UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2021

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: 001-36468

ARISTA NETWORKS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**20-1751121**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**

5453 Great America Parkway
Santa Clara, California 95054
(Address of principal executive offices)

(408) 547-5500
(Registrant's telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.0001 par value	**ANET**	**New York Stock Exchange**

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ☐ No ☒

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	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was approximately $21,908,602,716 as of June 30, 2021 (the last business day of the registrant's most recently completed second fiscal quarter) based on the closing price of the registrant's common stock on the New York Stock Exchange on such date. Shares held by persons who may be deemed affiliates have been excluded. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

On February 8, 2022, 307,766,578 shares of the registrant's common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement relating to its 2022 Annual Meeting of Stockholders to be filed pursuant to Regulation 14A within 120 days after the registrant's fiscal year end of December 31, 2021 are incorporated by reference into Part III of this Annual Report on Form 10-K.

ARISTA NETWORKS, INC.

TABLE OF CONTENTS

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K, including the sections entitled “Business,” “Risk Factors,” “Use of Proceeds,” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, as Section 21E of the Securities Exchange Act of 1934, as amended, which statements involve substantial risks and uncertainties. The words “believe,” “may,” “will,” “potentially,” “estimate,” “continue,” “anticipate,” “intend,” “could,” “would,” “project,” “plan,” “predict,” “expect” and similar expressions that convey uncertainty of future events or outcomes are intended to identify forward-looking statements.

These forward-looking statements include, but are not limited to, statements concerning the following:

- our ability to maintain an adequate rate of revenue growth and our future financial performance, including our expectations regarding our revenue, cost of revenue, gross profit or gross margin and operating expenses;
- our belief that the networking market is rapidly evolving and has a significant potential opportunity for growth;
- the capabilities of our technology including our cloud networking platform;
- our ability to expand our leadership position in the network switch industry, including the areas of mobility, virtualization, network monitoring, cloud computing and cloud networks, and to develop new products and expand our business into new markets such as the campus workspace, enterprise data center and security markets;
- our ability to satisfy the requirements for networking solutions and to successfully anticipate technological shifts and market needs, innovate new products, rapidly develop new features and applications, and bring them to market in a timely manner including any increased adoption of new technology solutions or consumption models such as commoditized hardware technology or open source networking solutions;
- our inability to fulfill our end customers’ orders due to supply chain delays, access to key commodities or technologies or events that impact our manufacturers or their suppliers such as the recent U.S. trade wars or the impact of the global coronavirus ("COVID-19") pandemic;
- the demand for our solutions, products and services we offer;
- our business plan and our ability to effectively manage our growth;
- our ability to integrate and realize the benefits of our recent and future acquisitions;
- costs associated with defending intellectual property infringement and other claims and the potential outcomes of such disputes, such as any claims discussed in “Legal Proceedings”;
- our ability to retain and increase sales to existing customers and attract new end customers, including large end customers;
- the budgeting cycles and purchasing practices of end customers, including large end customers who may receive lower pricing terms due to volume discounts or who may elect to re-assign allocations to multiple vendors based upon specific network roles or projects;
- the growth and buying patterns of our large end customers in which large bulk purchases may or may not occur in certain quarters;
- our expectations regarding the impact of the COVID-19 pandemic on our business;
- the deferral or cancellation of orders by end customers, warranty returns or delays in acceptance of our products;
- our ability to further penetrate our existing customer base and sell more complex and higher-performance configurations of our products;
- our ability to displace existing products in established markets;
- our belief that increasing channel leverage will extend and improve our engagement with a broad set of customers;

- our plans to continue to expand our sales force, marketing activities and relationships with channel, technology and system-level partners;
- our plans to invest in our research and development;
- our ability to timely and effectively scale and adapt our existing technology;
- the benefits realized by our customers in their use of our products and services including lower total cost of ownership;
- our ability to expand our business domestically and internationally;
- the effects of increased competition in our market and our ability to compete effectively;
- the effects of seasonal and cyclical trends on our results of operations;
- our expectations concerning relationships with third parties;
- the attraction and retention of qualified employees and key personnel;
- our ability to maintain, protect and enhance our brand and intellectual property;
- economic and industry trends;
- estimates and estimate methodologies used in preparing our financial statements;
- future trading prices of our common stock;
- our belief that we have adequately reserved for uncertain tax positions;
- global economic and political conditions that introduce instability into the U.S. economy;
- the impact of global and domestic tax reform;
- the impact of tariffs imposed by the U.S. on goods from other countries and tariffs imposed by other countries on U.S. goods;
- our belief that our existing cash and cash equivalents together with cash flow from operations will be sufficient to meet our working capital requirements and our growth strategies for the foreseeable future; and
- our ability to identify, complete and realize the benefits of future acquisitions of or investments in complementary companies, products, services or technologies.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in the section titled “Risk Factors” and elsewhere in this Annual Report on Form 10-K. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this Annual Report on Form 10-K may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. You should not rely upon forward-looking statements as predictions of future events.

The forward-looking statements made in this Annual Report on Form 10-K relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statements made in this Annual Report on Form 10-K to reflect events or circumstances after the date of this Annual Report on Form 10-K or to reflect new information or the occurrence of unanticipated events, except as required by law. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

PART I

Item 1. Business

Arista Networks pioneered data-driven, cognitive cloud networking for large-scale data center and campus workspace environments. At the core of Arista's platform is an advanced network operating system, Arista's Extensible Operating System ("EOS"), combined with a set of network and Ethernet switching and routing platforms based on merchant silicon. We are a leader in cloud networking solutions delivering high performance, scalability, availability, programmability, automation, and visibility.

In recent years, we have brought the operational consistency and principles of cloud networking to the broader enterprise and campus markets with our Cognitive Cloud Networking approach, extending EOS across the enterprise data center and campus wired and wireless workspace. CloudVision®, our workload orchestration and automation solution, leverages EOS based network wide data models to deliver turnkey automation and configuration capabilities across data center, wired and wireless workspaces, multi-cloud, and WAN routing use cases.

In 2020, we completed the acquisition of Big Switch Networks, a pioneer in network monitoring software and Awake Security, an AI-driven network detection and response (NDR) company. We believe the integration of these capabilities with Arista’s network-wide, data-based visibility and telemetry offerings delivers the next generation of operationally efficient network security and visibility solutions.

In addition, we continued to expand our 400G product portfolio for both enterprise and cloud customers with the introduction of the next generation 7050X/7060X and 7300X Series switches delivering performance and cost benefits for customers of all sizes as they transition to 400G. We also continue to expand our cognitive campus edge portfolio with the new C-360 Wi-Fi 6E access point to take advantage of the greater capacity, higher bandwidth, and lower latency of Wi-Fi 6E.

Since we began shipping our products, we have grown rapidly, and, according to market research, we have achieved the second largest market share in data center Ethernet switch ports and revenue, excluding China. We have been profitable and cash flow positive for each year since 2010.

We sell our products through both our direct sales force and our channel partners. Our end customers span a range of industries and include large internet companies, service providers, financial services organizations, government agencies, media and entertainment companies and others.

Our Market Opportunity

We compete primarily in the data center switching market for 10 Gigabit Ethernet and above, excluding blade switches. We added advanced routing capabilities to our R-Series switches, which in addition to switching address the Data Center Interconnect (DCI) market, cloud-grade routing, next-generation network edge and parts of the wide area networking routing market. We also compete in the enterprise campus market for 1 Gigabit Ethernet switching and above and in the cloud-managed wireless networking market. In addition, our acquisitions of Big Switch Networks and Awake Security enhance our ability to address a portion of the Network Monitoring and NDR security markets.

We believe that cloud computing represents a fundamental shift from traditional legacy network architectures. As organizations of all sizes have moved workloads to the cloud, spending on cloud and next-generation data centers has increased rapidly, while traditional legacy IT spending has grown more slowly.

Our Customers

As of December 31, 2021, we had delivered our cloud networking solutions to over 8,000 end customers worldwide. Our end customers span a range of industries and include large internet companies, service providers, financial services organizations, government agencies, media and entertainment companies and others. For the years ended December 31, 2021, 2020 and 2019, purchases by Microsoft accounted for more than 10% of our total revenue.

Cloud Networking and Digital Transformation Market Drivers

Digital transformation is fundamentally changing the way IT infrastructure is built and how applications are delivered from a cloud environment. In cloud computing, applications are distributed across thousands of servers. These servers are connected with high-speed network switches that, together, form a pool of resources that allows applications to be rapidly deployed and cost-effectively updated. Cloud computing enables ubiquitous and on-demand network access to these applications from internet-connected devices including personal computers, tablets, Internet of Things (IoT) devices, and smartphones.

Nearly all consumer applications today are delivered as cloud services. Enterprise applications are rapidly moving to the cloud as cloud services are easier and more cost effective to deploy, scale and operate than traditional applications. Internet leaders like Amazon, Meta Platforms, Google, and Microsoft pioneered the development of large-scale cloud data centers in order to meet the growing demands of their users, including business customers. Enterprises and service providers around the world are adopting cloud computing technologies in order to achieve similar performance improvements and cost reductions.

The aggregate network bandwidth in the cloud can be orders of magnitude higher than typical legacy data center networks. Therefore, the networks in such cloud environments must be architected and built in a new way. We refer to these next-generation data center networks as cloud networks. Cloud networks must deliver high capacity, high availability and predictable performance, and must be programmable to allow integration with third-party applications for network management, automation, orchestration, and network services.

Examples of key secular trends driving network transformation are illustrated below:

Limitations of Traditional Enterprise Data Center and Campus Networks

We believe that cloud networks and legacy networks are fundamentally different. In a traditional data center, specific applications are installed on a small number of servers and most network traffic is server-to-client, or “north-south” traffic, which results in perhaps a few terabits/second of aggregate network bandwidth. In the cloud, most network traffic is server-to-server, or “east-west” traffic. The aggregate network bandwidth in the cloud can exceed 1 petabit/second, orders of magnitude higher than that of typical legacy data center networks.

The much larger scale of cloud networks requires much higher network availability since network outages in the cloud are costly to customers. Traditional network switches have evolved, and the features and capabilities of their operating system have expanded over many years without addressing the structural deficiencies of their underlying software architectures, making it difficult to achieve high network switch reliability.

Some networking vendors have built products that use proprietary protocols to address the scaling needs of next-generation data centers. However, proprietary protocols are generally disfavored by internet companies or cloud service providers because they create vendor lock-in.

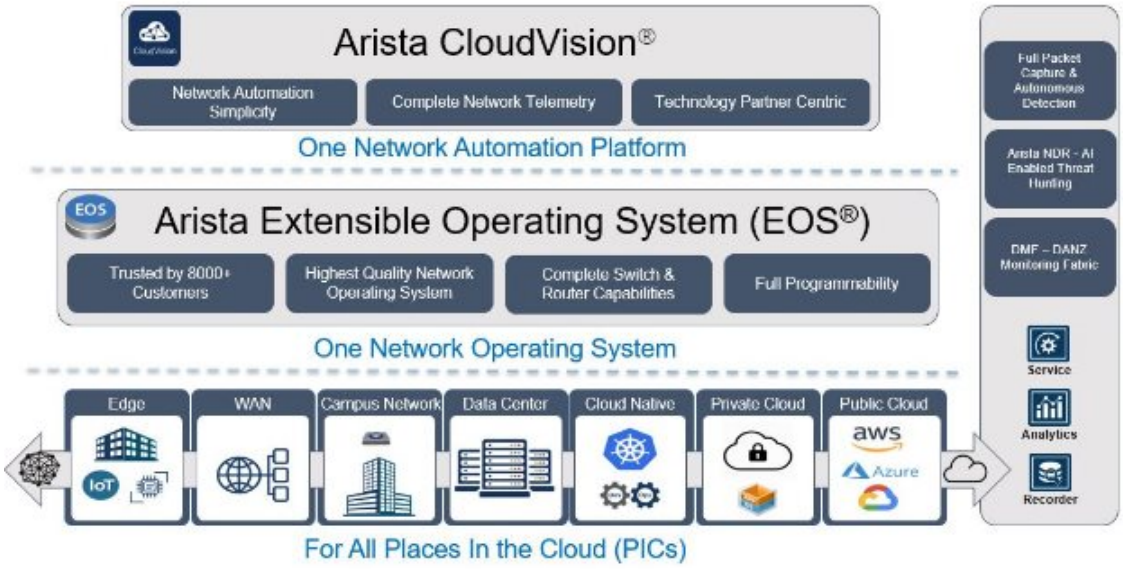
Legacy enterprise networks are generally not programmable and, as a result, are extremely difficult to integrate with third-party applications for network management, automation, orchestration and network services. This lack of integration forces customers to continue to rely on time consuming, error-prone manual processes that may be cost-prohibitive.

Traditional enterprise wired and wireless campus networks must cope with an ever-increasing number of endpoint IoT devices for users to be connected anywhere. Campus administrators have sought to address the resulting increased network complexities and bottlenecks through the adoption of a myriad of platforms, operating systems, proprietary features and network management tools. Coupled with the explosive growth of IoT and the requirement for workloads, the operational costs of managing these complexities have become prohibitive.

Our Cloud Networking Solutions

The core of Arista's platform is an advanced network operating system, Arista's EOS, which was designed to be fully programmable, modular and reliable. The programmability of EOS has allowed us to expand our software applications to address the ever-increasing demands of cloud networking, including data driven workflow automation, network visibility, analytics and network detection and response, and has further allowed us to integrate rapidly with a wide range of third-party applications for virtualization, management, automation, orchestration and network services.

An overview of our cloud networking solutions is shown below:



The key benefits of our cloud networking solutions are as follows:

Capacity, Performance and Scalability

Our cloud networking platform enables data center networks to scale to hundreds of thousands of physical servers and millions of virtual machines with the least number of switching tiers. We achieve this by leveraging standard protocols to meet the scale requirements of cloud computing. We have used active-active Layer 2 and Layer 3 network topologies to enable customers to build extremely large and resilient networks.

High Availability

Our highly modular EOS software architecture was designed to be fault-isolating and self-healing in order to deliver higher availability compared to legacy network operating systems. In addition, our customers can non-disruptively upgrade our switches running in the network using our Smart System Upgrade ("SSU") application, without interrupting the network service.

Open and Programmable

Our EOS software was purpose-built to offer programmable interfaces throughout all levels of our software. This has allowed us to integrate our cloud networking platform with a wide range of leading third-party applications. For example, we support VMware NSX, OpenConfig/YANG and Microsoft System Center for orchestration and fast provisioning, enabling true workload mobility and automatic provisioning of physical switches. We enable customers, through Application Programming Interfaces (APIs), to write their own scripts to customize and optimize their networks.

Workflow Automation

Our EOS software enables enterprises to provision networking resources in minutes with no manual intervention through our Zero Touch Provisioning. We also natively support Ansible, CFEngine, Chef, Puppet, virtual network orchestration applications and third-party management tools. CloudVision, a network-wide approach for workload orchestration and workflow automation, delivers a turnkey solution to enterprises looking to modernize their data centers for cloud networking. CloudVision extends the same EOS architectural approach across the network for state, topology, monitoring and visibility. This enables enterprises to move to cloud-class automation without needing significant internal development. Finally, EOS embraces the DevOps model, which is a software development method that combines development and operations, to provision and monitor servers, storage and network resources in a unified fashion.

Network Visibility

Our EOS software provides a set of tools and applications that proactively monitor, detect and notify network managers when network issues arise, delivering real-time data to third-party network performance and security applications to provide detailed application visibility. Our network visibility applications provide real-time insight into the status of the network.

Through the integration of DataANalyZer ("DANZ") features native to Arista switches with Big Switch's monitoring software, we provide the DANZ Monitoring Fabric (DMF). DMF delivers network traffic analysis, data analytics and contextual insights to enterprises looking for network-wide observability.

Security

Macro-Segmentation Services (MSS™) is one of the services enabled via CloudVision. Since CloudVision maintains a network-wide database of all states within the network, as well as direct integration with hypervisor resources like VMware vSphere and NSX, Macro-Segmentation extends the concept of fine-grained inter-hypervisor security to cloud networks by enabling dynamic security and services for physical to virtual workloads, and is a complement to fine-grained security delivered via Micro-Segmentation that is already implemented in the virtual switch of the physical host on which a VM is running.

Arista network detection and response (NDR) is an advanced solution that delivers answers, not alerts. By combining artificial intelligence with human expertise, Arista NDR autonomously hunts for both insider and external attacker behaviors, while providing triage, digital forensics and incident response across the entire network — campus workspace, data center, IoT/OT and cloud networks

Lower Total Cost of Ownership

Our cloud networking platform offers architectural and system advantages that provide our customers with cost-effective and highly available cloud networking solutions. We believe our programmable, scalable leaf-spine architectures, combined with our applications, significantly reduce networking costs when compared to legacy network designs, enabling faster time to service and improved availability. Our automation tools reduce the operational costs of provisioning, managing and monitoring a data center network and speed up service delivery. Our visibility tools provide high levels of visibility into complex network environments without the need for additional data collection equipment. As a result, this lowers operational costs because fewer network engineers are needed to operate large networks.

Cognitive Campus Workspace

Arista's solutions apply the principles of cognitive cloud computing to campus networks, with the intent of disrupting the wasteful, oversubscribed legacy three-tier architecture of access-aggregation-core. As the devices move to more disparate IoT for voice, video, and data traffic, Arista is addressing these trends in the campus network by using cognitive controls and analytics, driven by a single-image operating system that extends across the campus and the data center.

Using a cloud-based approach reduces operational costs by incorporating a network that is a seamless end-to-end solution rather than silos of different places in the network. Arista's cognitive campus workspace is a data-driven model coupled with our unified dashboard for wired/wireless edge for next gen zero touch campus deployments. Together, with zero trust security, the cognitive campus drives multifaceted visibility for Internet of things ("IoT") and operational technology ("OT") applications.

Our Cognitive Campus Networking solutions are based on three principles:

Universal Cloud Network - We offer our Universal Cloud Network as an alternative to brittle, proprietary solutions from legacy vendors. Our Universal Cloud Network is an open, standards-based design focusing on software-driven control principles. Our collapsed Spline™ approach consolidates traditional campus core and aggregation layers into a simple single tier with high availability.

Cognitive Management Plane - There is a void in management plane consistency and a need for data-driven analytics in the campus, as in the data center. We believe that a common model can be applied across both footprints, saving customers operational costs. The Cognitive Management Plane (CMP) is a data-driven repository for the automated actions across network analytics.

Securing The Campus - Securing the Campus requires a holistic approach to network segmentation, device compliance and auditing, as well as service integration with our security partners. We deliver these capabilities through EOS, DMF, NDR and CloudVision.

Our Competitive Strengths

We believe the following strengths will allow us to maintain and extend our technology leadership position in cognitive cloud networking and next-generation data center and campus workspace Ethernet products:

- ***Purpose-Built Cloud Networking Platform.*** We have developed a highly scalable cloud networking platform that uses software to address the needs of large-scale internet companies, cloud service providers, and large enterprises including financial services organizations, government agencies and media and entertainment companies, including virtualization, big data and low-latency applications. As a result, our cloud networking platform does not have the inherent limitations of legacy network architectures.

- ***Broad and Differentiated Portfolio.*** Using multiple merchant silicon architectures, we deliver switches, capable of routing, with industry-leading capacity, low latency, port density and power efficiency, and have innovated in areas such as deep packet buffers, highly available modular hardware, and reversible cooling options. Our broad portfolio has allowed us to offer customers products that best match their specific requirements.

- ***Single Binary Image Software.*** The single binary image of EOS software allows us to maintain feature consistency across our entire product portfolio and enables us to introduce new software innovations into the market that become available to our entire installed base without a “forklift upgrade” (i.e., a broad upgrade of the data center infrastructure).

- ***Rapid Development of New Features and Applications.*** Our highly modular EOS software has allowed us to rapidly deliver new features and applications while preserving the structural integrity and quality of our network operating system. We believe our ability to deliver new features and capabilities more quickly than legacy switch/router operators provides us with a strategic advantage given that the requirements in cloud and next-generation data center networking continue to evolve rapidly.

- ***Deep Understanding of Customer Requirements.*** We have developed close working relationships with many of our largest customers that provide us with insights about their needs and future requirements. This has allowed us to develop and deliver products to market that meet customer demands and expectations as well as to rapidly grow sales to existing customers.

- ***Strong Management and Engineering Team with Significant Data Center Networking Expertise.*** Our management and engineering team consists of networking veterans with extensive data center and campus networking expertise. Our President and Chief Executive Officer, Jayshree Ullal, has over 30 years of networking expertise from silicon to systems companies. Andy Bechtolsheim, our Founder and Chief Development Officer, was previously a founder and chief system architect at Sun Microsystems. Kenneth Duda, our Founder and Chief Technology Officer, led the software development effort of EOS.

- ***Significant Technology Lead.*** We believe that our networking technology represents a fundamental advance in networking software. Our EOS software is a key cloud networking software stack that is state-driven and a result of tremendous research and development efforts.

Our Products and Technology

Our portfolio of products and technology consists of our Core Data center/Cloud Switching Products, our Adjacent Campus and Routing Products and our Network Software and Services.

Extensible Operating System

The core of our cloud networking platform is our data-driven operating system, EOS, which runs on top of standard Linux and offers programmability at all layers of the stack. System state and data are stored in EOS and maintained in a highly efficient, centralized system database where data is accessed via an automated publish/subscribe model. This distinct design principle provides module independence, self-healing resiliency, and multi-process software stability.

Arista has continued to evolve the principle of EOS State Orientation from a single-system state database, to NetDB where the network device state is centralized across hundreds of systems, to the EOS Network Data Lake (NetDL) where, in addition to network device state, additional data sources have been added including packet data, flow data, and external enrichment data such as DNS naming and BGP Internet performance data.

We believe we are extending classic Software-Defined Networking (SDN) principles to software-driven networking control and an AI-enabled holistic view with NetDL, while building on Arista's core pillars of reliability, open standards, and programmability.

EOS Attributes

The modular and programmable architecture of EOS enables us to offer a set of attributes, capabilities and features that are essential for cloud networking and next-generation data centers.

High Availability

EOS is self-healing in the sense that individual processes can be restarted without impacting application traffic. This architectural design principle supports self-healing resiliency in our software, easier software maintenance and module independence, higher software quality overall, and faster time-to-market for new features that customers require.

Programmable at All Layers

EOS is programmable at all layers from the Linux kernel to switch configuration, provisioning, automation and detailed monitoring of the network. Public cloud providers have leveraged tools such as the EOS Software Development Kit ("SDK") and eAPI to implement fully customized infrastructure automation solutions.

Workflow Visibility

Through EOS, we have developed a wide range of applications available to our customers for purchase as additional licenses that enable enhanced network monitoring and visibility without requiring additional external monitoring devices. This includes (i) DANZ, which provides access to raw network data for analysis by security, troubleshooting and performance management tools, (ii) Latency/loss ANalyZer (LANZ), which provides access to internal network performance loads and packet loss and latency occurring at the microsecond level, (iii) Network Telemetry, which provides network state information including correlations with the dynamic state of the systems operating on the network such as Hypervisors and, distributed job controls, and (iv) Network Tracers, which provide active integration and diagnostics for various workload conditions dependent upon network performance.

Network Automation

EOS supports Puppet, Chef and Ansible, which enable automatic network configuration in the same manner as servers and storage. In addition, EOS provides tools that greatly reduce network operational costs.

Core Datacenter/Cloud

We offer one of the broadest product lines of datacenter 1/2.5/5/10/25/40/50/100/400 Gigabit Ethernet switches in the industry, comprising of 7000 Series, 7130 Series, 7150 Series, 7160 Series, 7170 Series, 7280 Series, 7500 Series and 7800 Series.

We deliver switching platforms with industry-leading capacity, low latency, port density and power efficiency. We have also innovated in areas such as deep packet buffers, embedded optics and reversible cooling.

Adjacent Campus and Routing

Cognitive Campus Switching and Routing

Our adjacent products include our Cognitive Campus switching products such as our 720XP fixed PoE switches, 750 modular PoE switches and 7300X3 spline switches, as well as our Universal Spine and Leaf Routing products such as our 7020R fixed routers, 7280R fixed routers, 7368X4 modular router, 7500R modular routers and 7800R modular routers.

Cognitive WiFi

Cognitive WiFi consists of our access point solutions (“APs”) that are tailored for a controller-less wireless network. These APs are available in disaggregated options harnessing the power of cloud, machine learning and cognitive networking. By integrating with CloudVision, Cognitive WiFi is based on a similar CMP model for cognitive analytics unifying the operational experience across wired and wireless. It enhances real-time insight into the experience of WiFi clients to connect and utilize the network. Cognitive WiFi also includes a suite of WiFi Tracer tools for wireless security, reachability and network health diagnostics.

Networking Software and Services

CloudVision

CloudVision is our network management plane solution for workload orchestration and workflow automation, which delivers a turnkey solution for cloud networking. CloudVision’s abstraction of the physical network to a broader, network-wide perspective provides a simplified approach for consistent network operations across network domains, including data center, campus wired and wireless, routing interconnect, and multi-cloud networks.

CloudVision highlights include: Centralized representation of distributed state based on Arista's Data Lake (NetDL), allowing for a single point of integration and network-wide visibility and analytics; Controller-agnostic support for physical and virtual workload orchestration through open APIs; Turn-key automation for zero touch provisioning, configuration management and network-wide upgrades and rollback; Compliance dashboard for security, audit and patch management; Cognitive AI/ML, driven by Arista's Autonomous Virtual Assist ("AVA") for dynamic insights and recommendations, built on a modern approach of real-time streaming for telemetry and as a replacement for legacy polling per device; Granular visibility and historical troubleshooting with predictive insights across the unified edge wired and wireless networks, including IoTvision, and finally Multi-domain segmentation for the zero trust enterprise, enabling macro-segmentation services (MSS®) for an open and scalable approach for network policy management and with dynamic integrations into security management systems from Arista’s security ecosystem partners.

DANZ Monitoring Fabric (DMF)

DANZ Monitoring Fabric (DMF) is a next-generation network packet broker (NPB) designed for pervasive, organization-wide network observability and security visibility, enabling IT to deliver multi-tenant monitoring-as-a-service. Leveraging Arista's high-performance and versatile 1G/10G/25G, 40G/100G and 400G Ethernet switch platforms with DMF, IT operators can pervasively monitor all user, device/IoT and application traffic (north-south and east-west) by gaining complete visibility into physical, virtual and container environments. DMF switch licenses are procured as subscription software. Additionally, DMF’s advanced services include deep hop-by-hop visibility, predictive analytics, contextual insights and scale-out packet capture — integrated through a single dashboard — to provide simplified network performance monitoring (NPM) and SecMon workflows for real-time and historical context. For enterprises, service providers and cloud providers, DMF provides a one-stop network observability solution for production data centers, enterprise campus/branch and 4G/5G mobile networks.

Arista Network Detection and Response (NDR)

The AI-driven Security Platform, driven by Arista's Autonomous Virtual Assist ("AVA"), deeply analyzes billions of network communications to autonomously discover, profile and classify every device, user and application across any network. Using a multi-dimensional ensemble machine learning approach, Arista NDR then models complex adversarial behaviors and detects threats by connecting the dots across entities, time, protocols and attack stages. By combining artificial intelligence with human expertise, Arista NDR hunts for both insider and external attacker behaviors, while providing triage, digital forensics and incident response across the entire network.

CloudEOS

CloudEOS™ is Arista's multi-cloud and cloud-native networking solution enabling a highly secure and reliable networking experience with consistent segmentation, telemetry, provisioning and troubleshooting for the entire enterprise. It can be deployed across the enterprise edge, WAN, campus workspace, data center, on-premises Kubernetes clusters, and multiple public and private clouds. CloudEOS provides multi-cloud connectivity across the entire enterprise cloud environment with high-performance virtual and container-based instances of EOS software that simplify network operations and integrate with declarative cloud provisioning toolchains like Terraform, Ansible, and other popular CloudOps and DevOps tools.

CloudEOS is designed for consumption on Amazon AWS, Microsoft Azure, and Google public clouds via their marketplace and service catalogs, and it is also available as a cloud-native instance for deployment in Kubernetes clusters. With CloudEOS and CloudVision, customers can integrate their cloud network deployments with the elasticity and automation of the public cloud, private cloud and cloud native platforms.

Arista A-Care Services

We have designed our customer support offerings, Arista A-Care Services, to provide our customers with high levels of support. Our global team of support engineers engages directly with client IT teams and is available at all times over e-mail, by phone or through our website.

We offer multiple service options that allow our customers to select the product replacement service level that best meets their needs. We stock spare parts in over 200 locations around the world through our third-party logistics suppliers. All of our service options include unlimited access to bug-fixes, new-feature-releases, online case management and our community forums.

Sales and Marketing

We market and sell our products through our direct sales force and in partnership with our channel partners, including distributors, value-added resellers, systems integrators and original equipment manufacturer ("OEM") partners. We also sell in conjunction with various technology partners. To facilitate channel coordination and increase productivity, we have created a partner program, the Arista Partner Program, to engage partners who provide value-added services and extend our reach into the marketplace. Authorized training partners perform technical training of our channel partners and end customers. Our partners commonly receive an order from an end customer prior to placing an order with us, and we confirm the identification of the end customer prior to accepting such orders. Our partners generally do not stock inventory received from us.

Our sales organization is supported by systems engineers with deep technical expertise and responsibility for pre-sales technical support and solutions engineering for our end customers, systems integrators, OEMs, and channel partners. A pool of shared channel sales and marketing representatives also supports these teams. Each sales team is responsible for a geographical territory, has responsibility for a number of major direct end-customer accounts or has assigned accounts in a specific vertical market.

Our marketing activities consist primarily of technology conferences, web marketing, trade shows, product demonstrations, seminars and events, public relations, analyst relations, demand generation and direct marketing to build our brand, increase end-customer awareness, communicate our product advantages and generate qualified leads for our field sales force and channel partners.

Seasonality

Our rapid historical growth may have reduced the impact of seasonal or cyclical factors that might have influenced our business to date. As our increasing size may cause our growth rate to slow, seasonal or cyclical variations in our operations may become more pronounced over time and may materially affect our business, financial condition, results of operations and prospects. We operate on a December 31st year-end and have typically experienced higher sequential product revenue growth in the fourth quarter, followed by flat-to-declining sequential growth in the first quarter of the following year. We believe that this seasonality results from a number of factors, including the procurement, budgeting and deployment cycles of many of our end customers. In addition, the current industry-wide supply chain shortages and extended lead times and their impact on our ability to ship products to our customers in a timely manner may disrupt typical seasonal trends.

Research and Development

We believe our future success depends on our ability to develop new products and features that address the needs of our end customers. Our in-house engineering personnel are responsible for the development, quality, documentation, support and release of our products. We plan to continue to invest in resources to conduct our research and development efforts.

Manufacturing

We subcontract the manufacturing of all of our products to various contract manufacturers. Our primary manufacturing partners are Jabil Circuit and Sanmina Corporation. This approach allows us to reduce our costs, manufacturing overhead and inventory position and allows us to adjust more quickly to changing end-customer demand. We require all of our manufacturing locations to be ISO-9001 certified. We have four direct fulfillment facilities worldwide to hold finished goods inventory, perform product transformations, and install our EOS software to ship to customers and partners.

Our contract manufacturing partners procure the majority of the components needed to build our products and assemble our products according to our design specifications. This allows us to leverage the purchasing power of our contract manufacturing partners. We retain complete control over the bill of materials, test procedures and quality assurance programs. Our personnel work closely with our partners and review on an ongoing basis forecasts, inventory levels, processes, capacity, yields and overall quality. Our contract manufacturing partners procure components and assemble our products based on our demand forecasts. These forecasts represent our estimates of future demand for our products based upon historical trends and analyses from our sales and product management functions as adjusted for overall market conditions. For example, current industry-wide supply chain shortages have resulted in extended lead times for components and have required us to extend the time horizon of our demand forecasts.

Our products rely on key components, including merchant silicon, integrated circuit components and power supplies purchased from a limited number of suppliers, including certain sole source providers. We also expect to see increased consolidation among our component suppliers. Generally, neither we nor our contract manufacturers have a written agreement with these component providers to guarantee the supply of the key components used in our products, nor do we have exclusive rights to such key components, and our suppliers could suffer shortages, delay shipments, prioritize shipments to other vendors, increase prices or cease manufacturing such products or selling them to us at any time. The supply of components may also be adversely affected by geopolitical conditions such as international trade wars like the U.S. trade war with China and the impact of public health epidemics like the coronavirus.

Our product development efforts also depend upon continued collaboration with our key suppliers, including our merchant silicon vendors such as Broadcom and Intel. As we develop our product roadmap and continue to expand our relationships with these and other merchant silicon vendors, it is critical that we work in tandem with our key merchant silicon vendors to ensure that their silicon includes improved features and that our products take advantage of such improved features. This enables us to focus our research and development resources on software core competencies and to leverage the investments made by merchant silicon vendors to achieve cost-effective solutions.

Once the completed products are manufactured and tested, our contract manufacturing partners ship them to various direct fulfillment facilities in the United States, the Netherlands and Singapore for final configuration,

quality-control inspection and shipment to our distribution partners and end customers. After the products are shipped to our end customers, our products are installed by the end customers or by third-party service providers such as system integrators or value-added resellers on their behalf.

Competition

The markets in which we compete are highly competitive and characterized by rapidly-changing technology, changing end-customer needs, evolving industry standards, frequent introductions of new products and services and industry consolidation. We expect competition to intensify in the future as the market for cloud networking expands and existing competitors and new market entrants introduce new products or enhance existing products.

The data center and campus networking markets have been historically dominated by Cisco, with competition also coming from other large network equipment and system vendors, including Extreme Networks, Dell/EMC, Hewlett Packard Enterprise and Juniper Networks. Most of our competitors and some strategic alliance partners have made acquisitions and/or have entered into or extended partnerships or other strategic relationships to offer more comprehensive product lines, including cloud networking solutions. For example, Broadcom acquired Brocade Communications Systems, Extreme Networks purchased certain data center networking assets from Broadcom/Brocade and Avaya as well as Aerohive Networks, Dell acquired EMC, Hewlett Packard Enterprise acquired Aruba Networks and Juniper Networks acquired Mist Systems.

We also face competition from other companies and new market entrants, current technology partners and end customers who may acquire or develop network switches and cloud service solutions for internal use and/or to broaden their portfolio of products to market and sell to customers. Some of these competitors are developing networking products based on off-the-shelf or commoditized hardware technology, or “white box” hardware, particularly where an end customer’s network strategy seeks to emphasize deployment of such product offerings or adopt a disaggregated approach to the procurement of hardware and software. End customers may also increase their adoption of networking solutions based upon open-source network operating systems that may be provided for free and used either on “white box” or proprietary hardware. The entrance of new competitors into our markets or the increased adoption of these new technology solutions or consumption models may cause downward pricing pressures, result in lost sales or otherwise have a material adverse effect on our business, prospects, financial condition and operating results.

In the NDR market, our Arista NDR offerings compete with other network security vendors including Cisco, DarkTrace, and ExtraHop. Lastly, in the network packet broker (NPB) market, Arista DANZ Monitoring Fabric competes with Gigamon, Keysight, and other network monitoring software providers.

Our relationships with our strategic alliance partners or suppliers may also shift as industry dynamics change. If strategic alliance partners acquire or develop competitive products or services, our relationship with those partners may be adversely impacted, which could lead to more variability to our results of operations and impact the pricing of our solutions.

The principal competitive factors applicable to our products include:

- breadth of product offerings and features;
- reliability and product quality;
- ease of use;
- pricing;
- total cost of ownership, including automation, monitoring and integration costs;
- performance and scale;
- programmability and extensibility;
- interoperability with other products;

- ability to be bundled with other vendor offerings; and
- quality of service, support and fulfillment.

We believe our products compete favorably with respect to these factors. Our EOS software offers high reliability, integrates with existing network protocols and is open and programmable. We believe the combination of EOS, a set of network applications and our 1/2.5/5/10/25/40/50/100/400 Gigabit Ethernet platforms make our offering highly competitive for both cloud and enterprise data centers. However, many of our competitors have greater name recognition, longer operating histories, larger sales and marketing budgets and resources, broader distribution and established relationships with channel partners and end customers, greater access to larger end-customer bases, greater end-customer support resources, greater manufacturing resources, the ability to leverage their sales efforts across a broader portfolio of products, the ability to leverage purchasing power when purchasing subcomponents, the ability to bundle competitive offerings with other products and services, the ability to develop their own silicon chips, the ability to set more aggressive pricing policies, lower labor and development costs, greater resources to make acquisitions, larger intellectual property portfolios and substantially greater financial, technical, research and development or other resources.

In addition, in the current industry-wide supply constrained environment, the ability to source components and provide customers with product in a timely manner can result in a significant competitive advantage. While we have extended our demand planning horizons and increased our component purchase commitments, there is no guarantee that suppliers will meet their commitments or that ultimate customer demand will directly match our demand forecasts.

Intellectual Property

Our success and ability to compete depend substantially upon our core technology and intellectual property. We rely on patent, trademark and copyright laws, trade secret protection and confidentiality agreements with our employees, end customers, resellers, systems integrators, manufacturers, and others to protect our intellectual property rights. We file U.S and foreign patent applications to protect our intellectual property and believe that the duration of our issued patents is adequate relative to the expected lives of our products. Patents generally have a duration of twenty years from filing. The remaining duration on the individual patents in our patent portfolio varies.

We cannot assure that any of our patent applications will result in the issuance of a patent or whether the examination process will result in patents of valuable breadth or applicability. In addition, any patents that may be issued may be contested, circumvented, found unenforceable or invalidated, and we may not be able to prevent third parties from infringing them. We also license software from third parties for integration into our products, including open-source software and other software available on commercially-reasonable terms. We own a number of trademarks in the U.S. and other jurisdictions, including Arista, EOS, CloudVision, CloudStream, CVP, CVX, Health Tracer, MapReduce Tracer, Path Tracer, MXP, MSS, RAIL, Score, SPLINE, SuperSpine, SSU, FlexRoute, NetRollBack, NetDB, OSFP, AlgoMatch, Macro-Segmentation and Macro-Segmentation Service.

We control access to and use of our software, technology and other proprietary information through internal and external controls, including contractual protections with employees, contractors, end customers and partners. Our software is protected by U.S. and international copyright, patent and trade secret laws. Despite our efforts to protect our software, technology and other proprietary information, unauthorized parties may still copy or otherwise obtain and use our software, technology and other proprietary information. In addition, we intend to expand our international operations, and effective patent, copyright, trademark and trade secret protection may not be available or may be limited in foreign countries.

Our industry is characterized by the existence of a large number of patents and frequent claims and related litigation regarding patent and other intellectual property rights. If we become more successful, we believe that competitors will be more likely to try to develop products that are similar to ours and that may infringe our proprietary rights. It may also be more likely that competitors or other third parties will claim that our products infringe their proprietary rights. In particular, large and established companies in our industry have extensive patent portfolios and are regularly involved in both offensive and defensive litigation. From time to time, third parties, including certain of these large companies and non-practicing entities, may assert patent, copyright, trademark and

other intellectual property rights against us, our channel partners or our end customers, whom our standard license and other agreements obligate us to indemnify against such claims.

Successful claims of infringement by a third-party, if any, could prevent us from distributing certain products or performing certain services, require us to expend time and money to develop non-infringing solutions or force us to pay substantial damages, royalties or other fees. We cannot assure that we do not currently infringe, or that we will not in the future infringe, upon any third-party patents or other proprietary rights.

Human Capital Management

At Arista, we seek to maintain an environment that is open, diverse and inclusive, and where our people feel valued, included and accountable. One of Arista's key principles is always doing the right thing for our employees. We are committed to maintaining the highest level of professional and ethical standards in the conduct of our business around the world. As of December 31, 2021, we employed approximately 2,993 full-time employees worldwide. None of our employees are represented by unions. We consider our relationship with our employees to be good and have not experienced significant interruptions of operations due to labor disagreements.

Diversity and Equal Employment

We seek to maintain an environment that is open, diverse and inclusive, and where our employees feel valued. We believe that diverse and inclusive teams enhance individual and company performance and help us attract and retain the best talent available. We strive to build an inclusive culture that encourages, supports and celebrates the diverse voices of our employees. As part of the Arista way, we believe in treating peers with respect, mentoring individuals and developing teams for overall success.

We are proud to be an S&P 500 company with both a female CEO and CFO. We also actively promote the hiring of female engineers by supporting periodic technology sessions for female engineers. In addition, we support under-represented employee affinity organizations and actively recruit from under-represented universities and professional societies.

Arista affirms the principle of equal employment opportunity without regard to any protected characteristic, including but not limited to race, religion, national origin, color, gender, age, disability, pregnancy, marital status, ancestry, military status or sexual orientation. We practice and promote such policies in all locations as appropriate under applicable law. We affirm this principle of freedom from discrimination in all aspects of the employment relationship from recruitment and hiring, through performance evaluations, compensation and promotions. At Arista, we believe that all employees should be treated with dignity and respect.

Health and Safety

We are committed to protecting the health and safety of our employees, visitors, and the public. Our policy is to maintain our facilities and run our business operations in a manner that does not jeopardize the occupational health and safety of employees.

During the COVID-19 pandemic, Arista asked its employees to work from home with limited exceptions. Essential workers have been given access to our facilities as may be permitted under applicable laws after instituting additional health and safety measures to reduce the risk of COVID-19. We work to provide safe working environments in our operations.

Compensation and Benefits

Arista provides competitive and comprehensive benefit packages that are designed to help employees make the best decisions for themselves, their family and their lifestyle. Our compensation committee provides oversight of our compensation policies, plans, benefit programs and overall compensation philosophy.

Along with Arista's traditional healthcare benefits, Arista has created a detailed injury and illness prevention program to better protect employees from occupational risks of injury or illness. Arista periodically hosts wellness days, whose purpose is to raise awareness on health issues, increase education on preventive

medicine and available services and shift employee behavior through interactive activities and live presentations. We also maintain a community engagement program, which provides opportunities for our employees to engage in community service.

Available Information

Our website is located at www.arista.com and our investor relations website is located at investors.arista.com. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are available free of charge on the Investors portion of our website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission (SEC). The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at www.sec.gov.

Webcasts of our earnings calls and certain events we participate in or host with members of the investment community are on our investor relations website. Additionally, we announce investor information, including news and commentary about our business and financial performance, SEC filings, notices of investor events, and our press and earnings releases, on our investor relations website. Investors and others can receive notifications of new information posted on our investor relations website in real time by signing up for email alerts and RSS feeds. Further corporate governance information, including our corporate governance guidelines, board committee charters, and code of conduct, is also available on our investor relations website under the heading "Governance." The contents of our websites, or information that can be accessed through our websites, are not incorporated by reference into this Annual Report on Form 10-K or in any other report or document we file with the SEC, and any references to our websites are intended to be inactive textual references only.

Item 1A. Risk Factors

You should consider carefully the risks and uncertainties described below, together with all of the other information in this Annual Report on Form 10-K, which could materially affect our business, financial condition, results of operations and prospects. The risks described below are not the only risks facing us. Risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially affect our business, financial condition, results of operations and prospects.

Risk Factors Summary

Our business is subject to numerous risks and uncertainties, including those highlighted in Part I, Item 1A titled "Risk Factors." These risks include, but are not limited to, the following:

Risks Related to Our Business and Industry

- the COVID-19 pandemic which has led, among other things, to manufacturing disruptions, supply chain shortages and unpredictable product demand and supply, increased lead times, extended demand planning horizons and increased purchase commitments, all of which, in turn, could materially adversely affect our business;
- the networking market is rapidly evolving;
- failure to successfully pursue new products and services and expand into adjacent markets could adversely affect our business;
- our revenue and revenue growth may decline;
- our results of operations may vary significantly from period to period;
- our gross margins vary and may be adversely affected by an increase in costs including component, shipping and other product costs;
- shipment delays could cause revenue to fall;
- some key components in our products come from sole or limited sources of supply and increases the risk of supply shortages, delays, extended lead times or costs, particularly in the current industry-wide supply constrained environment;
- adverse economic conditions and reduced information technology and network infrastructure spending may adversely affect our business;
- we face intense competition and industry consolidation;
- we are subject to risks associated with international sales and operations;
- we face risks associated with the acquisition and integration of complementary companies, products or technologies;
- seasonal fluctuations impact revenue;
- fluctuations in currency exchange rates could adversely affect our business;
- failure to raise any needed capital on favorable terms could harm our business.

Risks Related to Customers and Sales

- if we are unable to attract new large customers or sell additional products and services to our existing customers, our revenue growth will be adversely affected;
- large purchases by a limited number of customers represent a substantial portion of our revenue;
- if we are unable to increase market awareness of our products, our revenue may not continue to grow or may decline;
- some large customers require more favorable terms;
- sales of our switches generate most of our product revenue;
- sales prices of our products and services may decrease;
- sales cycle can be long and unpredictable;
- inability to offer high quality support and services could adversely affect our business;
- declines in maintenance renewals by customers could harm our business;
- indemnification provisions under sales contracts could expose us to losses;
- we rely on distributors, systems integrators and resellers to sell our products;
- sales to government entities are subject to a number of risks and challenges;
- we are exposed to credit risk of channel partners and customers.

Risks Related to Products and Services

- product quality problems, defects, errors or vulnerabilities could harm our business;
- failure to anticipate technological shifts could harm our business;
- our products must interoperate with operating systems, software and hardware developed by others.

Risks Related to Supply Chain and Manufacturing

- managing the supply of our products and product components is complex;
- we depend on third-party manufacturers to build our products;
- future sales forecasts may be materially inaccurate which could result in incorrect levels of inventory and purchase commitments.

Risks Related to Intellectual Property and Other Proprietary Rights

- assertions by third parties of intellectual property infringement could harm our business;
- failure to protect our intellectual property rights could harm our competitive position;
- we rely on the availability of licenses to third-party software and other intellectual property;
- failure to comply with open-source software licenses could restrict our ability to sell our products;
- risk that our competitors could develop products that are similar to or better than ours because we provide access to our software and selected source code to certain partners, which creates additional risks.

Risks Related to Litigation

- we may become involved in litigation that may materially adversely affect us.

Risks Related to Cybersecurity and Data Privacy

- defects, errors or vulnerabilities in our security network products, failure of our products to detect security breaches or incidents, misuse of our products or risks of product liability could harm our business;
- breaches of our cybersecurity systems or other security breaches or incidents could harm our business and our products and result in regulatory fines, required changes to our data handling processes or systems, and liability for damages to affected data subjects.

Risks Related to Accounting, Compliance, Regulation and Tax

- failure to maintain effective internal control over financial reporting could adversely affect the accuracy and timing of our financial reporting;
- if our critical accounting estimates are based on incorrect assumptions, our results of operations could fall below analyst and investor expectations and result in a decline in the market price of our common stock;
- enhanced U.S. tax, tariff, import/export restrictions or other trade barriers may negatively affect our business;
- changes in our effective tax rate or new tax laws could adversely affect our results;
- failure to comply with government laws and regulations could harm our business;
- we are subject to governmental export and import controls that could impair our ability to compete in international markets or subject us to liability for violations.

Risks Related to Ownership of Our Common Stock

- the trading price of our common stock is volatile and the value of your investment could decline;
- any reduction or discontinuance of our stock repurchase programs could cause the market price of our common stock to decline;
- sales of substantial amounts of our common stock could reduce the market price of our common stock;
- insiders have substantial control over us;
- our charter documents and Delaware law could discourage takeover attempts and lead to management entrenchment.

General Risks

- if we are unable to hire, retain and train personnel and senior management, our business could suffer;
- natural disasters, terrorism and other catastrophic events could harm our business;
- we have not paid dividends and do not intend to pay dividends for the foreseeable future.

Risks Related to Our Business and Industry

The COVID-19 pandemic, which has led, among other things, to manufacturing disruptions, supply chain shortages and unpredictable product demand and supply, extended demand planning horizons and increased purchase commitments, could materially adversely affect our business, financial condition, results of operations and prospects.

The COVID-19 pandemic has had and could continue to have an adverse impact on the business operations of our company and our customers, partners, manufacturers, suppliers, distribution fulfillment centers and service depots. The vast majority of our employees continue to work from home, and this remote model could present operational and other workplace challenges over time that may affect our business. We have also experienced, and may continue to experience, manufacturing and supply chain disruptions, components shortages, increased component lead times, unpredictability of supply, logistic challenges and increased costs.

Our contract manufacturers in Malaysia, Mexico and the United States are impacted by the pandemic and have experienced shelter in place orders, workforce disruptions, delays and increased costs for production, transit and the import and export of products. While our contract manufacturers have made progress to minimize disruptions caused by COVID-19, governments are continuing to impose restrictions on access as a result of COVID-19 variants, which has negatively impacted the staffing and product output of our contract manufacturers. Our contract manufacturers' activities are further limited by supply constraints caused by disruptions in the manufacturing activities of our suppliers. Similar to our manufacturing facilities, our direct fulfillment centers and service depots continue to operate with varying degrees of government restriction on access, which can materially impact our ability to ship products or provide support services to our customers. As a result of COVID-19 related manufacturing disruptions, the lead times for our products have increased and our supply chain costs have increased which has and may continue to adversely impact our gross margins. In addition, we have had to increase our demand planning horizon to address supply chain shortages, combined with increased component lead times and unpredictability of supply, resulting in significant increases to our purchase commitments and component buffer inventories. There is however no guarantee that suppliers will meet their commitments or that customers' actual demand will directly match our demand forecasts and this has increased the risk of future excess and obsolete inventory and could have a negative impact on our gross margins.

As the COVID-19 pandemic continues, we have experienced and may continue to experience additional risks including:

- more manufacturing disruptions and supply shortages, including shortages in semiconductors;
- increased lead times for our products including longer lead times for component parts incorporated into our products which, in turn, can increase the risk of order cancellations;
- reduced capacity and output at factories and factory closures;
- disruptions in logistics which impact the movement of components and finished products;
- overall increased demand for materials which could result in a limited or unpredictable supply of materials and components that are incorporated in our products;
- delays in product shipments and limits on our ability to provide in-person support services to customers; and
- increased risk of future excess and obsolete inventory as we extend our demand planning horizon and increase our purchase commitments and our inventory buffers.

The COVID-19 pandemic could limit our ability to add new customers and cause sales disruptions, order cancellations, longer upgrade cycles by customers for network equipment and overall lower demand for our products and services. Customers may purchase products in advance of their internal demand which could result in lower purchases in subsequent quarters. In addition, given supply chain constraints, customers may give us more optimistic indications about prospective purchases which could result in lower than expected orders or cancellations of orders. We could also face increased risk of customer defaults and delays in payment.

In addition, the COVID-19 pandemic has adversely affected, and may continue to adversely affect, the global economy and financial markets, which may result in an extended economic slowdown or a global recession that could adversely impact our business. Due to the uncertainty around the duration of the pandemic, the impact of new variants of

COVID-19, the availability, distribution and effectiveness of vaccines and treatments for COVID-19 around the world, the imposition of public safety measures, the impact of the pandemic on the global economy and the impact of COVID-19 on our customers, partners, contract manufacturers and supply chain, we are unable to predict the full impact of the COVID-19 pandemic on our business operations and financial performance. In addition, the COVID-19 pandemic and the various responses to it, may also have the effect of heightening many of the other risks discussed in this “Risk Factors” section.

The networking market is rapidly evolving. If this market does not evolve as we anticipate or our target end customers do not adopt our networking solutions, we may not be able to compete effectively, and our ability to generate revenue will suffer.

A substantial portion of our business and revenue depends on the growth and evolution of the networking market. The market demand for networking solutions has increased in recent years as end customers have deployed larger, more sophisticated networks and have increased the use of virtualization and cloud computing. The continued growth of this market will be dependent upon many factors including but not limited to the adoption of and demand for our end customers’ products and services, the expansion, evolution and build out of our end customers’ networks, the capacity utilization of existing network infrastructures, changes in the technological requirements for the products and services to be deployed in these networks, the amount and mix of capital spending by our end customers, the development of network switches and cloud service solutions by our large end customers for internal use, the financial performance and prospects of our end customers, the availability of capital resources to our end customers, changes in government regulation that could impact networking business models including those regulations related to cybersecurity, privacy, data protection and net neutrality, our ability to provide networking solutions that address the needs of end customers more effectively and economically than those of other competitors or existing technologies and general economic conditions, including the impact of the COVID-19 pandemic.

If the networking solutions market does not develop in the way we anticipate or otherwise experiences a slow-down, if our solutions do not offer benefits compared to competing networking products or if end customers do not recognize the benefits that our solutions provide, then our business, financial condition, results of operations and prospects could be materially adversely affected.

We pursue new product and service offerings and expand into adjacent markets, and if we fail to successfully carry out these initiatives, our business, financial condition, or results of operations could be adversely impacted.

We have made substantial investments to develop new products and services and enhancements to existing products through our acquisitions and research and development efforts to expand our product offerings and maintain our revenue growth. If we are unable to anticipate technological changes in our industry by introducing new or enhanced products and services in a timely and cost-effective manner, if we fail to introduce products and services that meet market demand, or if we do not successfully expand into adjacent markets, we may lose our competitive position, our products may become obsolete, and our business, financial condition or results of operations could be adversely affected. For example, as we introduce our 400 GbE and 800 GbE products, our ability to continue to maintain our competitive position with our customers will depend on our ability to deliver these new products in a timely manner and our customers' acceptance of these products. In addition, the evaluation, testing and qualification of our new products by our customers may be lengthy and may require contractual acceptance clauses, which could delay our revenue recognition and impact our revenue and deferred revenue balances.

Additionally, from time to time, we invest in expansion into adjacent markets, including campus switching, WiFi networking and network security markets. Although we believe these solutions are complementary to our current offerings, we have less experience and a more limited operating history in these markets, and our efforts in this area may not be successful. Expanding our services in existing and new markets and increasing the depth and breadth of our presence imposes significant burdens on our marketing, compliance, and other administrative and managerial resources. Our plan to expand and deepen our market share in our existing markets and possibly expand into additional markets is subject to a variety of risks and challenges. Our success in these new markets depends on a variety of factors, including but not limited to our ability to develop new products, new product features and services that address the customer requirements for these markets, attract a customer base in markets in which we have less experience, compete with new and existing competitors in these adjacent markets, and gain market acceptance of our new products.

Developing our products is expensive, and the investment in product development may involve a long payback cycle. We expect to continue to invest heavily in software development in order to expand the capabilities of our cloud networking platform and introduce new products and features. We expect that our results of operations will be impacted by the timing and size of these investments. These investments may take several years to generate positive returns, if ever.

Additionally, future market share gains may take longer than planned and cause us to incur significant costs. If we are unable to attract new large end customers or to sell additional products and services to our existing end customers, our revenue growth will be adversely affected and our revenue could decrease. Difficulties in any of our new product development efforts or our efforts to enter adjacent markets could adversely affect our operating results and financial condition.

Our revenue and our revenue growth rates are volatile and may decline.

Our revenue growth rate in previous periods may not be indicative of our future performance. We have experienced annual revenue growth rates of 27.2%, -3.9%, 12.1%, and 30.7% in 2021, 2020, 2019, and 2018, respectively. In the future, our revenue growth rates may continue to be volatile as we become more penetrated in our existing customer base and product markets, and as we look to enter and expand into new markets. In addition, COVID-19 related disruptions may cause delays in product shipments or cancellation of orders by end customers, and could have a negative impact on demand from our customers in future periods, and on our ability to add new customers. Other factors may also contribute to declines in our growth rates, including changes in demand for our products and services, particularly from our large end customers, changes in capital spending by our large end customers, increased competition, price sensitivities from our customers to increases in our pricing, our ability to successfully manage our expansion or continue to capitalize on growth opportunities, the maturation of our business, general economic and international trade conditions, and our ability to be successful in adjacent markets, such as campus switching, WiFi networking markets and network security markets. For example, we have experienced volatility in demand from certain of our large end customers. Overall demand from larger customers may decline in future periods, which would impact our future revenue growth. You should not rely on our revenue for any prior quarterly or annual period as an indication of our future revenue or revenue growth. If we are unable to maintain consistent revenue or revenue growth, our business, financial condition, results of operations and prospects could be materially adversely affected and our stock price could be volatile.

Our results of operations may vary significantly from period to period and be unpredictable and if we fail to meet the expectations of analysts or investors or our previously issued financial guidance, or if any forward-looking financial guidance does not meet the expectation of analysts or investors, the market price of our common stock could decline substantially.

Our results of operations have historically varied from period to period, and we expect that this trend will continue. As a result, you should not rely upon our past financial results for any period as indicators of future performance. Our results of operations in any given period can be influenced by a number of factors, many of which are outside of our control and may be difficult to predict, including:

- the disruption caused by COVID-19 and the government restrictions in response to the pandemic;
- our inability to fulfill our end customers' orders or the cancellation of orders by our end customers due to the unavailability or unpredictable supply of inventory, supply chain delays, access to key commodities or technologies, manufacturing disruptions or other events that impact our manufacturers or their suppliers;
- deferral, reduction or cancellation of orders from end customers, due to long lead times, announcements by us or other competitors of new products or product enhancements, warranty returns or other factors;
- our ability to increase sales to existing customers and attract new end customers, including large end customers;
- the budgeting, sales, implementation and refresh cycles, purchasing practices and buying patterns of end customers, including large end customers who may receive lower pricing terms due to volume discounts and who may or may not make large bulk purchases in certain quarters or who may elect to re-assign allocations to multiple vendors based upon specific network roles or projects;
- changes in the growth rate of existing or new customers, including large end customers and service providers, changes in end-customer, distributor or reseller requirements or market needs, and changes in growth rates of the networking market;
- the cost and potential outcomes of existing and future litigation;
- increased expenses resulting from increases in material or component costs and production costs including as a result of shortages in supply for semiconductors or the tariffs imposed by the U.S. on goods from other

countries and tariffs imposed by other countries on U.S. goods, including the tariffs implemented by the U.S. government on various imports from China;

- changes in our pricing policies, whether initiated by us or as a result of competition;
- the amount and timing of operating costs and capital expenditures related to the operation and expansion of our business;
- difficulty forecasting, budgeting and planning due to limited visibility beyond the first two quarters into the spending plans of current or prospective customers;
- the inclusion of any acceptance provisions in our customer contracts or any delays in acceptance of those products;
- the actual or rumored timing and success of new product and service introductions by us or our competitors or any other change in the competitive landscape of our industry, including consolidation among our competitors or end customers;
- our ability to successfully expand our business domestically and internationally;
- our ability to increase the size and production of our sales or distribution channel, or any disruption in, or termination of, our sales or distribution channels;
- decisions by potential end customers to purchase our networking solutions from larger, more established vendors, white box vendors or their primary network equipment vendors;
- insolvency or credit difficulties confronting our end customers, which could adversely affect their ability to purchase or pay for our products and services, or confronting our key suppliers, including our sole source suppliers, which could disrupt our supply chain;
- seasonality or cyclical fluctuations in our markets;
- future accounting pronouncements or changes in our accounting policies;
- our overall effective tax rate, including impacts caused by any reorganization in our corporate structure, any changes in our valuation allowance for domestic deferred tax assets and any new legislation or regulatory developments;
- increases or decreases in our expenses caused by fluctuations in foreign currency exchange rates, as an increasing portion of our expenses are incurred and paid in currencies other than the U.S. dollar;
- general economic conditions, both domestically and in foreign markets, and disruptions in our business and the markets due to, among other things, health epidemics, natural disasters, terrorism and other catastrophic events including international trade wars involving the U.S. and China and the political tensions in Russia, Europe and Asia;
- increases in cybersecurity threats, including security threats from state sponsors; and
- other risk factors described in this Annual Report on Form 10-K.

Any one of the factors above or the cumulative effect of several of the factors described above may result in significant fluctuations in our financial and other results of operations and may cause the market price of our common stock to decline. This variability and unpredictability could result in our failure to meet our revenue, gross margins, results of operations or other expectations contained in any forward looking financial guidance we have issued or the expectations of securities analysts or investors for a particular period. If we fail to meet or exceed such guidance or expectations for these or any other reasons, the market price of our common stock could decline substantially, and we could face costly lawsuits, including securities class action suits. In the past, we have failed to meet investor financial expectations and the market price of our common stock declined.

We expect our gross margins to vary over time and may be adversely affected by numerous factors.

We expect our gross margins to vary over time and the gross margins we have achieved in recent years may not be sustainable and may be adversely affected in the future by numerous factors, including but not limited to changes in end-customer, geographic or product mix, increased price competition, introduction of new products and new business models including the sale and delivery of more software and subscription solutions, increases in material or component costs and production costs including as a result of shortages in supply for semiconductors and other components, entry into new markets or growth in lower margin markets, entry in markets with different pricing and cost structures, pricing discounts given to customers, costs associated with defending intellectual property infringement and other claims and the potential outcomes of such disputes, higher levels of excess or obsolete inventory and inventory holding charges as a result of extended demand planning horizons due to industry-wide supply shortage, changes in shipment volumes, the timing of revenue recognition and revenue deferrals, increased costs arising from tariffs, increased costs arising from epidemics, changes in distribution channels, increased warranty costs, and our ability to execute our operating plans. In addition, inflationary pressures and shortages have increased and we expect will continue to increase costs for certain materials, components, supplies and services. If these effects continue for a prolonged period or result in sustained economic stress or recession, many of the risk factors identified in this risk factors section could be heightened. We determine our operating expenses largely on the basis of anticipated revenues and a high percentage of our expenses are fixed in the short and medium term. As a result, a failure or delay in generating or recognizing revenue could cause significant variations in our operating results and operating margin from quarter to quarter. Failure to sustain or improve our gross margins reduces our profitability and may have a material adverse effect on our business and stock price.

Interruptions or delays in shipments could cause our revenue for the applicable period to fall below expected levels.

We have been and could continue to be subject to manufacturing disruptions and supply chain delays. This places significant pressure on supply chain management, manufacturing, inventory and quality control management, shipping and trade compliance to ensure that we have properly forecasted supply purchasing, manufacturing capacity, inventory and quality compliance and logistics. A significant interruption in these critical functions could result in delayed order fulfillment, adversely affect our business, financial condition, results of operations and prospects and result in a decline in the market price of our common stock.

Because some of the components in our products come from sole or limited sources of supply, we have increased our purchase commitments and are susceptible to supply shortages, extended lead times or supply changes, which could disrupt or delay our scheduled product deliveries to our end customers and may result in the loss of sales and end customers.

Our products rely on components, including merchant silicon chips, integrated circuit components, printed circuit boards, connectors, custom-tooled sheet metal and power supplies that we purchase or our contract manufacturers purchase on our behalf from a limited number of suppliers, including certain sole source providers. Generally, we do not have guaranteed supply contracts with our component suppliers, and our suppliers could suffer shortages, longer lead times, delay shipments, prioritize shipments to other vendors, decommit orders, increase prices or cease manufacturing such products or selling them to us at any time. Supply of these components world-wide are being adversely affected by the COVID-19 pandemic as well as industry consolidation and geopolitical conditions such as international trade wars like the U.S. trade war with China and increased political tensions in Russia, Europe or Asia. Such shortages, increased component lead times, reduced allocations of components and decommitments of orders have, and could continue to, result in increased component prices, fewer sourcing options, unpredictability of supply, manufacturing disruptions and increased product lead times. In the past, we have also experienced shortages in inventory for dynamic random access memory integrated circuits, semiconductors and delayed releases of the next generation of chipset, which delayed our production and/or the release of our new products. In addition, we have experienced an increase in cost of certain components.

Although we have increased our purchase commitments to support long-term customer demand, if we are unable to obtain sufficient quantities of these components on commercially reasonable terms or in a timely manner, or if we are unable to obtain alternative sources for these components, shipments of our products could be delayed or halted entirely or we may be required to redesign our products. Any of these events could result in a cancellation of orders, lost sales, reduced gross margins or damage to our end customer relationships, which would adversely impact our business, financial condition, results of operations and prospects. Additionally, if our suppliers do not meet their commitments or actual demand does not directly match with our demand forecasts, it could result in excess or obsolete inventory, which we would be required to write down to its estimated realizable value, which in turn could result in lower gross margins.

Our reliance on component suppliers also yields the potential for the infringement or misappropriation of third-party intellectual property rights due to the incorporation of such components into our products. We may not be indemnified by such component suppliers for such infringement or misappropriation claims. Any litigation for which we do

not receive indemnification could require us to incur significant legal expenses in defending against such claims or require us to pay substantial royalty payments or settlement amounts that would not be reimbursed by our component suppliers.

Our product development efforts are also dependent upon the success of our continued collaboration with our key merchant silicon vendors such as Broadcom and Intel. As we develop our product roadmap, we select specific merchant silicon from these vendors for each new product. It is critical that we work in tandem with these vendors to ensure that their silicon includes improved features, that our products take advantage of such improved features, and that such vendors are able to supply us with sufficient quantities on commercially reasonable term to meet customer demand. Reliance on these relationships allows us to focus our research and development resources on our software core competencies while leveraging their investments and expertise. The merchant silicon vendors may not be successful in continuing to innovate, meet deadlines for the release of their products or produce a sufficient supply of their products. Moreover, these vendors may not collaborate with us or may become competitive with us by selling merchant silicon for “white boxes” or other products to our customers.

If our key merchant silicon vendors do not continue to innovate, if there are delays in the release of their products or supply shortages, if they no longer collaborate in such fashion or if such merchant silicon is not offered to us on commercially reasonable terms, our products may become less competitive, our own product launches could be delayed or we may be required to redesign our products to incorporate alternative merchant silicon, which could result in lost sales, reduce gross margins, damage to our customer relationships or otherwise have a material effect on revenue and business, financial condition, results of operations and prospects.

In the event of a shortage or supply interruption from our component suppliers, we may not be able to develop alternate or second sources in a timely manner. Further, long-term supply and maintenance obligations to end customers increase the duration for which specific components are required, which may increase the risk of component shortages or the cost of carrying inventory. In addition, our component suppliers change their selling prices frequently in response to market trends, including industry-wide increases in demand, and because we do not have contracts with these suppliers or guaranteed pricing, we are susceptible to availability or price fluctuations related to raw materials and components. If we are unable to pass component price increases along to our end customers or maintain stable pricing, our gross margins could be adversely affected and our business, financial condition, results of operations and prospects could suffer.

Adverse economic conditions or reduced information technology and network infrastructure spending may adversely affect our business, financial condition, results of operations and prospects.

Our business depends on the overall demand for information technology, network connectivity and access to data and applications. Weak domestic or global economic conditions, fear or anticipation of such conditions, international trade disputes, global pandemics, or a reduction in information technology and network infrastructure spending even if economic conditions improve, could adversely affect our business, financial condition, results of operations and prospects in a number of ways, including longer sales cycles, lower prices for our products and services, higher default rates among our distributors, and reduced unit sales and lower or no growth. For example, the global macroeconomic environment could be negatively affected by, among other things, the COVID-19 pandemic or other epidemics, instability in global economic markets, increased U.S. trade tariffs and trade disputes between the U.S., China and other countries, increased political tensions in Europe and Asia, instability in the global credit markets, the impact and uncertainty regarding global central bank monetary policy, including the instability in the geopolitical environment as a result of the withdrawal of the United Kingdom from the European Union ("EU"), the threat of potential Russian invasion of Ukraine, political tensions between Taiwan and China, political demonstrations, and foreign governmental debt concerns. Such challenges have caused, and are likely to continue to cause, uncertainty and instability in local economies and in global financial markets.

In addition, the COVID-19 pandemic has caused business disruptions around the world and may result in customers delaying or canceling capital expenditures on information technology and network infrastructure, which may affect the overall demand for our products. In light of the manufacturing disruptions and supply chain constraints caused by the COVID-19 pandemic, end customers may also be placing orders in advance of demand to ensure supply. Continuing or worsening economic instability could result in a cancellation of such orders or otherwise adversely affect spending for IT, network infrastructure, systems and tools. A downturn may also significantly affect financing markets, the availability of capital and the terms and conditions of financing arrangements, including the overall cost of financing as well as the financial health or creditworthiness of our end customers. Circumstances may arise in which we need, or desire, to raise additional capital, and such capital may not be available on commercially reasonable terms, or at all.

We face intense competition, especially from larger, well-established companies and industry consolidation may lead to further increased competition, which may harm our business, financial condition, results of operations and prospects.

The markets in which we compete, including the markets for data center, campus networking and network security, are intensely competitive, and we expect competition to increase in the future from established competitors and new market entrants. This competition could result in increased pricing pressure, reduced profit margins, increased sales and marketing expenses and our failure to increase, or the loss of, market share, any of which would likely seriously harm our business, financial condition, results of operations and prospects.

The data center and campus networking markets have been historically dominated by Cisco, with competition also coming from other large network equipment and system vendors, including Extreme Networks, Dell/EMC, Hewlett Packard Enterprise, and Juniper Networks. Most of our competitors and some strategic alliance partners have made acquisitions and/or have entered into or extended partnerships or other strategic relationships to offer more comprehensive product lines, including cloud networking solutions and network security. For example, Cisco acquired Acacia Communications, Broadcom acquired Brocade Communications Systems, Extreme Networks purchased certain data center networking assets from Broadcom/Brocade and Avaya, Dell acquired EMC, and Hewlett Packard Enterprise acquired Aruba Networks. This industry consolidation may lead to increased competition and may harm our business. Large system vendors are increasingly seeking to deliver top-to-bottom cloud networking solutions to end customers that combine cloud-focused hardware and software solutions to provide an alternative to our products. We expect this trend to continue as companies attempt to strengthen their market positions in an evolving industry and as companies are acquired or are unable to continue operations. Industry consolidation may result in stronger competitors that are better able to compete with us, and this could lead to more variability in our results of operations and could have a material adverse effect on our business, the pricing of our solutions, financial condition, results of operations and prospects.

We also face competition from other companies and new market entrants, including current technology partners, suppliers and end customers or other cloud service providers who may acquire or develop network switches and cloud service solutions for internal use and/or to broaden their portfolio of products to market and sell to customers. Some of these competitors are developing networking products based on off-the-shelf or commoditized hardware technology, or “white box” hardware, particularly where an end customer’s network strategy seeks to emphasize deployment of such product offerings or adopt a disaggregated approach to the procurement of hardware and software. End customers may also increase their adoption of networking solutions based upon open-source network operating systems that may be provided for free and used either on “white box” or proprietary hardware. The entrance of new competitors into our markets or the increased adoption of these new technology solutions or consumption models may cause downward pricing pressures, result in lost sales or otherwise have a material adverse effect on our business, prospects, financial condition and operating results.

Our relationships with our strategic alliance partners or suppliers may also shift as industry dynamics changes. If strategic alliance partners acquire or develop competitive products or services, our relationship with those partners may be adversely impacted, which could lead to more variability to our results of operations and impact the pricing of our solutions.

Many of our existing and potential competitors enjoy substantial competitive advantages, such as greater name recognition and longer operating histories, larger sales and marketing budgets and resources, broader distribution and established relationships with channel partners and end customers, the ability to leverage their sales efforts across a broader portfolio of products, the ability to bundle competitive offerings with other products and services, the ability to develop their own silicon chips, the ability to set more aggressive pricing policies, lower labor and development costs, greater resources to make acquisitions, larger intellectual property portfolio, and substantially greater financial, technical, research and development or other resources.

In addition, large competitors may have more extensive relationships with and within existing and potential end customers that provide them with an advantage in competing for business with those end customers. For example, certain large competitors encourage end customers of their other products and services to adopt their data networking solutions through discounted bundled product packages. Our ability to compete will depend upon our ability to provide a better solution than our competitors at a more competitive price. We may be required to make substantial additional investments in research, development, marketing and sales in order to respond to competition, and we cannot assure you that these investments will achieve any returns for us or that we will be able to compete successfully in the future.

We also expect increased competition if our market continues to expand. As we continue to expand globally, we have seen and continue to see new competition in different geographic regions. In particular, we have experienced and could continue to experience price-focused competition from competitors in Asia, especially from China. As we expand into new markets, we will face competition not only from our existing competitors but also from other competitors, including existing companies with strong technological, marketing, and sales positions in those markets, as well as those with greater resources, including technical and engineering resources, than we do. Conditions in our market could change rapidly and significantly as a result of technological advancements or other factors.

We are subject to a number of risks associated with the expansion of our international sales and operations.

Our ability to grow our business and our future success will depend to a significant extent on our ability to expand our operations and customer base worldwide. Many of our customers, resellers, partners, suppliers and manufacturers operate around the world. Operating in a global marketplace, we are subject to risks associated with having an international reach and compliance and regulatory requirements. Our international sales and operations are subject to a number of risks, including the following:

- ability to establish necessary business relationships and to comply with local business requirements, including distributor and reseller relationships;
- greater difficulty in enforcing contracts and accounts receivable collection and longer collection periods and non-standard terms with customers related to payment, warranties or performance obligations;
- increased expenses incurred in establishing and maintaining our international operations;
- fluctuations in exchange rates between the U.S. dollar and foreign currencies where we do business;
- general economic and political conditions in these foreign markets;
- risks associated with U.S. and foreign legal requirements, including those relating to anti-corruption, anti-bribery, privacy, data protection and the importation, certification and localization of our products in foreign countries;
- risks associated with U.S. government trade restrictions, including those which may impose restrictions, including prohibitions, on the exportation, re-exportation, sale, shipment or other transfer of programming, technology, components, and/or services to foreign persons;
- risks of unexpected changes in regulatory practices, tariffs and tax laws and treaties;
- greater risk of unexpected changes in tariffs imposed by the U.S. and other countries;
- deterioration of political relations between the U.S. and China, Russia, Canada, Mexico, the United Kingdom and the EU, which could have a material adverse effect on our sales and operations as well as our supply chain in these countries;
- the uncertainty of protection for intellectual property rights in some countries; and
- heightened risk of unfair or corrupt business practices in certain geographies and of improper or fraudulent sales arrangements that may impact financial results and result in restatements of, or irregularities in, financial statements.

These and other factors could harm our ability to gain future international revenue and, consequently, materially affect our business, financial condition, results of operations and prospects. Expanding our existing international operations and entering into additional international markets will require significant management attention and financial commitments. Our failure to successfully manage our international operations and the associated risks effectively could limit our future growth or materially adversely affect our business, financial condition, results of operations and prospects.

We have invested and may continue to invest in or acquire other businesses which could require significant management attention, disrupt our business, dilute stockholder value and adversely affect our business, financial condition, results of operations and prospects.

As part of our business strategy, we have made and could continue to make investments in complementary companies, products or technologies which could involve licenses, additional channels of distribution, discount pricing or investments in or acquisitions of other companies. For example, we completed the acquisition of Awake Security in October 2020 which required management to focus efforts on integrating Awake Security with the company. We may not be able to find suitable investment or acquisition candidates and we may not be able to complete such investments or acquisitions on favorable terms, if at all. If we do complete investments or acquisitions, we may not ultimately strengthen our competitive position or achieve our goals, and any investments or acquisitions we complete could be viewed negatively by our end customers, investors and securities analysts. Through acquisitions, we continue to expand into new markets and new market segments and we may experience challenges in entering into new market segments for which we have not previously manufactured and sold products, including facing exposure to new market risks, difficulty achieving expected

business results due to a lack of experience in new markets, products or technologies or the initial dependence on unfamiliar distribution partners or vendors.

In addition, investments and acquisitions may result in unforeseen operating difficulties and expenditures. For example, if we are unsuccessful at integrating any acquisitions or retaining key talent from those acquisitions, or the technologies associated with such acquisitions, into our company, the business, financial condition, results of operations and prospects of the combined company could be adversely affected. We may have difficulty retaining the employees of any acquired business or the acquired technologies or research and development expectations may prove unsuccessful. Any integration process may require significant time and resources, and we may not be able to manage the process successfully. Acquisitions may also disrupt our ongoing business, divert our resources and require significant management attention that would otherwise be available for development of our business. We may not successfully evaluate or utilize the acquired technology or personnel or accurately forecast the financial effects of an acquisition transaction, including accounting charges. Any acquisition or investment could expose us to unknown liabilities. Moreover, we cannot assure you that the anticipated benefits of any acquisition or investment would be realized or that we would not be exposed to unknown liabilities. We may not be successful in retaining or expanding the customers and sales activities of any acquired business or in realizing the expected operational and cost efficiencies anticipated with the acquisition. We may have to pay cash, incur debt or issue equity securities to pay for any such investment or acquisition, each of which could adversely affect our financial condition or the market price of our common stock. The sale of equity or issuance of debt to finance any such acquisitions could result in dilution to our stockholders. The incurrence of indebtedness would result in increased fixed obligations and could also include covenants or other restrictions that would impede our ability to manage our operations. Moreover, if the investment or acquisition becomes impaired, we may be required to take an impairment charge, which could adversely affect our financial condition or the market price of our common stock.

Seasonality may cause fluctuations in our revenue and results of operations.

We operate on a December 31st year end and have typically experienced higher sequential product revenue growth in the fourth quarter, followed by flat to declining sequential growth in the first quarter of the following year. We believe that this seasonality results from a number of factors, including the procurement, budgeting and deployment cycles of many of our end customers. Our rapid historical growth may have reduced the impact of seasonal or cyclical factors that might have influenced our business to date. If our increasing size causes our growth rate to slow, seasonal or cyclical variations in our operations may become more pronounced over time and may materially affect our business, financial condition, results of operations and prospects. In addition, the current industry-wide supply chain shortages and extended lead times and their impact on our ability to ship products to our customers in a timely manner may disrupt typical seasonal trends.

We are exposed to fluctuations in currency exchange rates, which could adversely affect our business, financial condition, results of operations and prospects.

Our sales contracts are primarily denominated in U.S. dollars, and therefore, substantially all of our revenue is not subject to foreign currency risk. However, a strengthening U.S. dollar could increase the real cost of our products to our end customers outside of the U.S., which could adversely affect our business, financial condition, results of operations and prospects. In addition, a decrease in the value of the U.S. dollar relative to foreign currencies could increase our product and operating costs in foreign locations. Further, a portion of our operating expenses is incurred outside the U.S., is denominated in foreign currencies and is subject to fluctuations due to changes in foreign currency exchange rates. If we are not able to successfully hedge against the risks associated with the currency fluctuations, our business, financial condition, results of operations and prospects could be adversely affected.

If we needed to raise additional capital to expand our operations, invest in new products or for other corporate purposes, our failure to do so on favorable terms could reduce our ability to compete and could harm our business, financial condition, results of operations and prospects.

We expect that our existing cash and cash equivalents, will be sufficient to meet our anticipated cash needs for the foreseeable future. If we did need to raise additional funds to expand our operations, invest in new products or for other corporate purposes, we may not be able to obtain additional debt or equity financing on favorable terms. If we raise additional equity financing, our stockholders may experience significant dilution of their ownership interests, and the market price of our common stock could decline. Furthermore, if we engage in debt financing, the holders of such debt would have priority over the holders of common stock, and we may be required to accept terms that restrict our ability to incur additional indebtedness or impose other restrictions on our business. We may also be required to take other actions that would otherwise be in the interests of the debt holders, including maintaining specified liquidity or other ratios, any of which could harm our business, financial condition, results of operations and prospects. If we need additional capital and cannot raise it on acceptable terms, we may not be able to, among other things, enhance our products and services, expand our sales and marketing and research and development organizations, acquire complementary technologies, products or

businesses, and respond to competitive pressures or unanticipated working capital requirements. Our failure to do any of these things could seriously harm our business, financial condition, results of operations and prospects.

Risks Related to Customers and Sales

If we are unable to attract new large end customers or to sell additional products and services to our existing end customers, our revenue growth will be adversely affected and our revenue could decrease.

To increase our revenue, we must add new end customers, especially large end customers, and sell additional products and services to existing end customers. For example, one of our sales strategies is to target specific projects at our current end customers because they are familiar with the operational and economic benefits of our solutions, thereby reducing the sales cycle into these customers. We also believe the opportunity with current end customers is significant given their existing infrastructure and expected future spend. Another one of our sales strategies is focused on increasing penetration in the enterprise and campus markets. However, sales strategies focused on expansion to adjacent markets can require more time and effort since enterprise and campus end customers typically start with small purchases, and there is often a long testing period. For this reason, in order to grow our revenue, it is important for us to attract new large end customers. Some factors that may limit our ability to attract new large end customers include, but are not limited to, saturation with certain large cloud networking customers, competition, decreased capital spending by such customers, a limited number of such customers, and a decline in growth at such customers. If we fail to attract new large end customers, including enterprise and campus end customers, or fail to reduce the sales cycle and sell additional products to our existing end customers, our business, financial condition, results of operations and prospects will be harmed.

We expect large purchases by a limited number of end customers to continue to represent a substantial portion of our revenue, and any loss, delay, decline or other change in expected purchases could result in material quarter-to-quarter fluctuations of our revenue or otherwise adversely affect our results of operations.

Historically, large purchases by a relatively limited number of end customers have accounted for a significant portion of our revenue. We have experienced unpredictability in the timing of orders from these large end customers primarily due to changes in demand patterns specific to these customers, the time it takes these end customers to evaluate, test, qualify and accept our products, and the overall complexity of these large orders. We expect continued variability in our customer concentration and timing of sales on a quarterly and annual basis. For example, sales to our end customers Microsoft and Meta Platforms in fiscal 2019 collectively represented 40% of our total revenue, whereas sales to our end customer Microsoft in fiscal 2020 and 2021 amounted to 21.5% and 15.0% of our revenues, respectively, with our end customer Meta Platforms representing less than 10% of our revenues in both fiscal 2020 and 2021. We expect customer concentration with these large customers to be cyclical and linked to new product introductions and customer investment cycles. In addition, we typically provide pricing discounts to large end customers, which may result in lower margins for the period in which such sales occur.

As a consequence of the concentrated nature of our customer base and their purchasing behavior, our quarterly revenue and results of operations may fluctuate from quarter to quarter and are difficult to estimate. Changes in the business requirements or focus, upgrade cycles, vendor selection, project prioritization, manner in which spending allocations are assigned among multiple vendors based upon specific network roles or projects, financial prospects, lack of growth of our customers, capital resources and expenditures or purchasing behavior and deceleration in spending of our key end customers could significantly decrease our sales to such end customers or could lead to delays, reductions or cancellations of planned purchases of our products or services.

Moreover, because our sales are based primarily on purchase orders, our customers may cancel, delay, reduce or otherwise modify their purchase commitments with little or no notice to us. For example, due to the manufacturing disruptions and supply chain constraints caused by the COVID-19 pandemic, end customers may be placing orders in advance of demand to ensure supply. End customers may decide to delay or cancel such orders if economic conditions worsen. This limited visibility regarding our end customers' product needs, the timing and quantity of which could vary significantly, requires us to rely on estimated demand forecasts to determine how much material to purchase and product to manufacture. Our failure to accurately forecast demand can lead to product shortages which could lead to delays in fulfilling current and future purchase orders that can impede production by our customers and harm our customer relationships. And, in the event of a cancellation or reduction of an order, we may not have enough time to reduce operating expenses to mitigate the effect of the lost revenue on our business, and in addition, could incur increased excess and obsolete inventory charges, all of which could materially affect our operating results.

We may be unable to sustain or increase our revenue from our large end customers, grow revenues with new or other existing end customers at the rate we anticipate or at all, or offset the discontinuation of concentrated purchases by our larger end customers with purchases by new or existing end customers. These customers could choose to divert all or a

portion of their business with us to one of our competitors, re-assign spending allocations, increase their adoption of "white box" solutions and open source network operating systems, demand pricing concessions for our services, require us to provide enhanced services that increase our costs, or reduce their spending levels. If these factors drove some of our large customers to cancel all or a portion of their business relationships with us, the growth in our business and the ability to meet our current and long-term financial forecasts may be materially impacted. We expect that such concentrated purchases will continue to contribute materially to our revenue for the foreseeable future and that our results of operations may fluctuate materially as a result of such larger end customers' buying patterns. In addition, we may see consolidation of our customer base, such as among Internet companies and cloud service providers, which could result in loss of end customers. The loss of such end customers, or a significant delay or reduction in their purchases, including reductions or delays due to customer departures from recent buying patterns, or an unfavorable change in competitive conditions could materially harm our business, financial condition, results of operations and prospects.

If we are unable to increase market awareness of our company and our new products and services, our revenue may not continue to grow or may decline.

We have not yet established broad market awareness of our new products and services, including new products we introduced in the campus workspace and network security markets. Market awareness of our value proposition and products and services will be essential to our continued growth and our success, particularly for the service provider and broader enterprise markets. If our marketing efforts are unsuccessful in creating market awareness of our company and our products and services or in gaining access to new customer markets, then our business, financial condition, results of operations and prospects will be adversely affected, and we will not be able to achieve sustained growth.

Some of our large end customers require more favorable terms and conditions from their vendors and may request price concessions. As we seek to sell more products to these end customers, we may be required to agree to terms and conditions that may have an adverse effect on our business or ability to recognize revenue.

Our large end customers have significant purchasing power and, as a result, may receive more favorable terms and conditions than we typically provide to other end customers, including lower prices, bundled upgrades, extended warranties, acceptance terms, indemnification terms and extended return policies and other contractual rights. As we seek to sell more products to these large end customers, an increased mix of our shipments may be subject to such terms and conditions, which may reduce our margins or affect the timing of our revenue recognition and thus may have an adverse effect on our business, financial condition, results of operations and prospects.

Sales of our switches generate most of our product revenue, and if we are unable to continue to grow sales of these products, our business, financial condition, results of operations and prospects will suffer.

Historically, we have derived substantially all of our product revenue from sales of our switches, and we expect to continue to do so for the foreseeable future. We have experienced declines in sales prices for our products, including our 10 Gigabit Ethernet modular and fixed switches. A decline in the price of switches and related services, or our inability to increase sales of these products, would harm our business, financial condition, results of operations and prospects more seriously than if we derived significant revenue from a larger variety of product lines and services. Our future financial performance will also depend upon successfully developing and selling next-generation versions of our switches. If we fail to deliver new products, new features, or new releases that end customers want and that allow us to maintain leadership in what will continue to be a competitive market environment, our business, financial condition, results of operations and prospects will be harmed.

The sales prices of our products and services may decrease, which may reduce our gross profits and adversely affect our results of operations.

The sales prices for our products and services may decline for a variety of reasons, including competitive pricing pressures, discounts, a change in our mix of products and services, the introduction of new products and services by us or by our competitors including the adoption of "white box" solutions, promotional programs, product and related warranty costs or broader macroeconomic factors. In addition, we have provided, and may in the future provide, pricing discounts to large end customers, which may result in lower margins for the period in which such sales occur. Our gross margins may also fluctuate as a result of the timing of such sales to large end customers.

We have experienced declines in sales prices for our products and services. Competition continues to increase in the market segments in which we participate, and we expect competition to further increase in the future, thereby leading to increased pricing pressures. Larger competitors with more diverse product and service offerings may reduce the price of products and services that compete with ours or may bundle them with other products and services. Additionally, although we generally price our products and services worldwide in U.S. dollars, currency fluctuations in certain countries and regions may adversely affect actual prices that partners and end customers are willing to pay in those countries and regions.

Furthermore, sales prices and gross profits for our products may decrease over product life cycles. Decreased sales prices for any reason may reduce our gross profits and adversely affect our result of operations.

Our sales cycles can be long and unpredictable, and our sales efforts require considerable time and expense. As a result, our sales and revenue are difficult to predict and may vary substantially from period to period, which may cause our results of operations to fluctuate significantly.

The timing of our sales and revenue recognition is difficult to predict because of the length and unpredictability of our products' sales cycles. A sales cycle is the period between initial contact with a prospective end customer and any sale of our products. End-customer orders often involve the purchase of multiple products. These orders are complex and difficult to complete because prospective end customers generally consider a number of factors over an extended period of time before committing to purchase the products and solutions we sell. End customers, especially our large end customers, often view the purchase of our products as a significant and strategic decision and require considerable time to evaluate, test and qualify our products prior to making a purchase decision and placing an order. The length of time that end customers devote to their evaluation, contract negotiation and budgeting processes varies significantly. In addition, customers may delay upgrades to their network infrastructure which extends the upgrade and sales cycle. Our products' sales cycles can be lengthy in certain cases, especially with respect to our prospective large end customers. During the sales cycle, we expend significant time and money on sales and marketing activities and make investments in evaluation equipment, all of which lower our operating margins, particularly if no sale occurs. Even if an end customer decides to purchase our products, there are many factors affecting the timing of our recognition of revenue, which makes our revenue difficult to forecast. For example, there may be unexpected delays in an end customer's internal procurement processes, particularly for some of our larger end customers for which our products represent a very small percentage of their total procurement activity. In addition, due to the COVID-19 pandemic, the sales cycle may be extended and there may be delays and reductions of expenditures and cancellations by end customers. There are many other factors specific to end customers that contribute to the timing of their purchases and the variability of our revenue recognition, including the strategic importance of a particular project to an end customer, budgetary constraints and changes in their personnel.

Even after an end customer makes a purchase, there may be circumstances or terms relating to the purchase that delay our ability to recognize revenue from that purchase. In addition, the significance and timing of our product enhancements, and the introduction of new products by our competitors, may also affect end customers' purchases. For all of these reasons, it is difficult to predict whether a sale will be completed, the particular period in which a sale will be completed or the period in which revenue from a sale will be recognized. If our sales cycles lengthen, our revenue could be lower than expected, which would have an adverse effect on our business, financial condition, results of operations and prospects.

Our ability to sell our products is highly dependent on the quality of our support and services offerings, and our failure to offer high-quality support and services could have a material adverse effect on our business, financial condition, results of operations and prospects.

Once our products are deployed within our end customers' networks, our end customers depend on our support organization and our channel partners to resolve any issues relating to our products. High-quality support is critical for the successful marketing and sale of our products. If we or our channel partners do not assist our end customers in deploying our products effectively, do not succeed in helping our end customers resolve post-deployment issues quickly or do not provide adequate ongoing support, or if we experience quality issues with these new products, it could adversely affect our ability to sell our products to existing end customers and could harm our reputation with potential end customers. In addition, as we expand our operations internationally, our support organization will face additional challenges, including those associated with delivering support, training and documentation in languages other than English. Our failure or the failure of our channel partners to maintain high-quality support and services could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our business depends on end customers renewing their maintenance and support contracts. Any decline in maintenance renewals could harm our future business, financial condition, results of operations and prospects.

We typically sell our products with maintenance and support as part of the initial purchase, and a portion of our annual revenue comes from renewals of maintenance and support contracts. Our end customers have no obligation to renew their maintenance and support contracts after the expiration of the initial period, and they may elect not to renew their maintenance and support contracts, to renew their maintenance and support contracts at lower prices through alternative channel partners or to reduce the product quantity under their maintenance and support contracts, thereby reducing our future revenue from maintenance and support contracts. If our end customers, especially our large end customers, do not renew their maintenance and support contracts or if they renew them on terms that are less favorable to us, our revenue may decline and our business, financial condition, results of operations and prospects will suffer.

Our standard sales contracts contain indemnification provisions requiring us to defend our end customers against third-party claims, including against infringement of certain intellectual property rights that could expose us to losses which could seriously harm our business, financial conditions, results of operations and prospects.

Under the indemnification provisions of our standard sales contracts, we agree to defend our end customers and channel partners against third-party claims asserting infringement of certain intellectual property rights, which may include patents, copyrights, trademarks or trade secrets, and to pay judgments entered on such claims. An adverse ruling in such litigation may potentially expose us to claims in the event that claims are brought against our customers based on the ruling and we are required to indemnify such customers.

Our exposure under these indemnification provisions is frequently limited to the total amount paid by our end customer under the agreement. However, certain agreements include indemnification provisions that could potentially expose us to losses in excess of the amount received under the agreement. Any of these events, including claims for indemnification, could seriously harm our business, financial condition, results of operations and prospects.

In addition to our own direct sales force, we rely on distributors, systems integrators and value-added resellers to sell our products, and our failure to effectively develop, manage or prevent disruptions to our distribution channels and the processes and procedures that support them could cause a reduction in the number of end customers of our products.

Our future success is highly dependent upon maintaining our relationships with distributors, systems integrators and value-added resellers and establishing additional sales channel relationships. We anticipate that sales of our products to a limited number of channel partners will continue to account for a material portion of our total product revenue for the foreseeable future. We provide our channel partners with specific training and programs to assist them in selling our products, but these steps may not be effective. In addition, our channel partners may be unsuccessful in marketing, selling and supporting our products and services. If we are unable to develop and maintain effective sales incentive programs for our channel partners, we may not be able to incentivize these partners to sell our products to end customers. These partners may have incentives to promote our competitors' products to the detriment of our own or may cease selling our products altogether. One of our channel partners could elect to consolidate or enter into a strategic partnership with one of our competitors, which could reduce or eliminate our future opportunities with that channel partner. Our agreements with our channel partners may generally be terminated for any reason by either party with advance notice. We may be unable to retain these channel partners or secure additional or replacement channel partners. The loss of one or more of our significant channel partners requires extensive training, and any new or expanded relationship with a channel partner may take several months or more to achieve productivity.

Where we rely on the channel partners for sales of our products, we may have little or no contact with the ultimate users of our products that purchase through such channel partners, thereby making it more difficult for us to establish brand awareness, ensure proper delivery and installation of our products, service ongoing end-customer requirements, estimate end-customer demand and respond to evolving end-customer needs. In addition, our channel partner sales structure could subject us to lawsuits, potential liability and reputational harm if, for example, any of our channel partners misrepresent the functionality of our products or services to end customers, fail to comply with their contractual obligations or violate laws or our corporate policies. If we fail to effectively manage our existing sales channels, or if our channel partners are unsuccessful in fulfilling the orders for our products, if we are unable to enter into arrangements with, and retain a sufficient number of, high-quality channel partners in each of the regions in which we sell products and keep them motivated to sell our products, our ability to sell our products and our business, financial condition, results of operations and prospects will be harmed.

A portion of our revenue is generated by sales to government entities, which are subject to a number of challenges and risks.

We anticipate increasing our sales efforts to U.S. and foreign, federal, state and local governmental end customers in the future. Sales to government entities are subject to a number of risks. Selling to government entities can be highly competitive, expensive and time consuming, often requiring significant upfront time and expense without any assurance that these efforts will generate a sale. The substantial majority of our sales to date to government entities have been made indirectly through our channel partners. Government certification requirements for products like ours may change and, in doing so, restrict our ability to sell into the government sector until we have attained revised certifications. Government demand and payment for our products and services may be affected by public sector budgetary cycles and funding authorizations, with funding reductions or delays adversely affecting public sector demand for our products and services. Government entities may have statutory, contractual or other legal rights to terminate contracts with our distributors and resellers for convenience or due to a default, and any such termination may adversely impact our future business, financial condition, results of operations and prospects. Selling to government entities may also require us to comply with various

regulations that are not applicable to sales to non-government entities, including regulations that may relate to pricing, classified material, prohibitions against use of certain foreign components in our products and services and other matters. Complying with such regulations may also require us to put in place controls and procedures to monitor compliance with the applicable regulations that may be costly or not possible. We are not currently certified to perform work under classified contracts with government entities. Failure to comply with any such regulations could adversely affect our business, prospects, results of operations and financial condition. Governments routinely investigate and audit government contractors' administrative processes, and any unfavorable audit could result in the government ceasing to buy our products and services, a reduction of revenue, fines or civil or criminal liability if the audit uncovers improper or illegal activities, any of which could materially adversely affect our business, financial condition, results of operations and prospects. The U.S. government may require certain products that it purchases to be manufactured in the U.S. and other relatively high-cost manufacturing locations, and we may not manufacture all products in locations that meet these requirements. Any of these and other circumstances could have a material adverse effect on our business, financial condition, results of operations and prospects. In addition, the U.S. government may require that products it purchases contain a certain threshold of "domestic origin" components in order to meet "Buy America" requirements.

We are exposed to the credit risk of our channel partners and some of our end customers, which could result in material losses.

Most of our sales are on an open credit basis, with standard payment terms of 30 days in the United States and, because of local customs or conditions, longer in some markets outside the U.S. We monitor individual end-customer payment capability in granting such open credit arrangements, seek to limit such open credit to amounts we believe the end customers can pay and maintain reserves we believe are adequate to cover exposure for doubtful accounts. We are unable to recognize revenue from shipments until the collection of those amounts becomes reasonably assured. Any significant delay or default in the collection of significant accounts receivable could result in an increased need for us to obtain working capital from other sources, possibly on worse terms than we could have negotiated if we had established such working capital resources prior to such delays or defaults. Any significant default could adversely affect our results of operations and delay our ability to recognize revenue.

A material portion of our sales is derived through our distributors, systems integrators and value-added resellers. Some of our distributors, systems integrators and value-added resellers may experience financial difficulties, which could adversely affect our collection of accounts receivable. Distributors tend to have more limited financial resources than other systems integrators, value-added resellers and end customers. Distributors represent potential sources of increased credit risk because they may be less likely to have the reserve resources required to meet payment obligations. Our exposure to credit risks of our channel partners may increase if our channel partners and their end customers are adversely affected by global or regional economic conditions. One or more of these channel partners could delay payments or default on credit extended to them, either of which could materially adversely affect our business, financial condition, results of operations and prospects.

Risks Related to Products and Services

Product quality problems, defects, errors or vulnerabilities in our products or services could harm our reputation and adversely affect our business, financial condition, results of operations and prospects.

We produce highly complex products that incorporate advanced technologies, including both hardware and software technologies. Despite testing prior to their release, our products may contain undetected defects or errors, especially when first introduced or when new versions are released. Product defects or errors could affect the performance of our products, could result in a failure of appropriate updates to be distributed or installed, could delay the development or release of new products or new versions of products, and could result in warranty claims and product liability claims from customers. Any actual or perceived defect, error, or vulnerability in our products or services, or other allegations of unsatisfactory performance could cause us to lose revenue or market share, increase our service costs, cause us to incur substantial costs in analyzing, correcting or redesigning the products or otherwise addressing defects, errors or vulnerabilities, cause us to lose significant end customers, harm our reputation and market positions, subject us to liability for damages, subject us to litigation, regulatory inquiries or investigations, and divert our resources from other tasks, any one of which could materially adversely affect our business, financial condition, results of operations and prospects.

From time to time, we have had to replace certain components of products that we had shipped and provide remediation in response to the discovery of defects or bugs, including failures in software protocols or defective component batches resulting in reliability issues, in such products, and we may be required to do so in the future. We may also be required to provide full replacements or refunds for such defective products. We cannot assure you that such remediation or any of the other circumstances described above, including claims, litigation, or regulatory investigations, would not have a material effect on our business, financial condition, results of operations and prospects.

If we do not successfully anticipate technological shifts and develop products and product enhancements that meet those technological shifts, if those products are not made available in a timely manner or do not gain market acceptance, or if we do not successfully manage product introductions, we may not be able to compete effectively, and our ability to generate revenue will suffer.

We must continue to enhance our existing products and develop new technologies and products that address emerging technological trends, evolving industry standards and changing end-customer needs. The process of enhancing our existing products and developing new technology is complex and uncertain, and new offerings require significant upfront investment that may not result in material design improvements to existing products or result in marketable new products or costs savings or revenue for an extended period of time, if at all.

In addition, new technologies could render our existing products obsolete or less attractive to end customers, and our business, financial condition, results of operations and prospects could be materially adversely affected if such technologies are widely adopted. For example, end customers may prefer to address their network switch requirements by licensing software operating systems separately and placing them on “white box” hardware rather than purchasing integrated hardware products as has occurred in the server industry. Additionally, end customers may require product upgrades including higher Ethernet speeds and additional functionality to address the increasing demands of the cloud computing environments.

In the past several years, we have announced a number of new products and enhancements to our products and services, including new products in the campus workspace and network security markets. The success of our new products depends on several factors including, but not limited to, appropriate new product definition, the development of product features that sufficiently meet end-user requirements, our ability to manage the risks associated with new product production ramp-up issues, component costs, availability of components, timely completion and introduction of these products, prompt solution of any defects or bugs in these products, our ability to support these products, differentiation of new products from those of our competitors and market acceptance of these products. For example, our new product releases will require strong execution from our third-party merchant silicon chip suppliers to develop and release new merchant silicon chips that satisfy end-customer requirements, to meet expected release schedules and to provide sufficient quantities of these components. If we are unable to successfully manage our product introductions or transitions, or if we fail to penetrate new markets, as a result of any of these or other factors, our business, financial condition, results of operations and prospects could be adversely affected.

Our product releases introduced new software products that include the capability for disaggregation of our software operating systems from our hardware. The success of our strategy to expand our software business is subject to a number of risks and uncertainties including the additional development efforts and costs to create these new products or make them compatible with other technologies, the potential for our strategy to negatively impact revenues and gross margins and additional costs associated with regulatory compliance.

We may not be able to successfully anticipate or adapt to changing technology or end-customer requirements on a timely basis, or at all. If we fail to keep up with technology changes or to convince our end customers and potential end customers of the value of our solutions even in light of new technologies, we may lose customers, decrease or delay market acceptance and sales of our present and future products and services and materially and adversely affect our business, financial condition, results of operations and prospects.

Our products must interoperate with operating systems, software applications and hardware that is developed by others, and if we are unable to devote the necessary resources to ensure that our products interoperate with such software and hardware, we may lose or fail to increase market share and experience a weakening demand for our products.

Generally, our products comprise only a part of the network infrastructure and must interoperate with our end customers’ existing infrastructure, specifically their networks, servers, software and operating systems, which may be manufactured by a wide variety of vendors and OEMs. Our products must comply with established industry standards in order to interoperate with the servers, storage, software and other networking equipment in the network infrastructure such that all systems function efficiently together. We depend on the vendors of servers and systems in a data center to support prevailing industry standards. Often, these vendors are significantly larger and more influential in driving industry standards than we are. Also, some industry standards may not be widely adopted or implemented uniformly and competing standards may emerge that may be preferred by our end customers.

In addition, when new or updated versions of these software operating systems or applications are introduced, we must sometimes develop updated versions of our software so that our products will interoperate properly. We may not accomplish these development efforts quickly, cost-effectively or at all. These development efforts require capital investment and the devotion of engineering resources. If we fail to maintain compatibility with these systems and

applications, our end customers may not be able to adequately utilize our products, and we may lose or fail to increase market share and experience a weakening in demand for our products, among other consequences, which would adversely affect our business, financial condition, results of operations and prospects.

Risks Related to Supply Chain and Manufacturing

Managing the supply of our products and product components is complex. Insufficient component supply and inventory may result in lost sales opportunities or delayed revenue, while excess inventory may harm our gross margins.

Managing our extended supply chain is complex, and our inventory management systems and related supply-chain visibility tools may not enable us to forecast accurately and effectively manage the supply of our products and product components. Our ability to manage our supply chain may also be adversely affected by other factors including geopolitical conditions such as the impact of the COVID-19 pandemic and the U.S. trade war with China and increased political tensions in Russia, Europe and Asia. The COVID-19 pandemic and related global geopolitical and economic conditions have resulted in manufacturing and supply chain disruptions, including temporary closures of certain contract manufacturer and supplier facilities which, in turn, have caused (and may continue to cause) shortages of, and extended lead times for, components used to manufacture our products, a reduction, unpredictability or interruption of supply, prioritization of component shipments to other vendors and decommitments of orders. Insufficient component supply, or any increases in the time required to manufacture our products, may lead to inventory shortages and manufacturing disruptions that could result in increased customer lead times for our products, delayed revenue, cancellation of orders or loss of sales opportunities altogether as potential end customers turn to competitors' products that are readily available.

In order to reduce manufacturing lead times and plan for adequate component supply, we have issued and expect to continue to issue purchase orders for components and products that are non-cancellable and non-returnable, including purchase commitments for semiconductors as disclosed in Note 7. Commitments and Contingencies of the Notes to Consolidated Financial Statements included in Part II, Item 8, of this Annual Report on Form 10-K. As a result of COVID-19 related supply disruptions, we have extended our demand planning horizon and increased our purchase commitments for components and products in order to support long-term customer demand. There is however no guarantee that suppliers will meet their commitments or that actual customer demand will directly match our demand forecasts. We establish a liability for non-cancellable, non-returnable purchase commitments with our component inventory suppliers for quantities in excess of our demand forecasts, or for products that are considered obsolete. In addition, we establish a liability and reimburse our contract manufacturer for component inventory purchased on our behalf that has been rendered excess or obsolete due to manufacturing and engineering change orders, or in cases where inventory levels greatly exceed our demand forecasts. Our non-cancellable commitments and the cash deposits to secure our purchases to our contract manufacturers are disclosed in Note 7. Commitments and Contingencies of the Notes to Consolidated Financial Statements included in Part II, Item 8, of this Annual Report on Form 10-K. If we ultimately determine that we have excess inventory or obsolete inventory, we may have to reduce our prices and write down inventory to its estimated realizable value, which in turn could result in lower gross margins. If we are unable to effectively manage our supply and inventory, our business, financial condition, results of operations and prospects could be adversely affected.

Because we depend on third-party manufacturers to build our products, we are susceptible to manufacturing delays and pricing fluctuations that could prevent us from shipping end-customer orders on time, if at all, or on a cost-effective basis, which may result in the loss of sales and end customers.

We depend on third-party contract manufacturers to manufacture our product lines. A significant portion of our cost of revenue consists of payments to these third-party contract manufacturers. Our reliance on these third-party contract manufacturers reduces our control over the manufacturing process, quality assurance, product costs and product supply and timing, which exposes us to risk. Our reliance on contract manufacturers also yields the potential for their infringement of third-party intellectual property rights in the manufacturing of our products or their misappropriation of our intellectual property rights in the manufacturing of other customers' products. If we are unable to manage our relationships with our third-party contract manufacturers effectively, or if these third-party manufacturers suffer delays or disruptions or quality control problems in their operations, experience increased manufacturing lead times, capacity constraints or fail to meet our future requirements for timely delivery, our ability to ship products to our end customers would be severely impaired, and our business, financial condition, results of operations and prospects would be seriously harmed.

To the extent that our products are manufactured at facilities in foreign countries, we may be subject to additional risks associated with complying with local rules and regulations in those jurisdictions, including shelter in place orders issued in connection with the COVID-19 pandemic. For example, due to the COVID-19 pandemic, some of our contract manufacturers have experienced temporary closures and labor shortages as a result of shelter in place orders issued in their

local jurisdictions. While our manufacturing sites are currently operational, further shelter in place orders, factory closures or reductions in staffing in these or other manufacturing sites would result in material disruptions, increased lead times and supply shortages of our products.

Our contract manufacturers typically fulfill our supply requirements on the basis of individual orders. We do not have long-term contracts with our third-party manufacturers that guarantee capacity, the continuation of particular pricing terms or the extension of credit limits. Accordingly, they are not obligated to continue to fulfill our supply requirements, which could result in supply shortages, and the prices we are charged for manufacturing services could be increased on short notice. For example, a competitor could place large orders with the third-party manufacturer, thereby utilizing all or substantially all of such third-party manufacturer's capacity and leaving the manufacturer little or no capacity to fulfill our individual orders without price increases or delays, or at all. Our contract with one of our contract manufacturers permits it to terminate the agreement for convenience, subject to prior notice requirements. We may not be able to develop alternate or second contract manufacturers in a timely manner.

If we add or change contract manufacturers or change any manufacturing plant locations within a contract manufacturer network, we would add additional complexity and risk to our supply chain management and may increase our working capital requirements. Ensuring a new contract manufacturer or new plant location is qualified to manufacture our products to our standards and industry requirements could take significant effort and be time consuming and expensive. Any addition or change in manufacturers may be extremely costly, time consuming and we may not be able to do so successfully.

In addition, we may be subject to additional significant challenges to ensure that quality, processes and costs, among other issues, are consistent with our expectations and those of our customers. A new contract manufacturer or manufacturing location may not be able to scale its production of our products at the volumes or quality we require. This could also adversely affect our ability to meet our scheduled product deliveries to our end customers, which could damage our customer relationships and cause the loss of sales to existing or potential end customers, late delivery penalties, delayed revenue or an increase in our costs which could adversely affect our gross margins. This could also result in increased levels of inventory subjecting us to increased excess and obsolete charges that could have a negative impact on our operating results.

Any production interruptions, labor shortages or disruptions for any reason, including those noted above, as well as a natural disaster, epidemic (such as the COVID-19 pandemic), capacity shortages, adverse results from intellectual property litigation or quality problems, at one of our manufacturing partners would adversely affect sales of our product lines manufactured by that manufacturing partner and adversely affect our business, financial condition, results of operations and prospects.

We base our inventory requirements on our forecasts of future sales. If these forecasts are materially inaccurate, we may procure inventory that we may be unable to use in a timely manner or at all.

We and our contract manufacturers procure components and build our products based on our forecasts. These forecasts are based on estimates of future demand for our products, which are in turn based on historical trends and analysis from our sales and marketing organizations, adjusted for overall market conditions and other factors. More recently, in order to address supply chain shortages and extended lead times, we have extended our demand planning horizon and increased our purchase commitments with our contract manufacturers and suppliers, and we have issued and may continue to issue purchase orders for components and products that are non-cancellable and non-returnable including purchase commitments for semiconductors as disclosed in Note 7. Commitments and Contingencies of the Notes to Consolidated Financial Statements included in Part II, Item 8, of this Annual Report on Form 10-K. However, there is no guarantee that suppliers will meet their commitments or that actual customer demand will directly match our demand forecasts. Our non-cancellable commitments and the cash deposits to secure our purchases to our contract manufacturers are disclosed in Note 7. Commitments and Contingencies of the Notes to Consolidated Financial Statements included in Part II, Item 8, of this Annual Report on Form 10-K. If our forecasts are materially inaccurate, customers' orders are cancelled or if we otherwise do not need such inventory, we may under- or over-procure inventory, and such inaccuracies in our forecasts could materially adversely affect our business, financial condition and results of operations.

Risks Related to Intellectual Property and Other Proprietary Rights

Assertions by third parties of infringement or other violations by us of their intellectual property rights, or other lawsuits asserted against us, could result in significant costs and substantially harm our business, financial condition, results of operations and prospects.

Patent and other intellectual property disputes are common in the network infrastructure, network security and Wi-Fi industries and have resulted in protracted and expensive litigation for many companies. Many companies in the network

infrastructure, network security and Wi-Fi industries, including our competitors and other third parties, as well as non-practicing entities, own large numbers of patents, copyrights, trademarks and trade secrets, which they may use to assert claims of patent infringement, misappropriation, or other violations of intellectual property rights against us. From time to time, they have or may in the future also assert such claims against us, our end customers or channel partners whom we typically indemnify against claims that our products infringe, misappropriate or otherwise violate the intellectual property rights of third parties. For example, we have previously been involved in litigation with Cisco and OptumSoft, and are currently involved in litigation with WSOU, which is described in the "Legal Proceedings" subheading in Note 7. Commitments and Contingencies of the Notes to Consolidated Financial Statements included in Part II, Item 8, of this Annual Report on Form 10-K.

As the number of products and competitors in our market increases and overlaps occur or if we enter into new markets, claims of infringement, misappropriation and other violations of intellectual property rights may increase. Any claim of infringement, misappropriation or other violations of intellectual property rights by a third-party, even those without merit, could cause us to incur substantial costs defending against the claim, distract our management from our business and require us to cease use of such intellectual property. In addition, some claims for patent infringement may relate to subcomponents that we purchase from third parties. If these third parties are unable or unwilling to indemnify us for these claims, we could be substantially harmed.

The patent portfolios of most of our competitors are larger than ours. This disparity may increase the risk that our competitors may sue us for patent infringement and may limit our ability to counterclaim for patent infringement or settle through patent cross-licenses. In addition, future assertions of patent rights by third parties, and any resulting litigation, may involve patent holding companies or other adverse patent owners who have no relevant product revenue and against whom our own patents may therefore provide little or no deterrence or protection. We cannot assure you that we are not infringing or otherwise violating any third-party intellectual property rights.

The third-party asserters of intellectual property claims may be unreasonable in their demands, or may simply refuse to settle, which could lead to expensive settlement payments, longer periods of litigation and related expenses, additional burdens on employees or other resources, distraction from our business, supply stoppages and lost sales.

An adverse outcome of a dispute may require us to pay substantial damages or penalties including treble damages if we are found to have willfully infringed a third-party's patents; cease making, licensing, using or importing into the U.S. products or services that are alleged to infringe or misappropriate the intellectual property of others; expend additional development resources to attempt to redesign our products or services or otherwise to develop non-infringing technology, which may not be successful; enter into potentially unfavorable royalty or license agreements in order to obtain the right to use necessary technologies or intellectual property rights; and indemnify our partners and other third parties. Any damages, penalties or royalty obligations we may become subject to as a result of an adverse outcome, and any third-party indemnity we may need to provide, could harm our business, financial condition, results of operations and prospects. Royalty or licensing agreements, if required or desirable, may be unavailable on terms acceptable to us, or at all, and may require significant royalty payments and other expenditures. Further, there is little or no information publicly available concerning market or fair values for license fees, which can lead to overpayment of license or settlement fees. In addition, some licenses may be non-exclusive, and therefore our competitors may have access to the same technology licensed to us. Suppliers subject to third-party intellectual property claims also may choose or be forced to discontinue or alter their arrangements with us, with little or no advance notice to us. Any of these events could seriously harm our business, financial condition, results of operations and prospects.

In the event that we are found to infringe any third-party intellectual property, we could be enjoined, or subject to other remedial orders that would prohibit us, from making, licensing, using or importing into the U.S. such products or services. In order to resume such activities with respect to any affected products or services, we (or our component suppliers) would be required to develop technical redesigns to this third-party intellectual property that no longer infringe the third-party intellectual property. In any efforts to develop technical redesigns for these products or services, we (or our component suppliers) may be unable to do so in a manner that does not continue to infringe the third-party intellectual property or that is acceptable to our customers. These redesign efforts could be extremely costly and time consuming as well as disruptive to our other development activities and distracting to management. Moreover, such redesigns could require us to obtain approvals from the court or administrative body to resume the activities with respect to these affected solutions. We may not be successful in our efforts to obtain such approvals in a timely manner, or at all. Any failure to effectively redesign our solutions or to obtain timely approval of those redesigns by a court or administrative body may cause a disruption to our product shipments and materially and adversely affect our business, prospects, reputation, results of operations, and financial condition. For example, in two prior investigations brought by Cisco in the International Trade Commission ("ITC"), we were subjected to remedial orders that prohibited us from importing and selling after importation any products the ITC found to infringe Cisco's patents. As a result, we were required to redesign certain aspects of our

products and obtain U.S. Customs and Border Protection's approval of those redesigns before we could continue to import those products into the United States.

If we are unable to protect our intellectual property rights, our competitive position could be harmed or we could be required to incur significant expenses to enforce our rights.

We depend on our ability to protect our proprietary technology. We rely on trade secret, patent, copyright and trademark laws and confidentiality agreements with employees and third parties, all of which offer only limited protection.

The process of obtaining patent protection is expensive and time-consuming, and we may not be able to prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. We may choose not to seek patent protection for certain innovations and may choose not to pursue patent protection in certain jurisdictions. Further, we do not know whether any of our pending patent applications will result in the issuance of patents or whether the examination process will require us to narrow our claims. To the extent that additional patents are issued from our patent applications, which is not certain, they may be contested, circumvented or invalidated in the future. Moreover, the rights granted under any issued patents may not provide us with proprietary protection or competitive advantages, and, as with any technology, competitors may be able to develop similar or superior technologies to our own now or in the future. In addition, we rely on confidentiality or license agreements with third parties in connection with their use of our products and technology. There is no guarantee that such parties will abide by the terms of such agreements or that we will be able to adequately enforce our rights, in part because we rely on "shrink-wrap" licenses in some instances.

We have not registered our trademarks in all geographic markets. Failure to secure those registrations could adversely affect our ability to enforce and defend our trademark rights and result in indemnification claims. Further, any claim of infringement by a third-party, even those claims without merit, could cause us to incur substantial costs defending against such claim, could divert management attention from our business and could require us to cease use of such intellectual property in certain geographic markets.

Despite our efforts, the steps we have taken to protect our proprietary rights may not be adequate to preclude misappropriation of our proprietary information or infringement of our intellectual property rights, and our ability to police such misappropriation or infringement is uncertain, particularly in countries outside of the United States.

Detecting and protecting against the unauthorized use of our products, technology and proprietary rights is expensive, difficult and, in some cases, impossible. Litigation may be necessary in the future to enforce or defend our intellectual property rights, to protect our trade secrets or to determine the validity and scope of the proprietary rights of others. Such litigation could result in substantial costs and diversion of management resources, either of which could harm our business, financial condition, results of operations and prospects, and there is no guarantee that we would be successful. Furthermore, many of our current and potential competitors have the ability to dedicate substantially greater resources to protecting their technology or intellectual property rights than we do. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating our intellectual property, which could result in a substantial loss of our market share.

We rely on the availability of licenses to third-party software and other intellectual property.

Many of our products and services include software or other intellectual property licensed from third parties, and we otherwise use software and other intellectual property licensed from third parties in our business. This exposes us to risks over which we may have little or no control. For example, a licensor may have difficulties keeping up with technological changes or may stop supporting the software or other intellectual property that it licenses to us. Also, it will be necessary in the future to renew licenses, expand the scope of existing licenses or seek new licenses, relating to various aspects of these products and services or otherwise relating to our business, which may result in increased license fees. These licenses may not be available on acceptable terms, if at all. In addition, a third-party may assert that we or our end customers are in breach of the terms of a license, which could, among other things, give such third-party the right to terminate a license or seek damages from us, or both. The inability to obtain or maintain certain licenses or other rights or to obtain or maintain such licenses or rights on favorable terms, or the need to engage in litigation regarding these matters, could result in delays in releases of products and services and could otherwise disrupt our business, until equivalent technology can be identified, licensed or developed, if at all, and integrated into our products and services or otherwise in the conduct of our business. Moreover, the inclusion in our products and services of software or other intellectual property licensed from third parties on a nonexclusive basis may limit our ability to differentiate our products from those of our competitors. Any of these events could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our products contain third-party open source software components, and failure to comply with the terms of the underlying open source software licenses could restrict our ability to sell our products.

Our products contain software modules licensed to us by third-party authors under “open source” licenses. Use and distribution of open source software may entail greater risks than use of third-party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. Some open source licenses contain requirements that we make available source code for modifications or derivative works we create based upon the type of open source software that we use. If we combine our software with open source software in a certain manner, we could, under certain open source licenses, be required to release portions of the source code of our software to the public. This would allow our competitors to create similar products with lower development effort and time and ultimately could result in a loss of product sales for us.

Although we monitor our use of open source software to avoid subjecting our products to conditions we do not intend, the terms of many open source licenses have not been interpreted by U.S. courts, and these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to commercialize our products. Moreover, we cannot assure you that our processes for controlling our use of open source software in our products will be effective. If we are held to have breached the terms of an open source software license, we could be required to seek licenses from third parties to continue offering our products on terms that are not economically feasible, to re-engineer our products, to discontinue the sale of our products if re-engineering could not be accomplished on a timely basis or to make generally available, in source code form, our proprietary code, any of which could adversely affect our business, financial condition, results of operations and prospects.

We provide access to our software and other selected source code to certain partners, which creates additional risk that our competitors could develop products that are similar to or better than ours.

Our success and ability to compete depend substantially upon our internally developed technology, which is incorporated in the source code for our products. We seek to protect the source code, design code, documentation and other information relating to our software, under trade secret, patent and copyright laws. However, we have chosen to provide access to selected source code of our software to several of our partners for co-development, as well as for open application programming interfaces ("APIs"), formats and protocols. Though we generally control access to our source code and other intellectual property and enter into confidentiality or license agreements with such partners as well as with our employees and consultants, this combination of procedural and contractual safeguards may be insufficient to protect our trade secrets and other rights to our technology. Our protective measures may be inadequate, especially because we may not be able to prevent our partners, employees or consultants from violating any agreements or licenses we may have in place or abusing their access granted to our source code. Improper disclosure or use of our source code could help competitors develop products similar to or better than ours.

Risks Related to Litigation

We may become involved in litigation that may materially adversely affect us.

From time to time, we may become involved in legal proceedings relating to matters incidental to the ordinary course of our business, including patent, copyright, commercial, product liability, employment, class action, whistleblower and other litigation, in addition to governmental and other regulatory investigations and proceedings. Such matters can be time-consuming, divert management’s attention and resources, cause us to incur significant expenses or liability and/or require us to change our business practices. For example, we were previously involved in litigation with Cisco and OptumSoft. In addition, on November 25, 2020, WSOU Investments LLC ("WSOU") filed a lawsuit against us in the Western District of Texas asserting that certain of our products infringe three WSOU patents. WSOU's allegations are directed to certain features of our wireless and switching products. WSOU seeks remedies including monetary damages, attorney’s fees and costs. On February 4, 2021, we filed an answer denying WSOU's allegations. On November 5, 2021, the case was transferred to the Northern District of California; trial has been set for October 23, 2023. We intend to vigorously defend against the claims brought against us by WSOU. However, we cannot be certain that any of WSOU's claims will be resolved in our favor, regardless of the merits of those claims. Any adverse litigation ruling could result in a significant damages award against us and injunctive relief.

Because of the potential risks, expenses and uncertainties of litigation, we may, from time to time, settle disputes, even where we have meritorious claims or defenses. Although we have insurance which may provide coverage for some kinds of claims we may face, that insurance may not cover some kinds of claims or types of relief and may not be adequate in a particular case. Because litigation is inherently unpredictable, we cannot assure you that the results of any of these actions will not have a material adverse effect on our business, financial condition, results of operations and prospects.

For more information regarding the litigation in which we have been involved, see the “Legal Proceedings” subheading in Note 7. Commitments and Contingencies of the Notes to Consolidated Financial Statements included in Part II, Item 8, of this Annual Report on Form 10-K incorporated herein by reference.

Risks Related to Cybersecurity and Data Privacy

Defects, errors or vulnerabilities in our products, the failure of our products to detect security breaches or incidents, the misuse of our products or the risks of product liability could harm our reputation and adversely impact our operating results.

Our products, services and internal network systems could become a target for security attacks, including attacks specifically designed to disrupt our business and our customers and introduce malicious software and attacks by state sponsors. If our products, services or internal networks, system or data are or are perceived to have been compromised, our reputation may be damaged and our financial results may be negatively affected.

Organizations are increasingly subject to a wide variety of attacks on their networks, systems, endpoints, products and services, and no security solution, including our security platform, can address all possible security threats or block all methods of penetrating a network, products and services or otherwise perpetrating a security incident. Additionally, any defects, errors, or vulnerabilities in our security platform or in the hardware upon which it is deployed, including a failure to implement updates to such platform, could temporarily or permanently limit our detection capabilities and expose our end-customers' networks, leaving their networks unprotected against the latest security threats. If customers of our security platform do suffer a data security incident or data breach, even if it is not attributable to a failure of our platform to identify any threat or vulnerability, customers may believe that our platform failed to detect a threat or vulnerability, which could harm our reputation or negatively affect our financial results.

The classifications of application type, virus, spyware, vulnerability exploits, data, or URL categories by our security platform may also falsely detect, report and act on applications, content, or threats that do not actually exist. These false positives may impair the perceived reliability of our security platform and may therefore adversely impact market acceptance of our security platform. Any such false identification of important files or applications could result in damage to our reputation, negative publicity, loss of channel partners, end-customers and sales, increased costs to remedy any problem, and costly litigation.

Breaches of our cybersecurity systems, or other security breaches or incidents with respect to our products, services, networks, systems, or data, could degrade our ability to conduct our business operations and deliver products and services to our customers, delay our ability to recognize revenue, compromise the integrity of our software products and our networks, systems, and data, result in significant data losses and the theft of our intellectual property, damage our reputation, expose us to liability to third parties and require us to incur significant additional costs to maintain the security of our networks and data.

We increasingly depend upon our IT systems to conduct virtually all of our business operations, ranging from our internal operations and product development activities to our marketing and sales efforts and communications with our customers and business partners. Computer programmers or other persons or organizations may attempt to penetrate our network security, or that of our website or systems, and access, use, or obtain confidential, personal, or otherwise sensitive or proprietary information about us or our customers, or via these or other methods, including denial of service attacks and other cyberattacks, disrupt or cause interruptions of our service. These risks may increase due to the current COVID-19 pandemic. Because the techniques used to access, disrupt, or sabotage networks and systems change frequently and may not be recognized until launched against a target, we may be unable to anticipate these techniques. In addition, our software and sophisticated hardware and operating system software and applications that we produce or procure from third parties may contain vulnerabilities or defects in design or manufacture, including "bugs" and other problems that could cause the software or applications to fail or otherwise to unexpectedly interfere with the operation of the system or that could result in a breach of or disruption to our systems, products, services or networks or the systems, networks, products, or services of third parties that support us and our services. We also face risks of others gaining unauthorized access to our products and services and introducing malicious software, and such malicious software, defects, bugs or vulnerabilities, or other defects, bugs, or vulnerabilities in our products or services may result in failures or interruptions of our products or services or expose our end-customers' networks, leaving their networks unprotected against the latest security threats. We have also outsourced a number of our business functions to third parties, including our manufacturers, logistics providers, and cloud service providers, and our business operations also depend, in part, on the success of these third parties' own cybersecurity measures. Similarly, we rely upon distributors, resellers and system integrators to sell our products and our sales operations depend, in part, on the reliability of their cybersecurity measures. Additionally, we depend upon our employees to appropriately handle confidential, sensitive, and proprietary data and deploy our IT resources with the use of security measures designed to prevent exposure of our networks and systems to security breaches and incidents and the loss of data. We and all of the aforementioned third parties also face the risk of ransomware and other malicious software, phishing schemes and other social engineering methods, fraud and other malfeasance, cybersecurity threats from state sponsors and other actors, and intentional or negligent acts or omissions of employees and contractors. Furthermore, our acquisition of

Awake Security and our provision of its NDR platform may result in us being a more attractive target for such attacks. Accordingly, if our cybersecurity systems and measures or those of any of the aforementioned third parties fail to protect against sophisticated cyber-attacks, other means of effectuating security breaches or incidents, interruptions or other disruptions of our or our third-party service providers' systems, networks, products, or services, the mishandling of data by employees and contractors, or any other means of unauthorized access to, or use of, our manufacturing process, products, services, networks, systems, or data that we or such third parties maintain, operate, or process, our ability to conduct our business effectively could be damaged in a number of ways, including:

- sensitive data regarding our business or our customers, including intellectual property and other proprietary data, could be stolen or lost, modified, rendered unavailable, or otherwise used or processed;
- our electronic communications systems, including email and other methods, or other systems, and access to or availability of data, could be disrupted or harmed, and our ability to conduct our business operations could be seriously damaged until such systems or data access and availability can be restored, which we may be unable to achieve in a prompt manner or at all;
- our ability to process customer orders and electronically deliver products and services could be degraded, and our distribution channels could be disrupted, resulting in delays in revenue recognition;
- defects and security vulnerabilities could be introduced into our software, thereby damaging the reputation and perceived reliability and security of our products and potentially making the data systems of our customers vulnerable to further data loss and cyber incidents;
- our manufacturing process, products, services, supply chain, network systems and data could be corrupted; and
- personal data of our customers, employees, contractors, and business partners could be lost, accessed, obtained, modified, disclosed or used without authorization, or otherwise compromised.

Should any of the above events occur, or be perceived to occur, we could be subject to significant claims for liability from our customers and others and regulatory investigations and actions from governmental agencies, and we could be required to expend significant capital and other resources to remediate and otherwise address any data security incident or breach, including to notify individuals, entities, or regulatory bodies and to implement measures in an effort to prevent further breaches or incidents. In addition, our ability to protect our intellectual property rights could be compromised and our reputation and competitive position could be significantly harmed. Also, the regulatory and contractual actions, proceedings, litigation, investigations, fines, penalties and liabilities relating to any actual or perceived data breaches or security incidents that result in losses of, damage or destruction of, or unauthorized access to or acquisition of, credit card information or other personal or sensitive data of users of our services can be significant in terms of fines and reputational impact and necessitate changes to our business operations that may be disruptive to us. Additionally, we could incur significant costs in order to upgrade our cybersecurity systems and other measures in an effort to prevent network and system disruptions and other security breaches and other incidents. Even the perception of inadequate security may damage our reputation and negatively impact our ability to win new customers and retain existing customers. Consequently, our financial performance and results of operations could be adversely affected by any of the foregoing types of security breaches, incidents, vulnerabilities, or other matters, or the perception that any of them have occurred.

In addition, we cannot assure that any limitation of liability provisions in our customer agreements, contracts with third-party vendors and service providers or other contracts would be enforceable or adequate or would otherwise protect us from any liabilities or damages with respect to any particular claim relating to a security breach or other security-related matter. We also cannot be certain that our insurance coverage will be adequate for data handling or data security liabilities actually incurred, that insurance will continue to be available to us on economically reasonable terms, or at all, or that any future claim will not be excluded or otherwise be denied coverage by any insurer. The successful assertion of one or more large claims against us that exceed available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could have a material adverse effect on our business, including our reputation, financial condition and operating results.

Risks Related to Accounting, Compliance. Regulation and Tax

If we fail to maintain effective internal control over financial reporting in the future, the accuracy and timing of our financial reporting may be adversely affected.

Assessing our processes, procedures and staffing in order to improve our internal control over financial reporting is an ongoing process. Preparing our financial statements involves a number of complex processes, many of which are done manually and are dependent upon individual data input or review. These processes include, but are not limited to,

calculating revenue, inventory costs and the preparation of our statement of cash flows. While we continue to automate our processes and enhance our review controls to reduce the likelihood for errors, we expect that for the foreseeable future many of our processes will remain manually intensive and thus subject to human error.

If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect or if there is a change in accounting principles, our results of operations could fall below expectations of securities analysts and investors, resulting in a decline in the market price of our common stock.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. A change in these principles or interpretations could harm our revenue and financial results, and could affect the reporting of transactions completed before the announcement of a change. In addition, we base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, as described in "Management's Discussion and Analysis of Financial Condition and Results of Operations", in Part II, Item 7, of this Annual Report on Form 10-K, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue and expenses. Significant assumptions and estimates used in preparing our consolidated financial statements include those related to revenue recognition, inventory valuation and contract manufacturer/supplier liabilities, income taxes and loss contingencies. If our assumptions change or if actual circumstances differ from those in our assumptions, our results of operations may be adversely affected and may fall below the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock.

Enhanced United States tax, tariff, import/export restrictions, Chinese regulations or other trade barriers may have a negative effect on global economic conditions, financial markets and our business.

There is currently significant uncertainty about the future relationship between the United States, and various other countries, most significantly China, with respect to trade policies, treaties, tariffs and taxes. In 2018, the Office of the U.S. Trade Representative (the "USTR") enacted a tariff of 10% on imports into the U.S. from China, including communications equipment products and components manufactured and imported from China. Since then, additional tariffs have been imposed by the USTR on imports into the United States from China, and China has also imposed tariffs on imports into China from the United States. Although the United States and China signed an interim trade agreement in January 2020, the new administration has not yet negotiated a trade agreement.

In addition, due to concerns with the security of products and services from certain telecommunications and video providers based in China, U.S. Congress has enacted bans on the use of certain Chinese-origin components or systems either in items sold to the U.S. government or in the internal networks of government contractors and subcontractors (even if those networks are not used for government-related projects). Further, the Chinese government has responded to these U.S. actions by indicating its intention to develop an unreliable entity list, which may limit the ability of companies on the list to engage in business with Chinese customers.

If tariffs, trade restrictions, or trade barriers remain in place or if new tariffs, trade restrictions, or trade barriers are placed on products such as ours by U.S. or foreign governments, especially China, our costs may increase. We believe we can adjust our supply chain and manufacturing practices to minimize the impact of the tariffs, but our efforts may not be successful, there can be no assurance that we will not experience a disruption in our business related to these or other changes in trade practices and the process of changing suppliers in order to mitigate any such tariff costs could be complicated, time-consuming, and costly.

The U.S. tariffs may also cause customers to delay orders as they evaluate where to take delivery of our products in connection with their efforts to mitigate their own tariff exposure. Such delays create forecasting difficulties for us and increase the risk that orders might be canceled or might never be placed. Current or future tariffs imposed by the U.S. may also negatively impact our customers' sales, thereby causing an indirect negative impact on our own sales. Even in the absence of further tariffs, the related uncertainty and the market's fear of an escalating trade war might cause our distributors and customers to place fewer orders for our products, which could have a material adverse effect on our business, liquidity, financial condition, and/or results of operations.

Given the relatively fluid regulatory environment in China and the United States and uncertainty how the U.S. government or foreign governments will act with respect to tariffs, international trade agreements and policies, a trade war, further governmental action related to tariffs or international trade policies, or additional tax or other regulatory changes in the future could directly and adversely impact our financial results and results of operations.

Changes in our income taxes or our effective tax rate, enactment of new tax laws or changes in the application of existing tax laws of various jurisdictions or adverse outcomes resulting from examination of our income tax returns could adversely affect our results.

Our income taxes are subject to volatility and could be adversely affected by several factors, some of which are outside of our control, including earnings that are lower than anticipated in countries that have lower tax rates and higher than anticipated in countries that have higher tax rates; our ability to generate and use tax attributes; changes in the valuation of our deferred tax assets and liabilities; transfer pricing adjustments from tax authorities challenging our methods for valuing developed technology or intercompany arrangements; tax effects of nondeductible compensation, including certain stock-based compensation; tax costs related to inter-company restructuring; changes in accounting principles; imposition of withholding or other taxes on payments by subsidiaries or customers; or a change in our decision to indefinitely reinvest certain foreign earnings.

Significant judgment is required to evaluate our tax positions and determine our income tax liability. The accounting guidance for uncertainty in income taxes applies to all income tax positions, including the potential recovery of previously paid taxes, which if settled unfavorably could adversely affect income taxes or additional paid-in capital.

Tax laws are dynamic and subject to change. Changes in tax laws and regulations and interpretations of such laws and regulations, including taxation of earnings outside of the U.S. may have adverse effects on our operating results and could impact the tax treatment of our earnings and cash and cash equivalent balances we currently maintain. Furthermore, due to shifting economic and political conditions, tax policies or rates in various jurisdictions, including the United States, may be subject to significant change. For example, the House of Representatives passed the Build Back Better Act containing tax reform legislation that includes changes to provisions addressing global intangible low-taxed income, foreign derived intangible income and the base erosion anti-abuse tax, and the disallowance of tax deductions for certain expenses, all of which could result in increased marginal corporate tax rates if the bill is passed in the Senate. Beginning in 2022, the Tax Cuts and Jobs Act of 2017 (“TCJA”) eliminates the option to deduct research and development expenditures currently and requires taxpayers to amortize them over five years pursuant to IRC Section 174. Although Congress is considering legislation that would defer the capitalization and amortization requirement to later years, we have no assurance that the provision will be repealed or otherwise modified. If the requirement is not modified, it will materially increase our cash taxes beginning in 2022. We do not, however, anticipate any material change to our effective tax rate as we selected the deferred method of accounting with respect to global intangible low tax income calculations. In addition, several countries, including the United States and Ireland as well as the Organization for Economic Cooperation and Development have reached agreement on a global minimum tax initiative. Many countries are also actively considering changes to existing tax laws or have proposed or enacted new laws that could increase our tax obligations in countries where we do business or cause us to change the way we operate our business.

Finally, we are subject to the examination of our income tax returns by the Internal Revenue Service (“IRS”) and other tax authorities. Audits by the IRS or other tax authorities are subject to inherent uncertainties and could result in unfavorable outcomes, including potential fines or penalties. As we operate in numerous taxing jurisdictions, the application of tax laws can be subject to diverging and sometimes conflicting interpretations by tax authorities of these jurisdictions. The expense of defending and resolving such an audit may be significant. The amount of time to resolve an audit is also unpredictable and may divert management’s attention from our business operations. We regularly assess the likelihood of adverse outcomes resulting from these examinations to determine the adequacy of our income taxes. We cannot assure you that fluctuations in our provision for income taxes or our effective tax rate, the enactment of new tax laws or changes in the application or interpretation of existing tax laws or adverse outcomes resulting from examination of our tax returns by tax authorities will not have an adverse effect on our business, financial condition, results of operations and prospects.

Failure to comply with governmental laws and regulations could harm our business, financial condition, results of operations and prospects.

Our business is subject to regulation by various federal, state, local and foreign governmental agencies, including agencies responsible for monitoring and enforcing employment and labor laws, workplace safety, product safety, environmental laws (including new laws related to climate change), consumer protection laws, privacy, data protection, anti-bribery laws, import/export controls, conflict minerals, federal securities laws and tax laws and regulations. In certain jurisdictions, these regulatory requirements may be more stringent than those in the United States. For example, the EU has implemented the General Data Protection Regulation (“GDPR”). The GDPR provides for substantial obligations relating to the handling, storage and other processing of data relating to individuals and administrative fines for violations, which can be up four percent of the previous year’s annual revenue or €20 million, whichever is higher. We have relied on the E.U.-U.S. and Swiss-U.S. Privacy Shield programs, and the use of standard contractual clauses approved by the European Commission ("SCC"), to legitimize these transfers. Both the E.U.-U.S. Privacy Shield and the SCCs have been subject to

legal challenge. We continue to analyze the July 2020 “Schrems II” decision by the Court of Justice of the E.U. ("CJEU") and its impact on our data transfer mechanisms as well as subsequent guidance from data privacy regulators and new SCCs published by the European Commission in June 2021. The effects of the CJEU's decision and related developments relating to cross-border data transfer are uncertain and difficult to predict. Among other effects, we may experience additional costs associated with increased compliance burdens and new contract negotiations with third parties that aid in processing data on our behalf. We may experience reluctance or refusal by current or prospective European customers to use our products, and we may find it necessary or desirable to make further changes to our handling of personal data of residents of the European Economic Area (“EEA”). The regulatory environment applicable to the handling of EEA residents’ personal data, and our actions taken in response, may cause us to assume additional liabilities or incur additional costs and could result in our business, operating results and financial condition being harmed. Additionally, we and our customers may face a risk of enforcement actions by data protection authorities in the EEA relating to personal data transfers to us and by us from the EEA. Any such enforcement actions could result in substantial costs and diversion of resources, distract management and technical personnel and negatively affect our business, operating results, and financial condition. Further, the UK has implemented legislation that substantially provides for the GDPR, which provides for fines of up to the greater of 17.5 million British Pounds or four percent of the previous year’s annual revenue, whichever is higher. The relationship between the UK and the EU in relation to certain aspects of data protection law remains unclear following the UK’s exit from the EU, including with respect to regulation of data transfers between EU member states and the UK.

Several jurisdictions have passed new laws and regulations relating to privacy, data protection, and other matters, and other jurisdictions are considering imposing additional restrictions. These laws continue to develop and may be inconsistent from jurisdiction to jurisdiction. For example, the California Consumer Privacy Act (“CCPA”) became operative on January 1, 2020. The CCPA requires covered companies to, among other things, provide new disclosures to California consumers, and affords such consumers new abilities to opt-out of certain sales of personal information. Certain aspects of the CCPA and its interpretation remain uncertain and are likely to remain uncertain for an extended period. Further, a new privacy law, the California Privacy Rights Act (“CPRA”), was approved in the November 3, 2020 election. The CPRA modifies the CCPA significantly, creating obligations relating to consumer data beginning on January 1, 2022, with implementing regulations expected on or before July 1, 2022, and enforcement beginning July 1, 2023. Passage of the CPRA has resulted in further uncertainty and may require us to incur additional costs and expenses in an effort to comply. In addition to the CCPA, numerous other states’ legislatures are considering similar laws that will require ongoing compliance efforts and investment. For example, in March 2021, Virginia enacted a Consumer Data Protection Act that will go into effect on January 1, 2023 and in June 2021, Colorado enacted a Colorado Privacy Act that will go into effect on July 1, 2023, both of which share similarities with the CCPA, CPRA, and legislation proposed in other states.

In addition, some countries are considering or have enacted legislation requiring local storage and processing of data that could increase the cost and complexity of delivering our services. Accordingly, we cannot predict the full impact of the CCPA, the CPRA or other evolving privacy and data protection obligations on our business or operations. Complying with emerging and changing legal and regulatory requirements relating to privacy, data protection and other matters may cause us to incur costs or require us to change our business practices, which could harm our business, financial condition, results of operations and prospects.

We are also subject to environmental laws and regulations governing the management and disposal of hazardous materials and wastes, including the hazardous material content of our products and laws relating to the collection, recycling and disposal of electrical and electronic equipment. Our failure, or the failure of our partners, including our contract manufacturers, to comply with past, present and future environmental laws could result in fines, penalties, third-party claims, reduced sales of our products, re-engineering our products, substantial product inventory write-offs and reputational damage, any of which could harm our business, financial condition, results of operations and prospects. We also expect that our business will be affected by new environmental laws and regulations on an ongoing basis applicable to us and our partners, including our contract manufacturers. To date, our expenditures for environmental compliance have not had a material effect on our results of operations or cash flows. Although we cannot predict the future effect of such laws or regulations, they will likely result in additional costs or require us to change the content or manufacturing of our products, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

From time to time, we may receive inquiries from governmental agencies or we may make voluntary disclosures regarding our compliance with applicable governmental regulations or requirements relating to various matters, including import/export controls, federal securities laws and tax laws and regulations which could lead to formal investigations. Actual or alleged noncompliance with applicable laws, regulations or other governmental requirements could lead to regulatory investigations, enforcement actions, and other proceedings, private claims and litigation, and potentially may subject us to sanctions, mandatory product recalls, enforcement actions, disgorgement of profits, fines, damages, civil and criminal penalties or injunctions. If any governmental fines, penalties, or other sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, financial condition, results of operations and prospects

could be materially adversely affected. In addition, responding to any investigation, action or other proceeding will likely result in a significant diversion of management's attention and resources and an increase in professional fees. Enforcement actions, investigations, and fines, penalties, and other sanctions could harm our business, financial condition, results of operations and prospects.

We are subject to governmental export and import controls that could impair our ability to compete in international markets or subject us to liability if we violate these controls.

Our products may be subject to various export controls and because we incorporate encryption technology into certain of our products, certain of our products may be exported from various countries only with the required export license or through an export license exception. If we were to fail to comply with the applicable export control laws, customs regulations, economic sanctions or other applicable laws, we could be subject to monetary damages or the imposition of restrictions which could be material to our business, operating results and prospects and could also harm our reputation. Further, there could be criminal penalties for knowing or willful violations, including incarceration for culpable employees and managers. Obtaining the necessary export license or other authorization for a particular sale may be time-consuming and may result in the delay or loss of sales opportunities. Furthermore, certain export control and economic sanctions laws prohibit the shipment of certain products, technology, software and services to embargoed countries and sanctioned governments, entities, and persons. Even though we take precautions to ensure that we and our channel partners comply with all relevant regulations, any failure by us or our channel partners to comply with such regulations could have negative consequences, including reputational harm, government investigations and penalties.

Although we have developed procedures and controls to comply with export control and other applicable laws, historically, we have had some instances where we inadvertently have not fully complied with certain export control laws, but we have disclosed them to, and implemented corrective actions with, the appropriate government agencies.

In addition, various countries regulate the import of certain encryption technology, including through import permit and license requirements, and have enacted laws that could limit our ability to distribute our products or could limit our end customers' ability to implement our products in those countries. Any change in export or import regulations, economic sanctions or related legislation, shift in the enforcement or scope of existing regulations or change in the countries, governments, persons or technologies targeted by such regulations could result in decreased use of our products by, or in our decreased ability to export or sell our products to, existing or potential end customers with international operations or create delays in the introduction of our products into international markets. Any decreased use of our products or limitation on our ability to export or sell our products could adversely affect our business, financial condition, results of operations and prospects.

Risks Related to Ownership of Our Common Stock

The trading price of our common stock has been and may continue to be volatile, and the value of your investment could decline.

The trading price of our common stock has historically been and is likely to continue to be volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. These fluctuations could cause you to lose all or part of your investment in our common stock. Factors that could cause fluctuations in the market price of our common stock include, but are not limited to, forward-looking statements related to future revenue, gross margins and earnings per share, changes or decreases in our growth rate, manufacturing, supply or distribution shortages or constraints, ratings changes by securities analysts, actual or anticipated announcements of new products by our company or our competitors, litigation, actual or anticipated changes or fluctuations in our results of operations, regulatory developments, repurchases of our common stock, departures of key executives, major catastrophic events, and broad market and industry fluctuations.

In addition, technology stocks have historically experienced high levels of volatility and, if the market for technology stocks or the stock market in general experiences a loss of investor confidence, the market price of our common stock could decline for reasons unrelated to our business, financial condition, results of operations and prospects. The market price of our common stock might also decline in reaction to events that affect other companies in our industry even if these events do not directly affect us. In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. If the market price of our common stock is volatile, we may become the target of securities litigation. Securities litigation could result in substantial costs and divert our management's attention and resources from our business and prospects. This could have a material adverse effect on our business, financial condition, results of operations and prospects.

We have adopted stock repurchase programs to repurchase shares of our common stock; however, any future decisions to reduce or discontinue repurchasing our common stock pursuant to our stock repurchase programs could cause the market price for our common stock to decline.

Although our board of directors has authorized stock repurchase programs, any determination to execute our stock repurchase programs will be subject to, among other things, our financial position and results of operations, available cash and cash flow, capital requirements, and other factors, as well as our board of director's continuing determination that the repurchase programs are in the best interests of our shareholders and is in compliance with all laws and agreements applicable to the repurchase programs. Our stock repurchase programs do not obligate us to acquire any common stock. If we fail to meet any expectations related to stock repurchases, the market price of our common stock could decline, and could have a material adverse impact on investor confidence. Additionally, price volatility of our common stock over a given period may cause the average price at which we repurchase our common stock to exceed the stock's market price at a given point in time.

We may further increase or decrease the amount of repurchases of our common stock in the future. Any reduction or discontinuance by us of repurchases of our common stock pursuant to our current stock repurchase programs could cause the market price of our common stock to decline. Moreover, in the event repurchases of our common stock are reduced or discontinued, our failure or inability to resume repurchasing common stock at historical levels could result in a lower market valuation of our common stock.

Sales of substantial amounts of our common stock in the public markets, or the perception that such sales might occur, could reduce the market price that our common stock might otherwise attain and may dilute your voting power and your ownership interest in us.

Sales of a substantial number of shares of our common stock in the public market, or the perception that such sales could occur, could adversely affect the market price of our common stock and may make it more difficult for you to sell your common stock at a time and price that you deem appropriate and may dilute your voting power and your ownership interest in us. Based on shares outstanding as of December 31, 2021, holders of approximately 21.1% of our common stock have rights, subject to some conditions, to require us to file registration statements covering the sale of their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. In addition, we have registered the offer and sale of all shares of common stock that we may issue under our equity compensation plans. If holders, by exercising their registration rights, sell large numbers of shares, it could adversely affect the market price of our common stock.

Insiders have substantial control over us, which could limit your ability to influence the outcome of key transactions, including a change of control.

Our directors, executive officers and each of our stockholders who own greater than 10% of our outstanding common stock together with their affiliates, in the aggregate, beneficially own approximately 19.6% of the outstanding shares of our common stock, based on shares outstanding as of December 31, 2021. As a result, these stockholders, if acting together, could exercise a significant level of influence over matters requiring approval by our stockholders, including the election of directors and the approval of mergers, acquisitions or other extraordinary transactions. They may also have interests that differ from yours and may vote in a way with which you disagree and which may be adverse to your interests. This concentration of ownership may also discourage a potential investor from acquiring our common stock due to the limited voting power of such stock or otherwise may have the effect of delaying, preventing or deterring a change of control of our company, could deprive our stockholders of an opportunity to receive a premium for their common stock as part of a sale of our company and might ultimately affect the market price of our common stock.

Our charter documents and Delaware law could discourage takeover attempts and lead to management entrenchment.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could delay or prevent a change in control of our company. These provisions could also make it difficult for stockholders to elect directors that are not nominated by the current members of our board of directors or take other corporate actions, including effecting changes in our management. These provisions include:

- a classified board of directors with three-year staggered terms, which could delay the ability of stockholders to change the membership of a majority of our board of directors;
- the ability of our board of directors to issue shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer;

- the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of our board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- the requirement that a special meeting of stockholders may be called only by the chairman of our board of directors, our president, our secretary or a majority vote of our board of directors, which could delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors;
- the requirement for the affirmative vote of holders of at least 66 2/3% of the voting power of all of the then outstanding shares of the voting stock, voting together as a single class, to amend the provisions of our amended and restated certificate of incorporation relating to the issuance of preferred stock and management of our business or our amended and restated bylaws, which may inhibit the ability of an acquirer to effect such amendments to facilitate an unsolicited takeover attempt;
- the ability of our board of directors, by majority vote, to amend the bylaws, which may allow our board of directors to take additional actions to prevent an unsolicited takeover and inhibit the ability of an acquirer to amend the bylaws to facilitate an unsolicited takeover attempt; and
- advance notice procedures with which stockholders must comply to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of us.

In addition, as a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time.

General Risks

If we are unable to hire, retain, train and motivate qualified personnel and senior management, our business, financial condition, results of operations and prospects could suffer.

Our future success depends, in part, on our ability to continue to attract and retain highly skilled personnel, particularly software engineering and sales personnel. In addition, our success in expanding into adjacent markets including the enterprise market requires a significant investment of time, effort and financial resources into hiring and training our sales force to address these markets. If we do not effectively train our direct sales force, we may be unable to add new end customers, increase sales to our existing end customers, or successfully expand into new markets. Competition for highly skilled personnel is often intense, especially in the San Francisco Bay Area where we have a substantial presence and need for highly skilled personnel. Many of the companies with which we compete for experienced personnel have greater resources than we have to provide more attractive compensation packages and other amenities. Research and development personnel are aggressively recruited by startup and growth companies, which are especially active in many of the technical areas and geographic regions in which we conduct product development. In addition, in making employment decisions, particularly in the high-technology industry, job candidates often consider the value of the stock-based compensation they are to receive in connection with their employment. Declines in the market price of our stock could adversely affect our ability to attract, motivate or retain key employees. In addition, our future performance also depends on the continued services and continuing contributions of our senior management to execute our business plan and to identify and pursue new opportunities and product innovations. Our employment arrangements with our employees do not generally require that they continue to work for us for any specified period, and therefore, they could terminate their employment with us at any time. If we are unable to attract or retain qualified personnel, or if there are delays in hiring required personnel, our business, financial condition, results of operations and prospects may be seriously harmed.

Our business is subject to the risks of earthquakes, fire, power outages, floods, health epidemics and other catastrophic events and to interruption by man-made problems such as terrorism.

Our corporate headquarters and the operations of our key manufacturing vendors, logistics providers and partners, as well as many of our customers, are located in areas exposed to risks of natural disasters such as earthquakes and tsunamis, including the San Francisco Bay Area, Japan and Taiwan. A significant natural disaster, such as an earthquake, tsunami, fire or a flood, or other catastrophic event such as the COVID-19 pandemic or other disease outbreak, could have a material adverse effect on our or their business, which could in turn materially affect our financial condition, results of operations and prospects. These events could result in manufacturing and supply chain disruptions, shipment delays, order

cancellations, and sales delays which could result in missed financial targets. Any health epidemic could have a material adverse effect on our ability to obtain components for our products that are supplied from Asia or to manufacture our products in Asia. Any such disruption of our suppliers, our contract manufacturers or our service providers would likely impact our sales and operating results. In addition, a health epidemic could adversely affect the economies of many countries, resulting in an economic downturn that could affect demand for our products and likely impact our operating results. In addition, acts of terrorism could cause disruptions in our business or the business of our manufacturers, logistics providers, partners or end customers or the economy as a whole. Given our typical concentration of sales at each quarter end, any disruption in the business of our manufacturers, logistics providers, partners or end customers that affects sales at the end of our quarter could have a particularly significant adverse effect on our quarterly results.

We have not paid dividends in the past and do not intend to pay dividends for the foreseeable future.

We have never declared nor paid any dividends on our common stock, and we do not anticipate paying any cash dividends in the future. As a result, you may only receive a return on your investment in our common stock if the market price of our common stock increases.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate headquarters is located in Santa Clara, California where we currently lease approximately 210,000 square feet of space under a lease agreement that expires in 2023. During the year ended December 31, 2021, we purchased land and the improvements thereon in Santa Clara, California to develop space for our future data centers. In addition, we lease office spaces for data centers, operations, sales personnel and research and development in locations throughout the U.S. and various international locations, including Ireland, Canada, India, and Australia. We also lease data centers in the U.S., Ireland and Australia. We believe that our current facilities are adequate to meet our current needs and are being utilized by our business.

Item 3. Legal Proceedings

The information set forth under the “Legal Proceedings” in Note 7. Commitments and Contingencies of the Notes to Consolidated Financial Statements included in Part II, Item 8, of this Annual Report on Form 10-K is incorporated herein by reference.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities

Market Information

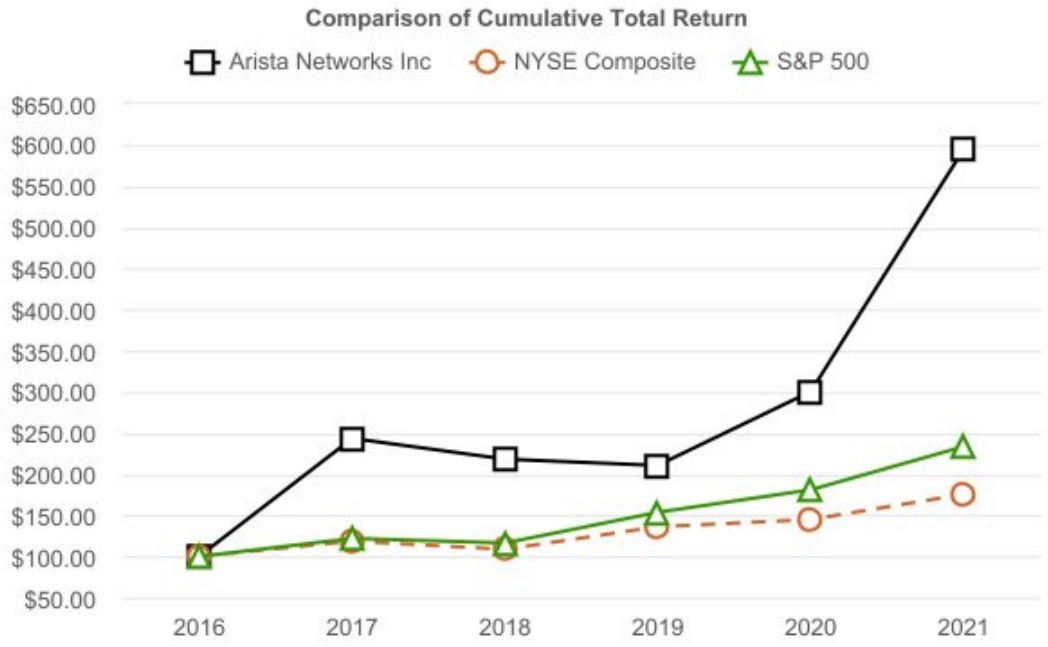
Our common stock is listed on the NYSE under the symbol "ANET". As of February 8, 2022, there were 57 holders of record of our common stock. Because many of our shares of common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders.

Stock Performance Graph

The following shall not be deemed "filed" for purposes of Section 18 of the Exchange Act, or incorporated by reference into any of our other filings under the Exchange Act or the Securities Act, except to the extent we specifically incorporate it by reference into such filing.

The following graph compares the cumulative total return of our common stock with the total return for the NYSE Composite Index and the Standard & Poor's 500 Index (the "S&P 500") from December 30, 2016 (the last trading day of the year) to December 31, 2021.

The graph assumes $100 was invested at the market close on December 30, 2016 in the Company's common stock and in each of the aforementioned indices with the re-investment of dividends, if any. The stock price performance on the following graph is not necessarily indicative of future stock price performance.



Securities Authorized for Issuance Under Equity Compensation Plans

Information about securities authorized for issuance under our equity compensation plans is provided in Note 8. Stockholders' Equity and Stock-Based Compensation of the Notes to Consolidated Financial Statements included in Part II, Item 8, of this Annual Report on Form 10-K.

Recent Sales of Unregistered Equity Securities

There were no sales of unregistered securities during fiscal year 2021.

Issuer Repurchases of Equity Securities

Under our equity incentive plans, certain participants may exercise options prior to vesting, subject to a right of repurchase by us. During the fourth quarter of 2021, there were no repurchases of unvested shares of our common stock made pursuant to our equity incentive plans as a result of us exercising our rights nor pursuant to any publicly-announced plan or program.

Stock Repurchase Programs

In April 2019, our board of directors authorized a $1.0 billion stock repurchase program (the "Repurchase Program"). This authorization allowed us to repurchase shares of our common stock over three years and we completed our repurchases under the Repurchase Program during the fourth quarter of 2021. In the fourth quarter of 2021, our board of directors authorized an additional $1.0 billion stock repurchase program (the "New Repurchase Program"). This authorization allows us to repurchase shares of our common stock and will be funded from working capital. Repurchases may be made at management's discretion from time to time on the open market, through privately negotiated transactions, transactions structured through investment banking institutions, block purchase techniques, 10b5-1 trading plans, or a combination of the foregoing. The New Repurchase Program commenced in the fourth quarter of 2021, and expires on the three-year anniversary thereof. The New Repurchase Program does not obligate us to acquire any of our common stock and may be suspended or discontinued by the company at any time without prior notice. Our repurchases for the three months ended December 31, 2021 are disclosed in the table below (in thousands, except per share amounts). For our repurchase activities made during the rest of the year ended December 31, 2021, please refer to Note 8. Stockholders' Equity and Stock-Based Compensation of the Notes to Consolidated Financial Statements included in Part II, Item 8, of this Annual Report on Form 10-K.

	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Publicly Announced Plans or Programs
October 1, 2021 - October 31, 2021 (1)	541	$ 86.36	541	$ 1,056,436
November 1, 2021 - November 30, 2021 (1)	651	129.00	651	972,418
December 1, 2021 - December 31, 2021	371	122.50	371	927,039
	1,563		1,563	

(1) October and November results have been adjusted to reflect the four-for-one stock split effected in the form of a stock dividend in November 2021. See Note 1, Organization and Summary of Accounting Policies, included in Part II, Item 8, of this Annual Report on Form 10-K for details.

Item 6. [Reserved]

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

You should read the following discussion and analysis of our financial condition and results of operations together with the consolidated financial statements and related notes that are included elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements based upon current plans, expectations and beliefs that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under "Risk Factors" and elsewhere in this Annual Report on Form 10-K.

Overview

Arista Networks pioneered data-driven, cognitive cloud networking for large-scale data center and campus workspace environments. Our cloud networking solutions consist of our Extensible Operating System ("EOS"), a set of network applications and our Ethernet switching and routing platforms. We are a leader in cloud networking solutions delivering high performance, scalability, availability, programmability, workload orchestration, automation and visibility. In recent years, we have sought to bring the operational consistency and principles of cloud networking to the broader enterprise and campus markets with our Cognitive Cloud Networking, extending EOS across the enterprise data center and campus wired and wireless workspaces.

We generate revenue primarily from sales of our switching and routing platforms, which incorporate our EOS software, and related network applications. We also generate revenue from post-contract support ("PCS"), which end customers typically purchase in conjunction with our products, and renewals of PCS. We sell our products through both our direct sales force and our channel partners. As of December 31, 2021, we had delivered our cloud networking solutions to over 8,000 end customers worldwide. Our end customers span a range of industries and include large internet companies, service providers, financial services organizations, government agencies, media and entertainment companies, and others.

Historically, large purchases by a relatively limited number of end customers have accounted for a significant portion of our revenue. We have experienced unpredictability in the timing of orders from these large end customers primarily due to changes in demand patterns specific to these customers, the time it takes these end customers to evaluate, test, qualify and accept our products, and the overall complexity of these large orders. We expect continued variability in our customer concentration and timing of sales on a quarterly and annual basis. For example, sales to our end customers Microsoft and Meta Platforms in fiscal 2019 collectively represented 40% of our total revenue, whereas sales to our end customer Microsoft in fiscal 2020 and 2021 amounted to 21.5% and 15.0% of our revenues, respectively, with our end customer Meta Platforms representing less than 10% of our revenues in both fiscal 2020 and 2021. While we experienced some decline in overall revenue in 2020, the decline in revenue from these large end customers in 2021 was more than offset by stronger sales to our enterprise and other cloud and service provider customers. In addition, we typically provide pricing discounts to large end customers, which may result in lower margins for the period in which such sales occur. We expect customer concentration with these large end customers to be cyclical and linked to new product introductions and customer investment cycles.

We believe that cloud computing represents a fundamental shift from traditional legacy network architectures. As organizations of all sizes have moved workloads to the cloud, spending on cloud and next-generation data centers has increased rapidly, while traditional legacy IT spending has grown more slowly. Our cloud networking platforms are well positioned to address the growing cloud networking market, and to address increasing performance requirements driven by the growing number of connected devices, as well as the need for constant connectivity and access to data and applications.

The markets for cloud networking solutions are highly competitive and characterized by rapidly changing technology, changing end-customer needs, evolving industry standards, frequent introductions of new products and services, and industry consolidation. We expect competition to intensify in the future as the market for cloud networking expands and existing competitors and new market entrants introduce new products or enhance existing products. Our future success is dependent upon our ability to continue to evolve and adapt to our rapidly changing environment. We must also continue to develop market-leading products and features that address the needs of our existing and new customers, and increase sales in the enterprise data center switching, and campus workspace markets. We intend to continue expanding our sales force and marketing activities in key geographies, as well as our relationships with channel, technology and system-level partners in order to reach new end customers more effectively, increase sales to existing customers, and provide services and support. In addition, we intend to continue to invest in our research and development organization to enhance the functionality of our existing cloud networking platform, introduce new products and features, and build upon our technology leadership. We believe one of our greatest strengths lies in our ability to rapidly develop new features and applications.

Our development model is focused on the development of new products based on our EOS software and enhancements to EOS. We engineer our products to be agnostic with respect to the underlying merchant silicon architecture. The programmability of EOS has allowed us to expand our software applications to address the ever-increasing demands of cloud networking, including workflow automation, network visibility, analytics and network detection and response, and has further allowed us to integrate rapidly with a wide range of third-party applications for virtualization, management, automation, orchestration and network services. This enables us to focus our research and development resources on our software core competencies and to leverage the investments made by merchant silicon vendors to achieve cost-effective solutions. We work closely with third-party contract manufacturers to manufacture our products. Our contract manufacturers deliver our products to our third-party direct fulfillment facilities. We and our fulfillment partners then perform labeling, final configuration, quality assurance testing and shipment to our customers.

COVID-19 Update

The global coronavirus ("COVID-19") pandemic continues to disrupt and have unpredictable impacts to our global society, economies, financial markets and business activities. We are actively monitoring and evaluating developments as the situation evolves and will continue to take further actions in our approach to address COVID-19. We have prioritized the protection of our employees during this pandemic and, as a result, our offices across the globe have remained closed, limiting access to facilities-based employees and a limited number of employees on a voluntary basis, and continue to impose some travel restrictions. In addition, our manufacturing and supply chain operations have experienced significant constraints, with component shortages, increased supply chain costs and delays broadly impacting the industry as a whole. We continue to work closely with our contract manufacturers and supply chain partners who have experienced delays in component sourcing, workforce disruptions and governmental restrictions on the production and export of their products. Although we have worked diligently to drive improvements in these areas, including funding additional working capital and incremental purchase commitments, these delays have negatively impacted our ability to supply products to our customers on a timely basis. We have increased our purchase commitments and expect to continue to invest in working capital to address delays in component sourcing and the risk of future COVID-19 related supply chain disruptions, but we cannot be certain that such delays or disruptions will not occur.

The extent of the impact of COVID-19 on our operational and financial performance, including our ability to execute our business strategies and initiatives in the expected time frame, will depend on future developments, including the duration of the pandemic, the breadth and duration of governmental containment measures such as workplace, travel and social distancing restrictions, as well as the reauthorization of or increase in such measures in the event of spikes in COVID-19 infection rates, the success of the COVID-19 vaccination deployment, and the impact on our customers, partners, employees, contract manufacturers and supply chain, all of which are uncertain and cannot be predicted. However, any continued or renewed disruption in manufacturing and supply resulting from the COVID-19 pandemic or related containment measures could negatively impact our business. We also believe that any extended or renewed COVID-19 related economic disruption could have a negative impact on demand from our customers in future periods. Accordingly, current results and financial condition discussed herein may not be indicative of future operating results and trends.

Results of Operations

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Revenue, Cost of Revenue and Gross Margin (in thousands, except percentages)

	Year Ended December 31,					
	2021		2020		Change in	
	$	% of Revenue	$	% of Revenue	$	%
Revenue						
Product	$ 2,377,727	80.7 %	$ 1,830,842	79.0 %	$ 546,885	29.9 %
Service	570,310	19.3	486,670	21.0	83,640	17.2
Total revenue	2,948,037	100.0	2,317,512	100.0	630,525	27.2
Cost of revenue						
Product	958,363	32.5	749,962	32.4	208,401	27.8
Service	108,895	3.7	85,664	3.7	23,231	27.1
Total cost of revenue	1,067,258	36.2	835,626	36.1	231,632	27.7
Gross profit	$ 1,880,779	63.8 %	$ 1,481,886	63.9 %	$ 398,893	26.9 %
Gross margin	63.8 %		63.9 %			

Revenue by Geography (in thousands, except percentages)

	Year Ended December 31,			
	2021	% of Total	2020	% of Total
Americas	$ 2,156,183	73.2 %	$ 1,771,992	76.5 %
Europe, Middle East and Africa	486,836	16.5	326,729	14.1
Asia-Pacific	305,018	10.3	218,791	9.4
Total revenue	$ 2,948,037	100.0 %	$ 2,317,512	100.0 %

Revenue

Product revenue primarily consists of sales of our switching and routing products, and software licenses. Service revenue is primarily derived from sales of PCS contracts, which is typically purchased in conjunction with our products, and subsequent renewals of those contracts. We expect our revenue may vary from period to period based on, among other things, the timing, size, and complexity of orders, especially with respect to our large end customers.

Product revenue increased by $546.9 million, or 29.9%, in the year ended December 31, 2021 compared to 2020, which reflected stronger demand for our products from new and existing customers, and broader market acceptance of our enterprise and campus products. Service revenue increased by $83.6 million, or 17.2%, in the year ended December 31, 2021 compared to 2020, as a result of continued growth in initial and renewal PCS contracts as our customer installed base continued to expand. International revenues increased from 23.5% in 2020 to 26.8% in 2021, which was mostly driven by increased shipments to our large end customers in the EMEA region.

Cost of Revenue and Gross Margin

Cost of product revenue primarily consists of amounts paid for inventory to our third-party contract manufacturers and merchant silicon vendors, overhead costs of our manufacturing operations, and other costs associated with manufacturing our products and managing our inventory. Cost of service revenue primarily consists of personnel and other costs associated with our global customer support and services organizations.

Cost of revenue increased by $231.6 million or 27.7% for the year ended December 31, 2021 compared to 2020. These increases were primarily driven by a corresponding increase in product and service revenues, coupled with an increase in supply chain costs due to increased production capacity and higher volumes.

Gross margin, or gross profit as a percentage of revenue, has been and will continue to be affected by a

variety of factors, including pricing pressure on our products and services due to competition, the mix of sales to large end customers who generally receive lower pricing, manufacturing-related costs, including costs associated with supply chain sourcing activities, merchant silicon costs, the mix of products sold, and excess/obsolete inventory write-downs, including charges for excess/obsolete component inventory held by our contract manufacturers. We expect our gross margins to fluctuate over time, depending on the factors described above.

Gross margin slightly decreased from 63.9% for the year ended December 31, 2020 to 63.8% for the year ended December 31, 2021. The change in gross margin was unfavorably impacted by higher supply chain costs, as well as increased service costs to support our growing installed base. These unfavorable impacts were mostly offset by improved product margins due to a reduced proportion of our sales to larger end customers who generally receive larger discounts.

Operating Expenses (in thousands, except percentages)

Our operating expenses consist of research and development, sales and marketing, and general and administrative expenses. The largest component of our operating expenses is personnel costs. Personnel costs consist of wages, benefits, bonuses and, with respect to sales and marketing expenses, sales commissions. Personnel costs also include stock-based compensation and travel expenses.

	Year Ended December 31,					
	2021		2020		Change in	
	$	% of Revenue	$	% of Revenue	$	%
Operating expenses:						
Research and development	$ 586,752	19.9 %	$ 486,594	20.9 %	$ 100,158	20.6 %
Sales and marketing	286,171	9.7	229,366	9.9	56,805	24.8
General and administrative	83,117	2.8	66,242	2.9	16,875	25.5
Total operating expenses	$ 956,040	32.4 %	$ 782,202	33.7 %	$ 173,838	22.2 %

Research and development.

Research and development expenses consist primarily of personnel costs, prototype expenses, third-party engineering costs, and an allocated portion of facility and IT costs. Our research and development efforts are focused on new product development and maintaining and developing additional functionality for our existing products, including new releases and upgrades to our EOS software and applications. We expect our research and development expenses to increase in absolute dollars as we continue to invest in software development in order to expand the capabilities of our cloud networking platform, introduce new products and features, and continue to invest in our technology.

Research and development expenses increased by $100.2 million, or 20.6%, for the year ended December 31, 2021 compared to 2020. The increase was primarily due to a $67.0 million increase in personnel costs driven by an increase in headcount, and a $32.3 million increase in new product introduction costs, including third-party engineering and other product development costs.

Sales and marketing.

Sales and marketing expenses consist primarily of personnel costs, marketing, trade shows, and other promotional activities, and an allocated portion of facility and IT costs. We expect our sales and marketing expenses to increase in absolute dollars as we continue to expand our sales and marketing efforts worldwide.

Sales and marketing expenses increased by $56.8 million, or 24.8%, for the year ended December 31, 2021 compared to 2020. The increase was primarily driven by increased headcount and higher sales volume resulting in increased compensation costs, including salaries, sales incentive compensation and stock-based compensation.

General and administrative.

General and administrative expenses consist primarily of personnel costs and professional services costs. General and administrative personnel costs include those for our executive, finance, human resources and legal functions. Our professional services costs are primarily related to external legal, accounting, and tax services.

General and administrative expenses increased by $16.9 million, or 25.5%, for the year ended December 31, 2021 compared to 2020. The increase was driven by a $17.7 million increase in personnel costs, primarily stock-based compensation, which was partially offset by a decrease in non-recurring acquisition-related expenses of $4.2 million resulting from the acquisitions of Big Switch and Awake Security in 2020.

Other Income, Net (in thousands, except percentages)

Other income, net consists primarily of interest income from our cash, cash equivalents and marketable securities, gains and losses on our investments in privately-held companies and marketable securities, and foreign currency transaction gains and losses. We expect other income, net may fluctuate in the future as a result of the re-measurement of our private company equity investments upon the occurrence of either observable price changes or impairments, changes in interest rates or returns on our cash and cash equivalents and marketable securities, and foreign currency exchange rate fluctuations.

	Year Ended December 31,					
	2021		2020		Change in	
	$	% of Revenue	$	% of Revenue	$	%
Other income, net:						
Interest income	$ 7,215	0.2 %	$ 27,139	1.2 %	$ (19,924)	(73.4)%
Gain on sale of marketable securities	—	—	9,432	0.4	(9,432)	(100.0)
Gain on investments in privately-held companies	—	—	4,164	0.2	(4,164)	(100.0)
Other income (expense)	(1,075)	—	(1,556)	(0.1)	481	(30.9)
Total other income, net	$ 6,140	0.2 %	$ 39,179	1.7 %	$ (33,039)	(84.3)%

The unfavorable change in other income, net, during the year ended December 31, 2021 as compared to 2020 was driven by a $19.9 million decrease in interest income, which was primarily caused by significant declines in the yields of government and corporate bonds in our investment portfolio. In addition, we recorded a gain on sale of marketable securities and a gain on investments in privately-held companies in 2020, which did not recur in 2021.

Provision for Income Taxes (in thousands, except percentages)

We operate in a number of tax jurisdictions and are subject to taxes in each country or jurisdiction in which we conduct business. Earnings from our non-U.S. activities are subject to local country income tax and may also be subject to U.S. income tax. Generally, our U.S. tax obligations are reduced by a credit for foreign income taxes paid on these foreign earnings, which avoids double taxation. Our tax expense to date consists of federal, state and foreign current and deferred income taxes.

	Year Ended December 31,					
	2021		2020		Change in	
	$	% of Revenue	$	% of Revenue	$	%
Provision for income taxes	$ 90,025	3.1 %	$ 104,306	4.5 %	$ (14,281)	(13.7)%
Effective tax rate	9.7 %		14.1 %			

Despite an increase in pre-tax income in 2021 as compared to 2020, our provision for income taxes and effective tax rate decreased in 2021 as compared to 2020. The decrease in our income taxes and effective tax

rate was largely attributable to increased tax benefits from stock-based compensation, combined with a favorable change in jurisdictional mix of earnings. These two factors are variable in nature and past results may not be indicative of future results. For further information regarding income taxes and the impact on our results of operations and financial position, refer to Note 10. Income Taxes of the Notes to Consolidated Financial Statements included in Part II, Item 8, of this Annual Report on Form 10-K.

Year Ended December 31, 2020 Compared to Year Ended December 31, 2019

Revenue, Cost of Revenue and Gross Margin (in thousands, except percentages)

	Year Ended December 31,					
	2020		2019		Change in	
	$	% of Revenue	$	% of Revenue	$	%
Revenue						
Product	$ 1,830,842	79.0 %	$ 2,021,150	83.8 %	$ (190,308)	(9.4)%
Service	486,670	21.0	389,556	16.2	97,114	24.9
Total revenue	2,317,512	100.0	2,410,706	100.0	(93,194)	(3.9)
Cost of revenue						
Product	749,962	32.4	792,382	32.9	(42,420)	(5.4)
Service	85,664	3.7	73,986	3.0	11,678	15.8
Total cost of revenue	835,626	36.1	866,368	35.9	(30,742)	(3.5)
Gross profit	$ 1,481,886	63.9 %	$ 1,544,338	64.1 %	$ (62,452)	(4.0)%
Gross margin	63.9 %		64.1 %			

Revenue by Geography (in thousands, except percentages)

	Year Ended December 31,			
	2020	% of Total	2019	% of Total
Americas	$ 1,771,992	76.5 %	$ 1,833,163	76.1 %
Europe, Middle East and Africa	326,729	14.1	381,651	15.8
Asia-Pacific	218,791	9.4	195,892	8.1
Total revenue	$ 2,317,512	100.0 %	$ 2,410,706	100.0 %

Revenue

Product revenue decreased by $190.3 million, or 9.4%, in the year ended December 31, 2020 compared to 2019. The decrease was primarily due to the recognition of $125.1 million of deferred product revenue in the year ended December 31, 2019 related to customer acceptance of products shipped in prior periods. In addition, we experienced reduced sales to our larger customers during fiscal 2020, combined with the impact of some COVID-19 related supply constraints. Service revenue increased by $97.1 million, or 24.9% in the year ended December 31, 2020 compared to 2019 as a result of continued growth in initial and renewal support contracts as our customer installed base continued to expand. International revenues remained relatively constant at 23.5% of total revenues in the year ended December 31, 2020, compared to 23.9% in 2019, with a slight decrease in growth in the EMEA region, mostly offset by an increase in growth in our Asia-Pacific region. International revenue generally fluctuates based on the timing of deployments by certain of our large end customers.

Cost of Revenue and Gross Margin

Cost of revenue decreased by $30.7 million or 3.5% for the year ended December 31, 2020 compared to 2019. The decrease in cost of revenue was primarily due to a corresponding decrease in product revenues,

and was partially offset by incremental COVID-19 related supply chain costs and increased product transition costs.

Gross margin slightly decreased from 64.1% for the year ended December 31, 2019 to 63.9% in 2020. Gross margin was negatively impacted by incremental COVID-19 related supply chain costs and some increased product transition costs, combined with the impact of fixed overhead costs on a lower revenue base. These negative impacts were partially offset by a reduction in sales to our larger end customers who generally receive larger discounts, and improved service margins as we scale our services organization.

Operating Expenses (in thousands, except percentages)

	Year Ended December 31,					
	2020		2019		Change in	
	$	% of Revenue	$	% of Revenue	$	%
Operating expenses:						
Research and development	$ 486,594	20.9 %	$ 462,759	19.2 %	$ 23,835	5.2 %
Sales and marketing	229,366	9.9	213,907	8.9	15,459	7.2
General and administrative	66,242	2.9	61,898	2.6	4,344	7.0
Total operating expenses	$ 782,202	33.7 %	$ 738,564	30.7 %	$ 43,638	5.9 %

Research and development

Research and development expenses increased by $23.8 million, or 5.2%, for the year ended December 31, 2020 compared to 2019. The increase was primarily due to a $26.8 million increase in stock-based compensation from new and refresh grants during fiscal 2020, and a $7.8 million increase in acquisition-related expenses and amortization of acquired intangible assets from our acquisition of Big Switch and Awake Security, partially offset by an $11.4 million decrease in new product introduction costs, including third-party engineering and other product development costs.

Sales and marketing

Sales and marketing expenses increased by $15.5 million, or 7.2%, for the year ended December 31, 2020 compared to 2019. The increase was driven by increased headcount, resulting in increased compensation costs, including salaries and stock-based compensation, partially offset by a decrease in travel and other sales and marketing activities due to COVID-19.

General and administrative

General and administrative expenses increased by $4.3 million, or 7.0%, for the year ended December 31, 2020 compared to 2019. The increase was primarily driven by acquisition-related costs from our acquisitions of Big Switch and Awake Security in fiscal year 2020.

Other Income, Net (in thousands, except percentages)

	Year Ended December 31,					
	2020		2019		Change in	
	$	% of Revenue	$	% of Revenue	$	%
Other income, net:						
Interest income	$ 27,139	1.2 %	$ 51,144	2.2 %	$ (24,005)	(46.9)%
Gain on sale of marketable securities	9,432	0.4	—	—	9,432	100.0
Gain on investments in privately-held companies	4,164	0.2	5,427	0.2	(1,263)	(23.3)
Other income (expense)	(1,556)	(0.1)	(75)	—	(1,481)	1,974.7
Total other income, net	$ 39,179	1.7 %	$ 56,496	2.4 %	$ (17,317)	(30.7)%

The unfavorable change in other income, net, during the year ended December 31, 2020 as compared to 2019 was driven by a $24.0 million decrease in interest income largely due to lower interest rates. This was partially offset by a realized gain of $9.4 million on the sale of marketable securities in the third quarter of the year ended December 31, 2020.

Provision for Income Taxes (in thousands, except percentages)

	Year Ended December 31,					
	2020		2019		Change in	
	$	% of Revenue	$	% of Revenue	$	%
Provision for income taxes	$ 104,306	4.5 %	$ 2,403	0.1 %	$ 101,903	4,240.7 %
Effective tax rate	14.1 %		0.3 %			

For the years ended December 31, 2020 and 2019, we recorded an expense of $104.3 million and $2.4 million for income taxes, respectively, and our effective tax rate increased from 0.3% in 2019 to 14.1% in 2020. The change in our income taxes was largely attributable to a net tax benefit of $86 million in 2019 resulting from an intra-entity transaction to sell our non-Americas economic and beneficial intellectual property rights. Further, while we experienced a decrease in worldwide profit before tax in 2020 compared to 2019, the tax benefits attributable to stock-based compensation also decreased, along with an increase in foreign earnings taxed in non-zero rate jurisdictions, resulting in overall higher tax expense. For further information regarding income taxes and the impact on our results of operations and financial position, refer to Note 10. Income Taxes of the Notes to Consolidated Financial Statements included in Part II, Item 8, of this Annual Report on Form 10-K.

Liquidity and Capital Resources

Our principal sources of liquidity are cash, cash equivalents, marketable securities, and cash generated from operations. As of December 31, 2021, our total balance of cash, cash equivalents and marketable securities was $3.4 billion, of which approximately $576.0 million was held outside the U.S. in our foreign subsidiaries.

Our cash, cash equivalents and marketable securities are held for general business purposes, including the funding of working capital. Our marketable securities investment portfolio is primarily invested in highly-rated securities, with the primary objective of minimizing the potential risk of principal loss. We plan to continue to invest for long-term growth. We believe that our existing balances of cash, cash equivalents and marketable securities, together with cash generated from operations, will be sufficient to meet our working capital requirements and our growth strategies for at least the next 12 months. Our future capital requirements will depend on many factors, including our growth rate, the timing and extent of our spending to support research and development activities, the timing and cost of establishing additional sales and marketing

capabilities, the introduction of new and enhanced product and service offerings, our costs associated with supply chain activities, including access to outsourced manufacturing, our costs related to investing in or acquiring complementary or strategic businesses and technologies, the continued market acceptance of our products, and stock repurchases. If we require or elect to seek additional capital through debt or equity financing in the future, we may not be able to raise capital on terms acceptable to us or at all. If we are required and unable to raise additional capital when desired, our business, operating results and financial condition may be adversely affected.

Cash Flows

	Year Ended December 31,		
	2021	2020	2019
	(in thousands)		
Cash provided by operating activities	$ 1,015,856	$ 735,114	$ 963,034
Cash (used in) investing activities	(925,562)	(608,802)	(284,072)
Cash (used in) financing activities	(360,882)	(346,339)	(217,964)
Effect of exchange rate changes	(1,816)	1,966	353
Net increase (decrease) in cash, cash equivalents and restricted cash	$ (272,404)	$ (218,061)	$ 461,351

Cash Flows from Operating Activities

Our operating activities consist of net income, adjusted for certain non-cash items, and changes in assets and liabilities.

During the year ended December 31, 2021, cash provided by operating activities was $1.0 billion, primarily from net income of $840.9 million and net non-cash adjustments to net income of $181.9 million, partially offset by a net increase of $6.9 million in working capital requirements. The net non-cash adjustments primarily consist of $186.9 million of stock-based compensation expenses, $50.3 million of depreciation and amortization expenses and $26.8 million of amortization of investment premiums (discounts), all of which were offset by the deferred income tax adjustment of $99.3 million. The increase in working capital primarily consisted of a $170.5 million increase in inventory to help mitigate the impact of COVID-19 related supply chain disruptions, a $134.8 million increase in prepaid and other current assets primarily driven by an increase in deferred cost of sales associated with higher product revenue deferrals, increased inventory deposits to our contract manufacturers, and higher prepaid taxes and other assets. In addition, we had an increase of $127.0 million in accounts receivables due to increased product and service billings. These cash outflows were largely offset by a $278.5 million increase in deferred revenue reflecting ongoing growth in PCS contracts and increased product deferred revenue related to contracts with acceptance terms. In addition, we had a $66.7 million increase in accounts payable related to the volume and timing of production receipts, and an $83.5 million increase in accrued expenses primarily driven by increased supply chain and development costs, as well as accrued compensation-related costs.

During the year ended December 31, 2020, cash provided by operating activities was $735.1 million, primarily from net income of $634.6 million and net non-cash adjustments to net income of $186.2 million, partially offset by a net increase of $85.7 million in working capital requirements. The net non-cash adjustments primarily consisted of $137.0 million of stock-based compensation expenses and $44.6 million of depreciation and amortization expenses. The increase in working capital primarily consisted of a $235.3 million increase in inventory to help mitigate the impact of COVID-19 related supply chain disruptions, partially offset by a $50.4 million increase in deferred revenue, a $41.1 million increase in accounts payable related to the timing of production receipts, and a $17.1 million increase in other liabilities primarily due to an increase in customer contract liabilities.

Cash Flows from Investing Activities

Our investing activities consist of our marketable securities investments, business combinations, investments in privately-held companies, and capital expenditures.

During the year ended December 31, 2021, cash used in investing activities was $925.6 million, primarily consisting of purchases of available-for-sale securities of $2.3 billion, investments and notes receivable in private companies of $19.9 million, and purchases of property, equipment and intangible assets of $64.7 million, partially offset by proceeds of $1.5 billion from maturities of marketable securities, proceeds from the sale of marketable securities of $19.6 million, and the receipt of escrow payments of $1.3 million.

During the year ended December 31, 2020, cash used in investing activities was $608.8 million, primarily consisting of purchases of available-for-sale securities of $2.7 billion, $227.4 million for the acquisitions of Big Switch and Awake Security, and purchases of property, equipment and intangible assets of $15.4 million, partially offset by proceeds of $1.5 billion from maturities of marketable securities, proceeds from the sale of marketable securities of $773.0 million and proceeds from the sale of one of our investments in privately-held companies of $3.4 million.

Cash Flows from Financing Activities

Our financing activities consist of proceeds from the issuance of our common stock under employee equity incentive plans, offset by repurchases of our common stock.

During the year ended December 31, 2021, cash used in financing activities was $360.9 million, consisting primarily of payments for repurchases of our common stock of $411.6 million and taxes paid of $16.5 million upon vesting of restricted stock units, offset partially by proceeds from the issuance of common stock under employee equity incentive plans of $67.2 million.

During the year ended December 31, 2020, cash used in financing activities was $346.3 million, consisting primarily of payments for repurchases of our common stock of $395.2 million and taxes paid of $8.7 million upon vesting of restricted stock units, offset partially by proceeds from the issuance of common stock under employee equity incentive plans of $57.6 million.

Stock Repurchase Programs

In April 2019, our board of directors authorized a $1.0 billion stock repurchase program (the “Repurchase Program”). This authorization allowed us to repurchase shares of our common stock over three years, and we completed our repurchases under the Repurchase Program during the fourth quarter of 2021. Also in the fourth quarter of 2021, our board of directors authorized an additional $1.0 billion stock repurchase program (the "New Repurchase Program"). This authorization allows us to repurchase shares of our common stock and will be funded from working capital. The New Repurchase Program commenced in the fourth quarter of 2021 and expires on the three-year anniversary thereof. The New Repurchase Program does not obligate us to acquire any of our common stock and may be suspended or discontinued by the company at any time without prior notice. As of December 31, 2021, the remaining authorized amount for repurchases under the New Repurchase Program was $927.0 million. Refer to Note 8. Stockholders' Equity and Stock-Based Compensation of the Notes to Consolidated Financial Statements included in Part II, Item 8, of this Annual Report on Form 10-K for further discussion.

Material cash requirements

Our material cash requirements will have an impact on our future liquidity. Our material cash requirements represent material expected or contractually committed future payment obligations. We believe that we will be able to fund these obligations through cash generated from operations and from our existing balances of cash, cash equivalents and marketable securities.

Our material cash requirements include the following contractual and other obligations:

Leases

We have operating lease arrangements for office space, data center, equipment and other corporate assets. As of December 31, 2021, we had lease payment obligations, net of immaterial sublease income, of $87.0 million, with $23.5 million payable within 12 months.

Purchase Obligations

Purchase obligations represent an estimate of all open purchase orders and contractual obligations, made either directly by Arista or by our contract manufacturers on our behalf, in the ordinary course of business for which we have not received the goods or services. As of December 31, 2021, we had $2.5 billion of such purchase obligations, with $2.3 billion payable within 12 months. These open purchase orders are considered enforceable and legally binding, and while we may have some limited ability to reschedule and adjust our requirements based on our business needs prior to the delivery of goods or performance of services, this can only occur with the agreement of the related supplier.

In addition to the purchase obligations outlined above, we also entered into an agreement covering an additional $275 million of extended lead-time component purchase commitments in support of 2023 forecasted demand, for which purchase orders had not been issued as of December 31, 2021.

Long Term Accrued Income Taxes

In connection with the Tax Cuts and Jobs Act of 2017, we recorded a federal income tax payable for transition tax on the mandatory deemed repatriation of foreign earnings that will be payable over an eight-year period. As of December 31, 2021, $6.3 million of long-term transition tax payable represents the remaining federal income tax payable due between one and three years. In addition to the long-term transition tax payable, as of December 31, 2021 we have recorded long-term tax liabilities of $63.6 million related to uncertain tax positions; however, we are unable to make a reasonably reliable estimate of the timing of settlement, if any, of these future payments.

Off-balance sheet arrangements

As of December 31, 2021, we did not have any relationships with any unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, that would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Critical Accounting Estimates

We have prepared our consolidated financial statements in accordance with accounting principles generally accepted in the United States ("GAAP" or "U.S. GAAP") and include our accounts and the accounts of our wholly owned subsidiaries. The preparation of these consolidated financial statements requires our management to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities at the date of the financial statements, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the applicable periods. Note 1, “Organization and Summary of Significant Accounting Policies,” of the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K describes the significant accounting policies and methods used in the preparation of the Company’s consolidated financial statements. We base our estimates, assumptions and judgments on historical experience and on various other factors that we believe to be reasonable under the circumstances. Different assumptions and judgments would change the estimates used in the preparation of our consolidated financial statements, which, in turn, could change the results from those reported. We evaluate our estimates, assumptions and judgments on an ongoing basis. Actual results may differ from these estimates. To the extent that there are material differences between these estimates and our actual results, our future financial statements will be affected.

Revenue Recognition

We generate revenue from sales of our products, which incorporate our EOS software and accessories such as cables and optics, to direct customers and channel partners together with PCS. We typically sell products and PCS in a single contract. We recognize revenue upon transfer of control of promised products or

services to customers in an amount that reflects the consideration we expect to be entitled to receive in exchange for those products or services. Most of our contracts with customers, other than renewals of PCS, contain multiple performance obligations with a combination of products and PCS. Products and PCS generally qualify as distinct performance obligations. Our hardware includes EOS software, which together deliver the essential functionality of our products. For contracts which contain multiple performance obligations, we allocate revenue to each distinct performance obligation based on the standalone selling price ("SSP"). Judgment is required to determine the SSP for each distinct performance obligation. We use a range of amounts to estimate SSP for products and PCS sold together in a contract to determine whether there is a discount to be allocated based on the relative SSP of the various products and PCS.

If we do not have an observable SSP, such as when we do not sell a product or service separately, then SSP is estimated using judgment and considering all reasonably available information, such as market conditions and information about the size and/or purchase volume of the customer. We generally use a range of amounts to estimate SSP for individual products and services based on multiple factors including, but not limited to, the sales channel (reseller, distributor or end customer), the geographies in which our products and services are sold, and the size of the end customer.

We limit the amount of revenue recognition for contracts containing forms of variable consideration, such as future performance obligations, customer-specific returns, and acceptance or refund obligations. We include some or all of an estimate of the related at-risk consideration in the transaction price only to the extent that it is probable that a significant reversal in the amount of cumulative revenue recorded under each contract will not occur when the uncertainties surrounding the variable consideration are resolved.

We may occasionally accept returns to address customer satisfaction issues even though there is generally no contractual provision for such returns. We estimate returns for sales to customers based on historical return rates applied against current-period shipments. Specific customer returns and allowances are considered when determining our sales return reserve estimate.

We have elected a practical expedient to apply the guidance to a portfolio of contracts or performance obligations with similar characteristics so long as such application would not differ materially from applying the guidance to the individual contracts (or performance obligations) within that portfolio. Consequently, we have chosen to apply the portfolio approach when possible, which we do not believe will happen frequently. Additionally, we will evaluate a portfolio of data, when possible, in various situations, including accounting for commissions, rights of return and transactions with variable consideration.

Inventory Valuation and Contract Manufacturer/Supplier Liabilities

Inventories primarily consist of finished goods and strategic components, primarily integrated circuits. Inventories are stated at the lower of cost (computed using the first-in, first-out method) and net realizable value. Manufacturing overhead costs and inbound shipping costs are included in the cost of inventory. We record a provision when inventory is determined to be in excess of anticipated demand, or obsolete, to adjust inventory to its estimated realizable value.

Our contract manufacturers procure components and assemble products on our behalf based on our forecasts. We record a liability and a corresponding charge for non-cancellable, non-returnable purchase commitments with our contract manufacturers or suppliers for quantities in excess of our demand forecasts or that are considered obsolete due to manufacturing and engineering change orders resulting from design changes.

We use significant judgment in establishing our forecasts of future demand and obsolete material exposures. These estimates depend on our assessment of current and expected orders from our customers, product development plans and current sales levels. In addition, current industry-wide supply chain shortages have resulted in extended lead times for components and have required us to extend the time horizon of our demand forecasts. There is however no guarantee that all suppliers will meet their commitments in the time frame committed or that actual customer demand will directly match our demand forecasts. If actual market demand conditions or supplier execution on commitments are less favorable than those projected by management, which may be caused by factors within and/or outside of our control, we may be required to increase our inventory write-downs and liabilities to our contract manufacturers and suppliers, which could have

an adverse impact on our gross margins and profitability. We regularly evaluate our exposure for inventory write-downs and adequacy of our contract manufacturer and supplier liabilities.

Income Taxes

Significant management judgment is required in developing our provision for or benefit from income taxes, including the determination of deferred tax assets and liabilities and any valuation allowances that might be required against the deferred tax assets. In assessing the need for a valuation allowance, we consider all available evidence, including past operating results and estimates of our ability to generate sufficient future taxable income in certain foreign and state tax jurisdictions, future reversals of taxable temporary differences, and potential tax planning strategies. An adjustment to the valuation allowance will either increase or decrease our provision for or benefit from income taxes in the period such determination is made.

We are subject to income taxes in the U.S. and numerous foreign jurisdictions, which involves significant judgment in the interpretation of complex domestic and international tax laws and may give rise to uncertain tax positions. We recognize potential liabilities for anticipated tax audit issues in the U.S. and other tax jurisdictions based on our estimate of whether it is more likely than not that additional taxes, interest, and penalties will be due. Although management believes our unrecognized tax benefits are reasonable, no assurance can be given that the final tax outcome of these matters will not be different from that which is reflected in our unrecognized tax benefits. Our unrecognized tax benefits are adjusted considering changing facts and circumstances, such as the closing of a tax examination or the refinement of an estimate. Resolution of these uncertainties in a manner inconsistent with management's expectations could have a material impact on our financial condition and operating results.

Recent Accounting Pronouncements

Refer to "Recent Accounting Pronouncements" in Note 1. Organization and Summary of Significant Accounting Policies of the Notes to Consolidated Financial Statements included in Part II, Item 8, of this Annual Report on Form 10-K.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk in the ordinary course of our business. Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily a result of fluctuations in foreign currency exchange rates, interest rates and investments in privately-held companies. The ongoing COVID-19 pandemic has increased the volatility of global financial markets, which may increase our foreign currency exchange risk and interest rate risk. For further discussion of the potential impacts of the COVID-19 pandemic on our business, operating results, and financial condition, see Risk Factors included in Part I, Item 1A of this Form 10-K.

Foreign Currency Exchange Risk

Our results of operations and cash flows are subject to fluctuations due to changes in foreign currency exchange rates. Substantially all of our revenue is denominated in U.S. dollars, and therefore, our revenue is not directly subject to foreign currency risk. However, we are indirectly exposed to foreign currency risk. A stronger U.S. dollar could make our products and services more expensive in foreign countries and therefore reduce demand. A weaker U.S. dollar could have the opposite effect. Such economic exposure to currency fluctuations is difficult to measure or predict because our sales are also influenced by many other factors.

Our expenses are generally denominated in the currencies in which our operations are located, which is primarily in the U.S. and to a lesser extent in Europe and Asia. Our results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates and may be adversely affected in the future due to changes in foreign exchange rates. A hypothetical 10% change in foreign currency exchange rates on our monetary assets and liabilities would not be material to our financial condition or results of operations. To date, foreign currency transaction gains and losses and exchange rate fluctuations have not been material to our financial statements. While we have not engaged in the hedging of our foreign currency transactions to date and do not enter into any hedging contracts for trading or speculative purposes, we may in the future hedge selected significant transactions denominated in currencies other than the U.S. dollar.

Interest Rate Sensitivity

As of December 31, 2021, and 2020, we had cash, cash equivalents and available-for-sale marketable securities totaling $3.4 billion and $2.9 billion, respectively. Cash equivalents and marketable securities were invested primarily in money market funds, corporate bonds, U.S. agency mortgage-backed securities, U.S. treasury securities and commercial paper. Our primary investment objectives are to preserve capital and maintain liquidity requirements. In addition, our policy limits the amount of credit exposure to any single issuer. We do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate risk exposure. Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of the interest rates in the U.S. A decline in interest rates would reduce our interest income on our cash, cash equivalents and marketable securities. For the years ended December 31, 2021, 2020 and 2019, the effect of an immediate 10% change in interest rates would not have been material to our operating results and the total value of the portfolio assuming consistent investment levels.

On the other hand, the fair market value of our investments in fixed income securities may be adversely impacted. We would incur unrealized losses on fixed income securities if there is an increase in interest rates compared to interest rates at the time of purchase. In the unlikely event we are forced to sell our marketable securities prior to maturity, we may incur realized losses in such investments. However, because of the conservative and short-term nature of the investments in our portfolio, a change in interest rates is not expected to have a material impact on our consolidated financial statements.

Investments in Privately-Held Companies

Our non-marketable equity investments in privately-held companies are recorded in “Investments” in our consolidated balance sheets. As of December 31, 2021 and 2020, the total carrying amount of our investments in privately-held companies was $20.2 million and $8.3 million. During fiscal 2021, we did not record any adjustments to our investments. During fiscal 2020, we recorded a net gain of $4.1 million on certain investments, compared to a net gain of $5.4 million during fiscal 2019. See Note 5. Investments of the Notes to Consolidated Financial Statements included in Part II, Item 8, of this Annual Report on Form 10-K for details.

The privately-held companies in which we invested are in the startup or development stages. These investments are inherently risky because the markets for the technologies or products these companies are developing are typically in the early stages and may never materialize. We could lose our entire investment in these companies. Our evaluation of investments in privately-held companies is based on the fundamentals of the businesses invested in, including among other factors, the nature of their technologies and potential for financial return.

Item 8. Financial Statements and Supplementary Data

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Arista Networks, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Arista Networks, Inc. (the Company) as of December 31, 2021 and 2020, the related consolidated statements of operations, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 14, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Inventory Valuation & Contract Manufacturer/Supplier Liabilities

Description of the Matter

As discussed in Note 1 of the consolidated financial statements, the Company's inventories are stated at the lower of cost (computed using the first-in, first-out method) and net realizable value. The Company's inventory balance totaled $650 million on December 31, 2021. The Company records a provision when inventory is determined to be in excess of anticipated demand, or obsolete, to adjust inventory to its estimated realizable value. The Company records a contract manufacturer/supplier liability and a corresponding charge for non-cancellable, non-returnable purchase commitments with contract manufacturers or suppliers for quantities in excess of the Company's demand forecasts, or that are considered obsolete.

Auditing management's assessment of net realizable value for inventory and contract manufacturer/supplier liabilities was complex and highly judgmental due to the assessment of management's estimates of forecasted product demand, which can be impacted by changes in overall customer demand, changes in the timing of the introduction and customer adoption of new products, adjustments to manufacturing and engineering schedules, and overall general economic and market conditions.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's determination of the net realizable value of inventory and the contract manufacturer/supplier liability. This included controls over the preparation of the demand and production forecasts, and the evaluation of the accuracy and completeness of the inventory provision and contract manufacturer/supplier liability.

To test the inventory provision and contract manufacturer/supplier liability, we performed audit procedures that included, among others, assessing the Company's methodology over the computation of the provision and liability, testing the significant assumptions and the underlying inputs used by the Company in its analysis including historical sales trends, expectations regarding future sales, changes in the Company's business, customer base, product roadmap and other relevant factors.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2008.
San Jose, California
February 14, 2022

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Arista Networks, Inc.

Opinion on Internal Control Over Financial Reporting

We have audited Arista Networks, Inc.'s internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Arista Networks, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on the COSO criteria. We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of Arista Networks Inc. as of December 31, 2021 and 2020, the related consolidated statements of operations, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes of the Company and our report dated February 14, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

San Jose, California
February 14, 2022

ARISTA NETWORKS, INC.
Consolidated Balance Sheets
(In thousands, except par value)

	December 31,	
	2021	2020
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 620,813	$ 893,219
Marketable securities	2,787,502	1,979,649
Accounts receivable, net of rebates and allowances of $5,088 and $4,497, respectively	516,509	389,540
Inventories	650,117	479,668
Prepaid expenses and other current assets	237,735	94,922
Total current assets	4,812,676	3,836,998
Property and equipment, net	78,634	32,231
Acquisition-related intangible assets, net	93,555	122,790
Goodwill	188,397	189,696
Investments	20,247	8,314
Operating lease right-of-use assets	65,182	77,288
Deferred tax assets	442,295	441,531
Other assets	33,443	30,071
TOTAL ASSETS	$ 5,734,429	$ 4,738,919
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$ 202,636	$ 134,235
Accrued liabilities	226,643	143,357
Deferred revenue	593,578	396,259
Other current liabilities	86,972	94,392
Total current liabilities	1,109,829	768,243
Income taxes payable	69,916	53,053
Operating lease liabilities, non-current	56,527	72,397
Deferred revenue, non-current	335,734	254,568
Deferred tax liabilities, non-current	129,074	227,936
Other long-term liabilities	54,749	42,431
TOTAL LIABILITIES	1,755,829	1,418,628
Commitments and contingencies (Note 7)		
STOCKHOLDERS' EQUITY:		
Preferred stock, $0.0001 par value—100,000 shares authorized and no shares issued and outstanding as of December 31, 2021 and 2020	—	—
Common stock, $0.0001 par value—1,000,000 shares authorized as of December 31, 2021 and 2020; 307,681 and 304,696 shares issued and outstanding as of December 31, 2021 and 2020 (1)	31	30
Additional paid-in capital (1)	1,530,046	1,292,409
Retained earnings	2,456,823	2,027,614
Accumulated other comprehensive income	(8,300)	238
TOTAL STOCKHOLDERS' EQUITY	3,978,600	3,320,291
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 5,734,429	$ 4,738,919

(1) Prior period results have been adjusted to reflect the four-for-one stock split effected in the form of a stock dividend in November 2021. See Note 1, Organization and Summary of Accounting Policies, for details.

The accompanying notes are an integral part of these consolidated financial statements.

ARISTA NETWORKS, INC.
Consolidated Statements of Operations
(In thousands, except per share amounts)

	Year Ended December 31,		
	2021	2020	2019
Revenue:			
Product	$ 2,377,727	$ 1,830,842	$ 2,021,150
Service	570,310	486,670	389,556
Total revenue	2,948,037	2,317,512	2,410,706
Cost of revenue:			
Product	958,363	749,962	792,382
Service	108,895	85,664	73,986
Total cost of revenue	1,067,258	835,626	866,368
Gross profit	1,880,779	1,481,886	1,544,338
Operating expenses:			
Research and development	586,752	486,594	462,759
Sales and marketing	286,171	229,366	213,907
General and administrative	83,117	66,242	61,898
Total operating expenses	956,040	782,202	738,564
Income from operations	924,739	699,684	805,774
Other income, net	6,140	39,179	56,496
Income before income taxes	930,879	738,863	862,270
Provision for income taxes	90,025	104,306	2,403
Net income	$ 840,854	$ 634,557	$ 859,867
Net income attributable to common stockholders:			
Basic	$ 840,854	$ 634,557	$ 859,444
Diluted	$ 840,854	$ 634,557	$ 859,468
Net income per share attributable to common stockholders (1):			
Basic	$ 2.74	$ 2.09	$ 2.82
Diluted	$ 2.63	$ 2.00	$ 2.66
Weighted-average shares used in computing net income per share attributable to common stockholders (1):			
Basic	306,512	303,936	305,248
Diluted	319,238	317,860	323,516

(1) Prior period results have been adjusted to reflect the four-for-one stock split effected in the form of a stock dividend in November 2021. See Note 1, Organization and Summary of Accounting Policies, for details.

The accompanying notes are an integral part of these consolidated financial statements.

ARISTA NETWORKS, INC.
Consolidated Statements of Comprehensive Income
(In thousands)

	Year Ended December 31,		
	2021	2020	2019
Net income	$ 840,854	$ 634,557	$ 859,867
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustments	(1,381)	1,514	(686)
Available-for-sale investments:			
Changes in net unrealized gains (losses) on available-for-sale securities	(7,157)	8,013	4,823
Less: reclassification adjustment for net (gains) included in net income	—	(9,432)	—
Net change	(7,157)	(1,419)	4,823
Other comprehensive income (loss)	(8,538)	95	4,137
Comprehensive income	$ 832,316	$ 634,652	$ 864,004

The accompanying notes are an integral part of these consolidated financial statements.

ARISTA NETWORKS, INC.
Consolidated Statements of Stockholders' Equity
(In thousands)

	Common Stock		Additional Paid-In Capital (2)	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares (2)	Amount (2)				
Balance — December 31, 2018	302,672	$ 30	$ 956,550	$ 1,190,803	$ (3,994)	$ 2,143,389
Cumulative-effect adjustment to beginning balance [1]	—	—	—	3,702	—	3,702
Net income	—	—	—	859,867	—	859,867
Other comprehensive income, net of tax	—	—	—	—	4,137	4,137
Stock-based compensation	—	—	101,280	—	—	101,280
Issuance of common stock in connection with employee equity incentive plans	7,804	—	57,377	—	—	57,377
Repurchase of common stock	(4,756)	—	—	(266,142)	—	(266,142)
Tax withholding paid for net share settlement of equity awards	(164)	—	(9,200)	—	—	(9,200)
Vesting of early-exercised stock options	—	—	276	—	—	276
Balance — December 31, 2019	305,556	30	1,106,283	1,788,230	143	2,894,686
Net income	—	—	—	634,557	—	634,557
Other comprehensive income, net of tax	—	—	—	—	95	95
Stock-based compensation	—	—	137,128	—	—	137,128
Issuance of common stock in connection with employee equity incentive plans	7,336	—	57,556	—	—	57,556
Repurchase of common stock	(8,048)	—	—	(395,173)	—	(395,173)
Tax withholding paid for net share settlement of equity awards	(148)	—	(8,722)	—	—	(8,722)
Vesting of early-exercised stock options	—	—	164	—	—	164
Balance — December 31, 2020	304,696	30	1,292,409	2,027,614	238	3,320,291
Net income	—	—	—	840,854	—	840,854
Other comprehensive loss, net of tax	—	—	—	—	(8,538)	(8,538)
Stock-based compensation	—	—	186,875	—	—	186,875
Issuance of common stock in connection with employee equity incentive plans	7,693	1	67,244	—	—	67,245
Repurchase of common stock	(4,537)	—	—	(411,645)	—	(411,645)
Tax withholding paid for net share settlement of equity awards	(171)	—	(16,482)	—	—	(16,482)
Balance — December 31, 2021	307,681	$ 31	$ 1,530,046	$ 2,456,823	$ (8,300)	$ 3,978,600

(1) On January 1, 2019, we adopted ASC 842 - Leases, which resulted in a cumulative-effect adjustment to the beginning balance of Retained Earnings for 2019.

(2) Prior period results have been adjusted to reflect the four-for-one stock split effected in the form of a stock dividend in November 2021. See Note 1, Organization and Summary of Accounting Policies, for details.

The accompanying notes are an integral part of these consolidated financial statements.

ARISTA NETWORKS, INC.
Consolidated Statements of Cash Flows
(In thousands)

	Year Ended December 31,		
	2021	**2020**	**2019**
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net income	$ 840,854	$ 634,557	$ 859,867
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and other	50,334	44,590	32,849
Noncash lease expense	17,112	16,970	16,179
Stock-based compensation	186,875	137,042	101,280
Deferred income taxes	(99,290)	(9,144)	(75,741)
(Gain) loss on investments in privately-held companies, net	—	(4,164)	(5,427)
(Gain) loss on sale of marketable securities	—	(9,432)	—
Amortization (accretion) of investment premiums (discounts)	26,847	10,381	(6,771)
Changes in operating assets and liabilities:			
Accounts receivable, net	(126,969)	10,673	(60,210)
Inventories	(170,449)	(235,318)	20,927
Prepaid expenses and other current assets	(134,814)	13,846	54,259
Other assets	(4,220)	4,965	(8,112)
Accounts payable	66,681	41,161	(1,937)
Accrued liabilities	83,524	2,728	16,366
Deferred revenue	278,485	50,352	(11,939)
Income taxes payable	6,223	8,805	23,523
Other liabilities	(5,337)	17,102	7,921
Net cash provided by operating activities	1,015,856	735,114	963,034
CASH FLOWS FROM INVESTING ACTIVITIES:			
Proceeds from maturities of marketable securities	1,455,465	1,545,689	1,208,717
Purchases of marketable securities	(2,317,264)	(2,688,064)	(1,503,893)
Business combinations, net of cash acquired	—	(227,420)	(1,365)
Purchases of property, equipment and intangible assets	(64,736)	(15,384)	(15,751)
Escrow receipts from past business acquisitions	1,299	—	—
Investments and notes receivable in privately-held companies	(19,933)	3,399	28,220
Proceeds from sale of marketable securities	19,607	772,978	—
Net cash used in investing activities	(925,562)	(608,802)	(284,072)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from issuance of common stock under equity plans	67,245	57,556	57,378
Tax withholding paid on behalf of employees for net share settlement	(16,482)	(8,722)	(9,200)
Repurchase of common stock	(411,645)	(395,173)	(266,142)
Net cash used in financing activities	(360,882)	(346,339)	(217,964)
Effect of exchange rate changes	(1,816)	1,966	353
NET INCREASE/(DECREASE) IN CASH, CASH EQUIVALENTS AND RESTRICTED CASH	(272,404)	(218,061)	461,351
CASH, CASH EQUIVALENTS AND RESTRICTED CASH —Beginning of period	897,454	1,115,515	654,164
CASH, CASH EQUIVALENTS AND RESTRICTED CASH —End of period	$ 625,050	$ 897,454	$ 1,115,515
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:			
Cash paid for income taxes, net of refunds	$ 189,774	$ 82,601	$ 32,832
SUPPLEMENTAL DISCLOSURES OF NON-CASH INVESTING AND FINANCING INFORMATION:			
Right-of-use assets recognized upon the adoption of ASC 842	$ —	$ —	$ 93,207
Right-of-use assets obtained in exchange for new operating lease liabilities	5,005	6,627	10,948
Property and equipment included in accounts payable and accrued liabilities	3,497	1,565	2,120
Vesting of early exercised stock options and restricted stock awards	—	164	276

The accompanying notes are an integral part of these consolidated financial statements.

ARISTA NETWORKS, INC.
Notes to Consolidated Financial Statements

1. Organization and Summary of Significant Accounting Policies

Organization

Arista Networks, Inc. (together with our subsidiaries, “we,” “our,” "Arista," "Company" or “us”) is a supplier of cloud networking solutions that use software innovations to address the needs of large-scale internet companies, cloud service providers and next-generation enterprises. Our cloud networking solutions consist of our EOS, a set of network applications and our Gigabit Ethernet switching and routing platforms. We are incorporated in the state of Delaware. Our corporate headquarters are located in Santa Clara, California, and we have wholly-owned subsidiaries throughout the world, including North America, Europe, Asia and Australia.

Basis of Presentation and Principles of Consolidation

The accompanying consolidated financial statements include the accounts of Arista Networks, Inc. and its wholly-owned subsidiaries and are prepared in accordance with accounting principles generally accepted in the United States ("GAAP"). All significant intercompany accounts and transactions have been eliminated.

On November 1, 2021, we announced a four-for-one split of the Company’s common stock effected in the form of a stock dividend (the “Stock Split”). Each stockholder of record on November 11, 2021 received three additional shares of common stock for each then-held share, and such shares were distributed after close of trading on November 17, 2021. All share and per share amounts presented herein have been retroactively adjusted to reflect the impact of the Stock Split.

Certain reclassifications of prior period amounts were made in the current year to conform to the current period presentation.

Risk and Uncertainties

The global coronavirus ("COVID-19") pandemic and resulting mitigation efforts by governments around the world to contain or slow its spread have negatively impacted the global economy and disrupted business activities.

Our contract manufacturers and suppliers have experienced workforce disruptions, delays in component sourcing, production, and export of their products, which have disrupted our supply chain and have impacted and likely will continue to impact our ability to supply products to our customers on a timely basis. While we have experienced improvements in overall demand from customers during 2021, we believe ongoing COVID-19 related disruptions, combined with other supply-chain related constraints, could impact our ability to fulfill this increased demand, and as a result could negatively impact our business in future periods. However, the extent of the impact of COVID-19 on our operational and financial performance, including our ability to execute our business strategies and initiatives in the expected time frame and the impact of any initiatives and programs we may undertake to address financial and operational challenges, will depend on future developments, including the duration and spread of the pandemic and related mitigation efforts, the impact to our customers, partners, contract manufacturers and supply chain, as well as restrictions on travel and transport, all of which continue to evolve and are unpredictable. Management continues to actively monitor the impact of the pandemic on the Company's financial condition, liquidity, operations, suppliers, industry, and workforce. As of the date of issuance of these consolidated financial statements, the extent to which the COVID-19 pandemic may materially impact the Company's financial condition, liquidity, or results of operations is uncertain.

Use of Estimates

The preparation of the accompanying consolidated financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the amounts reported and disclosed in the consolidated financial statements and accompanying notes. Those estimates and assumptions include, but are not limited to, valuation of inventory and contract manufacturer/supplier liabilities, accounting for income taxes, including the recognition of deferred tax assets and liabilities, valuation allowance on deferred tax assets and reserves for uncertain tax positions, revenue recognition and deferred revenue, allowance for doubtful accounts,

sales rebates and return reserves, valuation of goodwill and acquisition-related intangible assets, estimate of useful lives of long-lived assets including intangible assets, and the recognition and measurement of contingent liabilities. We evaluate our estimates and assumptions based on historical experience and other factors and adjust these estimates and assumptions when facts and circumstances dictate. Actual results could differ materially from these estimates.

Concentrations of Business and Credit Risk

We work closely with third-party contract manufacturers to manufacture our products. As of December 31, 2021, we had two primary contract manufacturing partners, who provided the vast majority of our electronic manufacturing services. Our contract manufacturing partners deliver our products to our third-party direct fulfillment facilities. We and our fulfillment partners then perform labeling, final configuration, quality assurance testing and shipment to our customers. Our products rely on key components, including certain integrated circuit components and power supplies, some of which our contract manufacturing partners purchase on our behalf from a limited number of suppliers, including certain sole-source providers. We generally do not have guaranteed supply contracts with our component suppliers, and our manufacturing partners could delay shipments or cease manufacturing such products or selling them to us at any time. If we are unable to obtain a sufficient quantity of these components on commercially reasonable terms or in a timely manner, or if we are unable to obtain alternative sources for these components, sales of our products could be delayed or halted entirely, or we may be required to redesign our products. Quality or performance failures of our products or changes in our contractors' or vendors' financial or business condition could disrupt our ability to supply quality products to our customers. Any of these events could result in lost sales and damage to our end-customer relationships, which would adversely impact our business, financial condition and results of operations.

Financial instruments that potentially subject us to concentrations of credit risk consist primarily of cash, cash equivalents, marketable securities, restricted cash, and accounts receivable. Our cash equivalents, restricted cash and marketable securities are invested in high quality financial instruments with banks and financial institutions. Such deposits may be in excess of insured limits provided on such deposits.

Our accounts receivable are unsecured and represent amounts due to us based on contractual obligations of our customers. We mitigate credit risk with respect to accounts receivable by performing ongoing credit evaluations of our customers to assess the probability of collection based on a number of factors, including past transaction experience with the customer, evaluation of their credit history, the credit limits extended, review of the invoicing terms of the arrangement, and current economic conditions that may affect a customer's ability to pay. In situations where a customer may be thinly capitalized and we have limited payment history with it, we will either establish a small credit limit or require it to prepay its purchases. We generally do not require our customers to provide collateral to support accounts receivable. We have recorded an allowance for doubtful accounts for accounts receivables that we have determined to be uncollectible. We mitigate credit risk with respect to accounts receivables by performing ongoing credit evaluations of the borrower to assess the probability of collecting all amounts due to us under the existing contractual terms.

We market and sell our products through both our direct sales force and our channel partners, including distributors, value-added resellers, system integrators and OEM partners, and in conjunction with various technology partners. Significant customers are those that represent more than 10% of our total net revenue during the period or net accounts receivable balance at each respective balance sheet date. As of December 31, 2021, we had three customers who represented 37%, 13% and 12% of total accounts receivable. As of December 31, 2020, we had two customers who represented 31% and 15% of total accounts receivable. For the years ended December 31, 2021 and 2020, there was one customer who represented 15% and 22% of our total revenue, respectively. For the year ended December 31, 2019, there were two customers who represented 23% and 17% of our total revenue.

Cash and Cash Equivalents

We consider all highly liquid investments with original or remaining maturities of three months or less at the time of purchase to be cash equivalents. Cash and cash equivalents consist of cash on deposit with various

financial institutions and highly liquid investments in money market funds. Interest is accrued as earned. As of December 31, 2021 and 2020, we had restricted cash of $4.2 million, respectively, and that primarily included $4.0 million pledged as collateral representing a security deposit required for a facility lease. Our restricted cash is classified as other assets in the accompanying consolidated balance sheets.

Marketable Securities

We classify all highly liquid investments in debt and equity securities with maturities of greater than three months at the date of purchase as marketable securities. We have classified and accounted for our marketable securities as available-for-sale. We determine the appropriate classification of these investments at the time of purchase and reevaluate such designation at each balance sheet date. We may or may not hold securities with stated maturities greater than 12 months until maturity. After consideration of our risk versus reward objectives, as well as our liquidity requirements, we may sell these securities prior to their stated maturities. As we view these securities as available to support current operations, we classify securities with maturities beyond 12 months as current assets under the caption marketable securities in the accompanying consolidated balance sheets. We carry these securities at fair value, and report the unrealized gains and losses, net of taxes, as a component of stockholders' equity. We determine the cost of the debt investment sold based on an average cost basis at the individual security level, and record the interest income in other income, net in the accompanying consolidated statements of operations. We determine any realized gains or losses on the sale of marketable securities using the specific identification method, and record such gains and losses in other income, net in the accompanying consolidated statements of operations.

For our debt securities in an unrealized loss position, we determine whether a credit loss exists by considering information about the collectability of the instrument and current market conditions. We recognize an allowance for credit losses, up to the amount of the unrealized loss when appropriate, and write down the amortized cost basis of the investment if it is more likely than not we will be required to sell or we intend to sell the investment before recovery of its amortized cost basis.

Accounts Receivable

Accounts receivable are recorded at the invoiced amount, net of allowances for doubtful accounts, sales rebates and returns reserves. We estimate our allowance for doubtful accounts based upon the collectability of the receivables in light of historical trends, reasonable and supportable information of our customers' economic conditions that may affect our customers' ability to pay, and prevailing economic conditions. This evaluation is done in order to identify issues that may impact the collectability of receivables and related estimated required allowance. Revisions to the allowance are recorded as an adjustment to bad debt expense. After appropriate collection efforts are exhausted, specific accounts receivable deemed to be uncollectible are charged against the allowance in the period they are deemed uncollectible. Recoveries of accounts receivable previously written-off are recorded as credits to bad debt expense. We primarily estimate our sales rebates and returns reserves based on historical rates applied against current period billings. Specific customer returns, rebates and allowances are considered when determining our estimates. Revisions to sales rebate and return reserves are recorded as adjustments to revenue.

Fair Value Measurements

Fair value is defined as the exchange price that would be received for an asset or an exit price that would be paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. We apply fair value accounting for all financial assets and liabilities that are recognized or disclosed at fair value in the financial statements on a recurring basis. These assets and liabilities include cash and cash equivalents, marketable securities, accounts receivable, accounts payable, and accrued liabilities. Cash equivalents, accounts receivable, accounts payable and accrued liabilities are stated at carrying values in our consolidated financial statements, which approximate their fair value due to the short-term nature of these instruments.

Assets and liabilities recorded at fair value on a recurring basis in the accompanying consolidated balance sheets are categorized based upon the level of judgment associated with the inputs used to measure their

fair value. We use a fair value hierarchy to measure fair value, maximizing the use of observable inputs and minimizing the use of unobservable inputs. The three-tiers of the fair value hierarchy are as follows:

Level I—Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level II—Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities; and

Level III—Unobservable inputs that are supported by little or no market data for the related assets or liabilities and typically reflect management's estimate of assumptions that market participants would use in pricing the asset or liability.

Foreign Currency

The functional currency of our foreign subsidiaries is either the U.S. dollar or their local currency depending on the nature of the subsidiaries' activities.

Transaction re-measurement - Assets and liabilities denominated in a currency other than a subsidiary's functional currency are re-measured into the subsidiary's functional currency using exchange rates in effect at the end of the reporting period, with gains and losses recorded in other income, net in the consolidated statements of operations. To date, foreign currency transaction gains and losses and exchange rate fluctuations have not been material to our consolidated financial statements.

Translation - Assets and liabilities of subsidiaries denominated in foreign functional currencies are translated into U.S. dollars at the closing exchange rate on the balance sheet date and equity-related balances are translated at historical exchange rates. Revenues, costs and expenses in foreign functional currencies are translated using average exchange rates that approximate those in effect during the period. Translation adjustments are recorded within accumulated other comprehensive income, a separate component of total stockholders' equity.

Inventory Valuation and Contract Manufacturer/Supplier Liabilities

Inventories primarily consist of finished goods and strategic components, primarily integrated circuits. Inventories are stated at the lower of cost (computed using the first-in, first-out method) and net realizable value. Manufacturing overhead costs and inbound shipping costs are included in the cost of inventory. We record a provision when inventory is determined to be in excess of anticipated demand, or obsolete, to adjust inventory to its estimated realizable value. For the years ended December 31, 2021, 2020 and 2019, we recorded charges of $61.8 million, $50.5 million and $41.2 million, respectively, within cost of product revenue for inventory write-downs.

Our contract manufacturers procure components and assemble products on our behalf based on our forecasts. We record a liability and a corresponding charge for non-cancellable, non-returnable purchase commitments with our contract manufacturers or suppliers for quantities in excess of our demand forecasts or that are considered obsolete due to manufacturing and engineering change orders resulting from design changes. For the years ended December 31, 2020 and 2019, we recorded charges of $14.9 million and $11.7 million, respectively, within cost of product revenue for such liabilities with our contract manufacturers and suppliers. For the year ended December 31, 2021, we did not incur any additional losses on such liabilities.

We use significant judgment in establishing our forecasts of future demand and obsolete material exposures. These estimates depend on our assessment of current and expected orders from our customers, product development plans and current sales levels. In addition, due to current industry-wide supply shortages, we have had to extend our demand planning horizon and increase our purchase commitments for long lead time components. If actual market conditions are less favorable than those projected by management, which may be caused by factors within and/or outside of our control, we may be required to increase our inventory write-downs and liabilities to our contract manufacturers and suppliers, which could have an adverse impact on our

gross margins and profitability. We regularly evaluate our exposure for inventory write-downs and adequacy of our contract manufacturer and supplier liabilities.

Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation, except for land which is not depreciated. We capitalize any additions and improvements and expense maintenance and repairs as incurred. Depreciation is calculated using the straight-line method over the estimated useful lives of the related assets, generally three years. Our leasehold improvements are depreciated over the shorter of the estimated useful lives of the improvements or the remaining lease term.

Leases

We lease office space, data centers, and equipment under non-cancellable operating leases with various expiration dates through 2028. We determine if an arrangement contains a lease at inception. Operating leases are included in operating lease right-of-use ("ROU") assets, other current liabilities, and operating lease liabilities, non-current in our consolidated balance sheets. We do not have any finance leases in any of the periods presented.

ROU assets and lease liabilities are recognized at the commencement date based on the present value of remaining lease payments over the lease term. The interest rate implicit in our operating leases is not readily available, and therefore, an incremental borrowing rate is estimated based on a hypothetical interest rate on a collateralized basis with similar terms, payments, and economic environments. Operating lease right-of-use assets also include any prepaid lease payments and lease incentives.

Our operating lease agreements may contain rent concession, rent escalation, and option to renew provisions. Lease expense is recognized on a straight-line basis over the lease term commencing on the date we have the right to use the leased property. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that the option will be exercised. In addition, certain of our operating lease agreements contain tenant improvement allowances from landlords. These allowances are accounted for as lease incentives and decrease our right-of-use asset and reduce lease expense over the lease term.

Our lease agreements may contain lease and non-lease components, which are combined and accounted for as a single lease component. We also elect to apply the short-term lease measurement and recognition exemption in which ROU assets and lease liabilities are not recognized for leases with terms of 12 months or less.

Business Combinations

We use the acquisition method to account for our business combinations in accordance with Accounting Standards Codification ("ASC") 805 - *Business Combinations*. We allocate the total fair value of purchase consideration to the tangible and intangible assets acquired and liabilities assumed based on their estimated fair values. The excess of the consideration transferred over the fair values of the assets acquired and liabilities assumed is recorded as goodwill. The results of operations of the acquired businesses are included in our consolidated financial statements from the date of acquisition. Acquisition-related transaction and restructuring costs are expensed as incurred.

During the measurement period, which is not to exceed one year from the acquisition date, we may record adjustments to the acquired assets and liabilities assumed, with a corresponding offset to goodwill or the preliminary purchase price, to reflect new information obtained about facts and circumstances that existed as of the acquisition date. Upon the conclusion of the measurement period, any subsequent adjustments are recorded to earnings.

Goodwill and Acquired Intangible Assets

Goodwill represents the excess of the purchase price over the fair value of net assets acquired in a business combination. The Company has one reporting unit and tests goodwill for impairment at least annually in the fourth quarter or more frequently if indicators of potential impairment exist. We first perform a qualitative assessment to determine whether it is more likely than not that the fair value of our reporting unit is less than its

carrying amount. If the reporting unit does not pass the qualitative assessment, a quantitative test is performed by comparing the fair value of our reporting unit with its carrying amount. We would recognize an impairment loss for the amount by which the carrying amount exceeds the fair value. There were no impairment charges in any of the periods presented in the consolidated financial statements. See Note 6. Goodwill and Acquisition-Related Intangible Assets for additional information.

Acquired intangible assets are carried at cost less accumulated amortization. All acquired intangible assets have been determined to have definite lives and are amortized on a straight-line basis over their estimated useful lives, ranging from one to eight years. Acquired intangible assets are reviewed for impairment under the long-lived asset model described below. There were no impairment charges in any of the periods presented in the consolidated financial statements. See Note 6. Goodwill and Acquisition-Related Intangible Assets for additional information.

Investments in Privately-Held Companies

Our equity investments in privately-held companies without readily determinable fair values are measured using the measurement alternative, defined by ASC 321 - *Investments-Equity Securities* as cost, less impairments, and remeasured based on observable price changes from orderly transactions of identical or similar securities of the same issuer. Any adjustments resulting from impairments and/or observable price changes are recorded within other income, net in our consolidated statements of operations. This election is reassessed each reporting period to determine whether investments in privately-held companies have a readily determinable fair value, in which case they would no longer be eligible for this election. The Company did not hold investments in privately-held companies whose fair value was readily determinable as of December 31, 2021 and 2020.

Impairment of Long-Lived Assets and Investments in Privately-Held Companies

The carrying amounts of our long-lived assets, including property and equipment, intangible assets, ROU assets and investments in privately-held companies, are periodically reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable. Recoverability of these assets is measured by comparison of the carrying amount of each asset to the future undiscounted cash flows the asset is expected to generate over its remaining life. If the asset is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset. No impairment of any other long-lived assets was identified for any of the periods presented in the consolidated financial statements.

Loss Contingencies

In the ordinary course of business, we are a party to claims and legal proceedings including matters relating to commercial, employee relations, business practices and intellectual property. In assessing loss contingencies, we use significant judgments and assumptions to estimate the likelihood of loss, impairment of an asset or the incurrence of a liability, as well as our ability to reasonably estimate the amount of loss. We record a provision for contingent losses when it is both probable that an asset has been impaired or a liability has been incurred and the amount of the loss can be reasonably estimated. We record a charge equal to the minimum estimated liability for litigation costs or a loss contingency only when both of the following conditions are met: (i) information available prior to issuance of our consolidated financial statements indicates that it is probable that a liability had been incurred at the date of the financial statements, and (ii) the range of loss can be reasonably estimated. We regularly evaluate current information available to us to determine whether such accruals should be adjusted and whether new accruals are required.

Revenue Recognition

We generate revenue from sales of our products, which incorporate our EOS software and accessories such as cables and optics, to direct customers and channel partners together with post-contract customer support (“PCS”). We typically sell products and PCS in a single contract. We recognize revenue upon transfer of control of promised products or services to customers in an amount that reflects the consideration we expect to be

entitled to receive in exchange for those products or services. We apply the following five-step revenue recognition model:

- Identification of the contract, or contracts, with a customer
- Identification of the performance obligations in the contract
- Determination of the transaction price
- Allocation of the transaction price to the performance obligations in the contract
- Recognition of revenue when (or as) we satisfy the performance obligation

Post-Contract Customer Support ("PCS")

PCS, which includes technical support, hardware repair and replacement parts beyond standard warranty, bug fixes, patches and unspecified upgrades on a when-and-if-available basis, is offered under renewable, fee-based contracts. We initially defer PCS revenue and recognize it ratably over the life of the PCS contract as there is no discernible pattern of delivery related to these promises. We do not provide unspecified upgrades on a set schedule and address customer requests for technical support if and when they arise, with the related expenses recognized as incurred. PCS contracts generally have a term of one to three years. We include billed but unearned PCS revenue in deferred revenue.

Contracts with Multiple Performance Obligations

Most of our contracts with customers, other than renewals of PCS, contain multiple performance obligations with a combination of products and PCS. Products and PCS generally qualify as distinct performance obligations. Our hardware includes EOS software, which together deliver the essential functionality of our products. For contracts that contain multiple performance obligations, we allocate revenue to each distinct performance obligation based on the standalone selling price (“SSP”). Judgment is required to determine the SSP for each distinct performance obligation. We use a range of amounts to estimate SSP for products and PCS sold together in a contract to determine whether there is a discount to be allocated based on the relative SSP of the various products and PCS.

If we do not have an observable SSP, such as when we do not sell a product or service separately, then SSP is estimated using judgment and considering all reasonably available information such as market conditions and information about the size and/or purchase volume of the customer. We generally use a range of amounts to estimate SSP for individual products and services based on multiple factors including, but not limited to, the sales channel (reseller, distributor or end customer), the geographies in which our products and services are sold, and the size of the end customer.

We limit the amount of revenue recognition for contracts containing forms of variable consideration, such as future performance obligations, customer-specific returns, and acceptance or refund obligations. We include some or all of an estimate of the related at-risk consideration in the transaction price only to the extent that it is probable that a significant reversal in the amount of cumulative revenue recorded under each contract will not occur when the uncertainties surrounding the variable consideration are resolved.

Most of our contracts with customers have payment terms of 30 days with some large high-volume customers having terms of up to 90 days. We have determined our contracts generally do not include a significant financing component because the Company and the customer have specific business reasons other than financing for entering into such contracts. Specifically, both we and our customers seek to ensure the customer has a simplified way of purchasing Arista products and services.

We account for multiple contracts with a single partner as one arrangement if the contractual terms and/or substance of those agreements indicate that they may be so closely related that they are, in effect, parts of a single contract.

We may occasionally accept returns to address customer satisfaction issues even though there is generally no contractual provision for such returns. We estimate returns for sales to customers based on

historical return rates applied against current-period shipments. Specific customer returns and allowances are considered when determining our sales return reserve estimate.

Our policy applies to the accounting for individual contracts. However, we have elected a practical expedient to apply the guidance to a portfolio of contracts or performance obligations with similar characteristics so long as such application would not differ materially from applying the guidance to the individual contracts (or performance obligations) within that portfolio. Consequently, we have chosen to apply the portfolio approach when possible, which we do not believe will happen frequently. Additionally, we will evaluate a portfolio of data, when possible, in various situations, including accounting for commissions, rights of return and transactions with variable consideration.

We report revenue net of sales taxes. We include shipping charges billed to customers in revenue and the related shipping costs are included in cost of product revenue.

Contract Balances

A contract asset is recognized when we have a contractual right to consideration for both completed and partially completed performance obligations that have not yet been invoiced. Contract assets are included in other current assets in the accompanying consolidated balance sheets.

A contract liability is recognized when we have received customer payments in advance of our satisfaction of a performance obligation under a contract that is cancellable. Contract liabilities are included in other current liabilities and other long-term liabilities in the accompanying consolidated balance sheets.

Assets Recognized from Costs to Obtain a Contract with a Customer

We recognize an asset for the incremental costs of obtaining a contract with a customer if we expect the benefit of those costs to be longer than one year. We have determined that certain sales commissions earned by our sales force meet the requirements for capitalization. These costs are deferred and then amortized over a period of benefit that we have determined to be five years. Total capitalized costs to obtain a contract are included in other current and long-term assets on our consolidated balance sheets. As of December 31, 2021 and 2020, total capitalized costs to obtain contracts were $11.5 million and $10.1 million, respectively.

Research and Development Expenses

Costs related to the research, design and development of our products are charged to research and development expenses as incurred. Software development costs are capitalized beginning when a product's technological feasibility has been established and ending when the product is available for general release to customers. Generally, our products are released soon after technological feasibility has been established. As a result, costs incurred subsequent to achieving technological feasibility have not been significant and accordingly, all software development costs have been expensed as incurred.

Warranty

We generally offer a one-year warranty on all of our hardware products and a 90-day warranty against defects in the software embedded in the products. We use judgment and estimates when determining warranty costs based on historical costs to replace product returns within the warranty period at the time we recognize revenue. We accrue for potential warranty claims at the time of shipment as a component of cost of revenues based on historical experience and other relevant information. We reserve for specifically identified products if and when we determine we have a systemic product failure. Although we engage in extensive product quality programs, if actual product failure rates or use of materials differ from estimates, additional warranty costs may be incurred, which could reduce our gross margin. The accrued warranty liability is recorded in accrued liabilities in the accompanying consolidated balance sheets.

Segment Reporting

We develop, market and sell cloud networking solutions, which primarily consist of our switching and routing platforms and related network applications, and there are no segment managers who are held accountable for operations or operating results below the Company level. Our chief operating decision maker is

our Chief Executive Officer, who reviews financial information presented on a consolidated basis for purposes of allocating resources and evaluating financial performance. Accordingly, we have determined that we operate as one reportable segment.

Stock-Based Compensation

Stock-based compensation cost for equity awards is measured at the grant-date fair value using appropriate valuation techniques and recognized as expense over the requisite service or performance period. We account for forfeitures when they occur.

Stock-based compensation costs for stock options and restricted stock units ("RSUs") are recognized on a straight-line basis over the requisite service period, which is generally two to five years. The Company has granted RSUs that vest upon the satisfaction of both service-based and performance-based conditions. The service-based condition for these awards is generally satisfied over four years. The performance-based conditions are satisfied upon achieving specified performance targets, such as financial or operating metrics. We record stock-based compensation expense for performance-based equity awards on an accelerated attribution method over the requisite service period, and only if performance-based conditions are considered probable to be satisfied.

See Note 8. Stockholders' Equity and Stock-Based Compensation for a detailed discussion of the Company’s stock plans, assumptions to the valuation techniques, and stock-based compensation expense.

Income Taxes

Income tax expense is an estimate of current income taxes payable in the current fiscal year based on reported income before income taxes. Deferred income taxes reflect the effect of temporary differences and carryforwards that we recognize for financial reporting and income tax purposes.

We account for income taxes under the liability approach for deferred income taxes, which requires recognition of deferred income tax assets and liabilities for the expected future tax consequences of events that have been recognized in our consolidated financial statements, but have not been reflected in our taxable income. Estimates and judgments occur in the calculation of certain tax liabilities and in the determination of the recoverability of certain deferred income tax assets, which arise from temporary differences and carryforwards. Deferred income tax assets and liabilities are measured using the currently enacted tax rates that apply to taxable income in effect for the years in which those tax assets are expected to be realized or settled. We regularly assess the likelihood that our deferred income tax assets will be realized based on the positive and negative evidence available. We record a valuation allowance to reduce the deferred tax assets to the amount that we are more likely than not to realize.

We believe that we have adequately reserved for our uncertain tax positions, although we can provide no assurance that the final tax outcome of these matters will not be materially different. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will affect the provision for income taxes in the period in which such determination is made and could have a material impact on our financial condition and results of operations. The provision for income taxes includes the effects of any reserves that we believe are appropriate, as well as the related net interest and penalties.

We regularly review our tax positions and benefits to be realized. We recognize tax liabilities based upon our estimate of whether, and to the extent to which, additional taxes will be due when such estimates are more likely than not to be sustained. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. We recognize interest and penalties related to income tax matters as income tax expense.

The U.S. tax rules require U.S. tax on foreign earnings, known as global intangible low taxed income (“GILTI”). Under U.S. GAAP, we are allowed to make an accounting policy choice of either (1) treating taxes due on future U.S. inclusions in taxable income related to GILTI as a current-period expense when incurred (the “period cost method”) or (2) factoring such amounts into a company’s measurement of its deferred taxes (the “deferred method”). We selected the deferred method of accounting and recorded the associated basis differences anticipated to influence prospective GILTI calculations.

Net Income per Share Attributable to Common Stockholders

Basic and diluted net income per share attributable to common stockholders are calculated in conformity with the two-class method required for participating securities. Our shares of common stock subject to repurchase are considered participating securities. Under the two-class method, net income attributable to common stockholders is calculated as net income less earnings attributable to participating securities. In computing diluted net income attributable to common stockholders, undistributed earnings are re-allocated to reflect the potential impact of dilutive securities. Basic net income per common share is computed by dividing the net income attributable to common stockholders by the weighted-average number of common shares outstanding during the period. Diluted net income per share attributable to common stockholders is computed by dividing the net income attributable to common stockholders by the weighted-average number of common shares outstanding, including potentially dilutive common shares assuming the dilutive effect of outstanding stock options, restricted stock units, and employee stock purchase plan using the treasury stock method. Potentially dilutive shares whose effect would have been antidilutive are excluded from the computation of diluted net income per share.

Recently Adopted Accounting Pronouncements

In December 2019, the FASB issued ASU 2019-12, Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes, which simplifies the accounting for incomes taxes by removing certain exceptions to the general principles in Topic 740 and amending existing guidance to improve consistent application. This new standard is effective for our interim and annual periods beginning January 1, 2021 with earlier adoption permitted. Most amendments within this standard are required to be applied on a prospective basis, while certain amendments must be applied on a retrospective or modified retrospective basis. We adopted this new standard on January 1, 2021, with no material impact on our consolidated financial statements.

Recent Accounting Pronouncements Not Yet Effective

In October 2021, the FASB issued ASU 2021-08, Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers, which requires contract assets and contract liabilities acquired in a business combination to be recognized and measured by the acquirer on the acquisition date in accordance with ASC 606, Revenue from Contracts with Customers, as if the acquirer had originated the contracts. This approach differs from the current requirement to measure contract assets and contract liabilities acquired in a business combination at fair value. This new standard is effective for our interim and annual periods beginning January 1, 2023, with early adoption permitted. We are currently evaluating the adoption impacts on our consolidated financial statements.

2. Business Combinations

On February 5, 2020, the Company completed its acquisition of Big Switch Networks, Inc. (“Big Switch”), a network monitoring and software-defined networking pioneer headquartered in Santa Clara, California. With the acquisition of Big Switch, we expect to expand our data center networking solutions and further strengthen our network monitoring and observability suite delivered through Arista’s software platform CloudVision and DANZ (DataANalyZer) capabilities.

We paid an aggregate of $73.3 million in cash for the acquisition of Big Switch, of which $5.3 million was severance and other costs accounted for as a post-combination expense and excluded from the purchase consideration. We also incurred certain acquisition-related expenses and restructuring costs of $6.6 million, which primarily consisted of retention bonuses to continuing employees, professional and consulting fees, and facilities restructuring costs.

On October 7, 2020, the Company completed its acquisition of Awake Security, Inc. (“Awake Security”), a network detection and response (“NDR”) platform provider headquartered in Santa Clara, California. With the acquisition of Awake Security, we added an NDR platform to our product portfolio that combines artificial intelligence (AI) with human expertise to autonomously hunt for and respond to insider and external security threats.

The Company acquired all outstanding shares of Awake Security for a total purchase consideration of $180.5 million with cash. The acquisition-related costs were immaterial.

Certain unvested stock options held by Awake Security employees were assumed by the Company in connection with the acquisition. The portion of the fair value of the assumed stock options associated with pre-acquisition services of Awake employees was immaterial. The fair value of $21.3 million of the unvested replacement options was excluded from the purchase price. These awards, which are subject to the recipients' continued service with the Company, will be recognized ratably as stock-based compensation expense over the requisite service period.

Both acquisitions were accounted for as a business combination with the aggregate purchase price allocated to the assets acquired and liabilities assumed based on their estimated fair values as of the acquisition date. The following table summarizes the final purchase price allocation for the two acquisitions (in thousands):

	Amount
Cash and cash equivalents	$ 21,051
Other tangible assets	19,580
Liabilities	(28,598)
Intangible assets	101,640
Goodwill	134,841
Net assets acquired	$ 248,514

The acquired intangible assets are amortized on a straight-line basis over their estimated useful lives, as we believe this method most closely reflects the pattern in which the economic benefits of the assets will be consumed. The following table shows the valuation of the intangible assets acquired (in thousands) along with their weighted average estimated useful lives:

	Acquisition Date Fair Value	Weighted Average Estimated Useful Life
Developed technology	$ 72,220	7 years
Customer relationships	18,840	7 years
Trade name	6,520	5 years
Others	4,060	2 years
Total intangible assets acquired	$ 101,640	

The goodwill of $134.8 million is primarily attributable to the expected synergies created by incorporating the solutions of the acquired businesses into our technology platform, and the value of the assembled workforce. The goodwill is not deductible for income taxes purposes. The Company's consolidated financial statements include the accounts of Big Switch and Awake Security starting as of the acquisition date. Pro forma and historical post-acquisition results of operations for these acquisitions were not material to the Company's consolidated financial statements.

3. Fair Value Measurements

We measure and report our cash equivalents, restricted cash, and available-for-sale marketable securities at fair value on a recurring basis. The following tables summarize the amortized costs, unrealized gains and losses, and fair values of these financial assets by significant investment category and their levels within the fair value hierarchy (in thousands):

	December 31, 2021						
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value	Level I	Level II	Level III
Financial Assets:							
Cash Equivalents:							
Money market funds	$ 221,382	$ —	$ —	$ 221,382	$ 221,382	$ —	$ —
Marketable Securities:							
Commercial paper	141,274	—	—	141,274	—	141,274	—
Certificates of deposits [1]	44,931	—	—	44,931	—	44,931	—
U.S. government notes	1,060,716	3	(2,909)	1,057,810	1,057,810	—	—
Corporate bonds	1,255,149	105	(3,028)	1,252,226	—	1,252,226	—
Agency securities	291,558	36	(333)	291,261	—	291,261	—
	2,793,628	144	(6,270)	2,787,502	1,057,810	1,729,692	—
Other Assets:							
Money market funds - restricted	4,237	—	—	4,237	4,237	—	—
Total Financial Assets	$ 3,019,247	$ 144	$ (6,270)	$ 3,013,121	$ 1,283,429	$ 1,729,692	$ —

(1) As of December 31, 2021, all of our certificates of deposits were domestic deposits.

	December 31, 2020						
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value	Level I	Level II	Level III
Financial Assets:							
Cash Equivalents:							
Money market funds	$ 438,854	$ —	$ —	$ 438,854	$ 438,854	$ —	$ —
Marketable Securities:							
Commercial paper	51,211	—	—	51,211	—	51,211	—
Certificates of deposits [1]	50,136	3	—	50,139	—	50,139	—
U.S. government notes	523,320	187	(1)	523,506	523,506	—	—
Corporate bonds	878,484	1,167	(330)	879,321	—	879,321	—
Agency securities	475,132	343	(3)	475,472	—	475,472	—
	1,978,283	1,700	(334)	1,979,649	523,506	1,456,143	—
Other Assets:							
Money market funds - restricted	4,235	—	—	4,235	4,235	—	—
Total Financial Assets	$ 2,421,372	$ 1,700	$ (334)	$ 2,422,738	$ 966,595	$ 1,456,143	$ —

(1) As of December 31, 2020, all of our certificates of deposits were domestic deposits.

As of December 31, 2021 and 2020, total unrealized losses of our marketable securities were $6.3 million and $0.3 million, respectively, none of which have been in a continuous unrealized loss position for more than 12 months. We invest in marketable securities that have maximum maturities of up to two years and are generally deemed to be low risk based on their credit ratings from the major rating agencies. The longer the duration of these marketable securities, the more susceptible they are to changes in market interest rates and bond yields. We expect to realize the full value of these investments upon maturity or sale and therefore, we do not consider any of our marketable securities to be impaired as of December 31, 2021 and December 31, 2020. We did not recognize any credit losses or non-credit-related impairments related to our available-for-sale marketable securities for the years ended December 31, 2021, 2020, and 2019.

As of December 31, 2021, the contractual maturities of our investments did not exceed 24 months. The fair values of available-for-sale marketable securities, by remaining contractual maturity, are as follows (in thousands):

	December 31, 2021
Due in 1 year or less	$ 1,691,472
Due in 1 year through 2 years	1,096,030
Total marketable securities	$ 2,787,502

The weighted-average remaining duration of our current marketable securities is approximately 0.8 years as of December 31, 2021.

4. Financial Statements Details

Cash, Cash Equivalents and Restricted Cash

The reconciliation of cash, cash equivalents and restricted cash reported in the accompanying consolidated balance sheets to the total of the same such amounts in the accompanying consolidated statements of cash flows is as follows (in thousands):

	December 31,	
	2021	2020
Cash and cash equivalents	$ 620,813	$ 893,219
Restricted cash included in other assets	4,237	4,235
Total cash, cash equivalents and restricted cash	$ 625,050	$ 897,454

Accounts Receivable, net

Accounts receivable, net consists of the following (in thousands):

	December 31,	
	2021	2020
Accounts receivable	$ 521,597	$ 394,037
Allowance for doubtful accounts	(132)	(659)
Product sales rebate and returns reserve	(4,956)	(3,838)
Accounts receivable, net	$ 516,509	$ 389,540

Allowance for Doubtful Accounts

Activities in the allowance for doubtful accounts consist of the following (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Balance at the beginning of year	$ 659	$ 638	$ 507
Additions charged to expense	(154)	397	221
Deductions/write-offs	(373)	(376)	(90)
Balance at the end of year	$ 132	$ 659	$ 638

Product Sales Rebate and Returns Reserve

Activities in the product sales rebate and returns reserve consist of the following (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Balance at the beginning of year	$ 3,838	$ 5,522	$ 8,613
Additions charged against revenue	7,104	9,454	2,032
Consumption	(5,986)	(11,138)	(5,123)
Balance at the end of year	$ 4,956	$ 3,838	$ 5,522

Inventories

Inventories consist of the following (in thousands):

	December 31,	
	2021	2020
Raw materials	$ 316,737	$ 219,218
Finished goods	333,380	260,450
Total inventories	$ 650,117	$ 479,668

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following (in thousands):

	December 31,	
	2021	2020
Inventory deposits	$ 46,311	$ 18,783
Prepaid income taxes	8,977	267
Other current assets	163,916	60,556
Other prepaid expenses and deposits	18,531	15,316
Total prepaid expenses and other current assets	$ 237,735	$ 94,922

Property and Equipment, net

Property and equipment, net consists of the following (in thousands):

	December 31,	
	2021	2020
Land	$ 40,145	$ —
Equipment and machinery	90,915	70,655
Computer hardware and software	44,083	40,081
Furniture and fixtures	3,634	3,787
Leasehold improvements	30,502	31,448
Construction-in-process	2,378	1,441
Property and equipment, gross	211,657	147,412
Less: accumulated depreciation	(133,023)	(115,181)
Property and equipment, net	$ 78,634	$ 32,231

Depreciation expense was $19.5 million, $20.1 million and $19.0 million for the years ended December 31, 2021, 2020 and 2019, respectively.

Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	December 31,	
	2021	2020
Accrued payroll related costs	$ 99,571	$ 73,634
Accrued manufacturing costs	80,213	43,181
Accrued product development costs	22,188	6,733
Accrued warranty costs	10,414	9,314
Other	14,257	10,495
Total accrued liabilities	$ 226,643	$ 143,357

Warranty Accrual

The following table summarizes the activity related to our accrued liability for estimated future warranty costs (in thousands):

	Year Ended December 31,	
	2021	2020
Warranty accrual, beginning of year	$ 9,314	$ 6,742
Liabilities accrued for warranties issued during the year	12,659	9,737
Warranty costs incurred during the year	(11,559)	(7,165)
Warranty accrual, end of year	$ 10,414	$ 9,314

Contract Assets

The following table summarizes the beginning and ending balances of our contract assets (in thousands):

	Year Ended December 31,	
	2021	2020
Contract assets, beginning balance	$ 16,380	$ 25,565
Contract assets, ending balance	24,388	16,380

Contract Liabilities

The following table summarizes the activity related to our contract liabilities (in thousands):

	Year Ended December 31,	
	2021	2020
Contract liabilities, beginning balance	$ 85,957	$ 61,050
Less: Revenue recognized from beginning balance	(34,177)	(23,394)
Less: Beginning balance reclassified to deferred revenue	(1,945)	(1,638)
Add: Contract liabilities recognized	43,547	49,939
Contract liabilities, ending balance	$ 93,382	$ 85,957

As of December 31, 2021 and 2020, $38.7 million and $34.5 million, respectively, of our contract liabilities were recorded within other current liabilities with the remaining balance recorded within other long-term liabilities in the accompanying consolidated balance sheets.

Deferred Revenue

Deferred revenue is comprised mainly of unearned revenue related to multi-year PCS contracts, services and product deferrals related to acceptance clauses. The following table summarizes the activity related to our deferred revenue (in thousands):

	Year Ended December 31, 2021
Deferred revenue, beginning balance	$ 650,827
Less: Revenue recognized from beginning balance	(373,881)
Add: Deferral of revenue in current period, excluding amounts recognized during the period	652,366
Deferred revenue, ending balance	$ 929,312

Other Performance Obligations

Other performance obligations include unbilled contract revenue for services and products that will be recognized in future periods. As of December 30, 2021, other performance obligations of $187.0 million were comprised of unbilled multi-year PCS contract amounts.

Revenue from Total Remaining Performance Obligations

Revenue from total remaining performance obligations represents contract liabilities, deferred revenue and other performance obligations. As of December 31, 2021, approximately $1,209.7 million of revenue is expected to be recognized from remaining performance obligations. We expect to recognize revenue on approximately 82% of these remaining performance obligations over the next 2 years and 18% during years 3 to 5.

Other Income, Net

Other income, net consists of the following (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Other income, net:			
Interest income	$ 7,215	$ 27,139	$ 51,144
Gain on sale of marketable securities	—	9,432	—
Gain on investments in privately-held companies	—	4,164	5,427
Other expense	(1,075)	(1,556)	(75)
Total other income, net	$ 6,140	$ 39,179	$ 56,496

5. Investments

Investments in Privately-Held Companies

Our investments in privately-held companies do not have readily determinable fair values. Their initial cost is subsequently adjusted to fair value on a non-recurring basis based on observable price changes from orderly transactions of identical or similar securities of the same issuer or for impairment. These investments are classified within Level III of the fair value hierarchy as we estimate the value based on valuation methods using the observable transaction price at the transaction date and other significant unobservable inputs, such as volatility, rights, and obligations related to these securities. In addition, the valuation requires management judgment due to the absence of market price and lack of liquidity. The following table summarizes the activity related to our investments in privately-held companies held as of December 31, 2021 and 2020 (in thousands):

	December 31, 2021	December 31, 2020
Cost of investments	$ 14,933	$ 3,000
Cumulative impairment	—	—
Cumulative upward adjustments	5,314	5,314
Carrying amount of investments	$ 20,247	$ 8,314

During the year ended December 31, 2019, we recorded a realized gain of $4.3 million upon the sale of one of our investments. In the year ended December 31, 2021, we did not record any adjustments to our investments, and in the years ended December 31, 2020 and 2019, we recorded $4.2 million and $1.2 million of unrealized gains, respectively. These unrealized gains were recorded on investments that were re-measured to fair value as of the date observable transactions occurred. The aforementioned realized and unrealized gains were recorded within other income, net in the accompanying consolidated statements of operations.

6. Goodwill and Acquisition-Related Intangible Assets

Goodwill

The changes in the carrying values of goodwill for the years ended December 31, 2021 and 2020 are as follows (in thousands):

	Amount
Balance at December 31, 2019	$ 54,855
Additions related to acquisitions (See Note 2 for additional information)	134,841
Balance at December 31, 2020	189,696
Escrow receipts from past acquisitions	(1,299)
Balance at December 31, 2021	$ 188,397

The Company performed an annual test for goodwill impairment in the fourth quarter of the fiscal years ended December 31, 2021 and 2020 and determined that goodwill was not impaired.

Acquisition-Related Intangible Assets

The following table presents details of our acquisition-related intangible assets as of December 31, 2021 and 2020 (in thousands, except for years):

	December 31, 2021			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Remaining Useful Life (In Years)
Developed technology	$ 124,730	$ (53,663)	$ 71,067	4.5
Customer relationships	25,920	(7,899)	18,021	5.2
Trade name	8,990	(4,693)	4,297	3.8
Others	5,720	(5,550)	170	0.1
Total	$ 165,360	$ (71,805)	$ 93,555	4.6

	December 31, 2020			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Remaining Useful Life (In Years)
Developed technology	$ 124,730	$ (31,805)	$ 92,925	5.2
Customer relationships	25,920	(4,298)	21,622	6.2
Trade name	8,990	(2,946)	6,044	4.3
Others	5,720	(3,521)	2,199	1.1
Total	$ 165,360	$ (42,570)	$ 122,790	5.3

Amortization expense related to acquisition-related intangible assets was $29.2 million, $24.1 million and $13.4 million for the years ended December 31, 2021, 2020 and 2019, respectively.

As of December 31, 2021, future estimated amortization expense related to the acquired-related intangible assets is as follows (in thousands):

Years Ending December 31,	Future Amortization Expense
2022	$ 26,774
2023	22,781
2024	16,103
2025	9,750
2026	7,737
Thereafter	10,410
Total	$ 93,555

7. Commitments and Contingencies

Operating Leases

We lease various offices and data centers in North America, Europe, Asia and Australia under non-cancellable operating lease arrangements that expire on various dates through 2028. Some of our leases include options to extend the term of such leases for a period from three months to up to 10 years and/or options to early

terminate the leases. As of December 31, 2021, we did not include any such options in determining the lease terms because we were not reasonably certain that we would exercise these options.

The following table summarizes the supplemental balance sheet information related to our operating leases (in thousands):

	December 31, 2021	December 31, 2020
Right-of-use assets:		
Operating lease right-of-use assets	$ 65,182	$ 77,288
Lease liabilities:		
Operating lease liabilities, current (included in other current liabilities)	20,298	17,773
Operating lease liabilities, non-current	56,527	72,397
Total operating lease liabilities	$ 76,825	$ 90,170

The following table summarizes our lease costs (in thousands):

	Year Ended December 31,	
	2021	2020
Operating lease costs:		
Fixed lease costs	$ 23,230	$ 23,392
Variable lease costs	7,781	7,459
Total operating lease costs	$ 31,011	$ 30,851

The operating lease costs in the table above include costs for long-term and short-term leases. Total short-term lease costs were immaterial. Fixed lease costs include expenses recognized for base rent payments on a straight-line basis. Variable lease costs primarily include maintenance, utilities and operating expenses that are incremental to the fixed base rent payments, and are excluded from the calculation of operating lease liabilities and ROU assets. For the years ended December 31, 2021 and 2020, cash paid for amounts associated with our operating lease liabilities were approximately $22.3 million and $20.2 million, respectively, which were classified as operating activities in the accompanying consolidated statements of cash flows.

Maturities of operating lease liabilities as of December 31, 2021 are presented in the table below (in thousands):

Years ending December 31,	Amount
2022	$ 23,527
2023	21,132
2024	12,796
2025	9,564
2026	7,730
2027 and thereafter	12,254
Total undiscounted operating lease payments (excluding non-lease components)	87,003
Less: imputed interest	(10,178)
Present value of operating lease payments as of December 31, 2021	$ 76,825

	December 31, 2021	December 31, 2020
Weighted-average remaining lease term — operating leases	4.6 years	5.4 years
Weighted-average discount rate — operating leases	5.0%	5.0%

Purchase Commitments

We outsource most of our manufacturing and supply chain management operations to third-party contract manufacturers, who procure components and assemble products on our behalf. In addition, we purchase strategic component inventory from certain suppliers under non-cancellable purchase commitments, including integrated circuits, which are consigned to our contract manufacturers. As of December 31, 2021, we had non-cancellable purchase commitments of $2,540.1 million, with $2,318.6 million payable within 12 months and the majority of the remaining $221.5 million payable within 2023. These open purchase orders are considered enforceable and legally binding, and while we may have some limited ability to reschedule, and adjust our requirements based on our business needs prior to the delivery of goods or performance of services, this can only occur with the agreement of the related supplier.

In addition to the purchase obligations outlined above, we also entered into an agreement covering an additional $275 million of extended lead time component purchase commitments in support of 2023 forecasted demand, for which purchase orders had not been issued as of December 31, 2021.

We also had deposits to our contract manufacturers to secure our purchase commitments in the amount of $49.1 million and $21.5 million as of December 31, 2021 and 2020, respectively, which were recorded within prepaid expenses and other current assets, as well as other assets in the accompanying consolidated balance sheets. In January 2022, we paid an additional cash deposit of $50.0 million to one of our contract manufacturers to secure our purchase commitments.

Guarantees

We have entered into agreements with some of our direct customers and channel partners that contain indemnification provisions relating to potential situations where claims could be alleged that our products infringe the intellectual property rights of a third-party. We have at our option and expense the ability to repair any infringement, replace product with a non-infringing equivalent-in-function product or refund our customers all or a portion of the value of the product. Other guarantees or indemnification agreements include guarantees of product and service performance and standby letters of credit for leased facilities and corporate credit cards. We have not recorded a liability related to these indemnification and guarantee provisions, and our guarantee and indemnification arrangements have not had any material impact on our consolidated financial statements to date.

Legal Proceedings

WSOU Investments, LLC

On November 25, 2020, WSOU Investments LLC ("WSOU") filed a lawsuit against us in the Western District of Texas asserting that certain of our products infringe three WSOU patents. WSOU's allegations are directed to certain features of our wireless and switching products. WSOU seeks remedies including monetary damages, attorney's fees and costs. On February 4, 2021, we filed an answer denying WSOU's allegations. On November 5, 2021, the case was transferred to the Northern District of California; trial has been set for October 23, 2023.

We intend to vigorously defend against the claims brought against us by WSOU. However, we cannot be certain that any of WSOU's claims will be resolved in our favor, regardless of the merits of those claims. Any adverse litigation ruling could result in a significant damages award against us and injunctive relief.

With respect to the legal proceedings described above, it is our belief that while a loss is not probable, it may be reasonably possible. Further, at this stage in the litigation, any possible loss or range of loss cannot be estimated. However, the outcome of litigation is inherently uncertain. Therefore, if this legal matter were resolved against us in a reporting period for a material amount, our consolidated financial statements for that reporting period could be materially adversely affected.

Other matters

In the ordinary course of business, we are a party to claims and legal proceedings including matters relating to commercial, employee relations, business practices and intellectual property.

We record a provision for contingent losses when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Based on currently available information, management does not believe that any liabilities relating to other unresolved matters are probable or that the amount of any resulting loss is estimable, and believes these other matters are not likely, individually and in the aggregate, to have a material adverse effect on our financial position, results of operations or cash flows. However, litigation is subject to inherent uncertainties and our view of these matters may change in the future. If an unfavorable outcome were to occur, there exists the possibility of a material adverse impact on our financial position, results of operations or cash flows for the period in which the unfavorable outcome occurs, and potentially in future periods.

8. Stockholders' Equity and Stock-Based Compensation

Stock Repurchase Programs

In April 2019, our board of directors authorized a $1.0 billion stock repurchase program (the "Repurchase Program"). This authorization allowed us to repurchase shares of our common stock over three years, and we completed our repurchases under the Repurchase Program during the fourth quarter of 2021. In the fourth quarter of 2021, our board of directors authorized an additional $1.0 billion stock repurchase program (the “New Repurchase Program”), which allows us to repurchase shares of our common stock to be funded from working capital. Repurchases may be made at management’s discretion from time to time on the open market, through privately negotiated transactions, transactions structured through investment banking institutions, block purchases, trading plans under Rule 10b5-1 of the Exchange Act, or a combination of the foregoing. The New Repurchase Program commenced in November 2021 and expires on the three year anniversary thereof. The New Repurchase Program does not obligate us to acquire any of our common stock, and may be suspended or discontinued by us at any time without prior notice. As of December 31, 2021, the remaining authorized amount for stock repurchases under the New Repurchase Program was approximately $927.0 million.

A summary of the stock repurchase activity under the Repurchase Programs is as follows, as adjusted to give effect to the Stock Split (in thousands, except per share amounts):

	Year Ended December 31,	
	2021	2020
Aggregate purchase price	$ 411,645	$ 395,173
Shares repurchased	4,537	8,048
Average price paid per share	$ 90.73	$ 49.11

The aggregate purchase price of repurchased shares of our common stock is recorded as a reduction to retained earnings. All shares repurchased under the Repurchase Programs have been retired.

2014 Equity Incentive Plan

In April 2014, the board of directors and stockholders approved the 2014 Equity Incentive Plan (the “2014 Plan”), effective on the first day that our common stock was publicly traded, and simultaneously terminated the 2004 and 2011 equity plans as to future grants. However, these plans will continue to govern the terms and conditions of the outstanding options previously granted thereunder.

Awards granted under the 2014 Plan could be in the form of Incentive Stock Options (“ISOs”), Nonstatutory Stock Options (“NSOs”), Restricted Stock Units (“RSUs”), Restricted Stock Awards (“RSAs”) or Stock Appreciation Rights (“SARs”). The number of shares available for grant and issuance under the 2014 Plan increases automatically on January 1 of each year commencing with 2016 by the number of shares equal to 3% of the outstanding shares of our common stock on the immediately preceding December 31, but not to exceed 50,000,000 shares (the “2014 Plan Evergreen Increase”), unless the board of directors, in its discretion, determines to make a smaller increase. Effective January 1, 2021, our board of directors authorized an increase

of 9,140,912 shares to the shares available for issuance under the 2014 Plan, as adjusted to give effect to the Stock Split. In fiscal 2020, in connection with our acquisition of Awake Security, we assumed the stock options outstanding under the Awake Security 2014 Equity Incentive Plan and registered an additional 461,352 shares to be available for future issuance, as adjusted to give effect to the Stock Split. As of December 31, 2021, there remained approximately 88.0 million shares available for issuance under the 2014 Plan. In February, 2022, our board of directors authorized an increase of 9,230,434 shares to shares available for future issuance under the 2014 Plan effective January 1, 2022.

2014 Employee Stock Purchase Plan

In April 2014, the board of directors and stockholders approved the 2014 Employee Stock Purchase Plan (the "ESPP"). The ESPP became effective on the first day that our common stock was publicly traded. The number of shares reserved for issuance under the ESPP increases automatically on January 1 of each year by the number of shares equal to 1% of our shares outstanding immediately preceding December 31, but not to exceed 10,000,000 shares, unless the board of directors, in its discretion, determines to make a smaller increase. Effective January 1, 2021, our board of directors authorized an increase of 3,046,968 shares as adjusted to give effect to the Stock Split to shares available for issuance under the ESPP. As of December 31, 2021, there remained 18.0 million shares available for issuance under the ESPP. In February, 2022, our board of directors authorized an increase of 3,076,811 shares to shares available for issuance under the ESPP effective January 1, 2022.

Under our ESPP, eligible employees are permitted to acquire shares of our common stock at 85% of the lower of the fair market value of our common stock on the first trading day of each offering period or on the exercise date. Each offering period lasts approximately two years starting on the first trading date after February 15 and August 15 of each year. Participants may purchase shares of common stock through payroll deductions up to 10% of their eligible compensation, subject to Internal Revenue Service mandated purchase limits.

During the year ended December 31, 2021, we issued 458,284 shares at an average purchase price of $46.50 under our ESPP, as adjusted to give effect to the Stock Split.

Stock Option Activities

The following table summarizes the option activities and related information, as adjusted to give effect to the Stock Split (in thousands, except years and per share amounts):

	Number of Shares Underlying Outstanding Options	Weighted-Average Exercise Price per Share	Weighted-Average Remaining Contractual Term (In Years)	Aggregate Intrinsic Value
Balance—December 31, 2020	13,719	$ 11.29	3.6	$ 841,659
Options granted	—	—		
Options exercised	(4,941)	9.30		
Options canceled	(93)	9.55		
Balance—December 31, 2021	8,685	$ 12.45	2.8	$ 1,140,369
Vested and exercisable—December 31, 2021	6,650	$ 9.70	2.4	$ 891,466

We did not grant any stock options in the year ended December 31, 2021. The weighted-average grant-date fair value of options granted during the years ended December 31, 2020 and 2019 was $46.24 and $26.86 per share, respectively, as adjusted to give effect to the Stock Split. The aggregate intrinsic value of options exercised during the years ended December 31, 2021, 2020 and 2019 was $410.9 million, $245.9 million and $323.1 million, respectively. The total fair value of options vested for the years ended December 31, 2021, 2020 and 2019 was approximately $25.3 million, $20.0 million and $23.0 million, respectively.

Restricted Stock Unit (RSU) Activities

The following table summarizes the RSU activities and related information, as adjusted to give effect to the Stock Split (in thousands, except per share amounts):

	Number of Shares	Weighted-Average Grant Date Fair Value Per Share
Unvested balance—December 31, 2020	7,263	$ 53.92
RSUs granted (1)	3,487	93.18
RSUs vested	(2,265)	53.15
RSUs forfeited/canceled	(664)	61.74
Unvested balance—December 31, 2021	7,821	$ 70.98

(1) Included in this amount are 268,000 performance-based RSUs ("PRSUs", as adjusted to give effect to the Stock Split) to our CEO and other executive officers that include both service and performance-based conditions. These PRSUs will vest over three to four years, and the ultimate number of shares eligible to vest will vary between 0% and 200% of the amount granted based on the achievement of certain performance metrics over the performance period and each holder's continued employment with Arista. As of December 31, 2021 we expect the achievement level of such awards to be at the higher end of the performance range.

The weighted-average grant-date fair value of RSUs granted during the years ended December 31, 2021, 2020 and 2019 was $93.18, $54.11 and $60.53 per share, respectively, as adjusted to give effect to the Stock Split. The total fair value of RSUs vested for the years ended December 31, 2021, 2020 and 2019 was approximately $120.4 million, $85.4 million, and $65.7 million, respectively.

Stock-Based Compensation Expense

The following table summarizes the stock-based compensation expense related to our equity awards (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Cost of revenue	$ 7,444	$ 6,272	$ 4,637
Research and development	99,770	79,913	53,068
Sales and marketing	46,521	34,944	29,168
General and administrative	33,140	15,913	14,407
Total stock-based compensation	$ 186,875	$ 137,042	$ 101,280

Determination of Fair Value

We record stock-based compensation awards based on fair value as of the grant date. We value RSUs at the market close price of our common stock on the grant date. For option awards and ESPP offerings, we use the Black-Scholes option pricing model to determine fair value. We recognize such costs as compensation expense generally on a straight-line basis over the requisite service period of the award.

Stock Options

We did not grant any stock options in the year ended December 31, 2021. For the years ended December 31, 2020 and 2019, the fair value of each stock option granted under our plans was estimated on the date of grant using the Black-Scholes option pricing model with the following assumptions:

	Year Ended December 31	
	2020	2019
Expected term (in years)	5.0	6.9
Risk-free interest rate	0.4 %	2.5 %
Expected volatility	43.5 %	42.8 %
Dividend rate	— %	— %

ESPP

The following table summarizes the assumptions relating to our ESPP:

	Year Ended December 31,		
	2021	2020	2019
Expected term (in years)	1.2	1.6	1.1
Risk-free interest rate	0.1 %	0.4 %	1.8 %
Expected volatility	40.2 %	45.1 %	42.5 %
Dividend rate	— %	— %	— %

As of December 31, 2021, there were $519.7 million of unrecognized compensation costs related to all unvested awards. The unamortized compensation costs are expected to be recognized over a weighted-average period of approximately 3.3 years.

9. Net Income Per Share

The following table sets forth the computation of our basic and diluted net income per share attributable to common stockholders, as adjusted to give effect to the Stock Split (in thousands, except per share amounts):

	Year Ended December 31,		
	2021	2020	2019
Numerator:			
Basic:			
Net income	$ 840,854	$ 634,557	$ 859,867
Less: undistributed earnings allocated to participating securities	—	—	(423)
Net income attributable to common stockholders, basic	$ 840,854	$ 634,557	$ 859,444
Diluted:			
Net income attributable to common stockholders, basic	$ 840,854	$ 634,557	$ 859,444
Add: undistributed earnings allocated to participating securities	—	—	24
Net income attributable to common stockholders, diluted	$ 840,854	$ 634,557	$ 859,468
Denominator:			
Basic:			
Weighted-average shares used in computing net income per share attributable to common stockholders, basic	306,512	303,936	305,248
Diluted:			
Weighted-average shares used in computing net income per share attributable to common stockholders, basic	306,512	303,936	305,248
Add weighted-average effects of dilutive securities:			
Stock options and RSUs	12,464	13,848	18,260
Employee stock purchase plan	262	76	8
Weighted-average shares used in computing net income per share attributable to common stockholders, diluted	319,238	317,860	323,516
Net income per share attributable to common stockholders:			
Basic	$ 2.74	$ 2.09	$ 2.82
Diluted	$ 2.63	$ 2.00	$ 2.66

The following weighted-average outstanding shares of common stock equivalents were excluded from the computation of diluted net income per share attributable to common stockholders because their effects would have been anti-dilutive for the periods presented, as adjusted to give effect to the Stock Split (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Stock options and RSUs	298	1,380	1,272
Employee stock purchase plan	37	332	328
Total	335	1,712	1,600

10. Income Taxes

The components of income before provision for income taxes are as follows (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Domestic	$ 737,620	$ 621,838	$ 727,632
Foreign	193,259	117,025	134,638
Income before income taxes	$ 930,879	$ 738,863	$ 862,270

The components of the provision for income taxes are as follows (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Current provision for income taxes:			
Federal	$ 137,203	$ 78,843	$ 58,187
State	38,478	21,135	19,067
Foreign	13,391	12,891	928
Total current	189,072	112,869	78,182
Deferred tax expense (benefit):			
Federal	(98,534)	(17,592)	362,056
State	(16,289)	(849)	(4,511)
Foreign	15,776	9,878	(433,324)
Total deferred tax expense (benefit)	(99,047)	(8,563)	(75,779)
Total provision for income taxes	$ 90,025	$ 104,306	$ 2,403

The reconciliation of the statutory federal income tax rate and our effective income tax rate is as follows (in percentages):

	Year Ended December 31,		
	2021	2020	2019
U.S. federal statutory income tax rate	21.00 %	21.00 %	21.00 %
State tax, net of federal benefit	1.89	2.23	1.30
Taxes on foreign earnings differential	(2.13)	(0.92)	(2.59)
Tax credits	(2.70)	(2.64)	(3.10)
Change in valuation allowance	0.01	(0.18)	(0.10)
Intra-Entity Sale	—	—	(9.95)
Stock-based compensation	(8.32)	(5.65)	(6.56)
Acquisition and integration costs	0.03	0.27	0.04
Other, net	(0.11)	0.01	0.24
Effective tax rate	9.67 %	14.12 %	0.28 %

The change in our income taxes was largely attributable to increased tax benefits from stock-based compensation, combined with a favorable change in jurisdictional mix of earnings. Excess tax benefits resulting from stock awards were $105.8 million, $58.7 million and $77.9 million for the years ended December 31, 2021, 2020 and 2019, respectively.

The tax effects of temporary differences that give rise to significant portions of deferred tax assets (liabilities) are as follows (in thousands):

	December 31,	
	2021	2020
Deferred tax assets:		
Intangible assets	$ 385,291	$ 392,053
Reserves and accruals not currently deductible	34,648	32,866
Deferred revenue	146,745	47,740
Tax credits	85,390	68,592
Lease financing obligation	17,845	22,080
Capitalized research and development expenses	28,012	28,009
Stock-based compensation	19,760	18,548
Net operating losses	21,284	23,998
Other	3,430	204
Gross deferred tax assets	742,405	634,090
Valuation allowance	(109,985)	(82,638)
Total deferred tax assets	632,420	551,452
Deferred tax liabilities:		
US tax on foreign earnings	(302,746)	(317,970)
Right of use asset	(14,892)	(18,764)
Other	(1,561)	(1,123)
Total deferred tax liabilities	(319,199)	(337,857)
Net deferred tax assets	$ 313,221	$ 213,595

The following table presents the breakdown between non-current deferred tax assets and liabilities (in thousands):

	December 31,	
	2021	2020
Deferred tax assets, non-current	$ 442,295	$ 441,531
Deferred tax liabilities, non-current	(129,074)	(227,936)
Total net deferred tax assets	$ 313,221	$ 213,595

Recognition of deferred tax assets is appropriate when realization of these assets is more likely than not. We believe, more likely than not, that we will have sufficient taxable income after deductions related to share-based awards to utilize our remaining deferred tax assets, with the exception of California, Canada, and U.K. deferred tax assets. In 2021, we increased our R&D tax credit carryforwards and capitalization in California and Canada, and increased our NOL carryforward in the U.K., which resulted in an increase of our valuation allowance on our deferred tax assets by $27.4 million. Therefore, we recorded a valuation allowance of $110.0 million and $82.6 million as of December 31, 2021 and 2020, respectively, against California, Canada, and U.K. deferred tax assets, since it is more likely than not that these assets will be not be recognized.

As of December 31, 2021, we had $227.5 million and $94.0 million of net operating loss carryforwards for federal and state income tax purposes, respectively, from the acquisition of Mojo Networks, Big Switch Networks and Awake Security. These federal and state losses will begin to expire in 2028 and 2029, respectively. For foreign jurisdictions, we had combined foreign net operating loss carryforwards of $14.4 million, which do not expire.

We had a federal credit of $2.0 million from the acquisition of Awake Security, which will begin to expire in 2038, and a California state credit of $156.2 million, which can be carried over indefinitely. For foreign jurisdictions, we had $0.6 million of Canadian scientific research and experimental development tax credit carry-forwards, which will begin to expire in 2034.

Utilization of the net operating losses and tax credit carryforwards may be subject to limitations due to ownership change limitations provided in the Internal Revenue code and similar state or foreign provisions.

The Tax Cuts and Jobs Act enacted on December 22, 2017 requires a Transition Tax on previously untaxed accumulated and current foreign earnings. Correspondingly, all undistributed earnings are deemed to be taxed and distributions of the unremitted earnings do not have any significant U.S. federal income tax impact. We have not provided for any remaining tax effect, if any, of limited outside basis differences of our foreign subsidiaries based upon plans of future reinvestment. The determination of the future tax consequences of the remittance of these earnings is not practicable.

Uncertain Tax Positions

We recognize uncertain tax positions only to the extent that management believes that it is more likely than not that the position will be sustained. The reconciliation of the beginning and ending amount of gross unrecognized tax benefits as of December 31, 2021, 2020 and 2019 is as follows (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Gross unrecognized tax benefits—beginning balance	$ 92,500	$ 93,806	$ 74,436
Increases related to tax positions taken in a prior year	2,476	3,103	11,171
Increases related to tax positions taken during current year	21,104	20,274	22,714
Decreases related to tax positions taken in a prior year	(853)	(18,029)	(89)
Decreases related to settlements with taxing authorities	—	—	(12,388)
Decreases related to lapse of statute of limitations	(414)	(6,654)	(2,120)
Adjustment for acquisition	—	—	82
Gross unrecognized tax benefits—ending balance	$ 114,813	$ 92,500	$ 93,806

As of December 31, 2021, 2020 and 2019, the total amount of gross unrecognized tax benefits was $114.8 million, $92.5 million and $93.8 million, respectively, of which $60.9 million, $44.7 million and $28.5 million would affect our effective tax rate if recognized.

Our policy is to recognize interest and penalties accrued on any unrecognized tax benefits as a component of income tax expense. We have recorded a net expense for interest and penalties of $1.6 million and $0.1 million in the years ended December 31, 2021 and 2020, respectively. As of December 31, 2021 and 2020, we recognized a liability for interest and penalties of $3.6 million and $2.0 million, respectively.

The statute of limitations for Federal and most states remains open for 2017 and forward. Some states have net operating loss and tax credit carryforwards, and therefore remain open to examination. The majority of our foreign tax returns are open to audit under the statute of limitations of the respective foreign countries, where the subsidiaries are located. It is possible that the amount of existing unrecognized tax benefits may decrease within the next 12 months as a result of statute of limitation lapses or payments to tax authorities in certain jurisdictions; however, an estimate of the range cannot be made.

11. Geographical Information

We operate as one reportable segment. The following table represents revenue based on customers' shipping addresses (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Americas	$ 2,156,183	$ 1,771,992	$ 1,833,163
Europe, Middle East and Africa	486,836	326,729	381,651
Asia Pacific	305,018	218,791	195,892
Total revenue	$ 2,948,037	$ 2,317,512	$ 2,410,706

Long-lived assets, excluding intercompany receivables, investments in subsidiaries, investments in privately-held companies and deferred tax assets, net by location are summarized as follows (in thousands):

	December 31,	
	2021	2020
United States	$ 62,163	$ 24,110
International	16,471	8,121
Total	$ 78,634	$ 32,231

12. Post-Employment Benefits

We have a 401(k) Plan that covers substantially all of our employees in the U.S. Effective January 1, 2017, we have elected to match 100% of employees' contributions up to a maximum of 3% of an employee's annual salary. Matching contributions are immediately vested. For the years ended December 31, 2021, 2020 and 2019, we contributed approximately $9.8 million, $7.4 million and $5.1 million for the matching contributions, respectively.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Management, with the participation of our Chief Executive Officer ("CEO") and our Chief Financial Officer ("CFO"), evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2021. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Based on the evaluation of our disclosure controls and procedures as of December 31, 2021, our CEO and CFO concluded that, as of such date, our disclosure controls and procedures are designed at a reasonable assurance level and are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in Securities and Exchange Commission (SEC) rules and forms, and that such information is accumulated and communicated to our management, including our CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Securities and Exchange Act of 1934, as amended, that occurred during the year ended December 31, 2021 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations of Internal Controls

Our management, including our CEO and CFO, does not expect that our disclosure controls and procedures or our internal controls over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control

over financial reporting is a process designed under the supervision of our principal executive and principal financial officers to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external purposes in accordance with U.S. generally accepted accounting principles.

Our internal control over financial reporting includes those policies and procedures that: (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on the Consolidated Financial Statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2021, based on the framework set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control - Integrated Framework (2013 framework). Based on that assessment, management concluded that, as of December 31, 2021, its internal control over financial reporting was effective to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with U.S. GAAP.

The effectiveness of our internal control over financial reporting, as of December 31, 2021, has been audited by Ernst & Young LLP, the independent registered public accounting firm that audits our Consolidated Financial Statements, as stated in their report included in Item 8 of this Annual Report on Form 10-K, which expresses an unqualified opinion on the effectiveness of our internal control over financial reporting as of December 31, 2021.

Item 9B. Other Information

Disclosure Pursuant to Section 13(r) of the Exchange Act

Under Section 13(r) of the Exchange Act, the Company is required to disclose in its periodic reports if it or any of its affiliates knowingly conducted a transaction or dealing with entities or individuals designated pursuant to certain Executive Orders.

On March 2, 2021, the U.S. Secretary of State designated the Russian Federal Security Service (the “FSB”) as a blocked party under Executive Order 13382. On the same day, the U.S. Department of the Treasury’s Office of Foreign Assets Control updated General License No. 1B to authorize transactions and activities with the FSB that are necessary and ordinarily incident to requesting, receiving, utilizing, paying for, or dealing in certain licenses, permits, certifications or notifications issued or registered by the FSB for the importation, distribution or use of certain information technology products in the Russian Federation.

Arista Networks Limited, one of our subsidiaries, authorized certain third-party resellers in Russia to periodically file notifications with, or apply for import licenses and permits from, the FSB on our behalf in connection with the importation of our products into Russia, as permitted under the OFAC General License. In the fiscal year ended December 31, 2021, resellers filed one or more notifications with and/or applied for one or more import licenses and permits from the FSB on our behalf. There was no gross revenue or net profits of the Company or any subsidiary directly associated with these filing activities. The Company and its subsidiaries do not sell products or provide services to the FSB. The Company and its subsidiaries will continue to authorize our resellers to file notifications with and apply for import licenses and permits from the FSB to qualify our products for importation and distribution in the Russian Federation to the extent permitted by applicable law.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not Applicable.

PART III

Item 10. Directors, Executive Officers, and Corporate Governance

Information required by this Item is incorporated herein by reference to our definitive proxy statement with respect to our 2022 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

Item 11. Executive Compensation

Information required by this Item is incorporated herein by reference to our definitive proxy statement with respect to our 2022 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information required by this Item is incorporated herein by reference to our definitive proxy statement with respect to our 2022 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

Item 13. Certain Relationships and Related Transactions and Director Independence

Information required by this Item is incorporated herein by reference to our definitive proxy statement with respect to our 2022 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

Item 14. Principal Accountant Fees and Services

Information required by this Item is incorporated herein by reference to our definitive proxy statement with respect to our 2022 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

PART IV

Item 15. Exhibits and Financial Statement Schedules

Documents filed as part of this Annual Report on Form 10-K are as follows:

1. Consolidated Financial Statements

Our Consolidated Financial Statements are listed in the “Index to Consolidated Financial Statements” under Part II, Item 8 of this Annual Report on Form 10-K.

2. Financial Statement Schedules

Financial statement schedules have been omitted because they are not required, not applicable, not present in amounts sufficient to require submission of the schedule, or the required information is shown in the Consolidated Financial Statements or Notes thereto.

3. Exhibits

The exhibits listed in the following Exhibit Index are filed or incorporated by reference into this report:

EXHIBIT INDEX

Exhibit Number	Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
3.1	Amended and Restated Certificate of Incorporation of the Registrant.	10-Q	001-36468	3.1	8/8/2014	
3.2	Bylaws of the Registrant.	10-Q	001-36468	3.2	8/8/2014	
4.1	Form of the Registrant's common stock certificate.	S-1/A	333-194899	4.1	4/21/2014	
4.2	Description of Registrant's securities registered under Section 12 of the Exchange Act					✓
10.1	Form of Indemnification Agreement between the Registrant and each of its directors and executive officers.	10-Q	001-36468	10.1	11/1/2019	
10.2 †	2004 Equity Incentive Plan.	S-1	333-194899	10.2	3/31/2014	
10.3 †	2011 Equity Incentive Plan.	S-1	333-194899	10.3	3/31/2014	
10.4 †	2014 Equity Incentive Plan.	S-1/A	333-194899	10.4	5/27/2014	
10.5 †	2014 Employee Stock Purchase Plan.	10-K	001-36468	10.5	3/12/2015	
10.6 †	Offer Letter, dated October 17, 2004, by and between the Registrant and Kenneth Duda.	S-1	333-194899	10.6	3/31/2014	
10.7 †	Offer Letter, dated June 8, 2007, by and between the Registrant and Anshul Sadana.	S-1	333-194899	10.7	3/31/2014	
10.8 †	Offer Letter, dated August 1, 2008, by and between the Registrant and Jayshree Ullal.	S-1	333-194899	10.8	3/31/2014	
10.9 †	Offer Letter, dated March 27, 2013, by and between the Registrant and Charles Giancarlo.	S-1	333-194899	10.9	3/31/2014	
10.10 †	Offer Letter, dated June 3, 2013, by and between the Registrant and Ann Mather.	S-1	333-194899	10.10	3/31/2014	
10.11	Lease between Arista Networks, Inc. and The Irvine Company LLC, dated August 10, 2012, as amended on February 28, 2013.	S-1	333-194899	10.15	3/31/2014	
10.12	Second Amendment to Lease, by and between Arista Networks, Inc. and The Irvine Company LLC, dated July 30, 2014.	10-Q	001-36468	10.1	8/8/2014	
10.13	License Agreement, dated November 30, 2004, by and between the Registrant and OptumSoft, Inc.	S-1	333-194899	10.16	3/31/2014	
10.14‡	Manufacturing Services Letter Agreement, dated February 5, 2007, between the Registrant and Jabil Circuit, Inc.	S-1	333-194899	10.17	3/31/2014	
10.15 †	Employee Incentive Plan.	S-1/A	333-194899	10.21	4/21/2014	
10.16 †	Offer Letter, dated May 18, 2015, by and between the Registrant and Ita Brennan.	8-K	001-36468	10.1	5/14/2015	
10.17 †	Severance Agreement, effective May 18, 2015, by and between the Registrant and Ita Brennan.	8-K	001-36468	10.2	5/14/2015	
10.18 †	2015 Global Sales Incentive Plan.	10-Q	001-36468	10.3	5/5/2016	
10.19 †	Offer letter, dated January 2, 2013, by and between the Registrant and Marc Taxay.	10-Q	001-36468	10.1	5/8/2017	
10.20 †	Severance Agreement, dated March 30, 2015, by and between the Registrant and Marc Taxay.	10-Q	001-36468	10.2	5/8/2017	
10.21 †	Offer letter, dated February 14, 2017, by and between the Registrant and John McCool.	10-Q	001-36468	10.3	5/8/2017	

Exhibit Number	Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.22 †	Severance Agreement, dated March 20, 2017, by and between the Registrant and John McCool.	10-Q	001-36468	10.4	5/8/2017	
10.23 ‡	Term Sheet of Mutual Release and Settlement Agreement, dated August 6, 2018, between the Registrant and Cisco Systems, Inc.	10-Q	001-36468	10.1	11/5/2018	
10.24 ‡	Mutual Release and Settlement Agreement, dated August 6, 2018, by and between the Registrant and Cisco Systems, Inc.	10-K	001-36468	10.24	2/15/2019	
10.25 †	Awake Security, Inc. 2014 Equity Incentive Plan	S-8	333-249591	99.1	10/22/2020	
21.1	List of Subsidiaries of the Registrant.					✓
23.1	Consent of Independent Registered Public Accounting Firm.					✓
31.1	Certification of the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					✓
31.2	Certification of the Chief Financial Officer pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002.					✓
32.1*	Certifications of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002.					✓
101.INS	XBRL Instance Document.					
101.SCH	XBRL Taxonomy Extension Schema Document.					
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.					
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.					
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.					
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.					
104.0	Cover Page Interactive File (formatted as Inline XBRL and contained in Exhibit 101)					

† Indicates a management contract or compensatory plan or arrangement.

‡ Confidential treatment has been requested for portions of this exhibit. These portions have been omitted and have been filed separately with the Securities and Exchange Commission.

* The certifications attached as Exhibit 32.1 that accompany this Annual Report on Form 10-K are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of Arista Networks, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Annual Report on Form 10-K, irrespective of any general incorporation language contained in such filing.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

ARISTA NETWORKS, INC.
(Registrant)

Dated: February 14, 2022

By: /s/ JAYSHREE ULLAL
Jayshree Ullal
President, Chief Executive Officer and Director
(Principal Executive Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Jayshree Ullal and Ita Brennan, jointly and severally, his or her attorney-in-fact, with the power of substitution, for him or her in any and all capacities, to sign any amendments to this Annual Report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his or her substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

Signature	Title	Date
/s/ JAYSHREE ULLAL **Jayshree Ullal**	President, Chief Executive Officer and Director (Principal Executive Officer)	February 14, 2022
/s/ ITA BRENNAN **Ita Brennan**	Chief Financial Officer (Principal Accounting and Financial Officer)	February 14, 2022
/s/ ANDY BECHTOLSHEIM **Andy Bechtolsheim**	Founder, Chief Development Officer and Chairman of the Board of Directors	February 14, 2022
/s/ ANN MATHER **Ann Mather**	Director	February 14, 2022
/s/ CHARLES GIANCARLO **Charles Giancarlo**	Director	February 14, 2022
/s/ DAN SCHEINMAN **Dan Scheinman**	Director	February 14, 2022
/s/ KELLY BATTLES **Kelly Battles**	Director	February 14, 2022
/s/ LEWIS CHEW **Lewis Chew**	Director	February 14, 2022
/s/ MARK TEMPLETON **Mark Templeton**	Director	February 14, 2022
/s/ NIKOS THEODOSOPOULOS **Nikos Theodosopoulos**	Director	February 14, 2022

Exhibit 4.2

DESCRIPTION OF CAPITAL STOCK

The following description of the capital stock of Arista Networks, Inc. ("us," "our," "we" or the "Company") is a summary of the rights of our capital stock and summarizes certain provisions of our amended and restated certificate of incorporation and our amended and restated bylaws. This summary does not purport to be complete and is qualified in its entirety by the provisions of our amended and restated certificate of incorporation, amended and restated bylaws and 2004 Rights Agreement, copies of which have been filed as exhibits to this Annual Report on Form 10-K, as well as to the applicable provisions of the Delaware General Corporation Law.

Our authorized capital stock consists of 1,100,000,000 shares, with a par value of $0.0001 per share, of which:

- 1,000,000,000 shares are designated as common stock; and
- 100,000,000 shares are designated as preferred stock.

Common Stock

The holders of common stock are entitled to one vote per share on all matters submitted to a vote of our stockholders and do not have cumulative voting rights. Accordingly, holders of a majority of the shares of common stock entitled to vote in any election of directors may elect all of the directors standing for election. Subject to preferences that may be applicable to any preferred stock outstanding at the time, the holders of outstanding shares of common stock are entitled to receive ratably any dividends declared by our board of directors out of assets legally available. Upon our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preference of any then outstanding shares of preferred stock. Holders of common stock have no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock.

Preferred Stock

Pursuant to our amended and restated certificate of incorporation, our board of directors has the authority, without further action by the stockholders, to issue, from time to time, up to 100,000,000 shares of preferred stock in one or more series. Our board of directors may designate the rights, preferences, privileges and restrictions of the preferred stock, including dividend rights, conversion rights, voting rights, redemption rights, liquidation preference, sinking fund terms and the number of shares constituting any series or the designation of any series. The issuance of preferred stock could have the effect of restricting dividends on the common stock, diluting the voting power of the common stock, impairing the liquidation rights of the common stock or delaying, deterring or preventing a change in control. Such issuance could have the effect of decreasing the market price of the common stock.

Registration Rights—2004 Rights Agreement

Certain holders of shares of our common stock or their permitted transferees are entitled to rights with respect to the registration of these shares under the Securities Act of 1933, as amended (the "Securities Act"). These rights are provided under the terms of a rights agreement dated October 16, 2004 between us and the holders of these shares (the "2004 Rights Agreement") and include demand registration rights, short-form registration rights and piggyback registration rights.

The registration rights provided for in the 2004 Rights Agreement terminate seven (7) years following the completion of our initial public offering or, with respect to any particular stockholder, at such time that such stockholder can sell all of its registrable securities during any three-month period pursuant to Rule 144 of the Securities Act or the registrable securities of such stockholders represent less than one percent of our outstanding capital stock.

Demand Registration Rights

Certain holders of shares of our common stock or their permitted transferees, are entitled to demand registration rights pursuant to the 2004 Rights Agreement. Under the terms of the 2004 Rights Agreement, we will be required, upon the written request of holders of at least 50% of the shares that are entitled to registration rights under the 2004 Rights Agreement with respect to a registration with an anticipated aggregate offering price, before any underwriting discounts and commissions, in excess of $25.0 million, to register, as soon as practicable, all or a portion of these shares for public resale. We are required to effect only one registration pursuant to this provision of the rights agreement. Depending on certain conditions, however, we may defer such registration for up to 90 days twice in any 12-month period. We are not required to

effect a demand registration earlier than 180 days after the effective date of this offering. If the holders requesting registration intend to distribute their shares by means of an underwriting, the underwriters of such offering will have the right to limit the number of shares to be underwritten for reasons related to the marketing of the shares.

Short-Form Registration Rights

Certain holders of shares of our common stock or their permitted transferees are also entitled to short-form registration rights pursuant to the 2004 Rights Agreement. If we are eligible to file a registration statement on Form S-3, these holders have the right, upon written request from holders of these shares, to have such shares registered by us if the proposed aggregate offering price of the shares to be registered by the holders requesting registration is at least $2.5 million, net of any underwriter's discounts or commissions, subject to exceptions set forth in the 2004 Rights Agreement.

Piggyback Registration Rights

Certain holders of shares of our common stock or their permitted transferees are entitled to piggyback registration rights pursuant to the 2004 Rights Agreement. If we register any of our securities under the Securities Act, subject to certain exceptions, the holders of these shares will be entitled to notice of the registration and to include their registrable securities in the registration. The underwriters of any underwritten offering have the right to limit the number of shares registered by these holders for marketing reasons, subject to limitations set forth in the 2004 Rights Agreement.

Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions and certain provisions of Delaware law, which are summarized below, could discourage takeovers, coercive or otherwise. These provisions are also designed, in part, to encourage persons seeking to acquire control of us to negotiate first with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate with an unfriendly or unsolicited acquirer outweigh the disadvantages of discouraging a proposal to acquire us.

Undesignated Preferred Stock. As discussed above under "—Preferred Stock," our board of directors has the ability to designate and issue preferred stock with voting or other rights or preferences that could deter hostile takeovers or delay changes in our control or management.

Limits on Ability of Stockholders to Act by Written Consent or Call a Special Meeting. Our amended and restated certificate of incorporation provides that our stockholders may not act by written consent. This limit on the ability of stockholders to act by written consent may lengthen the amount of time required to take stockholder actions. As a result, the holders of a majority of our capital stock would not be able to amend the amended and restated bylaws or remove directors without holding a meeting of stockholders called in accordance with the amended and restated bylaws.

In addition, our amended and restated bylaws provides that special meetings of the stockholders may be called only by the chairman of the board, the chief executive officer, the president (in the absence of a chief executive officer) or our board of directors. A stockholder may not call a special meeting, which may delay the ability of our stockholders to force consideration of a proposal or for holders controlling a majority of our capital stock to take any action, including the removal of directors.

Requirements for Advance Notification of Stockholder Nominations and Proposals. Our amended and restated bylaws contain advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of our board of directors or a committee of the board of directors. These advance notice procedures may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed and may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempt to obtain control of our company.

Board Classification. Our amended and restated certificate of incorporation provides that our board of directors is divided into three classes, one class of which is elected each year by our stockholders. The directors in each class serve for a three-year term. Our classified board of directors may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us because it generally makes it more difficult for stockholders to replace a majority of the directors.

Election and Removal of Directors. Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that establish specific procedures for appointing and removing members of our board of directors. Under our amended and restated certificate of incorporation and amended and restated bylaws, vacancies and newly created directorships on our board of directors may be filled only by a vote of a majority of the directors then serving on the board of directors. Under our amended and restated certificate of incorporation and amended and restated bylaws, directors may be

removed only for cause by the affirmative vote of the holders of a majority of the shares then entitled to vote at an election of directors.

No Cumulative Voting. The Delaware General Corporation Law provides that stockholders are not entitled to the right to cumulate votes in the election of directors unless our restated certificate of incorporation provides otherwise. Our restated certificate of incorporation and amended and restated bylaws do not expressly provide for cumulative voting. Without cumulative voting, a minority stockholder may not be able to gain as many seats on our board of directors as the stockholder would be able to gain if cumulative voting were permitted. The absence of cumulative voting makes it more difficult for a minority stockholder to gain a seat on our board of directors to influence our board of directors' decision regarding a takeover.

Amendment of Charter Provision. Any amendment of the above provisions in our amended and restated certificate of incorporation would require approval by holders of at least two-thirds of our then outstanding common stock.

Delaware Anti-Takeover Statute. We are subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. In general, Section 203 prohibits a publicly held Delaware corporation from engaging, under certain circumstances, in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder unless:

- prior to the date of the transaction, our board of directors approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, (1) shares owned by persons who are directors and also officers and (2) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to the date of the transaction, the business combination is approved by our board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2⁄3% of the outstanding voting stock that is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting stock. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. We also anticipate that Section 203 may discourage attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

The provisions of Delaware law and the provisions of our amended and restated certificate of incorporation and amended and restated bylaws could have the effect of discouraging others from attempting hostile takeovers and as a consequence, they might also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions might also have the effect of preventing changes in our management. It is also possible that these provisions could make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A.

Exhibit 21.1

SUBSIDIARIES OF ARISTA NETWORKS, INC.

Name of Subsidiary	Jurisdiction of Incorporation
Arista Networks Australia Pty Ltd	Australia
Arista Networks Austria GmbH	Austria
Arista Networks Canada Ltd.	Canada
Arista Networks ULC	Canada
Arista Networks (Shanghai) Co., Ltd.	China
Arista Networks Cyprus Ltd	Cyprus
Arista Networks EURL	France
Arista Networks GmbH	Germany
Arista Networks Hong Kong Limited	Hong Kong
Arista Networks India Private Limited	India
Mojo Networks Private Limited	India
Arista Networks Limited	Ireland
Arista Networks International Limited	Ireland
Arista Technology Ireland Unlimited Company	Ireland
Arista Holding Limited	Ireland
Arista Networks Israel Ltd	Israel
Arista Networks Japan Ltd.	Japan
Arista Networks Korea, LLC	Korea
Arista Networks Malaysia Sdn. Bhd.	Malaysia
Arista Networks Mexico S. de R.L. de C.V.	Mexico
Arista Networks B.V.	The Netherlands
Arista Networks Poland Spółka z ograniczoną	Poland
Arista Networks Singapore Private Ltd.	Singapore
Arista Networks Spain S.L.	Spain
Arista Networks Sweden AB	Sweden
Arista Networks Taiwan Limited	Taiwan
Arista Networks Middle East DMCC	United Arab Emirates
Arista Networks UK Ltd	United Kingdom
ANET LLC	United States
Arista Networks Holding Corporation	United States
Mojo Networks, LLC	United States
Big Switch Networks LLC	United States
Big Switch Networks GC, Inc.	United States
Awake Security LLC	United States

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements (Form S-8 Nos. 333-196550, 333-202919, 333-209723, 333-216136, 333-223093, 333-229730, 333-236426, 333-249591, and 333-253277) of Arista Networks, Inc. of our reports dated February 14, 2022, with respect to the consolidated financial statements of Arista Networks, Inc. and the effectiveness of internal control over financial reporting of Arista Networks, Inc. included in this Annual Report (Form 10-K) for the year ended December 31, 2021, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

San Jose, California
February 14, 2022

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Jayshree Ullal, certify that:

1. I have reviewed this Annual Report on Form 10-K of Arista Networks, 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: February 14, 2022

/s/ JAYSHREE ULLAL
Jayshree Ullal
President, Chief Executive Officer and Director
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Ita Brennan, certify that:

1. I have reviewed this Annual Report on Form 10-K of Arista Networks, 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: February 14, 2022

/s/ ITA BRENNAN

Ita Brennan
Chief Financial Officer
(Principal Accounting and Financial Officer)

Exhibit 32.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER AND PRINCIPAL FINANCIAL OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Jayshree Ullal, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Arista Networks, Inc. on Form 10-K for the fiscal year ended December 31, 2021, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and that information contained in such Annual Report on Form 10-K fairly presents, in all material respects, the financial condition and results of operations of Arista Networks, Inc.

Date: February 14, 2022

By: /s/ JAYSHREE ULLAL
Name: Jayshree Ullal
Title: President, Chief Executive Officer and Director
(Principal Executive Officer)

I, Ita Brennan, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Arista Networks, Inc. on Form 10-K for the fiscal year ended December 31, 2021, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and that information contained in such Annual Report on Form 10-K fairly presents, in all material respects, the financial condition and results of operations of Arista Networks, Inc.

Date: February 14, 2022

By: /s/ ITA BRENNAN
Name: Ita Brennan
Title: Chief Financial Officer
(Principal Accounting and Financial Officer)