** *(Check A or B. If neither is checked or both are checked, then A and only A is deemed to be checked.)*
 - A. Intermediary's official statement of the Account (an "Account Statement") is not attached as an **exhibit** hereto. Intermediary does not hereby confirm that any assets are held in the Account as of the date of this Agreement.
 - B. Intermediary's official statement of the Account (an "Account Statement") is attached as an **exhibit** hereto. Intermediary hereby confirms that all assets listed on such Account Statement are held in the Account as of the date stated on such Account Statement.

4. Certain Assets Not Collateral. Notwithstanding anything herein to the contrary, the following assets are not Collateral (even if they are included in an Account Statement), and Intermediary hereby makes no confirmation, covenant, representation, or warranty with respect thereto:

4.1. Any assets that are neither registered in the name of Intermediary or Intermediary's nominee nor maintained by Intermediary at any central securities depository (such as the Depository Trust Company) or Federal Reserve Bank or with a sub-custodian nor held by Intermediary in unregistered or bearer form or in such form as will pass title by delivery.

4.2. Any global securities maintained by Intermediary with a sub-custodian.

4.3. Any contract, declaration of trust, document of title, general intangible, lease, limited liability company interest, loan agreement, note, offering memorandum, partnership interest, security certificate, subscription agreement, or other instrument which may establish rights to income, principal, or other distributions on an asset.

4.4. Any units resulting from Intermediary's provision of unitized accounting services under the Custody Agreement and reflecting assets not held in the Account.

4.5. Real estate.

4.6. Any securities which are "*control securities*" or "*restricted securities*" within the meaning of Rule 144 under the Securities Act of 1933, as amended, or are subject to other marketability limitations.

4.7. Any asset that is not a "*financial asset*" within the meaning of Article 8.

4.8. Any such "*financial asset*" in the physical possession of Intermediary that is registered in the name of, payable to the order of, or specially indorsed to anyone other than Intermediary and has not been indorsed to Intermediary or in blank.

Pledgor hereby covenants not to deliver, or cause to be delivered, any of the foregoing to the Account.

5. **Secured Party's Power to Direct Intermediary.**

5.1. Pledgor and Secured Party hereby direct Intermediary to comply with all directions, instructions, or entitlement orders concerning the Collateral originated by Secured Party without further consent by Pledgor. Intermediary will comply with all directions, instructions, or entitlement orders concerning the Collateral originated by Secured Party without further consent by Pledgor. Pledgor hereby agrees that Intermediary's obligation to act on Secured Party's directions, instructions, or entitlements orders is unconditional. Intermediary will have no duty, obligation, or authority to determine whether Secured Party is acting properly, even if Pledgor objects or directs Intermediary not to follow Secured Party's directions, instructions, or entitlement orders.

5.2. If Intermediary receives from Secured Party a written notice that Secured Party is exercising exclusive control over the Collateral substantially in the form of **Exhibit A (Notice of Exclusive Control)** attached hereto (the "Notice of Exclusive Control"), then Intermediary will, in reliance upon such Notice of Exclusive Control, stop complying with directions, instructions, or entitlement orders concerning the Collateral originated by Pledgor. Intermediary will have no duty, obligation, or authority to determine whether Secured Party's delivery of the Notice of Exclusive Control (or the terms thereof) is proper, even if Pledgor objects or directs Intermediary not to honor the Notice of Exclusive Control.

6. **Withdrawal or Transfer (Part 1).** (Check A, B, or C. If none is checked or more than one are checked, then A and only A is deemed to be checked.)

- A. Unless and until Intermediary receives a **Notice of Exclusive Control**, Secured Party hereby consents to Pledgor's withdrawal or transfer of the Collateral, including Pledgor's instructions to Intermediary to that effect.

- B. Secured Party hereby consents to Pledgor's withdrawal or transfer of the Collateral, including Pledgor's instructions to Intermediary to that effect, but only if such withdrawal or transfer is made to the following destination: [INSERT ACCOUNT NAME, ACCOUNT NUMBER, AND ROUTING INFORMATION] (the "Pre-Approved Destination"). Pledgor will not, and hereby covenants not to, withdraw or transfer any Collateral without Secured Party's prior written consent unless such withdrawal or transfer is made to the Pre-Approved Destination. Without Secured Party's prior written consent, Intermediary will not comply with Pledgor's instructions to withdraw or transfer the Collateral unless such withdrawal or transfer is made to the Pre-Approved Destination.
- C. Pledgor will not, and hereby covenants not to, withdraw or transfer any Collateral without Secured Party's prior written consent. Without Secured Party's prior written consent, Intermediary will not comply with Pledgor's instructions to withdraw or transfer the Collateral.

7. **Withdrawal or Transfer (Part 2).**

7.1. Notwithstanding anything herein to the contrary, any limits on Pledgor's withdrawal or transfer of the Collateral do not apply to cash interest, income, and dividends.

7.2. Pledgor may notify Intermediary from time to time of the identity of Pledgor's agent with respect to the Account ("Agent"). To that end, Pledgor hereby identifies:

Name of Agent (Firm Name): _____

EIN of Agent (Firm EIN): _____

Notwithstanding anything herein to the contrary, Secured Party hereby consents to Agent's withdrawal of Collateral, including Agent's instructions to Intermediary to that effect, for the purpose of paying Agent's fees and expenses with respect to the Account. Pledgor hereby covenants that (i) such fees and expenses will not exceed 1% of the value of the Collateral at the time of any withdrawal, according to the pricing services and sources relied upon by Intermediary, and (ii) the sole purpose of any such instruction is payment of Agent's fees and expenses with respect to the Account.

8. **Trading or Substitution.** *(Check A or B. If neither is checked or both are checked, then A and only A is deemed to be checked.)*

- A. Unless and until Intermediary receives a **Notice of Exclusive Control**, Secured Party hereby consents to Pledgor's trading or substituting the Collateral, including Pledgor's instructions to Intermediary to that effect, so long as the proceeds resulting from such trading or substituting remain in the Account. Pledgor will not, and hereby covenants not to, trade for the Account on margin.
- B. Pledgor will not, and hereby covenants not to, trade or substitute the Collateral without Secured Party's prior written consent. Without Secured Party's prior written consent, Intermediary will not comply with Pledgor's instructions to trade or substitute the Collateral.

9. **Trade, Substitute, Withdraw, or Transfer.** As used herein, the words "trade" and "substitute" and words derived therefrom refer to deliveries out of the Account for counter-value, whereas the words "withdraw" and "transfer" and words derived therefrom refer to deliveries out of the Account not for counter-value.

10. **Effectiveness of Notice of Exclusive Control.** Any Notice of Exclusive Control provided to Intermediary will only be binding after (a) Intermediary receives such Notice of Exclusive Control and (b) Intermediary has had a reasonable opportunity to act upon such Notice of Exclusive Control.

11. No Other Security Interest; Ownership of Collateral.

11.1. Pledgor hereby represents and warrants that (i) Pledgor has not granted a security interest in the Collateral to any person or entity other than Secured Party and Intermediary, and (ii) Pledgor is the sole beneficial owner of the Collateral (except for Secured Party's interest and Intermediary's interest).

11.2. Intermediary's records show that Pledgor is the sole owner of the Collateral and that Intermediary has not received notice of any levy, security interest, or other claim in or to the Collateral other than this Agreement ("Adverse Claim"). If Intermediary receives notice of an Adverse Claim, then Intermediary will use commercially reasonable efforts to notify Pledgor and Secured Party thereof.

11.3. Intermediary is not presently obligated to comply with transfer or withdrawal orders from any person other than Pledgor with respect to the Collateral. After the execution of this Agreement, without Secured Party's prior written consent, Intermediary will not enter into any agreements by which Intermediary agrees to comply with transfer or withdrawal orders of any person other than Secured Party with respect to the Collateral.

11.4. To the extent Pledgor has directed, or hereafter directs, Intermediary to designate the Account as transfer on death ("TOD") or payable on death ("POD"), Pledgor hereby acknowledges that any right, title, or interest of any beneficiary under such TOD or POD designation is subordinate to Secured Party's right, title, and interest in the Account. By way of example and not limitation, Secured Party may thus direct liquidation of any and all assets in the Account upon any loan default, including death of a Pledgor, and apply the liquidation proceeds to amounts outstanding under any loan(s) and other obligations secured by the Account before any distribution of assets under pursuant to such TOD or POD. This Section 11.4 cannot be amended or superseded by the execution of any TOD or POD agreement.

12. Limited Subordination.

12.1. Intermediary hereby subordinates to Secured Party's security interests all of Intermediary's present and future liens, security interests, rights of set-off, claims, and other rights and interests relating to the Collateral, except for those resulting from any (i) advance of funds or securities in furtherance of settling securities transactions and other financial-market transactions under the Custody Agreement ("Settlement Claims") or (ii) outstanding compensation, expenses, fees, costs, or other charges incurred by Intermediary in providing services under this Agreement or the Custody Agreement.

12.2. Intermediary hereby represents and warrants that no Settlement Claims are past due as of the date of this Agreement.

12.3. Except to the extent allowed under this Section, Intermediary will not execute or exercise any of Intermediary's present or future liens, security interests, rights of set-off, claims, or other rights or interests relating to the Collateral.

13. Limited Responsibility of Intermediary.

13.1. Intermediary will be fully protected in acting in accordance with any direction, instruction, or entitlement order provided pursuant to this Agreement, and Intermediary has no duty to (i) solicit or confirm directions, instructions, or entitlement orders; (ii) notify Pledgor of receiving any direction, instruction, or entitlement order originated by Secured Party or Notice of Exclusive Control; (iii) select a broker in furtherance of complying with a direction, instruction, or entitlement order or take any action that would require Intermediary to register as a broker; or (iv) question whether any direction, instruction, or entitlement order received under this Agreement by email or any financial-messaging system, network, or service acceptable to Intermediary, such as the Society for Worldwide Interbank Financial Telecommunication messaging system ("Messaging System"), or entered into Pledgor's or Secured Party's account in Intermediary's on-line portal, is unreliable or has been compromised, such as by identity theft.

13.2. Other than the obligation to provide Account Statements as set forth herein, Intermediary will have no responsibility or liability to Secured Party with respect to the value of the Collateral.

13.3. Intermediary will have no duty to investigate or make any determination or provide any notice as to (i) whether Secured Party has “*control*” of the Collateral within the meaning of Article 8; (ii) the suitability or value of any asset held as Collateral or any decrease in such value; (iii) the purpose of any direction, instruction, or entitlement order provided pursuant to this Agreement; or (iv) whether a default exists under any other agreement.

13.4. The duties of Intermediary will be strictly limited to those set forth in this Agreement, and no implied covenants, duties, responsibilities, representations, warranties, or obligations will be read into this Agreement against Intermediary.

13.5. Notwithstanding anything to the contrary, Intermediary makes no representation or warranty with regard to the enforceability of any security interest described herein.

14. **Indemnification; Force Majeure; Damages.**

14.1. **Indemnification.**

14.1.1. “Indemnified Person” means Intermediary and its affiliates, and their officers, directors, employees, agents, successors, and assigns. “Harm” means claims, costs, damages, delayed payment or non-payment on assets sold, expenses (including attorneys’ and other professional fees), fines, interest, liabilities, losses, penalties, stockholders’ assessments (asserted on account of asset registration), and taxes.

14.1.2. Pledgor hereby indemnifies and releases each Indemnified Person and holds each Indemnified Person harmless from and against, and an Indemnified Person will incur no liability to any person or entity for, any Harm that may be imposed on, incurred by, or asserted against an Indemnified Person by reason of the Indemnified Person’s action or omission in connection with this Agreement or the Account (including, but not limited to, an action or omission that is consistent with directions provided under this Agreement), except to the extent that a court of competent jurisdiction has made a final judgment that the Harm resulted directly from the Indemnified Person’s willful misconduct, gross negligence, bad faith, or material breach of this Agreement.

14.1.3. Secured Party hereby indemnifies and releases each Indemnified Person and holds each Indemnified Person harmless from and against, and an Indemnified Person will incur no liability to any person or entity for, any Harm that may be imposed on, incurred by, or asserted against an Indemnified Person by reason of the Indemnified Person’s action or omission in connection with this Agreement or the Account (including, but not limited to, an action or omission that is consistent with directions provided under this Agreement), except to the extent that a court of competent jurisdiction has made a final judgment that the Harm resulted directly from the Indemnified Person’s willful misconduct, gross negligence, bad faith, or material breach of this Agreement.

14.1.4. The foregoing provisions will survive the termination of this Agreement.

14.2. **Force Majeure.** No party is liable for any delay or failure in performing its obligations under this Agreement caused by wars (whether declared or not and including existing wars), revolutions, insurrections, riots, civil commotion, acts of God, accidents, fires, explosions; stoppages of labor, strikes, or other differences with employees (other than Intermediary’s disputes with its employees); laws, regulations, orders, or other acts of any governmental authority; or any other circumstances beyond its reasonable control. Nor will any such failure or delay give any party the right to terminate this Agreement.

14.3. **Damages.** No party is liable for any indirect, incidental, special, punitive, or consequential damages arising out of or in any way related to this Agreement or the performance of its obligations under this Agreement. This limitation applies even if the party has been advised of, or is aware of, the possibility of such damages.

15. **Tax Reporting.** All reports relating to the Collateral to federal, state, and local tax authorities will be made under the name and tax identification number of Pledgor.

16. Termination of Agreement.

16.1. Intermediary may terminate this Agreement by notice to Pledgor and Secured Party, and such termination will be effective thirty (30) calendar days after delivery of the notice, except to the extent the parties agree in writing to a different effective date. Secured Party may terminate this Agreement by notice to Intermediary, and such termination will be effective upon delivery. Pledgor may not terminate this Agreement.

16.2. This Agreement is deemed to be terminated, and Pledgor and Secured Party hereby direct Intermediary to close the Account, upon Secured Party's withdrawal or transfer of all the Collateral.

17. **Account Statements.** Intermediary will send duplicate copies of any Account Statements to Secured Party at its address set forth below.

18. Authorized Persons; Delivery of Directions.

18.1. **Authorized Persons.** With respect to this Agreement:

18.1.1. Pledgor will notify Intermediary of the identity of each (i) employee of Pledgor who is authorized to act on Pledgor's behalf, (ii) third-party agent that is authorized to act on Pledgor's behalf, and (iii) employee of each third-party agent who is authorized to act on such agent's behalf. In no event is any such agent authorized to execute this Agreement or any amendment thereto or to terminate this Agreement.

18.1.2. Secured Party will notify Intermediary of the identity of each (i) employee of Secured Party who is authorized to act on Secured Party's behalf, (ii) third-party agent that is authorized to act on Secured Party's behalf, and (iii) employee of each third-party agent who is authorized to act on such agent's behalf. In no event is any such agent authorized to execute this Agreement or any amendment thereto or to terminate this Agreement.

18.1.3. Intermediary may assume that any such employee or agent of Pledgor continues to be so authorized, until Intermediary receives notice to the contrary from Pledgor (or, with respect to any such employee of any such agent, from such agent). Intermediary may assume that any such employee or agent of Secured Party continues to be so authorized, until Intermediary receives notice to the contrary from Secured Party (or, with respect to any such employee of any such agent, from such agent).

18.1.4. Pledgor hereby represents and warrants that any such employee or agent of Pledgor was duly appointed and is appropriately monitored and covenants that Pledgor will furnish such employee or agent with a copy of this Agreement, as amended from time to time. Pledgor hereby acknowledges that (i) such employee's or agent's actions or omissions are binding upon Pledgor as if Pledgor had taken such actions or made such omissions itself and (ii) Intermediary is indemnified, released, and held harmless accordingly.

18.1.5. Secured Party hereby represents and warrants that any such employee or agent of Secured Party was duly appointed and is appropriately monitored and covenants that Secured Party will furnish such employee or agent with a copy of this Agreement, as amended from time to time. Secured Party hereby acknowledges that (i) such employee's or agent's actions or omissions are binding upon Secured Party as if Secured Party had taken such actions or made such omissions itself and (ii) Intermediary is indemnified, released, and held harmless accordingly.

18.2. **Delivery of Directions.**

18.2.1. Any direction, notice, or other communication to or from Pledgor provided for in this Agreement will be given in writing and (i) unless the recipient has timely delivered a superseding address under this Agreement, addressed as provided under this Agreement, (ii) entered into Pledgor's account in Intermediary's on-line portal, or (iii) sent to Intermediary by Messaging System.

18.2.2. Any direction, notice, or other communication to or from Secured Party provided for in this Agreement will be given in writing and (i) unless the recipient has timely delivered a superseding address under this

Agreement, addressed as provided under this Agreement, (ii) entered into Secured Party's account in Intermediary's on-line portal, or (iii) sent to Intermediary by Messaging System.

18.2.3. Any direction received from Pledgor under this Agreement by email or Messaging System, or entered into Pledgor's account in Intermediary's on-line portal, is deemed to be given in a writing signed by Pledgor. Pledgor hereby represents and warrants that Pledgor maintains commercially reasonable security measures for preventing unauthorized access to its portal account; to the email accounts of its employees, agents, and agents' employees; and to any Messaging System used by its employees, agents, and agents' employees, and Pledgor hereby assumes all risk to the Account of such unauthorized access. Pledgor hereby acknowledges that Pledgor is fully informed of the protections and risks associated with the various methods of transmitting directions to Intermediary and that there may be more secure methods of transmitting directions than the methods selected by Pledgor and Pledgor's agents.

18.2.4. Any direction received from Secured Party under this Agreement by email or Messaging System, or entered into Secured Party's account in Intermediary's on-line portal, is deemed to be given in a writing signed by Secured Party. Secured Party hereby represents and warrants that Secured Party maintains commercially reasonable security measures for preventing unauthorized access to its portal account; to the email accounts of its employees, agents, and agents' employees; and to any Messaging System used by its employees, agents, and agents' employees, and Secured Party hereby assumes all risk to the Account of such unauthorized access. Secured Party hereby acknowledges that Secured Party is fully informed of the protections and risks associated with the various methods of transmitting directions to Intermediary and that there may be more secure methods of transmitting directions than the methods selected by Secured Party and Secured Party's agents.

19. **Services Not Exclusive.** Intermediary is free to render services to others, whether similar to those services rendered under this Agreement or of a different nature.

20. **Binding Obligations.** Pledgor, Secured Party, and Intermediary each hereby represent and warrant that (i) it has the power and authority to transact the business in which it is engaged and to execute, deliver, and perform this Agreement and has taken all action necessary to execute, deliver, and perform this Agreement and (ii) this Agreement constitutes its legal, valid, and binding obligation enforceable according to the terms hereof.

21. **Complete Agreement; Amendment; Prevalence.**

21.1. **Complete Agreement.** This Agreement contains a complete statement of all the arrangements between the parties with respect to its subject matter and supersedes any existing agreements between them concerning the subject. This Agreement and any administrative form under this Agreement may be proved either by a signed original or by a reproduced copy thereof (including, not by way of limitation, a microfiche copy or an electronic file copy).

21.2. **Amendment.** This Agreement may be amended at any time, in whole or in part, by a written instrument signed by Pledgor, Secured Party, and Intermediary.

21.3. **Prevalence.** Pledgor and Intermediary hereby acknowledge and agree that, in the event of any inconsistency between this Agreement and the Custody Agreement regarding the Collateral, this Agreement prevails with respect to the Collateral.

22. **Governing Law; Venue.** This Agreement will be governed, enforced, and interpreted according to the laws of the State of Minnesota without regard to conflicts of laws, except where pre-empted by federal law. All legal actions or other proceedings directly or indirectly relating to this Agreement will be brought in federal court (or, if unavailable, state court) sitting in the State of Minnesota. The parties submit to the jurisdiction of any such court in any such action or proceeding and waive any immunity from suit in such court or execution, attachment (whether before or after judgment), or other legal process in or by such court.

23. **Successors and Assigns.**

23.1. This Agreement binds, and inures to the benefit of, Pledgor, Secured Party, Intermediary, and their respective successors and assigns; provided, however, that Pledgor will have no right to assign any rights with respect to Collateral, except as specifically permitted in this Agreement.

23.2. No party may assign any of its rights under this Agreement without the consent of each other party, which consent will not be unreasonably withheld. Pledgor hereby acknowledges that Intermediary will withhold consent unless and until Intermediary verifies Pledgor's assignee's identity according to Intermediary's Customer Identification Program and, to that end, Pledgor hereby agrees to notify Intermediary of such assignment and provide Intermediary with the assignee's name, physical address, EIN, organizational documents, certificate of good standing, and license to do business, as well as other information that Intermediary may request. Secured Party hereby acknowledges that Intermediary will withhold consent unless and until Intermediary verifies Secured Party's assignee's identity according to Intermediary's Customer Identification Program and, to that end, Secured Party hereby agrees to notify Intermediary of such assignment and provide Intermediary with the assignee's name, physical address, EIN, organizational documents, certificate of good standing, and license to do business, as well as other information that Intermediary may request. No consent is required if a party merges with, consolidates with, or sells substantially all of its assets to another entity, provided that such other entity assumes without delay, qualification, or limitation all obligations of that party under this Agreement by operation of law or by contract.

24. **Severability.** The provisions of this Agreement are severable. The invalidity of a provision herein will not affect the validity of any other provision.

25. **No Third-Party Beneficiaries.** This Agreement is made solely for the benefit of the parties. No person other than such parties has any rights or remedies under this Agreement.

26. **Solvency.**

26.1. Intermediary has no duty to inquire whether Pledgor or Secured Party is insolvent or subject to a pending bankruptcy or receivership proceeding.

26.2. Pledgor hereby represents and warrants that Pledgor is neither insolvent nor subject to any pending bankruptcy or receivership proceeding. Pledgor will promptly notify Intermediary and Secured Party of any such insolvency or proceeding.

26.3. Secured Party hereby represents and warrants that Secured Party is neither insolvent nor subject to any pending bankruptcy or receivership proceeding. Secured Party will promptly notify Intermediary and Pledgor of any such insolvency or proceeding.

26.4. Intermediary may forward any such notice onto Secured Party or Pledgor, as the case may be. In any event, if Intermediary has actual knowledge of any such proceeding, then Intermediary may suspend performance of any of its obligations under this Agreement and may require additional documentation from the directing party before following any direction under this Agreement. Pledgor and Secured Party (i) will reimburse Intermediary for any expenses, fees, costs, or other charges incurred by Intermediary in responding to any such proceeding, including, but not limited to, any fees charged by an attorney of Intermediary's choice, and (ii) hereby covenant not to give any direction under this Agreement that is contrary to applicable bankruptcy or receivership law.

27. **Legal Advice.** Pledgor and Secured Party hereby acknowledge that they (i) did not receive legal advice from Intermediary concerning this Agreement, (ii) had an adequate opportunity to consult attorneys of their choice before executing this Agreement, and (iii) executed this Agreement upon their own judgment and, if sought, the advice of such attorneys.

28. **Waiver of Jury Trial.** Each party hereby irrevocably waives all right to a trial by jury in any action, proceeding, claim, or counterclaim (whether based on contract, tort, or otherwise) directly or indirectly arising out of or relating to this Agreement.

29. **Legal Action.** If Intermediary is served with any freeze order, garnishment, levy, restraining order, search warrant, subpoena, writ of attachment or execution, or similar order relating to the Account (each, a “Legal Action”), then Intermediary will, to the extent permitted by law, use commercially reasonable efforts to notify Pledgor and Secured Party of such service. Pledgor and Secured Party will reimburse Intermediary for any expenses, fees, costs, or other charges incurred by Intermediary in responding to the Legal Action, including, but not limited to, any fees charged by an attorney of Intermediary’s choice. If Pledgor notifies Intermediary that Pledgor is seeking a protective order to resist the Legal Action, then Intermediary will provide reasonable cooperation at Pledgor’s request and sole cost and expense. If Secured Party notifies Intermediary that Secured Party is seeking a protective order to resist the Legal Action, then Intermediary will provide reasonable cooperation at Secured Party’s request and sole cost and expense. In any event, Intermediary may comply with the Legal Action at any time, except to the extent Intermediary has received a protective order that prevents Intermediary from complying.

30. **Interpleader.** With respect to Collateral that is the subject of a dispute, Intermediary may file an interpleader action or other petition with a court of competent jurisdiction for directions with respect to the dispute. Pledgor and Secured Party will reimburse Intermediary for any expenses, fees, costs, or other charges incurred by Intermediary in filing such petition and implementing such directions, including, but not limited to, any fees charged by an attorney of Intermediary’s choice. Before disbursing Collateral pursuant to such directions, Intermediary will deduct therefrom an amount in payment or reimbursement for all (i) compensation, expenses, fees, costs, or other charges incurred by Intermediary in providing services under this Agreement or the Custody Agreement and (ii) Settlement Claims.

31. **Representations and Warranties.** Pledgor and Secured Party each hereby covenant that, if any of the representations or warranties that it provides in this Agreement becomes inaccurate or incomplete, it will promptly notify Intermediary thereof and of any fact, omission, event, or change of circumstances related thereto.

32. **Publicity.** No party will disclose the existence of this Agreement or any terms thereof in advertising, promotional, or marketing materials without obtaining, in each case, the prior written consent of each other party.

33. **Counterparts and Duplicates.** This Agreement may be executed in any number of counterparts, each of which will be considered an original, but all of which together will constitute the same instrument.

34. **Effective Date.** This Agreement will become effective when all parties have signed it. The date of this Agreement will be the date this Agreement is signed by the last party to sign it (as indicated by the date associated with that party’s signature).

[SIGNATURES APPEAR ON FOLLOWING PAGE.]

IN WITNESS WHEREOF, an authorized officer of each party hereby executes this Agreement on the date stated beneath that party's signature.

PLEDGOR (AS DEFINED IN THIS AGREEMENT)

By: /s/ Michael Foliano
(Signature of Pledgor's authorized officer)
Michael Foliano
(Printed name of Pledgor's authorized officer)

Its: CFO
(Title of Pledgor's authorized officer)

Dated: November 4, 2020

U.S. Mail Address:
ADTRAN, INC.
901 Explorer Boulevard
Huntsville, Alabama 35806

Email Address:
Mike.Foliano@adtran.com

SECURED PARTY (AS DEFINED IN THIS AGREEMENT)

By: /s/ Brian Heslop
(Signature of Secured Party's authorized officer)
Brian Heslop
(Printed name of Secured Party's authorized officer)

Its: Executive Vice President
(Title of Secured Party's authorized officer)

Dated: November 4, 2020

U.S. Mail Address:
CADENCE BANK, N.A.
2100 Third Avenue North, Suite 1100
Birmingham, Alabama 35203

Email Address:
Brian.Heslop@CadenceBank.com

[Signatures continue on following page.]

U.S. BANK NATIONAL ASSOCIATION

By: /s/ Kameron M. George
(Signature)
Kameron M. George
(Printed Name)

Its: Vice President and Relationship Manager

Dated: November 4, 2020

U.S. Mail Address:
2204 Lakeshore Drive Suite 205
Birmingham, AL 35209

Email Address:
Kameron.george@usbank.com

[End of signatures.]

CONTROL AGREEMENT

Exhibit A (Notice of Exclusive Control)

[Drafting note: To be provided on letterhead of Secured Party]

Date: _____

To: U.S. Bank National Association
c/o _____, Vice President and Relationship Manager

Re: Agreement entitled “Control Agreement” among ADTRAN, INC. (“Pledgor”); CADENCE BANK, N.A. (“Secured Party”); and U.S. Bank National Association (“Intermediary”) and dated _____ (the “Control Agreement”)

Notice of Exclusive Control

Secured Party hereby (i) notifies Intermediary that Secured Party is exercising exclusive control over the Collateral (as defined in the Control Agreement); (ii) instructs Intermediary to stop complying with directions, instructions, or entitlement orders concerning the Collateral originated by Pledgor; and (iii) represents and warrants to Intermediary that this Notice of Exclusive Control is lawful and authorized by the applicable agreement between Pledgor and Secured Party. Intermediary has no duty, obligation, or authority to determine whether Secured Party’s delivery of this Notice of Exclusive Control (or the terms hereof) is proper, even if Pledgor objects or directs Intermediary not to honor this Notice of Exclusive Control.

SECURED PARTY (AS DEFINED ABOVE)

By: _____
(Signature of Secured Party’s authorized officer)

(Printed name of Secured Party’s authorized officer)

Its: _____
(Title of Secured Party’s authorized officer)

Dated: _____

CERTIFICATIONS

I, Thomas R. Stanton, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of ADTRAN, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 6, 2020

/s/ Thomas R. Stanton

Thomas R. Stanton

Chief Executive Officer and Chairman of the Board

CERTIFICATIONS

I, Michael Foliano, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of ADTRAN, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 6, 2020

/s/ Michael Foliano

Michael Foliano

Senior Vice President of Finance and
Chief Financial Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of ADTRAN, Inc. (the "Company") on Form 10-Q for the quarter ending September 30, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Thomas R. Stanton, Chief Executive Officer and Chairman of the Board of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Thomas R. Stanton

Thomas R. Stanton

Chief Executive Officer and Chairman of the Board

November 6, 2020

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of ADTRAN, Inc. (the "Company") on Form 10-Q for the quarter ending September 30, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michael Foliano, Senior Vice President of Finance and Chief Financial Officer, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Michael Foliano

Michael Foliano
Senior Vice President of Finance and
Chief Financial Officer
November 6, 2020