

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the quarterly period ended June 30, 2019

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

(State or Other Jurisdiction of Incorporation or Organization)

20-1751121

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

5453 Great America Parkway , Santa Clara , California

(Address of principal executive offices)

95054

(Zip Code)

(408) 547-5500

(Registrant's telephone number, including area code)

Not Applicable

(Former name, former address and former fiscal year, if changed since last report)

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

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, 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 ☒

Non-accelerated filer ☐

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 is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The number of shares outstanding of the registrant's Common Stock, \$0.0001 par value, as of July 26, 2019 was 76,644,302 .

ARISTA NETWORKS, INC.

TABLE OF CONTENTS

	<u>Page</u>
PART I. FINANCIAL INFORMATION	
Item 1.	<u>Financial Statements (Unaudited)</u> <u>1</u>
	<u>Condensed Consolidated Balance Sheets as of June 30, 2019 and December 31, 2018</u> <u>1</u>
	<u>Condensed Consolidated Statements of Operations for the Three and Six Months Ended June 30, 2019 and 2018</u> <u>2</u>
	<u>Condensed Consolidated Statements of Comprehensive Income (Loss) for the Three and Six Months Ended June 30, 2019 and 2018</u> <u>3</u>
	<u>Condensed Consolidated Statements of Stockholders' Equity for the Three and Six Months Ended June 30, 2019 and 2018</u> <u>4</u>
	<u>Condensed Consolidated Statements of Cash Flows for the Six Months Ended June 30, 2019 and 2018</u> <u>5</u>
	<u>Notes to Condensed Consolidated Financial Statements</u> <u>6</u>
Item 2.	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u> <u>21</u>
Item 3.	<u>Quantitative and Qualitative Disclosures About Market Risk</u> <u>28</u>
Item 4.	<u>Controls and Procedures</u> <u>29</u>
PART II. OTHER INFORMATION	
Item 1.	<u>Legal Proceedings</u> <u>29</u>
Item 1A.	<u>Risk Factors</u> <u>29</u>
Item 2.	<u>Unregistered Sales of Equity Securities and Use of Proceeds</u> <u>59</u>
Item 3.	<u>Defaults Upon Senior Securities</u> <u>60</u>
Item 4.	<u>Mine Safety Disclosures</u> <u>60</u>
Item 5.	<u>Other Information</u> <u>60</u>
Item 6.	<u>Exhibits</u> <u>61</u>
	<u>Signatures</u> <u>62</u>

PART I. FINANCIAL INFORMATION
Item 1. Financial Statements (Unaudited)
**ARISTA NETWORKS, INC.
Condensed Consolidated Balance Sheets
(Unaudited, in thousands, except par value)**

	June 30, 2019	December 31, 2018
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 944,414	\$ 649,950
Marketable securities	1,313,389	1,306,197
Accounts receivable, net of rebates and allowances of \$7,488 and \$9,120, respectively	343,080	331,777
Inventories	314,177	264,557
Prepaid expenses and other current assets	113,458	162,321
Total current assets	3,028,518	2,714,802
Property and equipment, net	41,023	75,355
Acquisition-related intangible assets, net	51,612	58,610
Goodwill	53,684	53,684
Investments	31,486	30,336
Operating lease right-of-use assets	94,203	—
Deferred tax assets	113,660	126,492
Other assets	27,106	22,704
TOTAL ASSETS	\$ 3,441,292	\$ 3,081,983
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	\$ 86,134	\$ 93,757
Accrued liabilities	113,898	123,254
Deferred revenue	272,366	358,586
Other current liabilities	52,622	30,907
Total current liabilities	525,020	606,504
Income taxes payable	45,804	36,167
Operating lease liabilities, non-current	89,705	—
Finance lease liabilities, non-current	—	35,431
Deferred revenue, non-current	229,852	228,641
Other long-term liabilities	25,351	31,851
TOTAL LIABILITIES	915,732	938,594
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 June 30, 2019 and December 31, 2018	—	—
Common stock, \$0.0001 par value—1,000,000 shares authorized as of June 30, 2019 and December 31, 2018; 76,555 and 75,668 shares issued and outstanding as of June 30, 2019 and December 31, 2018	8	8
Additional paid-in capital	1,038,740	956,572
Retained earnings	1,484,777	1,190,803
Accumulated other comprehensive income (loss)	2,035	(3,994)
TOTAL STOCKHOLDERS' EQUITY	2,525,560	2,143,389
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 3,441,292	\$ 3,081,983

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

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Revenue:				
Product	\$ 513,171	\$ 444,767	\$ 1,018,586	\$ 852,384
Service	95,150	75,078	185,159	139,950
Total revenue	608,321	519,845	1,203,745	992,334
Cost of revenue:				
Product	200,534	171,622	398,686	328,313
Service	17,596	14,340	34,298	27,219
Total cost of revenue	218,130	185,962	432,984	355,532
Gross profit	390,191	333,883	770,761	636,802
Operating expenses:				
Research and development	114,295	104,078	233,964	206,440
Sales and marketing	53,040	46,188	104,093	88,328
General and administrative	16,019	18,420	31,525	38,099
Legal settlement	—	405,000	—	405,000
Total operating expenses	183,354	573,686	369,582	737,867
Income (loss) from operations	206,837	(239,803)	401,179	(101,065)
Other income (expense), net	13,811	(2,169)	26,144	1,987
Income (loss) before income taxes	220,648	(241,972)	427,323	(99,078)
Provision for (benefit from) income taxes	31,397	(86,703)	37,043	(88,347)
Net income (loss)	\$ 189,251	\$ (155,269)	\$ 390,280	\$ (10,731)
Net income (loss) attributable to common stockholders:				
Basic	\$ 189,152	\$ (155,187)	\$ 390,063	\$ (10,725)
Diluted	\$ 189,158	\$ (155,187)	\$ 390,076	\$ (10,725)
Net income (loss) per share attributable to common stockholders:				
Basic	\$ 2.47	\$ (2.08)	\$ 5.12	\$ (0.14)
Diluted	\$ 2.33	\$ (2.08)	\$ 4.80	\$ (0.14)
Weighted-average shares used in computing net income (loss) per share attributable to common stockholders:				
Basic	76,552	74,503	76,238	74,250
Diluted	81,335	74,503	81,271	74,250

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

ARISTA NETWORKS, INC.
Condensed Consolidated Statements of Comprehensive Income (Loss)
(Unaudited, in thousands)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net income (loss)	\$ 189,251	\$ (155,269)	\$ 390,280	\$ (10,731)
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments	(272)	(1,167)	(37)	(814)
Net change in unrealized gains (losses) on available-for-sale securities	2,887	242	6,066	(1,799)
Other comprehensive income (loss)	2,615	(925)	6,029	(2,613)
Comprehensive income (loss)	<u>\$ 191,866</u>	<u>\$ (156,194)</u>	<u>\$ 396,309</u>	<u>\$ (13,344)</u>

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

ARISTA NETWORKS, INC.
Condensed Consolidated Statements of Stockholders' Equity
(Unaudited, in thousands)

	Three Months Ended June 30, 2019						Six Months Ended June 30, 2019					
	Common Stock		Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity	Common Stock		Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Amount					Shares	Amount				
Balance at beginning of period	76,453	\$ 8	\$1,005,405	\$1,395,534	\$ (580)	\$ 2,400,367	75,668	\$ 8	\$ 956,572	\$1,190,803	\$ (3,994)	\$ 2,143,389
Cumulative-effect adjustment to beginning balance ⁽¹⁾	—	—	—	—	—	—	—	—	—	3,702	—	3,702
Net income	—	—	—	189,251	—	189,251	—	—	—	390,280	—	390,280
Other comprehensive income, net of tax	—	—	—	—	2,615	2,615	—	—	—	—	6,029	6,029
Stock-based compensation	—	—	24,297	—	—	24,297	—	—	48,588	—	—	48,588
Issuance of common stock in connection with employee equity incentive plans	521	—	11,781	—	—	11,781	1,312	—	38,104	—	—	38,104
Tax withholding paid for net share settlement of equity awards	(12)	—	(2,812)	—	—	(2,812)	(18)	—	(4,662)	—	—	(4,662)
Vesting of early-exercised stock options	—	—	69	—	—	69	—	—	138	—	—	138
Repurchase of common stock	(407)	—	—	(100,008)	—	(100,008)	(407)	—	—	(100,008)	—	(100,008)
Balance at end of period	76,555	\$ 8	\$1,038,740	\$1,484,777	\$ 2,035	\$ 2,525,560	76,555	\$ 8	\$1,038,740	\$1,484,777	\$ 2,035	\$ 2,525,560

(1) On January 1, 2019, we adopted Accounting Standard Codification Topic 842 - *Leases* ("ASC 842"), which resulted in a cumulative-effect adjustment to the beginning balance of Retained Earnings for 2019. See Note 1 of the accompanying notes for further details.

	Three Months Ended June 30, 2018						Six Months Ended June 30, 2018					
	Common Stock		Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity	Common Stock		Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Amount					Shares	Amount				
Balance at beginning of period	74,338	\$ 8	\$841,431	\$1,007,226	\$ (3,626)	\$ 1,845,039	73,706	\$ 7	\$804,731	\$859,114	\$ (1,938)	\$ 1,661,914
Cumulative-effect adjustment to beginning balance	—	—	—	—	—	—	—	—	—	3,574	—	3,574
Net loss	—	—	—	(155,269)	—	(155,269)	—	—	—	(10,731)	—	(10,731)
Other comprehensive loss, net of tax	—	—	—	—	(925)	(925)	—	—	—	—	(2,613)	(2,613)
Stock-based compensation	—	—	22,478	—	—	22,478	—	—	43,329	—	—	43,329
Issuance of common stock in connection with employee equity incentive plans	465	—	11,510	—	—	11,510	1,103	1	28,809	—	—	28,810

Tax withholding paid for net share settlement of equity awards	(12)	—	(2,927)	—	—	(2,927)	(18)	—	(4,463)	—	—	(4,463)
Vesting of early-exercised stock options	—	—	67	—	—	67	—	—	153	—	—	153
Balance at end of period	74,791	\$ 8	\$872,559	\$ 851,957	\$ (4,551)	\$ 1,719,973	74,791	\$ 8	\$872,559	\$851,957	\$ (4,551)	\$ 1,719,973

ARISTA NETWORKS, INC.
Condensed Consolidated Statements of Cash Flows
(Unaudited, in thousands)

	Six Months Ended June 30,	
	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income (loss)	\$ 390,280	\$ (10,731)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation, amortization and other	16,757	11,328
Stock-based compensation	48,588	43,329
Noncash lease expense	7,955	—
Deferred income taxes	7,914	(18,281)
(Gain) loss on investments in privately-held companies	(1,150)	9,100
Accretion of investment discounts	(4,260)	(783)
Changes in operating assets and liabilities:		
Accounts receivable, net	(11,303)	(13,571)
Inventories	(49,620)	60,759
Prepaid expenses and other current assets	48,864	(72,418)
Other assets	(4,635)	629
Accounts payable	(6,783)	3,597
Accrued liabilities	(9,476)	(47,153)
Accrued legal settlement	—	405,000
Deferred revenue	(85,009)	(50,096)
Income taxes payable	14,399	6,653
Other liabilities	3,955	(1,237)
Net cash provided by operating activities	366,476	326,125
CASH FLOWS FROM INVESTING ACTIVITIES:		
Proceeds from maturities of marketable securities	552,512	222,764
Purchases of marketable securities	(549,383)	(696,665)
Purchases of property and equipment	(8,639)	(13,071)
Investments in privately-held companies	—	(8,000)
Other investing activities	—	(2,000)
Net cash used in investing activities	(5,510)	(496,972)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Principal payments of lease financing obligations	—	(921)
Proceeds from issuance of common stock under equity plans	38,104	28,810
Tax withholding paid on behalf of employees for net share settlement	(4,662)	(4,463)
Repurchase of common stock	(100,008)	—
Net cash provided by (used in) financing activities	(66,566)	23,426
Effect of exchange rate changes	72	(607)
NET INCREASE (DECREASE) IN CASH, CASH EQUIVALENTS AND RESTRICTED CASH	294,472	(148,028)
CASH, CASH EQUIVALENTS AND RESTRICTED CASH —Beginning of period	654,164	864,697
CASH, CASH EQUIVALENTS AND RESTRICTED CASH —End of period ⁽¹⁾	\$ 948,636	\$ 716,669
SUPPLEMENTAL DISCLOSURES OF NON-CASH INVESTING AND FINANCING INFORMATION:		
Right-of-use assets recognized upon the adoption of ASC 842 ⁽²⁾	\$ 93,207	\$ —
Right-of-use assets obtained in exchange for new operating lease liabilities	9,130	—
Property and equipment included in accounts payable and accrued liabilities	1,376	1,077

(1) See Note 4 of the accompanying notes for a reconciliation of the ending balance of cash, cash equivalents and restricted cash as shown in this condensed consolidated statements of cash flows.

(2) See Note 1 of the accompanying notes.

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

ARISTA NETWORKS, INC.
Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Organization and Summary of Significant Accounting Policies

Organization

Arista Networks, Inc. (together with our subsidiaries, “we,” “our” 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 enterprise. Our cloud networking solutions consist of our Extensible Operating System (“EOS”), a set of network applications and our 10/25/40/50/100 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 unaudited condensed consolidated financial statements include the accounts of Arista Networks, Inc. and its wholly owned subsidiaries and have been prepared in accordance with U.S. generally accepted accounting principles (“GAAP”) and the requirements of the U.S. Securities and Exchange Commission (the “SEC”) for interim reporting. As permitted under those rules, certain footnotes or other financial information that are normally required by GAAP can be condensed or omitted. In management’s opinion, the unaudited condensed consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements and include all adjustments, which include only normal recurring adjustments, necessary for the fair presentation of our financial information. The results for the three and six months ended June 30, 2019, are not necessarily indicative of the results expected for the full fiscal year. The condensed consolidated balance sheet as of December 31, 2018 has been derived from the audited consolidated financial statements at that date but does not include all of the information and notes required by GAAP for complete financial statements. All significant intercompany accounts and transactions have been eliminated.

Our condensed consolidated financial statements and related financial information in this Quarterly Report on Form 10-Q should be read in conjunction with the audited consolidated financial statements and related footnotes included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, filed with the SEC on February 15, 2019.

Use of Estimates

The preparation of the accompanying condensed 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, revenue recognition and deferred revenue; allowance for doubtful accounts, sales rebates and return reserves; valuation of goodwill and acquisition-related intangible assets, accounting for income taxes, including the valuation allowance on deferred tax assets and reserves for uncertain tax positions; estimate of useful lives of long-lived assets including intangible assets; valuation of inventory and contract manufacturer/supplier liabilities; recognition and measurement of contingent liabilities; valuation of equity investments in privately-held companies; determination of fair value for stock-based awards; estimate of incremental borrowing rate for determining the present value of future lease payments; and valuation of warranty accruals. We evaluate our estimates and assumptions based on historical experience and other factors and adjust those estimates and assumptions when facts and circumstances dictate. Actual results could differ materially from those estimates.

Significant Accounting Policies

During the six months ended June 30, 2019, we adopted ASC 842 - *Leases*, as discussed in the section titled *Recently Adopted Accounting Pronouncements* of this Note 1. As a result, we added a new significant accounting policy “Leases” as described below. There have been no other significant changes to our accounting policies described in our Annual Report on Form 10-K for the year ended December 31, 2018, filed with the SEC on February 15, 2019.

Leases

Our initial application date of ASC 842 is January 1, 2019. For the periods prior to 2019, our leases were accounted for under the legacy guidance in ASC 840.

We determine if a contract contains a lease at inception. The lease term represents the non-cancellable period for which we have the right to use an underlying asset, which may include periods covered by certain options to extend and/or terminate the lease. Lease liabilities and corresponding right-of-use (“ROU”) assets are recognized at the commencement date of a lease. Leases with an initial lease term of 12 months or less are not recorded on the balance sheet.

A lease liability is the present value of our future fixed lease payments. As none of our leases provides an implicit interest rate, we use our estimated incremental borrowing rate as of the lease commencement date to determine the present value of future lease payments. Our discount rates are determined and applied at a company level. An ROU asset is calculated as the lease liability, adjusted by unamortized initial direct costs, unamortized lease incentives received, cumulative deferred or prepaid lease payments, and accumulated impairment losses.

For fixed lease payments under operating leases, lease expense is recognized on a straight-lined basis over the lease term. For variable lease payments, lease expense is recognized when incurred. For operating leases that include both lease and non-lease components, we account for lease and non-lease components as a single lease component for all classes of underlying assets and, therefore, recognize non-lease payments as lease expense.

Recently Adopted Accounting Pronouncements

Leases

In February 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standard Update (“ASU”) No. 2016-02, *Leases* (“ASU 2016-02”), and in July 2018, the FASB issued ASU 2018-11, *Leases (Topic 842): Targeted Improvements* (“ASU 2018-11”) (collectively referred to as “ASC 842”). Under the guidance, lessees are required to recognize assets and lease liabilities on the balance sheet for most leases including operating leases and provide enhanced disclosures. Companies are required to adopt this guidance using a modified retrospective approach and apply the transition provisions under the guidance at either 1) the later of the beginning of the earliest comparative period presented in the financial statements and the commencement date of the lease, or 2) the beginning of the period of adoption (i.e. on the effective date). Under the transition method using the second application date, a company initially applies the new leases standard at the adoption date and recognizes a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption.

We adopted the guidance on January 1, 2019 using the modified retrospective transition method and initially applied the transition provisions at January 1, 2019, which allows us to continue to apply the legacy guidance in ASC 840 for periods prior to 2019. We elected the package of transition practical expedients, which, among other things, allows us to keep the historical lease classifications and not have to reassess the lease classification for any existing leases as of the date of adoption. We also made the following accounting policy elections as allowed by ASC 842:

- to apply the short-term lease exception, which allows us to keep leases with an initial term of twelve months or less off the balance sheet.
- to account for each separate lease component of a contract and its associated non-lease components as a single lease component for all our leases.

As a result of the adoption, we recognized operating leases that were previously not recognized on the consolidated balance sheets. In addition, we derecognized the assets and the lease financing liabilities previously recorded for our headquarters building under a build-to-suit lease. Under ASC 842, this lease is recognized as an operating lease in our condensed consolidated financial statements beginning in the first quarter of 2019. The table below summarizes the impact of the adoption of ASC 842 on the condensed consolidated balance sheet as of January 1, 2019 (in thousands).

Balance Sheet Line Item	December 31, 2018	Adjustments for the Adoption of ASC 842		January 1, 2019
		Derecognition of Build-to-Suit Lease	Recognition of Operating Leases ⁽¹⁾	
Property and equipment, net	\$ 75,355	\$ (32,806)	\$ —	\$ 42,549
Operating lease right-of-use assets	—	—	93,207	93,207
Deferred tax assets	126,492	(1,165)	—	125,327
Other current liabilities	30,907	(2,242)	12,391	41,056
Operating lease liabilities, non-current	—	—	88,230	88,230
Finance lease liabilities, non-current	35,431	(35,431)	—	—
Other long-term liabilities	31,851	—	(7,414)	24,437
Retained earnings	1,190,803	3,702	—	1,194,505

(1) Includes an operating lease for our corporate headquarters building under the build-to-suit arrangement, which was accounted for as a financing lease prior to 2019 and derecognized on January 1, 2019 upon the adoption of ASC 842.

Recent Accounting Pronouncements Not Yet Effective

Credit Losses of Financial Instruments

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, to replace the incurred loss impairment methodology under current GAAP with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The proposed standard requires a financial asset measured at amortized cost basis to be presented at the net amount expected to be collected. For trade receivables, we will be required to estimate lifetime expected credit losses. For available-for-sale debt securities, we will be required to recognize an allowance for credit losses rather than a reduction to the carrying value of the asset. In May 2019, the FASB issued ASU 2019-05, *Financial Instruments—Credit Losses, Topic 326*, which allows companies to make an irrevocable one-time election upon adoption of ASU 2016-13 to elect the fair value option for certain financial assets currently measured at amortized cost (except held-to-maturity securities). The election is to be applied on an instrument-by-instrument basis. ASU 2016-13 is effective for us for our first quarter of 2020. We are currently assessing the impact this guidance may have on our consolidated financial statements.

2. Business Combinations

In the three months ended September 30, 2018, we acquired Mojo Networks, Inc. (“Mojo”) and Metamako Holding PTY LTD. (“Metamako”) in order to extend our cognitive cloud networking architecture and to improve our next generation platforms for low-latency applications.

The total fair value of consideration transferred for these acquisitions was approximately \$117.5 million, which consisted of \$101.9 million in cash and \$15.6 million for the fair value of 58,072 shares of our common stock issued. The following table summarizes our preliminary purchase price allocation of the two acquisitions, in aggregate, based on the estimated fair value of the assets acquired and liabilities assumed at their respective acquisition dates (in thousands):

	Purchase Price Allocation
Cash and cash equivalents	\$ 4,953
Other tangible assets	23,824
Liabilities	(28,706)
Intangible assets	63,720
Goodwill	53,684
Net assets acquired	\$ 117,475

We continue the process of identifying and evaluating pending escrow claims related to inventory, tax and other liabilities. Accordingly, the preliminary values reflected in the table above are subject to further measurement period adjustments.

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 estimated useful lives.

	Acquisition Date Fair Value	Estimated Useful Life
Developed technology	\$ 52,510	5 years
Customer relationships	7,080	7 years
Trade name	2,470	3 years
Others	1,660	1 year
Total intangible assets acquired	\$ 63,720	

Goodwill of \$53.7 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. We operate under a single reportable segment. The goodwill is not deductible for income taxes purposes.

3. Fair Value Measurements

Assets and liabilities recorded at fair value on a recurring basis in the accompanying condensed 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.

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 value of these financial assets by significant investment category and their level within the fair value hierarchy (in thousands):

	June 30, 2019						
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value	Level I	Level II	Level III
Financial Assets:							
<i>Cash Equivalents:</i>							
Money market funds	\$ 518,039	\$ —	\$ —	\$ 518,039	\$ 518,039	\$ —	\$ —
Agency securities	3,992	—	—	3,992	—	3,992	—
U.S. government notes	3,996	—	—	3,996	3,996	—	—
	526,027	—	—	526,027	522,035	3,992	—
<i>Marketable Securities:</i>							
Corporate bonds	658,913	2,863	(33)	661,743	—	661,743	—
U.S. government notes	342,004	834	(11)	342,827	342,827	—	—
Agency securities	269,193	864	(28)	270,029	—	270,029	—
Commercial paper	35,790	—	—	35,790	—	35,790	—
Certificates of deposits ⁽¹⁾	3,000	—	—	3,000	—	3,000	—
	1,308,900	4,561	(72)	1,313,389	342,827	970,562	—
<i>Other Assets:</i>							
Money market funds - restricted	4,222	—	—	4,222	4,222	—	—
Total Financial Assets	\$ 1,839,149	\$ 4,561	\$ (72)	\$ 1,843,638	\$ 869,084	\$ 974,554	\$ —

	December 31, 2018							
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value	Level I	Level II	Level III	
Financial Assets:								
Cash Equivalents:								
Money market funds	\$ 322,080	\$ —	\$ —	\$ 322,080	\$ 322,080	\$ —	\$ —	
Marketable Securities:								
Corporate bonds	660,353	264	(1,399)	659,218	—	659,218	—	
U.S. government notes	308,946	118	(286)	308,778	308,778	—	—	
Agency securities	273,993	240	(511)	273,722	—	273,722	—	
Commercial paper	59,479	—	—	59,479	—	59,479	—	
Certificates of deposits ⁽¹⁾	5,000	—	—	5,000	—	5,000	—	
	1,307,771	622	(2,196)	1,306,197	308,778	997,419	—	
Other Assets:								
Money market funds - restricted	4,214	—	—	4,214	4,214	—	—	
Total Financial Assets	\$ 1,634,065	\$ 622	\$ (2,196)	\$ 1,632,491	\$ 635,072	\$ 997,419	\$ —	

(1) As of June 30, 2019 and December 31, 2018, all of our certificates of deposits were domestic deposits.

We did not realize any other-than-temporary losses on our marketable securities for the three and six months ended June 30, 2019 and 2018. As of June 30, 2019 and December 31, 2018, total unrealized losses of our marketable securities that had been in a continuous unrealized loss position were immaterial. 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. As interest rates increase, those marketable securities purchased at a time with lower interest rates show a mark-to-market unrealized loss. 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 other-than-temporarily impaired as of June 30, 2019.

As of June 30, 2019, 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):

	June 30, 2019
Due in 1 year or less	\$ 932,285
Due in 1 year through 2 years	381,104
Total marketable securities	\$ 1,313,389

The weighted-average remaining duration of our current marketable securities is approximately 0.8 years as of June 30, 2019. 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 unaudited condensed consolidated balance sheets.

4. Financial Statements Details

Cash, Cash Equivalents and Restricted Cash

The following table is a reconciliation of cash, cash equivalents and restricted cash reported within the accompanying condensed consolidated balance sheets that sum to the total of the same such amounts shown in the accompanying condensed consolidated statements of cash flows (in thousands):

	June 30, 2019	June 30, 2018
Cash and cash equivalents	\$ 944,414	\$ 711,157
Restricted cash included in other assets	4,222	5,512
Total cash, cash equivalents and restricted cash	\$ 948,636	\$ 716,669

Restricted cash included in other assets as of June 30, 2019 and June 30, 2018 primarily included \$4.0 million pledged as collateral representing a security deposit required for a facility lease. In addition, restricted cash included in other assets as of June 30, 2018 included \$1.1 million related to a letter of credit issued to a business partner.

Accounts Receivable, Net

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

	June 30, 2019	December 31, 2018
Accounts receivable	\$ 350,568	\$ 340,897
Allowance for doubtful accounts	(837)	(507)
Product sales rebate and returns reserve	(6,651)	(8,613)
Accounts receivable, net	<u>\$ 343,080</u>	<u>\$ 331,777</u>

Inventories

Inventories consist of the following (in thousands):

	June 30, 2019	December 31, 2018
Raw materials	\$ 105,639	\$ 76,795
Finished goods	208,538	187,762
Total inventories	<u>\$ 314,177</u>	<u>\$ 264,557</u>

Prepaid Expenses and Other Current Assets

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

	June 30, 2019	December 31, 2018
Prepaid income taxes	\$ 43,464	\$ 38,636
Inventory deposit	14,250	14,639
Other current assets	43,665	95,730
Other prepaid expenses and deposits	12,079	13,316
Total prepaid expenses and other current assets	<u>\$ 113,458</u>	<u>\$ 162,321</u>

Property and Equipment, Net

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

	June 30, 2019	December 31, 2018
Equipment and machinery	\$ 59,720	\$ 55,912
Computer hardware and software	33,229	30,566
Leasehold improvements	31,402	36,447
Furniture and fixtures	3,736	3,697
Building	—	35,154
Construction-in-process	959	3,591
Property and equipment, gross	<u>129,046</u>	<u>165,367</u>
Less: accumulated depreciation	<u>(88,023)</u>	<u>(90,012)</u>
Property and equipment, net	<u>\$ 41,023</u>	<u>\$ 75,355</u>

On January 1, 2019, upon the adoption of ASC 842, we derecognized the building and certain leasehold improvements that were capitalized for our corporate headquarters building under a build-to-suit arrangement. See Note 1 and Note 6 for further details.

Depreciation expense was \$4.8 million and \$5.4 million for the three months ended June 30, 2019 and 2018, respectively, and \$9.5 million and \$10.7 million for the six months ended June 30, 2019 and 2018, respectively.

Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	June 30, 2019	December 31, 2018
Accrued payroll related costs	\$ 55,957	\$ 70,755
Accrued manufacturing costs	30,318	31,336
Accrued product development costs	12,189	6,988
Accrued professional fees	6,312	5,678
Accrued warranty costs	5,074	5,362
Other	4,048	3,135
Total accrued liabilities	<u>\$ 113,898</u>	<u>\$ 123,254</u>

Warranty Accrual

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

	Six Months Ended June 30,	
	2019	2018
Warranty accrual, beginning of period	\$ 5,362	\$ 7,415
Liabilities accrued for warranties issued during the period	2,082	3,813
Warranty costs incurred during the period	(2,370)	(3,046)
Warranty accrual, end of period	<u>\$ 5,074</u>	<u>\$ 8,182</u>

Contract Balances

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Contract assets, beginning balance	\$ 5,699	\$ —	\$ 6,341	\$ —
Contract assets, ending balance	1,668	6,959	1,668	6,959

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Contract liabilities, beginning balance	\$ 37,314	\$ 18,838	\$ 32,595	\$ 16,521
Less: Revenue recognized from beginning balance	(3,552)	(1,933)	(6,766)	(4,070)
Less: Beginning balance reclassified to deferred revenue	(1,593)	(906)	(1,205)	(731)
Add: Contract liabilities recognized	9,857	5,843	17,402	10,122
Contract liabilities, ending balance	<u>\$ 42,026</u>	<u>\$ 21,842</u>	<u>\$ 42,026</u>	<u>\$ 21,842</u>

As of June 30, 2019 and December 31, 2018, \$16.7 million and \$13.5 million of our contract liabilities, respectively, was included in “Other current liabilities” with the remaining balances included in “Other long-term liabilities”.

Deferred Revenue and Performance Obligations

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):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Deferred revenue, beginning balance ⁽¹⁾	\$ 536,471	\$ 456,054	\$ 587,227	\$ 498,740
Less: Revenue recognized from beginning balance	(119,542)	(112,998)	(253,616)	(238,557)
Add: Deferral of revenue in current period, excluding amounts recognized during the period	85,289	105,588	168,607	188,461
Deferred revenue, ending balance	\$ 502,218	\$ 448,644	\$ 502,218	\$ 448,644

(1) The beginning balance of the six months ended June 30, 2018 excludes \$16.5 million that was reclassified to other current liabilities and other long-term liabilities at January 1, 2018 as a result of our adoption of ASC 606.

Revenue from Remaining Performance Obligations

Revenue from remaining performance obligations represents contracted revenue that has not yet been recognized, which includes contract liabilities and deferred revenue that will be recognized as revenue in future periods. As of June 30, 2019, approximately \$545.7 million of revenue is expected to be recognized from remaining performance obligations. We expect to recognize revenue on approximately 83% of these remaining performance obligations over the next 2 years and 17% during the 3rd to the 5th year.

Other Income (Expense), Net

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Interest income	\$ 13,107	\$ 7,964	\$ 25,005	\$ 13,348
Interest expense	—	(680)	—	(1,367)
Gain (loss) on investment in privately-held companies	—	(9,100)	1,150	(9,100)
Other income (expense), net	704	(353)	(11)	(894)
Total	\$ 13,811	\$ (2,169)	\$ 26,144	\$ 1,987

Upon the adoption of ASC 842 on January 1, 2019, we derecognized the lease financing obligation associated with a build-to-suit lease, and therefore did not incur interest expense in the three and six months ended June 30, 2019. See Note 1 for further details.

5. Investments

Investments in Privately-Held Companies

Our investments are in the equity of privately-held companies, which do not have readily determinable fair values. The following table summarizes cost, impairments and/or downward adjustments, upward adjustments, and carrying value of our investments in privately-held companies held as of June 30, 2019 and December 31, 2018 (in thousands):

	June 30, 2019	December 31, 2018
Cost of investment	\$ 44,136	\$ 44,136
Cumulative impairment	(15,000)	(15,000)
Cumulative upward adjustment	2,350	1,200
Carrying amount of investment	\$ 31,486	\$ 30,336

As of June 30, 2019 and December 31, 2018, the portion of the carrying amount of the investments that have been remeasured to fair value as a result of impairment or observable transactions totaled \$26.5 million and \$22.3 million, respectively, and are classified within Level III of the fair value hierarchy.

During the three months ended June 30, 2019, there were no realized or unrealized gains/losses recorded. During the six months ended June 30, 2019, we recorded \$1.2 million of unrealized gains. During the three and six months ended June 30, 2018, we also recorded \$1.2 million of unrealized gains. These unrealized gains were recorded on investments that were re-measured to fair value as of the date observable transactions occurred. In addition, during the three and six months ended June 30, 2018, we recorded an impairment of \$10.3 million on one of our investments. These unrealized gains and losses are classified in "Other income (expense), net" in our accompanying unaudited condensed consolidated statements of operations.

6. Leases

Operating Leases

We lease various offices and data centers in North America, Europe, Asia and Australia under non-cancelable 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 June 30, 2019, we did not include any such options in determining the lease terms because we were not reasonably certain that we would exercise those options. Most of our leases require us to pay certain operating expenses in addition to base rent, such as taxes, repairs, and insurance and contain renewal and escalation clauses.

Build-to-Suit Lease

In August 2012, we executed a lease for a building then under construction in Santa Clara, California to serve as our headquarters. The lease term is 120 months and commenced in August 2013. Based on the terms of the lease agreement and due to our involvement in certain aspects of the construction, we were deemed the accounting owner of the building during the construction period in accordance with ASC 840. As a result, we recognized assets under construction and corresponding liabilities on the consolidated balance sheet. Upon completion of the construction in 2013, we concluded that we had forms of continued economic involvement in the facility, and therefore did not meet with the provisions for sale-leaseback accounting. Pursuant to ASC 840, we continued to carry the assets and liabilities capitalized during the construction period and accounted for the lease as a capital lease for the building and an operating lease for the underlying land.

Upon our adoption of ASC 842 on January 1, 2019 (see Note 1), we derecognized the assets and the lease financing liabilities recorded for the building. The build-to-suit lease was re-classified as an operating lease effective January 1, 2019 in accordance with ASC 842.

The following table summarizes the supplemental balance sheet information related to our operating leases as of June 30, 2019 (in thousands).

	Financial Statement Classification	June 30, 2019
Right-of-use assets:		
Operating lease right-of-use assets	Operating lease right-of-use assets	\$ 94,203
Lease liabilities:		
Operating lease liabilities, current	Other current liabilities	14,666
Operating lease liabilities, non-current	Operating lease liabilities, non-current	89,705
Total operating lease liabilities		<u>\$ 104,371</u>

The following table summarizes our lease costs for the three and six months ended June 30, 2019 (in thousands).

	Financial Statement Classification	Three Months Ended June 30, 2019	Six Months Ended June 30, 2019
Operating lease costs:			
Fixed lease costs	Operating expenses	\$ 5,615	\$ 11,098
Variable lease costs	Operating expenses	1,531	2,995
Total operating lease costs		<u>\$ 7,146</u>	<u>\$ 14,093</u>

The operating lease costs in the table above include costs for long-term leases and short-term leases. Total short-term lease costs were immaterial. Fixed lease costs include expenses recognized for base rent payments on a straight-lined 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 three and six months ended June 30, 2019, cash paid for amounts associated with our operating lease liabilities were approximately \$4.6 million and \$9.0 million, respectively, which were classified as operating activities in the condensed consolidated statements of cash flows.

Prior to 2019, we recognized rent expense for our operating leases under the legacy guidance ASC 840. For the three and six months ended June 30, 2018, rent expense for all operating leases amounted to \$2.9 million and \$5.7 million, respectively, and did not include maintenance, utilities and other operating expenses in accordance with ASC 840.

The following table shows our undiscounted future fixed payment obligations under our recognized operating leases and a reconciliation to the operating lease liabilities as of June 30, 2019 (in thousands).

	June 30, 2019
Remainder of 2019	\$ 9,458
2020	20,042
2021	20,800
2022	21,153
2023	17,498
2024 and thereafter	35,870
Total future fixed operating lease payments	124,821
Less:	
Imputed interest	(20,450)
Total operating lease liabilities	\$ 104,371

	June 30, 2019
Weighted-average remaining lease term — operating leases	6.2 years
Weighted-average discount rate — operating leases	5.1%

7. Commitments and Contingencies

Leases

We lease various offices and data centers in North America, Europe, Asia and Australia under non-cancelable operating lease arrangements that expire on various dates through 2028. See Note 6 for our future minimum payment obligations under our leases as of June 30, 2019.

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 based on our forecasts in order to reduce manufacturing lead times and ensure adequate component supply. We issue purchase orders to our contract manufacturers for finished products and a significant portion of these orders consist of firm non-cancellable commitments. In addition, we purchase strategic component inventory from certain suppliers under purchase commitments that in some cases are non-cancellable, including integrated circuits, which are consigned to our contract manufacturers. As of June 30, 2019, we had non-cancellable purchase commitments of \$230.9 million, of which \$208.8 million was to our contract manufacturers and suppliers. In addition, we have provided deposits to secure our obligations to purchase inventory. We had \$17.0 million and \$17.4 million in deposits as of June 30, 2019 and December 31, 2018, respectively. These deposits are classified in “Prepaid expenses and other current assets” and “Other assets” in our accompanying unaudited condensed consolidated balance sheets.

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 significant impact on our consolidated financial statements to date.

Legal Proceedings

OptumSoft, Inc. Matters

On April 4, 2014, OptumSoft filed a lawsuit against us in the Superior Court of California, Santa Clara County titled *OptumSoft, Inc. v. Arista Networks, Inc.*, in which it asserts (i) ownership of certain components of our EOS network operating

system pursuant to the terms of a 2004 agreement between the companies; and (ii) breaches of certain confidentiality and use restrictions in that agreement. Under the terms of the 2004 agreement, OptumSoft provided us with a non-exclusive, irrevocable, royalty-free license to software delivered by OptumSoft comprising a software tool used to develop certain components of EOS and a runtime library that is incorporated into EOS. The 2004 agreement places certain restrictions on our use and disclosure of the OptumSoft software and gives OptumSoft ownership of improvements, modifications and corrections to, and derivative works of, the OptumSoft software that we develop.

In its lawsuit, OptumSoft has asked the Court to order us to (i) give OptumSoft access to our software for evaluation by OptumSoft; (ii) cease all conduct constituting the alleged confidentiality and use restriction breaches; (iii) secure the return or deletion of OptumSoft's alleged intellectual property provided to third parties, including our customers; (iv) assign ownership to OptumSoft of OptumSoft's alleged intellectual property currently owned by us; and (v) pay OptumSoft's alleged damages, attorney's fees, and costs of the lawsuit. David Cheriton, one of our founders and a former member of our board of directors, who resigned from our board of directors on March 1, 2014 and has no continuing role with us, is a founder and, we believe, the largest stockholder and director of OptumSoft. The 2010 David R. Cheriton Irrevocable Trust dated July 28, 2010, a trust for the benefit of the minor children of Mr. Cheriton, is one of our largest stockholders.

On April 14, 2014, we filed a cross-complaint against OptumSoft, in which we asserted our ownership of the software components at issue and our interpretation of the 2004 agreement. Among other things, we asserted that the language of the 2004 agreement and the parties' long course of conduct support our ownership of the disputed software components. We asked the Court to declare our ownership of those software components, all similarly-situated software components developed in the future and all related intellectual property. We also asserted that, even if we are found not to own certain components, such components are licensed to us under the terms of the 2004 agreement. However, there can be no assurance that our assertions will ultimately prevail in litigation. On the same day, we also filed an answer to OptumSoft's claims, as well as affirmative defenses based in part on OptumSoft's failure to maintain the confidentiality of its claimed trade secrets, its authorization of the disclosures it asserts and its delay in claiming ownership of the software components at issue. We have also taken additional steps to respond to OptumSoft's allegations that we improperly used and/or disclosed OptumSoft confidential information. While we believe we have meritorious defenses to these allegations, we believe we have (i) revised our software to remove the elements we understand to be the subject of the claims relating to improper use and disclosure of OptumSoft confidential information and made the revised software available to our customers and (ii) removed information from our website that OptumSoft asserted disclosed OptumSoft confidential information.

The parties tried Phase I of the case, relating to contract interpretation and application of the contract to certain claimed source code, in September 2015. On March 23, 2016, the Court issued a Final Statement of Decision Following Phase I Trial, in which it agreed with and adopted our interpretation of the 2004 agreement and held that we, and not OptumSoft, own all the software at issue in Phase I. The remaining issues that were not addressed in the Phase I trial are set to be tried in Phase II, including the application of the Court's interpretation of the 2004 agreement to any other source code that OptumSoft claims to own and the trade secret misappropriation and confidentiality claims. The Court has agreed to vacate the trial date pending the parties' efforts to settle the issues in dispute in the Phase II trial.

We intend to vigorously defend against any claims brought against us by OptumSoft. However, we cannot be certain that, if litigated, any claims by OptumSoft would be resolved in our favor. For example, if it were determined that OptumSoft owned components of our EOS network operating system, we would be required to transfer ownership of those components and any related intellectual property to OptumSoft. If OptumSoft were the owner of those components, it could make them available to our competitors, such as through a sale or license. An adverse litigation ruling could result in a significant damages award against us and injunctive relief. In addition, OptumSoft could assert additional or different claims against us, including claims that our license from OptumSoft is invalid.

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 one or more of these legal matters 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 other 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. As of June 30, 2019, provisions recorded for contingent losses related to other claims and matters have not been significant. Based on currently available information, management does not believe that any additional 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. Were an unfavorable outcome 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

Stock Repurchase Program

In April 2019, our board of directors authorized a \$1.0 billion stock repurchase program (the "Repurchase Program"). This authorization allows us to repurchase shares of our common stock opportunistically 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 purchases, trading plans under Rule 10b5-1 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or a combination of the foregoing. The Repurchase Program, which expires in April 2022, 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 June 30, 2019, the remaining authorized amount for stock repurchases under this program was approximately \$900.0 million.

A summary of the stock repurchase activity under the Repurchase Program for the three and six months ended June 30, 2019 is as follows (in thousands, except per share amounts):

	Three Months Ended June 30, 2019	Six Months Ended June 30, 2019
Aggregate purchase price	\$ 100,008	\$ 100,008
Shares repurchased	407	407
Average price paid per share	\$ 245.95	\$ 245.95

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 Program have been retired.

Equity Award Plan Activities

2014 Employee Stock Purchase Plan

Effective January 1, 2019, our board of directors authorized an increase of 756,679 shares to shares available for issuance under our 2014 Employee Stock Purchase Plan (the "ESPP"). Pursuant to the ESPP, the 2019 share increase was determined based the lesser of 1% of the total shares of common stock outstanding on December 31, 2018, 2,500,000 shares, or such amount as determined by our board of directors. During the three months ended June 30, 2019, we issued 45,743 shares at a weighted-average purchase price of \$190.31 per share, respectively, under the ESPP. As of June 30, 2019, there remained 3,244,374 shares available for issuance under the ESPP.

Stock Option Activities

The following table summarizes the option activity under our stock plans and related information (in thousands, except years and per share amounts):

	Options Outstanding		Weighted-Average Remaining Contractual Term (Years) of Stock Options	Aggregate Intrinsic Value of Stock Options Outstanding
	Number of Shares Underlying Outstanding Options	Weighted-Average Exercise Price per Share		
Balance—December 31, 2018	5,899	\$ 37.09	5.2	\$ 1,027,741
Options granted	76	226.53		
Options exercised	(1,000)	29.39		
Options canceled	(14)	32.22		
Balance—June 30, 2019	4,961	\$ 41.57	4.8	\$ 1,081,820
Vested and exercisable—June 30, 2019	2,628	\$ 26.75	4.3	\$ 612,008

Restricted Stock Unit (RSU) Activities

A summary of the RSU activity under our 2014 equity incentive plan (“2014 Plan”) and related information are presented below (in thousands, except years and per share amounts):

	Number of Shares	Weighted-Average Grant Date Fair Value Per Share	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Unvested balance—December 31, 2018	1,308	\$ 150.60	1.5	\$ 275,638
RSUs granted	268	245.20		
RSUs vested	(266)	114.91		
RSUs forfeited/canceled	(34)	184.47		
Unvested balance—June 30, 2019	1,276	\$ 176.99	1.7	\$ 331,178

Shares Available for Grant

The following table presents the stock activity and the total number of shares available for grant under the 2014 Plan as of June 30, 2019 (in thousands):

	Number of Shares
Balance—December 31, 2018	15,386
Options granted	(76)
RSUs granted	(268)
Options canceled	14
RSUs forfeited	34
Shares traded for taxes	18
Balance—June 30, 2019	15,108

Stock-Based Compensation Expense

Total stock-based compensation expense related to options, restricted stock units, restricted stock, and employee stock purchase rights granted were allocated as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Cost of revenue	\$ 1,028	\$ 1,236	\$ 2,126	\$ 2,438
Research and development	12,568	11,745	25,699	22,690
Sales and marketing	7,097	6,274	13,631	12,234
General and administrative	3,604	3,223	7,132	5,967
Total stock-based compensation	<u>\$ 24,297</u>	<u>\$ 22,478</u>	<u>\$ 48,588</u>	<u>\$ 43,329</u>

As of June 30, 2019, unrecognized stock-based compensation expenses by award type and their expected weighted-average recognition periods are summarized in the following table (in thousands, except years).

	June 30, 2019			
	Stock Option	RSU	ESPP	Restricted Stock
Unrecognized stock-based compensation expense	\$ 53,788	\$ 203,793	\$ 4,681	\$ 4,665
Weighted-average amortization period	3.6 years	3.5 years	0.9 years	3.2 years

9. Net Income (Loss) Per Share Available to Common Stock

The following table sets forth the computation of our basic and diluted net income (loss) per share available to common stock (in thousands, except per share amounts):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Numerator:				
Basic:				
Net income (loss)	\$ 189,251	\$ (155,269)	\$ 390,280	\$ (10,731)
Less: undistributed earnings allocated to participating securities	(99)	82	(217)	6
Net income (loss) available to common stockholders, basic	<u>\$ 189,152</u>	<u>\$ (155,187)</u>	<u>\$ 390,063</u>	<u>\$ (10,725)</u>
Diluted:				
Net income (loss) attributable to common stockholders, basic	\$ 189,152	\$ (155,187)	\$ 390,063	\$ (10,725)
Add: undistributed earnings allocated to participating securities	6	—	13	—
Net income (loss) attributable to common stockholders, diluted	<u>\$ 189,158</u>	<u>\$ (155,187)</u>	<u>\$ 390,076</u>	<u>\$ (10,725)</u>
Denominator:				
Basic:				
Weighted-average shares used in computing net income (loss) per share available to common stockholders, basic	<u>76,552</u>	<u>74,503</u>	<u>76,238</u>	<u>74,250</u>
Diluted:				
Weighted-average shares used in computing net income (loss) per share available to common stockholders, basic	76,552	74,503	76,238	74,250
Add weighted-average effect of dilutive securities:				
Stock options and RSUs	4,775	—	5,025	—
Employee stock purchase plan	<u>8</u>	<u>—</u>	<u>8</u>	<u>—</u>
Weighted-average shares used in computing net income (loss) per share available to common stockholders, diluted	<u>81,335</u>	<u>74,503</u>	<u>81,271</u>	<u>74,250</u>
Net income (loss) per share attributable to common stockholders:				
Basic	<u>\$ 2.47</u>	<u>\$ (2.08)</u>	<u>\$ 5.12</u>	<u>\$ (0.14)</u>
Diluted	<u>\$ 2.33</u>	<u>\$ (2.08)</u>	<u>\$ 4.80</u>	<u>\$ (0.14)</u>

The following weighted-average outstanding shares of common stock equivalents were excluded from the computation of diluted net income (loss) per share available to common stockholders for the periods presented because including them would have been anti-dilutive (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Stock options and RSUs to purchase common stock	195	8,011	179	8,168
Employee stock purchase plan	31	145	68	132
Total	<u>226</u>	<u>8,156</u>	<u>247</u>	<u>8,300</u>

10. Income Taxes

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
(in thousands, except percentages)				
Income (loss) before income taxes	\$ 220,648	\$ (241,972)	\$ 427,323	\$ (99,078)
Provision for (benefit from) income taxes	31,397	(86,703)	37,043	(88,347)
Effective tax rate	14.2%	35.8%	8.7%	89.2%

The effective tax rates above reflect tax expense recorded on pre-tax income in the three and six months ended June 30, 2019 and overall tax benefits recorded on pre-tax income in the three and six months ended June 30, 2018. The change in effective tax rate in the three and six months ended June 30, 2019, as compared to the same periods in 2018, is a result of the significant benefit on the \$405 million charge related to the legal settlement recorded in the three and six months ended June 30, 2018 and to the overall increase in worldwide earnings, which proportionally exceeded the increase in excess tax benefits attributable to equity compensation.

On June 7, 2019, the Court of Appeals for the Ninth Circuit issued an opinion on Altera Corporation and Subsidiaries vs. Commissioner on Internal Revenue (“Opinion”). The Opinion overturned the Tax Court decision and ruled in favor of the Commissioner validating the Regulations requiring stock-based compensation to be included in a cost sharing arrangement. As a result of the Opinion, we have changed our position and determined it is more likely than not that these Regulations are valid. As such, we have accounted for the impact of the decision in the three months ended June 30, 2019 resulting in a discrete income tax expense of \$9.8 million. Further, the estimated annual effective tax rate for the year ending December 31, 2019 includes the estimated impact of sharing stock-based compensation within our cost sharing arrangement.

11. Segment Information

We have determined that we operate as one reportable segment. The following table represents revenue based on the customer’s location, as determined by the customer’s shipping address (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Americas	\$ 446,370	\$ 377,460	\$ 886,008	\$ 692,958
Europe, Middle East and Africa	112,060	101,811	223,329	223,697
Asia-Pacific	49,891	40,574	94,408	75,679
Total revenue	\$ 608,321	\$ 519,845	\$ 1,203,745	\$ 992,334

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

	June 30, 2019	December 31, 2018
United States	\$ 35,108	\$ 69,238
International	5,915	6,117
Total	\$ 41,023	\$ 75,355

Item 2. 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 unaudited condensed consolidated financial statements and related notes that are included elsewhere in this Quarterly Report on Form 10-Q, and our Annual Report on Form 10-K filed with the SEC on February 15, 2019. 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 Quarterly Report on Form 10-Q.

Overview

We are a leading supplier of cloud networking solutions that use software innovations to address the needs of large-scale internet companies, cloud service providers and next-generation data centers and campuses for enterprise support. Our cloud

networking solutions consist of our Extensible Operating System, or EOS, a set of network applications and our Ethernet switching and routing platforms. Our cloud networking solutions deliver industry-leading performance, scalability, availability, programmability, automation and visibility. At the core of our cloud networking platform is EOS, which was purpose-built to be fully programmable and highly modular. The programmability of EOS has allowed us to create a set of software applications that address the requirements of cloud networking, including workflow automation, network visibility and analytics, and has also allowed us to rapidly integrate with a wide range of third-party applications for virtualization, management, automation, orchestration and network services.

We believe that cloud networks will continue to replace legacy network technologies, and that our cloud networking platform addresses the large and growing cloud networking segment of data center switching, which remains in the early stage of adoption. Cloud networks are subject to increasing performance requirements due to the growing number of connected devices, as well as new enterprise and consumer applications. Computing architectures are evolving to meet the need for constant connectivity and access to data and applications. We expect to continue growing our organization to meet the needs of new and existing customers as they increasingly realize the performance and cost benefits of our cloud networking solutions and as they expand their cloud networks. Accordingly, 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 rapid development of new features and applications.

We generate revenue primarily from sales of our switching products which incorporate our EOS software. We generate the majority of our services revenue from post contract support, or PCS, which end customers typically purchase in conjunction with our products. 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. As we have grown the functionality of our EOS software, expanded the range of our product portfolio and increased the size of our sales force, our revenue has grown rapidly. We have also been profitable and operating cash flow positive for each year since 2010.

To continue to grow our revenue, it is important that we both obtain new customers and sell additional products to existing customers. We expect that a substantial portion of our future sales will be follow-on sales to existing customers. It is also important that we are successful in markets other than cloud data center networking, such as the campus switching and WiFi networking 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 effectively. In order to support our strong growth, we have and may continue to accelerate our investment in infrastructure, such as enterprise resource planning software and other technologies to improve the efficiency of our operations.

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 to the underlying merchant silicon architecture. Today, we combine our EOS software with merchant silicon into a family of switching and routing products. 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 currently procure certain merchant silicon components from multiple vendors, and we continue to expand our relationships with these and other vendors. 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.

Historically, large purchases by a relatively limited number of end customers have accounted for significant portion of our revenue. We have experienced unpredictability in the timing of large orders, especially with respect to our large end customers, due to the complexity of orders, the time it takes end customers to evaluate, test, qualify and accept our products and other factors specific to our end customers. Due to these factors, we expect continued variability in our customer concentration and timing of sales on a quarterly and annual basis. For example, our sales to Microsoft as an end-user in fiscal 2018 represented 27% of revenue for the year due to certain factors that are not expected to be repeated in fiscal 2019 or future fiscal years. As a result, the percentage of our revenue from Microsoft in fiscal 2019 is expected to decline.

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.

Results of Operations

Three and Six Months Ended June 30, 2019 Compared to Three and Six Months Ended June 30, 2018

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

	Three Months Ended June 30,				Six Months Ended June 30,			
	2019	2018	Change in		2019	2018	Change in	
	\$	\$	\$	%	\$	\$	\$	%
Revenue								
Product	\$ 513,171	\$ 444,767	\$ 68,404	15.4%	\$ 1,018,586	\$ 852,384	\$ 166,202	19.5%
Service	95,150	75,078	20,072	26.7	185,159	139,950	45,209	32.3
Total revenue	608,321	519,845	88,476	17.0	1,203,745	992,334	211,411	21.3
Cost of revenue								
Product	200,534	171,622	28,912	16.8	398,686	328,313	70,373	21.4
Service	17,596	14,340	3,256	22.7	34,298	27,219	7,079	26.0
Total cost of revenue	218,130	185,962	32,168	17.3	432,984	355,532	77,452	21.8
Gross profit	\$ 390,191	\$ 333,883	\$ 56,308	16.9%	\$ 770,761	\$ 636,802	\$ 133,959	21.0%
Gross margin	64.1%	64.2%			64.0%	64.2%		

Revenue by Geography (in thousands, except percentages)

	Three Months Ended June 30,				Six Months Ended June 30,			
	2019	% of Total	2018	% of Total	2019	% of Total	2018	% of Total
Americas	\$ 446,370	73.4%	\$ 377,460	72.6%	\$ 886,008	73.6%	\$ 692,958	69.8%
Europe, Middle East and Africa	112,060	18.4	101,811	19.6	223,329	18.6	223,697	22.5
Asia-Pacific	49,891	8.2	40,574	7.8	94,408	7.8	75,679	7.7
Total revenue	\$ 608,321	100.0%	\$ 519,845	100.0%	\$ 1,203,745	100.0%	\$ 992,334	100.0%

Revenue

We generate revenue primarily from sales of our products. We also derive a portion of our revenue from sales of PCS, 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 and size of orders, the delivery and acceptance of products, and the impact of significant transactions. In addition, while we expect our revenue to continue to grow in absolute dollars on a year-over-year basis, our revenue growth rates are expected to decline as our business scales.

Product revenue increased \$68.4 million, or 15.4%, and \$166.2 million, or 19.5%, in the three and six months ended June 30, 2019, respectively, compared to the same periods in 2018. The increases were primarily driven by sales to our existing customers as they continued to expand and upgrade their cloud networks. In addition, our newer switch products have continued to gain market acceptance, which has contributed to our revenue growth. Service revenue increased \$20.1 million, or 26.7%, and \$45.2 million, or 32.3%, in the three and six months ended June 30, 2019, respectively, compared to the same periods in 2018 as a result of continued growth in initial and renewal support contracts as our customer installed base has continued to expand. We continue to experience pricing pressure on our products and services due to competition, but demand for our products and growth in our installed base has more than offset this pricing pressure during the period. However, we experienced a slowdown in demand from certain large end customers during the second quarter of 2019, and this slowdown could continue in future periods. In order to continue to grow our future revenue, we must continue to add new cloud data center networking customers and expand our presence in the campus switching and WiFi networking markets.

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 in our manufacturing operations department, and other manufacturing-related costs associated with manufacturing our products and managing our inventory. Cost of providing PCS and other services consists primarily of personnel costs for our global customer support organization. We expect our cost of revenue to continue to increase as our revenue increases.

Cost of revenue increased \$32.2 million, or 17.3%, and \$77.5 million, or 21.8%, in the three and six months ended June 30,

2019 , respectively, compared to the same periods in 2018 . The increases were primarily due to the corresponding increases in product and service revenues.

Gross margin, or gross profit as a percentage of revenue, has been and will continue to be affected by a variety of factors, including 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 decreased from 64.2% to 64.1% for the three months ended June 30, 2019 and from 64.2% to 64.0% for the six months ended June 30, 2019 compared to the same periods in 2018 . The decreases were primarily driven by a decrease in product margin due to increased product transition costs including some excess and obsolete inventory-related charges, mostly offset by a favorable customer mix with lower discounts on smaller volume transactions. Service margin continued to improve due to a relatively fixed services cost base and growing service revenues.

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. We expect operating expenses to continue to increase in absolute dollars in the near term as we continue to invest in the growth of our business.

	Three Months Ended June 30,				Six Months Ended June 30,			
	2019	2018	Change in		2019	2018	Change in	
	\$	\$	\$	%	\$	\$	\$	%
Operating expenses:								
Research and development	\$ 114,295	\$ 104,078	\$ 10,217	9.8 %	\$ 233,964	\$ 206,440	\$ 27,524	13.3 %
Sales and marketing	53,040	46,188	6,852	14.8	104,093	88,328	15,765	17.8
General and administrative	16,019	18,420	(2,401)	(13.0)	31,525	38,099	(6,574)	(17.3)
Legal settlement	—	405,000	(405,000)	(100.0)	—	405,000	(405,000)	(100.0)
Total operating expenses	<u>\$ 183,354</u>	<u>\$ 573,686</u>	<u>\$ (390,332)</u>	<u>(68.0)%</u>	<u>\$ 369,582</u>	<u>\$ 737,867</u>	<u>\$ (368,285)</u>	<u>(49.9)%</u>

Research and development.

Research and development expenses consist primarily of personnel costs, prototype expenses, third-party engineering and contractor support costs, and an allocated portion of facility and IT costs including depreciation. Our research and development efforts are focused on maintaining and developing additional functionality for our existing products and on new product development, 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 heavily in software development in order to expand the capabilities of our cloud networking platform, introduce new products and features and build upon our technology leadership.

Research and development expenses increased \$10.2 million , or 9.8% , and \$27.5 million , or 13.3% , for the three and six months ended June 30, 2019 compared to the same periods in 2018 . The increases in the three and six months ended June 30, 2019 included a \$6.7 million and a \$17.2 million increase in personnel costs driven primarily by growth in headcount, including headcount additions from the two acquisitions we completed in the third quarter of 2018, a \$2.7 million and a \$5.6 million increase in new products compliance testing and certification services costs, and a \$1.7 million and a \$4.8 million increase in research and development-related facilities and IT costs due to headcount growth and facilities expansion.

Sales and marketing.

Sales and marketing expenses consist primarily of personnel costs, marketing and promotional activities, and an allocated portion of facility and IT costs including depreciation. 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 \$6.9 million , or 14.8% , and \$15.8 million , or 17.8% , for the three and six months ended June 30, 2019 compared to the same periods in 2018 . The increases in the three and six months ended June 30, 2019 included a \$7.7 million and a \$13.2 million increase in personnel costs due to growth in headcount and higher sales volumes, which resulted in an increase in compensation, including sales commissions.

General and administrative.

General and administrative expenses consist primarily of personnel costs, professional services fees, litigation-related expenses, and an allocated portion of facility and IT costs including depreciation. General and administrative personnel costs include those for our executive, finance, human resources and legal functions. Our professional services fees are primarily due to external legal, accounting and tax services.

General and administrative expenses decreased \$2.4 million , or 13.0% , and \$6.6 million , or 17.3% , for the three and six months ended June 30, 2019 compared to the same periods in 2018 . The decrease in each period was primarily due to a \$3.1 million and an \$8.7 million decrease in litigation fees related to a reduced level of litigation activities as a result of the settlement of our litigation with Cisco in August 2018, which was partially offset by a \$0.6 million and a \$1.8 million increase in personnel costs.

Legal settlement.

During the three and six months ended June 30, 2018, we recorded \$405.0 million in legal settlement expenses in connection with a binding term sheet (“Term Sheet”) that was entered into on August 6, 2018 between the Company and Cisco (the “Legal Settlement”), which included a \$400.0 million payment to Cisco and \$5.0 million of legal fees associated with the settlement. Pursuant to the Term Sheet, the Company and Cisco obtained dismissals of all then ongoing district court and USITC litigation between us. On December 3, 2018, the parties entered into a mutual release and settlement agreement, which superseded the Term Sheet but did not substantially alter the terms.

Other Income (Expense), Net (in thousands, except percentages)

Other income (expense) consists primarily of interest income from our cash, cash equivalents and marketable securities, gains and losses on our investments in privately-held companies, foreign currency transaction gains and losses, and interest expense on finance lease obligations. Upon adoption of ASC 842 on January 1, 2019, we derecognized the finance lease obligation associated with our build-to-suit lease, and therefore will not incur further interest expense as it relates to this obligation. See Note 1. Organization and Summary of Significant Accounting Policies of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1, of this Quarterly Report on Form 10-Q for further discussion. We expect other income (expense) may fluctuate in the future as a result of the re-measurement of our private company equity investments upon the occurrence of observable price changes and/or impairments, changes in interest rates or returns on our cash and cash equivalents and marketable securities, and foreign currency exchange rate fluctuations.

	Three Months Ended June 30,				Six Months Ended June 30,			
	2019	2018	Change in		2019	2018	Change in	
	\$	\$	\$	%	\$	\$	\$	%
Other income (expense), net:								
Interest income	\$ 13,107	\$ 7,964	\$ 5,143	64.6 %	\$ 25,005	\$ 13,348	\$ 11,657	87.3 %
Interest expense	—	(680)	680	(100.0)	—	(1,367)	1,367	(100.0)
Gain (loss) on investments in privately-held companies	—	(9,100)	9,100	(100.0)	1,150	(9,100)	10,250	(112.6)
Other income (expense), net	704	(353)	1,057	(299.4)	(11)	(894)	883	(98.8)
Total other income (expense), net	<u>\$ 13,811</u>	<u>\$ (2,169)</u>	<u>\$ 15,980</u>	<u>(736.7)%</u>	<u>\$ 26,144</u>	<u>\$ 1,987</u>	<u>\$ 24,157</u>	<u>1,215.8 %</u>

The increases in other income (expense), net, during the three and six months ended June 30, 2019 as compared to the same periods of 2018 were partially due to increases in interest income as we continued to generate cash and expand our marketable securities portfolios and favorable changes in gain (loss) on our investments in privately-held companies. See Note 5. Investments of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1, of this Quarterly Report on Form 10-Q for further discussion.

Provision for (Benefit from) 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.

	Three Months Ended June 30,				Six Months Ended June 30,			
	2019	2018	Change in		2019	2018	Change in	
	\$	\$	\$	%	\$	\$	\$	%
Income (loss) before income taxes	\$ 220,648	\$ (241,972)	\$ 462,620	(191.2)%	\$ 427,323	\$ (99,078)	\$ 526,401	(531.3)%
Provision for (benefit from) income taxes	31,397	(86,703)	118,100	(136.2)%	37,043	(88,347)	125,390	(141.9)%
Effective tax rate	14.2%	35.8%			8.7%	89.2%		

For the three and six months ended June 30, 2019, we recorded expenses of \$31.4 million and \$37.0 million, respectively. For the three and six months ended June 30, 2018, we recorded benefits of \$86.7 million and \$88.3 million, respectively. The income tax benefits for the 2018 periods included a \$99.0 million federal and state tax benefit on the \$405.0 million charge related to the Legal Settlement recorded in the three and six months ended June 30, 2018. In addition, the changes in our income taxes were attributable to a change in our position on sharing stock-based compensation within our cost sharing arrangement as a result of an opinion issued in June 2019. See Note 10. Income Taxes of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1, of this Quarterly Report on Form 10-Q for further information. The remaining changes in the income taxes were attributable to the overall increase in worldwide earnings.

Liquidity and Capital Resources

Our principal sources of liquidity are cash, cash equivalents, marketable securities, and cash generated from operations. As of June 30, 2019, our total balance of cash, cash equivalents and marketable securities was approximately \$2.3 billion, of which approximately \$318.3 million was held outside the U.S. in our foreign subsidiaries.

Our cash, cash equivalents and marketable securities are held for working capital purposes. 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, costs incurred related to outstanding litigation claims, 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

	Six Months Ended June 30,	
	2019	2018
	(in thousands)	
Cash provided by operating activities	\$ 366,476	\$ 326,125
Cash used in investing activities	(5,510)	(496,972)
Cash provided by (used in) financing activities	(66,566)	23,426
Effect of exchange rate changes	72	(607)
Net increase (decrease) in cash, cash equivalents and restricted cash	\$ 294,472	\$ (148,028)

Cash Flows from Operating Activities

During the six months ended June 30, 2019, cash provided by operating activities was \$366.5 million, primarily from net income of \$390.3 million and non-cash adjustments to net income of \$75.8 million, offset partially by a net decrease of \$99.6 million in cash from changes in our operating assets and liabilities. Our operating cash benefited primarily from a \$48.9 million decrease in prepaid expenses and other current assets including a reduction in deferred cost of inventory related to recognition of product deferred revenue and a \$14.4 million increase in income taxes payable. These favorable changes were more than offset by an \$85.0 million decrease in deferred revenue primarily due to the recognition of product deferred revenue related to contract acceptance terms, a \$49.6 million increase in inventories primarily related to upcoming product transitions, an \$11.3 million

increase in accounts receivable due to timing of billing and cash collections, and a \$9.5 million decline in accrued liabilities due to net payments made under our corporate bonus program, and the timing of vendor payments related to product development activities and inventory purchases, partially offset by an increase in manufacturer/supplier liability accruals.

During the six months ended June 30, 2018, cash provided by operating activities was \$326.1 million, primarily from net loss of \$10.7 million with non-cash adjustments to net income of \$44.7 million, and a net increase of \$292.2 million in cash from changes in our operating assets and liabilities. The increase in cash from changes in operating assets and liabilities was primarily due to a \$405.0 million legal settlement liability accrued in the second quarter of 2018 in connection with the Legal Settlement, a \$60.8 million decrease in inventories driven by improved inventory management and timing of receipts, and a \$6.7 million increase in income taxes payable. These cash inflows were partially offset by cash outflows of \$72.4 million from an increase in prepaid expenses and other current assets primarily due to higher prepaid income taxes in connection with an income tax benefit associated with the Legal Settlement charges referenced above, offset partially by lower deferred costs of inventory associated with the lower product revenue deferrals referenced below, \$50.1 million from a decline in deferred revenue primarily related to customer acceptance of our 945 investigation-related product redesigns, \$47.2 million from a decline in accrued liabilities due to corporate bonus payments and the timing of vendor payments, and \$13.6 million from an increase in accounts receivable due to timing of billing and cash collections.

Cash Flows from Investing Activities

During the six months ended June 30, 2019, cash used in investing activities was \$5.5 million, consisting of purchases of available-for-sale securities of \$549.4 million, offset by proceeds of \$552.5 million from maturities of marketable securities, and purchases of property and equipment of \$8.6 million.

During the six months ended June 30, 2018, cash used in investing activities was \$497.0 million, consisting of purchases of available-for-sale securities of \$696.7 million, offset by proceeds of \$222.8 million from maturities of marketable securities, and purchases of property and equipment of \$13.1 million.

Cash Flows from Financing Activities

During the six months ended June 30, 2019, cash used in financing activities was \$66.6 million, consisting of payments for repurchases of our common stock from the open market of \$100.0 million and minimum payroll taxes withheld of \$4.7 million upon vesting of restricted stock units, offset partially by proceeds from the issuance of common stock under employee equity incentive plans of \$38.1 million.

During the six months ended June 30, 2018, cash provided by financing activities was \$23.4 million, consisting primarily of proceeds from the issuance of common stock under employee equity incentive plans of \$28.8 million, offset by minimum tax withheld for employees of \$4.5 million.

Stock Repurchase Program

From time to time, we repurchase stock opportunistically pursuant to our Repurchase Program authorized by our board of directors in April 2019. The repurchases are funded from working capital. The Repurchase Program, which expires in April 2022, 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 June 30, 2019, the remaining authorized amount for stock repurchases under this program is approximately \$900.0 million. Refer to Note 8. Equity Award Plan Activities of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1, of this Quarterly Report on Form 10-Q for further discussion.

Off-Balance Sheet Arrangements

As of June 30, 2019, 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.

Contractual Obligations and Commitments

Our contractual obligations 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 equivalent and marketable securities. As of June 30, 2019, our principal commitments consist primarily of obligations under operating leases for offices and data centers and purchase commitments with our contract manufacturers and suppliers. See Note 6. Leases and Note 7. Commitments and Contingencies of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1, of this Quarterly Report on Form 10-Q for future payment commitments under leases and our purchase commitments as of June 30, 2019, respectively.

Critical Accounting Policies and Estimates

Our management's discussion and analysis of financial condition and results of operations is based on our unaudited condensed consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these unaudited condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses, and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances. We evaluate our estimates and assumptions 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. We believe the critical accounting policies and estimates discussed in the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of our Annual Report on Form 10-K filed with the SEC on February 15, 2019, reflect our more significant judgments and estimates used in the preparation of the condensed consolidated financial statements. There have been no significant changes to our critical accounting policies and estimates as disclosed in our Annual Report on Form 10-K.

Recent Accounting Pronouncements

Refer to the sections titled "*Recently Adopted Accounting Pronouncements*" and "*Recent Accounting Pronouncements Not Yet Effective*" in Note 1. Organization and Summary of Significant Accounting Policies of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1, of this Quarterly Report on Form 10-Q.

Item 3. 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.

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. For the three and six months ended June 30, 2019, the effect of a hypothetical 10% change in foreign currency exchange rates applicable to our business would not have had a material impact on our operating results. 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 June 30, 2019 and December 31, 2018, we had cash, cash equivalents and available-for-sale marketable securities totaling \$2.3 billion and \$2.0 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 three and six months ended June 30, 2019, the effect of a hypothetical 100 basis point increase or decrease in overall interest rates would not have had a material impact on our interest income.

On the other hand, the fair market value of our investments in fixed income securities may be adversely impacted as a result of an increase in interest rates. We would incur unrealized losses on fixed income securities primarily due to higher interest rates compared to interest rates at the time of purchase. Under certain circumstances, if 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 condensed consolidated financial statements.

Investments in Privately-Held Companies

Our non-marketable equity investments in privately-held companies are recorded in “Investments” in our condensed consolidated balance sheets. As of June 30, 2019 and December 31, 2018, the total carrying amount of our investments in privately-held companies was \$31.5 million and \$30.3 million. See Note 5. Investments of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1, of this Quarterly Report on Form 10-Q.

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 4. 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 pursuant to Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Based on the evaluation of our disclosure controls and procedures as of June 30, 2019, 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 SEC rules and forms, and that such information is accumulated and communicated to our management, including our chief executive officer and chief financial officer, 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 Rules 13a-15(d) and 15d-15(d) of the Exchange Act, that occurred during the quarter ended June 30, 2019 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

In connection with our adoption of ASC 842, the new lease accounting standard, on January 1, 2019, we implemented new internal controls and revised certain existing internal controls to ensure we adequately evaluate our contracts and properly assess the impact of ASC 842 on our financial statements and disclosures.

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.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

The information set forth under the “Legal Proceedings” subheading in Note 7 of Notes to Condensed Consolidated Financial Statements in Part I, Item 1, of this Quarterly Report on Form 10-Q is incorporated herein by reference.

Item 1A. Risk Factors

You should consider carefully the risks and uncertainties described below, together with all of the other information in this Quarterly Report on Form 10-Q, 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 may also materially affect our business, financial condition, results of operations and prospects.

Risks Related to Our Business and Our Industry

Our business and operations have experienced rapid growth, and if we do not appropriately manage any future growth or are unable to improve our systems and processes, our business, financial condition, results of operations and prospects will be adversely affected.

We have experienced rapid growth and increased demand for our products over the last several years, which has placed a strain on our management, administrative, operational and financial infrastructure. Our employee headcount and number of end customers have increased, and we expect both to continue to grow over the next year. For example, between December 31, 2015 and December 31, 2018, our headcount grew from approximately 1,200 employees to approximately 2,300 employees, and our cumulative number of end customers grew from approximately 3,700 to over 5,500. As we have grown, we have had to manage an increasingly large and more complex array of internal systems and processes to scale with all aspects of our business, including our hardware and software development, contract manufacturing, purchasing, logistics, fulfillment and maintenance and support. Our success will depend in part upon our ability to manage our growth effectively. To do so, we must continue to increase the productivity of our existing employees and continue to hire, train and manage new employees as needed. To manage domestic and international growth of our operations and personnel, we will need to continue to improve our operational, financial and management controls and our reporting processes and procedures and implement more extensive and integrated financial and business information systems. We may not be able to successfully implement these or other improvements to our systems and processes in an efficient or timely manner, and we may discover deficiencies in their capabilities or effectiveness. We may experience difficulties in managing improvements to our systems and processes or in connection with third-party technology. In addition, our systems and processes may not prevent or detect all errors, omissions or fraud. Our failure to improve our systems and processes, or their failure to operate effectively and in the intended manner, may result in disruption of our current operations and end-customer relationships, our inability to manage the growth of our business and our inability to accurately forecast our revenue, expenses and earnings and prevent certain losses.

The cloud networking market is rapidly evolving. If this market does not evolve as we anticipate or our target end customers do not adopt our cloud 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 cloud networking market. The market demand for cloud 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 cloud networking business models including those regulations related to cyber security, privacy, data protection and net neutrality, our ability to provide cloud 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.

If the cloud 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.

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, 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, reduced unit sales and lower or no growth. For example, the global macroeconomic environment could be negatively affected by, among other things, instability in global economic markets resulting from increased U.S. trade tariffs on steel and other products and trade disputes between the U.S. and other countries, instability in the global credit markets, the impact and uncertainty regarding global central bank monetary policy, rising interest rates and increased inflation, including the recent rise in U.S. interest rates, the instability in the geopolitical

environment as a result of the United Kingdom “Brexit” decision to withdraw from the European Union, economic challenges in China and ongoing U.S. 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, particularly if any future sovereign debt defaults or significant bank failures or defaults occur. Market uncertainty and instability in Europe or Asia could intensify or spread further, particularly if ongoing stabilization efforts prove insufficient. Continuing or worsening economic instability could adversely affect spending for IT, network infrastructure, systems and tools. Continued turmoil in the geopolitical environment in many parts of the world may also affect the overall demand for our products. Although we do not believe that our business, financial condition, results of operations and prospects have been significantly adversely affected by economic and political uncertainty in Europe, Asia or other countries to date, deterioration of such conditions may harm our business, financial condition, results of operations and prospects in the future. A prolonged period of economic uncertainty or 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.

Our limited operating history makes it difficult to evaluate our current business and future prospects and may increase the risk associated with your investment.

We shipped our first products in 2008 and the majority of our revenue growth has occurred since the beginning of 2010. Our limited operating history makes it difficult to evaluate our current business and our future prospects, including our ability to plan for and model future growth. We have encountered and will continue to encounter risks and difficulties frequently experienced by rapidly growing companies in constantly evolving industries, including the risks described elsewhere in this Quarterly Report on Form 10-Q. If we do not address these risks successfully, our business, financial condition, results of operations and prospects will be adversely affected, and the market price of our common stock could decline. Further, we have limited historical financial data, and we operate in a rapidly evolving market. As such, any predictions about our future revenue and expenses may not be as accurate as they would be if we had a longer operating history or operated in a more predictable market.

We pursue new product offerings and technology initiatives from time to time, and if we fail to successfully carry out these initiatives, our business, financial condition, or results of operations could be adversely impacted.

As part of the evolution of our business, we have made substantial investments to develop new products and enhancements to existing products through our acquisitions and research and development efforts to diversify our product offerings and maintain growth of the Company. If we are unable to anticipate technological changes in our industry by introducing new or enhanced products in a timely and cost-effective manner, or if we fail to introduce products that meet market demand, we may lose our competitive position, our products may become obsolete, and our business, financial condition or results of operations could be adversely affected.

Additionally, from time to time, we invest in expansion into adjacent markets, including the campus switching and WiFi networking 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 the following:

- Our ability to develop new products, new product features and services that address the customer requirements for these markets;
- Our ability to attract a customer base in markets in which we have less experience;
- Our successful development of new sales and marketing strategies to meet customer requirements;
- Our ability to develop new channel relationships and enhance existing relationships to market and sell new products;
- Our ability to compete with new and existing competitors in these adjacent markets, many of which may have more financial resources, market experience, brand recognition, relevant intellectual property rights, or established customer relationships than we currently do;
- Our ability to skillfully balance our investment in adjacent markets with investment in our existing products and services; and
- Our ability to grow our sales force to address new markets.

Additionally, future market share gains may take longer than planned and cause us to incur significant costs. 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.

If we do not successfully anticipate technological shifts, market needs and opportunities, and develop products and product enhancements that meet those technological shifts, needs and opportunities, or if those products are not made available in a timely manner or do not gain market acceptance, 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 requires 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 industry-standard servers or develop their own networking products 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. For example, we recently introduced our 7800R family of products for demanding 400G cloud networks. 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, component costs, 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.

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.

To remain competitive, we must successfully manage product introductions and transitions.

Our ability to continue to compete effectively in a rapidly evolving market requires that we successfully release new products that meet the increasingly sophisticated networking requirements of our end customers. For example, we recently introduced our 7800R family of products for demanding 400G cloud networks and the next generation of the Arista 7500R, 7280R Series. The success of new product introductions will depend on a number of factors including, but not limited to, timely and successful product development, market acceptance of our new products, our ability to penetrate new markets, our ability to manage the risks associated with new product production ramp-up issues, the timely development and availability of new merchant silicon chips from our suppliers, the effective management of purchase commitments and inventory in line with anticipated product demand, the availability of products in appropriate quantities and costs to meet anticipated demand, and the risk that new products may have quality or other defects or deficiencies in the early stages of introduction. 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. In addition, we recently introduced Arista Cognitive Cloud Networking for the Campus as well as Mojo Cognitive WiFi and Metamako low latency switches. 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 revenue growth rate in recent periods may not be indicative of our future performance.

Our revenue growth rate in recent periods may not be indicative of our future performance. We experienced annual revenue growth rates of 30.7% , 45.8%, and 34.8% in 2018, 2017, and 2016, respectively. In the future, we expect our revenue growth rates to decline as the size of our customer base increases, we achieve higher market penetration in our current target market and we continue to enter and expand into new target markets. 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, our ability to successfully manage our expansion or continue to capitalize on growth opportunities, the maturation of our business and general economic, international trade conditions, and our ability to be successful in adjacent markets, such as the campus switching and WiFi networking markets. For example, we experienced a slowdown in demand from certain large end customers during the quarter ended June 30, 2019, and this slowdown could continue, which may 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 are likely to 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:

- our ability to increase sales to existing customers and attract new end customers, including large end customers;
- the budgeting 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;
- changes in end-customer, geographic or product mix;
- changes in the growth rate of existing or new customers, including large end customers;
- changes in growth rates of the networking market;
- the cost and potential outcomes of existing and future litigation, including the OptumSoft litigation matters;
- increased expenses resulting from 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 the sales and implementation cycles for our products including the qualification and testing of our products by our customers and any delays or cancellations of purchases caused by such activities;
- the rate of expansion and productivity of our sales force including any expansion into new markets;
- changes in our pricing policies, whether initiated by us or as a result of competition;
- our inability to fulfill our end customers' orders due to the availability of inventory, supply chain delays, access to key commodities or technologies or events that impact our manufacturers or their suppliers;
- the amount and timing of operating costs and capital expenditures related to the operation and expansion of our business;
- changes in end-customer, distributor or reseller requirements or market needs;
- difficulty forecasting, budgeting and planning due to limited visibility beyond the first two quarters into the spending plans of current or prospective customers;
- deferral, reduction or cancellation of orders from end customers, including in anticipation of new products or product enhancements announced by us or our competitors, or warranty returns;
- 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 of our sales or distribution channel, any disruption in our sales or distribution channels, and/or termination of our relationship with important channel partners;
- decisions by potential end customers to purchase our networking solutions from larger, more established vendors, white box vendors or their primary network equipment vendors;
- price competition;

- 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;
- stock-based compensation expense;
- 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, including the Tax Cuts and Jobs Act of 2017 (the “Tax Act”);
- 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
- other risk factors described in this Quarterly Report on Form 10-Q.

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. In the past, we failed to meet our financial expectations and the market price of our common stock declined. 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.

If we are unable to attract new large end customers or to sell additional products 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 and large end customers and sell additional products 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 to be 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, market saturation in the cloud networking market, competition, decreased capital spending of such customers, a limited number of such customers, and a decline in growth of 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, particularly in the cloud networking market. Many of these end customers make large purchases to complete or upgrade specific data center installations and are typically made on a purchase-order basis rather than pursuant to long-term contracts. For example, revenue from sales to Microsoft, through our channel partner, World Wide Technology, Inc., accounted for 27%, 16% and 16% of our revenue for the years ended December 31, 2018, 2017 and 2016, respectively. Our sales to Microsoft as an end-user in fiscal 2018 benefited from certain factors that are not expected to be repeated in fiscal 2019 or future years. As a result, the percentage of our revenue from Microsoft in fiscal 2019 is expected to decline.

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, vendor selection, project prioritization, financial prospects, lack of growth of our customers, capital resources and expenditures or purchasing behavior 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 will be based primarily on purchase orders, our customers may cancel, delay, reduce or otherwise modify their purchase commitments with little or no notice to us. 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, 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 can drive the growth in revenue for particular products and services based on factors such as: trends in the networking market, business mergers and acquisitions, trends in economic conditions and the overall fast growth of a customer's underlying business. These customers could choose to divert all or a portion of their business with us to one of our competitors, 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.

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.

We face intense competition, especially from larger, well-established companies, and we may lack sufficient financial or other resources to maintain or improve our competitive position.

The markets in which we compete, including the markets for data center and campus networking, 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 Systems ("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, in the last few years alone, Broadcom acquired Brocade Communications Systems, Extreme Networks purchased certain data center networking assets from Broadcom/Brocade and Avaya, Dell acquired EMC, Hewlett Packard Enterprise acquired Aruba Networks, and Juniper Networks acquired Mist Systems. In addition, Cisco recently announced that it intends to acquire Acacia Communications, Inc. We also face competition from other companies and new market entrants, including "white box" switch vendors as well as 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. Furthermore, our relationships with our strategic alliance partners may 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;
- 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 with vendor 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 including bundling of products that are competitive with ours with other products that we do not sell or with support service contracts;
- 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.

Our competitors also may be able to provide end customers with capabilities or benefits different from or greater than those we can provide in areas such as technical qualifications or geographic presence or may be able to provide end customers a broader range of products, services and prices. 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 may see new competition in different geographic regions. In particular, we may 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. Current or potential competitors may be acquired by third parties that have greater resources available than we do. Our current or potential competitors might take advantage of the greater resources of the larger organization resulting from these acquisitions to compete more vigorously or broadly with us. In addition, continued industry consolidation might adversely affect end customers' perceptions of the viability of smaller and even medium-sized networking companies and, consequently, end customers' willingness to purchase from those companies. Further, certain large end customers may develop network switches and cloud service solutions for internal use and/or to broaden their portfolio of products, which could allow these end customers to become new competitors in the market.

Industry consolidation may lead to increased competition and may harm our business, financial condition, results of operations and prospects.

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, in the last few years alone, Broadcom acquired Brocade Communications Systems, Extreme Networks purchased certain data center networking assets from Broadcom/Brocade and Avaya, Dell acquired EMC, Hewlett Packard Enterprise acquired Aruba Networks, and Juniper Networks acquired Mist Systems. In addition, Cisco recently announced that it intends to acquire Acacia Communications, Inc.

Moreover, 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. Our relationship with our strategic alliance partners may shift as industry dynamics change. For example, companies that are strategic alliance partners in some areas of our business may acquire or form alliances with our competitors and could combine competitor product portfolios into unified offerings optimized for their platforms. Such changes could result in a reduction of business with us, a change in the terms upon which they offer us their products and services or even a termination of our strategic partnerships entirely. Industry consolidation may result in stronger competitors that are better able to compete with us, including any competitors that seek to become sole source vendors for end customers. 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.

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

Managing the supply of our products and product components is complex, and our inventory management systems and related supply-chain visibility tools may not enable us to forecast accurately and manage effectively the supply of our products and product components.

Insufficient supply and inventory may result in increased lead times for our products, lost sales opportunities or delayed revenue, while excess inventory may harm our gross margins. In order to reduce manufacturing lead times and plan for adequate component supply, from time to time we may issue purchase orders for components and products that are non-cancelable and non-returnable. We establish a liability for non-cancelable, 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.

Supply management remains an increased area of focus as we balance the need to maintain sufficient supply levels to ensure competitive lead times against the risk of obsolescence or the end of life of certain products. If we ultimately determine that we have excess supply, we may have to reduce our prices and write down inventory, which in turn could result in lower gross margins. 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.

Alternatively, insufficient supply levels may lead to shortages that result in delayed revenue or loss of sales opportunities altogether as potential end customers turn to competitors' products that are readily available. Additionally, any increases in the time required to manufacture our products or ship products could result in supply shortfalls. 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 some of the key components in our products come from sole or limited sources of supply, we are susceptible to supply shortages 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 key 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, delay shipments, prioritize shipments to other vendors, increase prices or cease manufacturing such products or selling them to us at any time. For example, in the past, we have experienced shortages in inventory for dynamic random access memory integrated circuits and delayed releases of the next generation of chipset, which delayed our production and/or the release of our new products. The development of alternate sources for those components is time-consuming, difficult and costly. 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, sales 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 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.

Our reliance on component suppliers also yields the potential for their infringement or misappropriation of third party intellectual property rights with respect to components which may be incorporated 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 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. Our relationship with these merchant silicon vendors 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. However, merchant silicon vendors may not continue to 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 no longer collaborate in such a fashion, if they do not continue to innovate, if there are delays in the release of their products or supply shortages or if such merchant silicon is not offered to us on commercially reasonable terms, our products may become less competitive, 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.

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. 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. 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 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 quality control problems in their manufacturing operations 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.

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 in ensuring 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 or disruptions for any reason, including those noted above, as well as a natural disaster, epidemic, 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.

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 and could

delay the development or release of new products or new versions of products. 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, cause us to lose significant end customers, subject us to liability for damages 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 would not have a material effect on our business, financial condition, results of operations and prospects. See “—Our business is subject to the risks of warranty claims, product returns, product liability and product defects.”

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

We may be subject to supply chain delays, or end-customer buying patterns in which a substantial portion of sales orders and shipments may occur in the second half of each quarter. This places significant pressure on order review and processing, 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, it 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.

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 analyses from our sales and marketing organizations, adjusted for overall market conditions and other factors. To the extent our forecasts are materially inaccurate 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.

We are currently involved in a license dispute with OptumSoft, Inc.

On April 4, 2014, OptumSoft filed a lawsuit against us in the Superior Court of California, Santa Clara County titled OptumSoft, Inc. v. Arista Networks, Inc., in which it asserts (i) ownership of certain components of our EOS network operating system pursuant to the terms of a 2004 agreement between the companies and (ii) breaches of certain confidentiality and use restrictions in that agreement. Under the terms of the 2004 agreement, OptumSoft provided us with a non-exclusive, irrevocable, royalty-free license to software delivered by OptumSoft comprising a software tool used to develop certain components of EOS and a runtime library that is incorporated into EOS. The 2004 agreement places certain restrictions on our use and disclosure of the OptumSoft software and gives OptumSoft ownership of improvements, modifications and corrections to, and derivative works of, the OptumSoft software that we develop.

In its lawsuit, OptumSoft has asked the Court to order us to (i) give OptumSoft access to our software for evaluation by OptumSoft; (ii) cease all conduct constituting the alleged confidentiality and use restriction breaches; (iii) secure the return or deletion of OptumSoft’s alleged intellectual property provided to third parties, including our customers; (iv) assign ownership to OptumSoft of OptumSoft’s alleged intellectual property currently owned by us; and (v) pay OptumSoft’s alleged damages, attorney’s fees, and costs of the lawsuit. David Cheriton, one of our founders and a former member of our board of directors, who resigned from our board of directors on March 1, 2014 and has no continuing role with us, is a founder and, we believe, the largest stockholder and director of OptumSoft. The 2010 David R. Cheriton Irrevocable Trust dated July 28, 2010, a trust for the benefit of the minor children of Mr. Cheriton, is one of our largest stockholders.

On April 14, 2014, we filed a cross-complaint against OptumSoft, in which we asserted our ownership of the software components at issue and our interpretation of the 2004 agreement. Among other things, we asserted that the language of the 2004 agreement and the parties’ long course of conduct support our ownership of the disputed software components. We asked the Court to declare our ownership of those software components, all similarly-situated software components developed in the future and all related intellectual property. We also asserted that, even if we are found not to own certain components, such components are licensed to us under the terms of the 2004 agreement. However, there can be no assurance that our assertions will ultimately prevail in litigation. On the same day, we also filed an answer to OptumSoft’s claims, as well as affirmative defenses based in part on OptumSoft’s failure to maintain the confidentiality of its claimed trade secrets, its authorization of the disclosures it asserts and its delay in claiming ownership of the software components at issue. We have also taken additional steps to respond to OptumSoft’s allegations that we improperly used and/or disclosed OptumSoft confidential information. While we believe we have meritorious defenses to these allegations, we believe we have (i) revised our software to remove the elements we understand to be the subject of the claims relating to improper use and disclosure of OptumSoft confidential information and made the revised

software available to our customers and (ii) removed information from our website that OptumSoft asserted disclosed OptumSoft confidential information.

The parties tried Phase I of the case, relating to contract interpretation and application of the contract to certain claimed source code, in September 2015. On March 23, 2016, the Court issued a Final Statement of Decision Following Phase I Trial, in which it agreed with and adopted our interpretation of the 2004 agreement and held that we, and not OptumSoft, own all the software at issue in Phase I. The remaining issues that were not addressed in the Phase I trial are set to be tried in Phase II, including the application of the Court's interpretation of the 2004 agreement to any other source code that OptumSoft claims to own following a review and the trade secret misappropriation and confidentiality claims. The Court has agreed to vacate the trial date pending the parties' efforts to settle the issues in dispute in the Phase II trial.

We intend to vigorously defend against any claims brought against us by OptumSoft. However, we cannot be certain that, if litigated, any claims by OptumSoft would be resolved in our favor. For example, if it were determined that OptumSoft owned components of our EOS network operating system, we would be required to transfer ownership of those components and any related intellectual property to OptumSoft. If OptumSoft were the owner of those components, it could make them available to our competitors, such as through a sale or license. An adverse litigation ruling could result in a significant damages award against us and injunctive relief. In addition, OptumSoft could assert additional or different claims against us, including claims that our license from OptumSoft is invalid.

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

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.

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

We have not yet established broad market awareness of our products and services. 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 large enterprise markets. If our marketing efforts are unsuccessful in creating market awareness of our company and our products and services, then our business, financial condition, results of operations and prospects will be adversely affected, and we will not be able to achieve sustained growth.

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. For example, 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. 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. 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.

Also, to the extent we hire personnel from competitors, we may be subject to allegations that such personnel has been improperly solicited, that such personnel has divulged proprietary or other confidential information or that former employers own certain inventions or other work product. Such claims could result in litigation. Please see “We may become involved in litigation that may materially adversely affect us.”

We employ a number of foreign nationals who are required to obtain visas and entry permits in order to legally work in the United States and other countries. The United States has recently increased the level of scrutiny in granting H-1(B), L-1 and other business visas, and the current administration has indicated that immigration reform is a priority. Our compliance with United States immigration and labor laws could require us to incur additional unexpected labor costs and expenses or could restrain our ability to retain skilled professionals.

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 require that they continue to work for us for any specified period, and therefore, they could terminate their employment with us at any time. The loss of our key personnel, including Jayshree Ullal, our Chief Executive Officer, Andy Bechtolsheim, our Founder and Chief Development Officer, Kenneth Duda, our Founder, Chief Technology Officer and SVP of Software Engineering, Anshul Sadana, our Chief Customer Officer or other members of our senior management team, sales and marketing team or engineering team, or any difficulty attracting or retaining other highly qualified personnel in the future, could significantly delay or prevent the achievement of our development and strategic objectives, which could adversely affect our business, financial condition, results of operations and prospects.

If we do not effectively expand and train our direct sales force, we may be unable to add new end customers, increase sales to our existing end customers, and/or successfully expand into new markets, and our business will be adversely affected.

We depend on our direct sales force to obtain new end customers and increase sales with existing end customers. As such, we have invested and will continue to invest in our sales organization. In recent periods, we have been adding personnel and other resources to our sales function as we focus on growing our business, entering new markets and increasing our market share, and we expect to incur additional expenses in expanding our sales personnel in order to achieve revenue growth. For example, we expect to continue to invest significant time, effort and financial resources into hiring and training our sales force to address the enterprise and campus markets. Despite our efforts, we do not have significant experience selling to enterprise and campus customers, and there can be no assurance that we will be successful in these markets. There is significant competition for sales personnel with the skills and technical knowledge that we require. Our ability to achieve significant revenue growth will depend, in large part, on our success in recruiting, training, retaining and integrating sufficient numbers of sales personnel to support our growth, particularly in international markets. New hires require significant training and may take significant time before they achieve full productivity. Our recent hires and planned hires may not become productive as quickly as we expect, and we may be unable to hire, retain or integrate into our corporate culture sufficient numbers of qualified individuals in the markets where we

do business or plan to do business. In addition, because we continue to grow rapidly, a large percentage of our sales force is new to our company. If we are unable to hire, integrate and train a sufficient number of effective sales personnel, or the sales personnel we hire are not successful in obtaining new end customers or increasing sales to our existing end-customer base, our business, financial condition, results of operations and prospects will be adversely affected.

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. We have a limited history of marketing, selling and supporting our products and services internationally. Operating in a global marketplace, we are subject to risks associated with having an international reach and requirements such as compliance with applicable anti-corruption laws.

One such applicable anti-corruption law is the U.S. Foreign Corrupt Practices Act, or FCPA, which generally prohibits U.S. companies and its employees and intermediaries from making corrupt payments to foreign officials for the purpose of obtaining or keeping business, securing an advantage and directing business to another, and requires companies to maintain accurate books and records and a system of internal accounting controls. Under the FCPA, U.S. companies may be held liable for the corrupt actions taken by directors, officers, employees, agents, or other strategic or local partners or representatives. As such, if we or our intermediaries fail to comply with the requirements of the FCPA or similar legislation, governmental authorities in the U.S. and elsewhere could seek to impose civil and/or criminal fines and penalties which could have a material adverse effect on our business, results of operations and financial conditions. Failure to comply with anti-corruption and anti-bribery laws, such as the FCPA and the United Kingdom Bribery Act of 2010, or the U.K. Bribery Act, and similar laws associated with our activities outside the U.S., could subject us to penalties and other adverse consequences. We intend to increase our international sales and business and, as such, the risk of violating laws such as the FCPA and U.K. Bribery Act increases.

Additionally, the U.S. government has adopted broader sanctions and embargoes that generally forbid supplying many items to or involving certain countries, territories, governments, legal entities and individuals, including restrictions imposed by the U.S. and EU on exports to Russia and Ukraine. We have implemented systems to detect and prevent sales into these countries or to prohibit entities or individuals, but we are necessarily dependent in part on our third-party suppliers and distributors to implement these systems. We cannot assure you that these systems will always be effective, or that our suppliers and distributors effectively implement our systems to detect and prevent such sales without our prior knowledge, and we may incur additional unexpected costs or expenses to comply with applicable trade restrictions.

As a result of our international reach, we must hire and train experienced personnel to staff and manage our foreign operations. To the extent that we experience difficulties in recruiting, training, managing and retaining an international staff, and specifically staff related to sales management and sales personnel, we may experience difficulties in sales productivity in foreign markets. We also enter into strategic distributor and reseller relationships with companies in certain international markets where we do not have a local presence. If we are not able to maintain successful strategic distributor relationships internationally or to recruit additional companies to enter into strategic distributor relationships, our future success in these international markets could be limited. Business practices in the international markets that we serve may differ from those in the U.S. and may require us in the future to include terms other than our standard terms in end-customer contracts, although to date we generally have not done so. To the extent that we may enter into end-customer contracts in the future that include non-standard terms related to payment, warranties or performance obligations, our results of operations may be adversely affected.

Additionally, our international sales and operations are subject to a number of risks, including the following:

- greater difficulty in enforcing contracts and accounts receivable collection and longer collection periods;
- 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;
- greater difficulty and costs in recruiting local experienced personnel;
- wage inflation in certain growing economies;
- general economic and political conditions in these foreign markets;
- economic uncertainty around the world as a result of sovereign debt issues;
- communication and integration problems resulting from cultural and geographic dispersion;
- limitations on our ability to access cash resources in our international operations;
- ability to establish necessary business relationships and to comply with local business requirements;
- risks associated with foreign legal requirements, including the importation, certification and localization of our products required in foreign countries;

- risks associated with U.S. government trade restrictions, including those which may impose restrictions, including prohibitions, on the exportation, reexportation, sale, shipment or other transfer of programming, technology, components, and/or services to foreign persons;
- greater risk of unexpected changes in regulatory practices, tariffs and tax laws and treaties, including the Tax Act;
- greater risk of unexpected changes in 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, Canada, Mexico and the EU, and by the governments of these jurisdictions on certain U.S. goods, and any other possible tariffs that may be imposed on services such as ours, the scope and duration of which, if implemented, remain uncertain;
- deterioration of political relations between the U.S. and Canada, the U.K., the EU, Mexico and China, which could have a material adverse effect on our sales and operations in these countries;
- greater risk of changes in diplomatic and trade relationships, including new tariffs, trade protection measures, import or export licensing requirements, trade embargoes and other trade barriers;
- the uncertainty of protection for intellectual property rights in some countries;
- greater risk of a failure of foreign employees to comply with both U.S. and foreign laws, including antitrust regulations, the FCPA and any trade regulations ensuring fair trade practices; 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.

Moreover, our business is also impacted by the negotiation and implementation of free trade agreements between the United States and other countries. Such agreements can reduce barriers to international trade and thus the cost of conducting business overseas. For instance, the United States recently reached a new trilateral trade agreement with the governments of Canada and Mexico to replace the North American Free Trade Agreement (“NAFTA”). If the United States withdraws from NAFTA and the three countries fail to approve the new agreements, known as the United States-Mexico-Canada Agreement, our cost of doing business within the three countries could increase.

The United Kingdom’s vote to leave the European Union will have uncertain effects and could adversely affect us.

On June 23, 2016, the electorate in the United Kingdom, or UK, voted in favor of leaving the European Union, or EU, (commonly referred to as the “Brexit”). Thereafter, on March 29, 2017, the country formally notified the EU of its intention to withdraw pursuant to Article 50 of the Lisbon Treaty. Although the withdrawal of the UK from the EU was scheduled to take effect on March 29, 2019, the withdrawal agreement was extended until April 12, 2019, and further extended until October 31, 2019.

The effects of Brexit will depend on agreements the UK makes to retain access to EU markets either during a transitional period or more permanently. Brexit creates an uncertain political and economic environment in the UK and potentially across other EU member states for the foreseeable future, including during any period while the terms of Brexit are being negotiated and such uncertainties could impair or limit our ability to transact business in the member EU states.

Further, Brexit could adversely affect European and worldwide economic or market conditions and could contribute to instability in global financial markets, and the value of the Pound Sterling currency or other currencies, including the Euro. We are exposed to the economic, market and fiscal conditions in the UK and the EU and to changes in any of these conditions. Depending on the terms reached regarding Brexit, it is possible that there may be adverse practical and/or operational implications on our business.

A significant amount of the regulatory regime that applies to us in the UK is derived from EU directives and regulations. For so long as the UK remains a member of the EU, those sources of legislation will (unless otherwise repealed or amended) remain in effect. However, Brexit could change the legal and regulatory framework within the UK where we operate and is likely to lead to legal uncertainty and potentially divergent national laws and regulations as the UK determines which EU laws to replace or replicate. Consequently, no assurance can be given as to the impact of Brexit and, in particular, no assurance can be given that our operating results, financial condition and prospects would not be adversely impacted by the result.

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 trade policies, treaties, tariffs and taxes, including trade policies and tariffs

regarding China. The current U.S. Administration has called for substantial changes to U.S. foreign trade policy with respect to China and other countries and the countries continue to negotiate a trade deal, including the possibility of imposing greater restrictions on international trade. 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.

If tariffs, trade restrictions, or trade barriers are placed on products such as ours by foreign governments, especially China, our costs may increase, which would narrow the profits we earn from sales of products requiring such materials and the prices for our products may increase, which may result in the loss of customers and our business, financial condition and results of operations may be harmed. 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. Any reduction in our customers' sales, and/or any apprehension among distributors and customers of a possible reduction in such sales, would likely cause 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.

Furthermore, our business may be impacted by retaliatory trade measures taken by China and other countries including restricted access to suppliers, communications equipment products and components used in our products, causing us to raise prices or make changes to our products, which could materially harm our business, financial condition and results of operations.

Trade barriers or the perception that any of them could occur, may have a material adverse effect on global economic conditions and the stability of global financial markets, and may significantly reduce global trade and, in particular, trade between these nations and the United States. Any of these factors could depress economic activity and restrict our access to suppliers or customers and have a material adverse effect on our business, financial condition and results of operations and affect our strategy in China and elsewhere around the world. Given the relatively fluid regulatory environment in China and the United States and uncertainty how the U.S. Administration 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.

Sales of our 7000 Series of 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 7000 Series of 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 our 7000 Series 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 7000 Series of 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.

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

We operate on a December 31st year end and believe that there are significant seasonal factors which may cause sequential product revenue growth to be greater for the second and fourth quarters of our year than our first and third quarters. 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. As 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.

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.

In the past, we have identified material weaknesses in our internal control over financial reporting and we cannot give assurance that additional material weaknesses will not be identified in the future. The existence of one or more material weaknesses could preclude a conclusion by management that we maintained effective internal control over financial reporting. The existence or disclosure of any such material weakness could adversely affect our stock price.

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

From time to time, in addition to the litigation involving OptumSoft described elsewhere in these risk factors, we may become involved in various 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 and claims, 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. 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, by agreeing to settlement agreements. 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 are currently involved, see the "Legal Proceedings" subheading in Note 7. Commitments and Contingencies of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1, of this Quarterly Report on Form 10-Q incorporated herein by reference.

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 and WiFi industries and have resulted in protracted and expensive litigation for many companies. Many companies in the network infrastructure and WiFi 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 are currently a party to litigation involving OptumSoft described elsewhere in these risk factors and we have previously been involved in litigation with Cisco.

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, prolonged 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 (including those lawsuits described under the "Legal Proceedings" subheading in Note 7. Commitments and Contingencies of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1, of

this Quarterly Report on Form 10-Q) 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 Customs approval of those redesigns before we could continue to import those products into the United States.

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.

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.

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 data center 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 original equipment manufacturers, or OEMs. Our products must comply with established industry standards in order to interoperate with the servers, storage, software and other networking equipment in the data center 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.

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, or 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.

We expect our gross margins to vary over time and to 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:

- changes in end-customer, geographic or product mix, including mix of configurations within each product group;
- increased price competition and changes in the actions of our competitors or their pricing strategies;
- introduction of new products, including products with price-performance advantages and new business models including the sale and delivery of more software and subscription solutions;
- increases in material or component costs including such increases caused by any restriction from sourcing components and manufacturing products internationally;
- our ability to reduce production costs;
- entry into new markets or growth in lower margin markets, including markets with different pricing and cost structures, through acquisitions or internal development;
- entry in markets with different pricing and cost structures;
- pricing discounts, particularly to our large end customers;
- increases in material costs in the event we are restricted from sourcing components and manufacturing products internationally;
- costs associated with defending intellectual property infringement and other claims and the potential outcomes of such disputes, such as those claims discussed in "Legal Proceedings," including the OptumSoft litigation matters;
- excess inventory and inventory holding charges;
- obsolescence charges;
- changes in shipment volume;
- the timing of revenue recognition and revenue deferrals;

- increased cost, loss of cost savings or dilution of savings due to changes in component pricing or charges incurred due to inventory holding periods if parts ordering does not correctly anticipate product demand or if the financial health of either contract manufacturers or suppliers deteriorates;
- increased costs arising from 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 recently implemented and additional tariffs that have been proposed by the U.S. government on various imports from China, Canada, Mexico and the E.U. and by the governments of these jurisdictions on certain U.S. goods;
- lower than expected benefits from value engineering;
- changes in distribution channels;
- increased warranty costs; and
- our ability to execute our strategy and operating plans.

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.

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 in the case of 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. 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. 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 business is subject to the risks of warranty claims, product returns, product liability and product defects.

Our products are very complex and despite testing prior to their release, they have contained and 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 and could delay the development or release of new products or new versions of products, adversely affect our reputation and our end customers' willingness to buy products from us and adversely affect market acceptance or perception of our products. Real or perceived errors, failures or bugs in our products could cause us to lose revenue or market share, increase our service costs, cause us to incur substantial costs in redesigning the products, cause us to lose significant end-customers, subject us to liability for damages and divert our resources from other tasks, any one of which could materially and adversely affect our business, results of operations and financial condition.

Additionally, real or perceived errors, failures or bugs in our products could result in claims by end customers for losses that they sustain. If end customers make these types of claims, we may be required, or may choose, for end-customer relations or other reasons, to expend additional resources in order to address the problem. We may also be required to repair or replace such products or provide a refund for the purchase price for such products. Liability provisions in our standard terms and conditions of sale, and those of our resellers and distributors, may not be enforceable under some circumstances or may not fully or effectively

protect us from end-customer claims and related liabilities and costs, including indemnification obligations under our agreements with end customers, resellers and distributors. The sale and support of our products also entail the risk of product liability claims. Even claims that ultimately are unsuccessful could result in expenditures of funds in connection with litigation and divert management's time and other resources.

Levels or types of insurance coverage purchased may not adequately cover claims or liabilities.

We maintain insurance to protect against certain types of claims associated with the use of our products, operations, property damage, casualty and other risks, but our insurance coverage may not adequately cover all claims or penalties. Depending on our assumptions regarding level of risk, availability, cost and other considerations, we purchase differing amounts of insurance from time to time and in various locations. Our insurance coverage is subject to deductibles, exclusions and policy limits that may require us to self-insure certain types of claims or claims in certain countries. If our level of insurance is inadequate or a loss isn't covered by insurance, we could be required to pay unpredictable and substantial amounts that could have a substantial negative impact on our financial results or operations.

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 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.

We may 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 may 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 Mojo Networks, Inc. ("Mojo") in August 2018 and the acquisition of Metamako Holding PTY LTD. ("Metamako") in September 2018. However, we do not have significant experience in making investments in other companies nor had we made any acquisitions prior to those of Mojo and Metamako, and as a result, our ability as an organization to evaluate and/or complete investments or acquire and integrate other companies, products or technologies in a successful manner is unproven. 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.

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 customers 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 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.

Furthermore, 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.

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 at all. 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, if at all, we may not be able to, among other things:

- evolve or enhance our products and services;
- continue to expand our sales and marketing and research and development organizations;
- acquire complementary technologies, products or businesses;

- expand operations in the U.S. or internationally;
- hire, train and retain employees; or
- 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.

If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, 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. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, as described in Part II Item 7 of “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue and expenses that are not readily apparent from other sources. 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.

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.

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, an increasing 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.

Our business is subject to the risks of earthquakes, fire, power outages, floods and other catastrophic events and to interruption by manmade 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 a 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. For example, in the event our service providers’

information technology systems or manufacturing or logistics abilities are hindered by any of the events discussed above, shipments could be delayed, which could result in missed financial targets, such as revenue and shipment targets, for a particular quarter. Further, if a natural disaster occurs in a region from which we derive a significant portion of our revenue, end customers in that region may delay or forego purchases of our products, which may materially and adversely affect our business, financial condition, results of operations and prospects. 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. All of the aforementioned risks may be augmented if our disaster recovery plans and those of our manufacturers, logistics providers or partners prove to be inadequate. To the extent that any of the above results in delays or cancellations of end-customer orders, or delays in the manufacture, deployment or shipment of our products, our business, financial condition, results of operations and prospects would be adversely affected.

Breaches of our cybersecurity systems 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, 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 may attempt to penetrate our network security, or that of our website, and misappropriate proprietary information about us or our customers or cause interruptions of our service. Because the techniques used by such computer programmers to access or sabotage networks change frequently and may not be recognized until launched against a target, we may be unable to anticipate these techniques. In addition, sophisticated hardware and operating system software and applications that we produce or procure from third parties may contain defects in design or manufacture, including “bugs” and other problems that could unexpectedly interfere with the operation of the system. 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 data and deploy our IT resources in safe and secure fashion that does not expose our network systems to security breaches and the loss of data. Accordingly, if our cybersecurity systems and those of our contractors fail to protect against unauthorized access, sophisticated cyber attacks and the mishandling of data by our employees and contractors, 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;
- our electronic communications systems, including email and other methods, could be disrupted, and our ability to conduct our business operations could be seriously damaged until such systems can be restored;
- 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; and
- personally identifiable data of our customers, employees and business partners could be compromised.

Should any of the above events occur, we could be subject to significant claims for liability from our customers and regulatory actions from governmental agencies. 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, litigations, investigations, fines, penalties and liabilities relating to data breaches that result in losses of personally identifiable or credit card information 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 remediate damages. Consequently, our financial performance and results of operations could be adversely affected.

We believe our long-term value as a company will be greater if we focus primarily on growth instead of profitability.

Our business strategy is to focus primarily on our long-term growth. As a result, our profitability in any given period may be lower than it would be if our strategy was to maximize short-term profitability. Expenditures on research and development, sales and marketing, infrastructure and other such investments may not ultimately grow our business, prospects or cause long term profitability. For example, in order to support our strong growth, we have accelerated our investment in infrastructure, such as

enterprise resource planning software and other technologies to improve the efficiency of our operations. As a result, we expect our levels of operating profit could decline in the short to medium term. If we are ultimately unable to achieve or maintain profitability at the level anticipated by analysts and our stockholders, the market price of our common stock may decline.

We may not generate positive returns on our research and development investments.

Developing our products is expensive, and the investment in product development may involve a long payback cycle. For the years ended December 31, 2018, 2017 and 2016, our research and development expenses were \$442.5 million, or approximately 20.6% of our revenue, \$349.6 million, or approximately 21.2% of our revenue, and \$273.6 million, or approximately 24.2% of our revenue, respectively. We expect to continue to invest heavily in software development in order to expand the capabilities of our cloud networking platform, introduce new products and features and build upon our technology leadership. We believe one of our greatest strengths lies in the speed of our product development efforts. By investing in research and development, we believe we will be well positioned to continue our rapid growth and take advantage of our large market opportunity. 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.

Changes in our income taxes or our effective tax rate, the 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, many 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; expiration of or lapses in the federal research and development (“R&D”) tax credit laws; transfer pricing adjustments, including the effect of acquisitions on our inter-company R&D cost sharing arrangement and legal structure; tax effects of nondeductible compensation, including certain stock-based compensation; tax costs related to inter-company realignments; changes in accounting principles; adverse tax consequences, including imposition of withholding or other taxes on payments by subsidiaries or customers; a change in our decision to indefinitely reinvest certain foreign earnings or changes in tax laws and regulations, including the Tax Act enacted on December 22, 2017 and the new U.S. changes to the taxation of earnings of our foreign subsidiaries.

Significant judgment is required to evaluate our tax positions and determine our income taxes. 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. In addition, tax laws are dynamic and subject to change as evidenced by the Tax Act. As new laws are passed and new interpretations of the law are issued or applied, our income taxes may be affected. Changes to U.S. tax laws, including taxation of earnings outside of the U.S., the introduction of a base erosion anti-abuse tax and the disallowance of tax deductions for certain book expense, as well as changes to U.S. tax laws that may be enacted in the future, could impact the tax treatment of our earnings, as well as cash and cash equivalent balances we currently maintain. Furthermore, due to shifting economic and political conditions, tax policies or rates in various jurisdictions may be subject to significant change. For example, on June 7, 2019, the Court of Appeals for the Ninth Circuit issued an opinion on *Altera Corporation and Subsidiaries vs. Commissioner on Internal Revenue*. The Opinion overturned the Tax Court decision and ruled in favor of the Commissioner validating the Regulations requiring stock-based compensation to be included in a cost sharing arrangement. As a result of the Opinion, we have changed our position and determined it is more likely than not that these Regulations are valid and recognized an income tax expense of \$9.8 million.

Further, we are subject to the examination of our income tax returns by the Internal Revenue Service and other tax authorities. Audits by the Internal Revenue Service 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.

The requirements of being a public company may strain our resources, divert management’s attention and affect our ability to attract and retain qualified board members.

As a public company, we are subject to the reporting and corporate governance requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, the listing requirements of the New York Stock Exchange and other applicable securities rules and regulations, including the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, and the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, or the Dodd-Frank Act. Compliance with these rules and regulations and the

attendant responsibilities of management and the board, may make it more difficult to attract and retain executive officers and members of our board of directors, particularly to serve on our Audit Committee and Compensation Committee, has increased our legal and financial compliance costs, made some activities more difficult, time-consuming or costly and increased demand on our systems and resources. Among other things, the Exchange Act requires that we file annual, quarterly and current reports with respect to our business and results of operations and maintain effective disclosure controls and procedures and internal control over financial reporting. In order to maintain and, if required, improve our disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight may be required. In addition, if our internal control over financial reporting is not effective as defined under Section 404, we could be subject to one or more investigations or enforcement actions by state or federal regulatory agencies, stockholder lawsuits or other adverse actions requiring us to incur defense costs, pay fines, settlements or judgments. As a result, management's attention may be diverted from other business concerns, which could harm our business, financial condition, results of operations and prospects. Although we have already hired additional employees to help comply with these requirements, we may need to further expand our legal and finance departments in the future, which will increase our costs and expenses.

In addition, changing laws, regulations, and standards relating to corporate governance and public disclosure, such as continued rulemaking pursuant to the Dodd-Frank Act and related rules and regulations, are creating uncertainty for public companies, increasing legal and financial compliance costs and making some activities more time consuming. These laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to invest resources to comply with evolving laws, regulations, and standards, and this investment may result in increased general and administrative expense and a diversion of management's time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies, regulatory authorities may initiate legal proceedings against us and our business and prospects may be harmed. As a result of disclosure of information in the filings required of a public company, our business and financial condition will become more visible, which may result in threatened or actual litigation, including by competitors and other third parties. If such claims are successful, our business, financial condition, results of operations and prospects could be harmed, and even if the claims do not result in litigation or are resolved in our favor, these claims, and the time and resources necessary to resolve them, could divert the resources of our management and harm our business, financial condition, results of operations and prospects.

In addition, as a result of our disclosure obligations as a public company, we will have reduced strategic flexibility and will be under pressure to focus on short-term results, which may adversely affect our ability to achieve long-term profitability. We also believe that being a public company and these new rules and regulations makes it more expensive for us to obtain and maintain director and officer liability insurance, and in the future, we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified members of our board of directors, particularly to serve on our Audit Committee and Compensation Committee, and qualified executive officers.

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, consumer protection laws, privacy, data protection, anti-bribery laws, import/export controls, 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 European Union, or EU, has now implemented General Data Protection Regulation ("GDPR"). The GDPR requires substantial changes to the handling and storage of data and administrative fines for violations, which can be up four percent of the previous year's annual revenue or €20 million, whichever is higher. From time to time, we may receive inquiries from such governmental agencies or we may make voluntary disclosures regarding our compliance with applicable governmental regulations or requirements relating to import/export controls, federal securities laws and tax laws and regulations which could lead to formal investigations. Noncompliance with applicable government regulations or requirements could subject us to sanctions, mandatory product recalls, enforcement actions, disgorgement of profits, fines, damages, civil and criminal penalties or injunctions. If any governmental 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 action will likely result in a significant diversion of management's attention and resources and an increase in professional fees. Enforcement actions and 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.

As our company grows we also continue developing 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.

If we or our partners fail to comply with environmental requirements, our business, financial condition, results of operations, prospects and reputation could be adversely affected.

We and our partners, including our contract manufacturers, are subject to various local, state, federal and international environmental laws and regulations, including laws governing the hazardous material content of our products and laws relating to the collection, recycling and disposal of electrical and electronic equipment. Examples of these laws and regulations include the EU Restrictions on the use of Hazardous Substances Directive, or RoHS Directive, and the EU Waste Electrical and Electronic Equipment Directive, or WEEE Directive, as well as the implementing legislation of the EU member states. Similar laws and regulations have been passed or are pending in China, South Korea, Norway and Japan and may be enacted in other regions, including in the U.S., and we or our partners, including our contract manufacturers, are, or may in the future be, subject to these laws and regulations.

The EU RoHS Directive and the similar laws of other jurisdictions limit the content of certain hazardous materials such as lead, mercury and cadmium in the manufacture of electrical equipment, including our products. Our products currently comply with the RoHS Directive; however, if there are future changes to this directive, we may be required to re-engineer our products to use components compatible with these regulations. This re-engineering and component substitution could result in additional costs to us or disrupt our operations or logistics.

We are also subject to environmental laws and regulations governing the management and disposal of hazardous materials and wastes. 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, 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.

Regulations related to conflict minerals may cause us to incur additional expenses and could limit the supply and increase the costs of certain metals used in the manufacturing of our products.

As a public company, we are subject to requirements under the Dodd-Frank Act that require us to perform diligence, and disclose and report whether or not our products contain "conflict minerals" mined from the Democratic Republic of Congo and adjoining countries and procedures regarding a manufacturer's efforts to prevent the sourcing of such "conflict minerals."

The implementation of these requirements could adversely affect the sourcing, availability and pricing of the materials used in the manufacture of components used in our products. In addition, we will incur additional costs to comply with these disclosure requirements, including costs related to conducting diligence procedures and, if applicable, potential changes to products, processes or sources of supply as a consequence of such verification activities. We may also face reputational harm if we determine that certain of our products contain minerals not determined to be conflict-free or if we are unable to alter our products, processes or sources of supply to avoid such materials.

Risks Related to the Securities Markets and 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 the following:

- actual or anticipated announcements of new products, services or technologies, commercial relationships, acquisitions or other events by us or our competitors;
- forward-looking statements related to future revenue, gross margins and earnings per share;
- price and volume fluctuations in the overall stock market from time to time;
- changes in the growth rate of our revenues and the networking market;
- litigation involving us, our industry, or both including events occurring in our litigation with OptumSoft;
- manufacturing, supply or distribution shortages or constraints, or challenges with adding or changing our manufacturing process or supply chain;
- significant volatility in the market price and trading volume of technology companies in general and of companies in the IT security industry in particular;
- fluctuations in the trading volume of our shares or the size of our public float;
- sales by our officers, directors or significant stockholders;
- actual or anticipated changes or fluctuations in our results of operations;
- adverse changes to our relationships with any of our channel partners;
- whether our results of operations or our financial outlook for future fiscal periods meet the expectations of securities analysts or investors;
- actual or anticipated changes in the expectations of investors or securities analysts;
- regulatory developments in the U.S., foreign countries or both;
- general economic conditions and trends;
- major catastrophic events;
- sales of large blocks of our common stock; or
- departures of key personnel.

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.

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 June 30, 2019, holders of approximately 23.0% 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.

We may also issue shares of common stock or securities convertible into our common stock in connection with a financing, acquisition, our equity incentive plans, or otherwise. Any such issuances would result in dilution to our existing stockholders and the market price of our common stock may be adversely affected.

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 22.6% of the outstanding shares of our common stock, based on shares outstanding as of June 30, 2019. 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.

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.

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

Although our board of directors has authorized a share repurchase program, any determination to execute our stock repurchase program 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 program is in the best interests of our shareholders and is in compliance with all laws and agreements applicable to the repurchase program. Our stock repurchase program does 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 share repurchase authorization program 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.

If securities or industry analysts publish inaccurate or unfavorable research reports about our business or prospects, the market price of our common stock and trading volume could decline.

The trading market for our common stock, to some extent, depends on the research and reports that securities or industry analysts publish about us or our business or prospects. We do not have any control over these analysts. If one or more of the analysts who cover us should downgrade our shares or change their opinion of our shares, the market price of our common stock would likely decline. If one or more of these analysts should cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause the market price of our common stock or trading volume to decline.

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.

The issuance of additional stock in connection with financings, acquisitions, investments, our stock incentive plans or otherwise will dilute all other stockholders.

Our amended and restated certificate of incorporation authorizes us to issue up to 1,000,000,000 shares of common stock and up to 100,000,000 shares of preferred stock with such rights and preferences as may be determined by our board of directors. Subject to compliance with applicable rules and regulations, we may issue our shares of common stock or securities convertible into our common stock from time to time in connection with a financing, acquisition, investment, our stock incentive plans or otherwise. We may from time to time issue additional shares of common stock at a discount from the then market price of our common stock. Any issuance of stock could result in substantial dilution to our existing stockholders and cause the market price of our common stock to decline.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

(c) Issuer Purchase of Equity Securities

Our stock repurchases under the authorized Repurchase Program (see Note 8. Equity Award Plan Activities of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1, of this Quarterly Report on Form 10-Q) during the three months ended June 30, 2019 were as follows (in thousands, except per share amounts):

	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
April 1, 2019 - April 30, 2019	—	\$ —	—	\$ 1,000,000
May 1, 2019 - May 31, 2019	257	247.74	257	936,457
June 1, 2019 - June 30, 2019	150	242.90	150	899,992
	<u>407</u>	<u>\$ 245.95</u>	<u>407</u>	<u>\$ 899,992</u>

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit Number	Description
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	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.

* The certifications attached as Exhibit 32.1 that accompany this Quarterly Report on Form 10-Q 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 Quarterly Report on Form 10-Q, irrespective of any general incorporation language contained in such filing.

SIGNATURES

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

Arista Networks, Inc.
(Registrant)

Date: August 2, 2019

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

Date: August 2, 2019

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

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

I, Jayshree Ullal, certify that:

1. I reviewed this Quarterly Report on Form 10-Q of Arista Networks, Inc. for the quarter ended June 30, 2019 ;
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: August 2, 2019

/s/ JAYSHREE ULLAL

Jayshree Ullal

President, Chief Executive Officer and Director
(Principal Executive Officer)

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

I, Ita Brennan, certify that:

1. I reviewed this Quarterly Report on Form 10-Q of Arista Networks, Inc. for the quarter ended June 30, 2019 ;
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: August 2, 2019

/s/ ITA BRENNAN

Ita Brennan

Chief Financial Officer

(Principal Accounting and Financial Officer)

**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 Quarterly Report of Arista Networks, Inc. on Form 10-Q for the quarter ended June 30, 2019 , fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and that information contained in such Quarterly Report on Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of Arista Networks, Inc.

Date: August 2, 2019

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 Quarterly Report of Arista Networks, Inc. on Form 10-Q for the quarter ended June 30, 2019 , fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and that information contained in such Quarterly Report on Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of Arista Networks, Inc.

Date: August 2, 2019

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