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

FORM 10-Q

(Mark One)

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

FOR THE QUARTERLY PERIOD ENDED JUNE 30, 2017
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: 001-37771

Acacia Communications, Inc.
(Exact Name of Registrant as Specified in its Charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

27-0291921
(I.R.S. Employer
Identification No.)

Three Mill and Main Place, Suite 400
Maynard, Massachusetts 01754
(Address of principal executive offices)
(978) 938-4896
(Registrant's telephone number, including area code)

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post 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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/> (Do not check if a small reporting company)	Small reporting company	<input type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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

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

As of July 28, 2017, the registrant had 39,228,125 shares of common stock issued and outstanding.

ACACIA COMMUNICATIONS, INC.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of the federal securities laws, and these statements involve substantial risks and uncertainties. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, forward-looking statements can be identified by terms such as “may,” “should,” “expects,” “plans,” “anticipates,” “could,” “intends,” “target,” “projects,” “contemplates,” “believes,” “estimates,” “predicts,” “potential” or “continue” or the negative of these terms or other similar expressions that concern our expectations, strategy, plans or intentions. Forward-looking statements contained in this Quarterly Report on Form 10-Q include, but are not limited to, statements about:

- our expectations regarding our expenses and revenue, our ability to maintain and expand gross profit, the sufficiency of our cash resources and needs for additional financing;
- our anticipated growth strategies;
- our expectations regarding competition;
- the anticipated trends and challenges in our business and the market in which we operate;
- our expectations regarding, and the capacity and stability of, our supply chain and manufacturing;
- the scope, progress, expansion, and costs of developing and commercializing our products;
- the size and growth of the potential markets for our products and the ability to serve those markets;
- the timing, rate and degree of introducing any of our products into the market and the market acceptance of any of our products;
- our ability to establish and maintain development partnerships;
- our ability to attract or retain key personnel;
- our expectations regarding federal, state and foreign regulatory requirements, including export controls, tax law changes and interpretations, economic sanctions and anti-corruption regulations;
- regulatory developments in the United States and foreign countries, including under export control laws or regulations that could impede our ability to sell our products to certain customers or customers in certain foreign jurisdictions; and
- our ability to obtain and maintain intellectual property protection for our products.

The foregoing list may not contain all of the forward-looking statements made in this Quarterly Report on Form 10-Q.

The forward-looking statements in this Quarterly Report on Form 10-Q are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this Quarterly Report on Form 10-Q and are subject to a number of risks, uncertainties and assumptions described in the “Risk Factors” section and elsewhere in this Quarterly Report on Form 10-Q. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, investors in our common stock should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements.

Although we may elect to update forward-looking statements in the future, we specifically disclaim any obligation to do so, even if our estimates change, and readers should not rely on those forward-looking statements as representing our views as of any date subsequent to the date of this Quarterly Report on Form 10-Q.

PART I—FINANCIAL INFORMATION

ITEM 1. Condensed Consolidated Financial Statements (Unaudited).

ACACIA COMMUNICATIONS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except per share amounts)
(Unaudited)

	June 30, 2017	December 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 106,127	\$ 206,402
Marketable securities - short-term	176,293	104,004
Accounts receivable	82,911	108,127
Inventory	41,686	31,681
Prepaid expenses and other current assets	18,750	12,076
Deferred product costs	371	85
Total current assets	426,138	462,375
Marketable securities - long-term	60,486	—
Restricted cash	37	1,630
Property and equipment, net	25,765	25,124
Deferred tax asset	37,472	23,533
Other assets	8,864	4,274
Total assets	\$ 558,762	\$ 516,936
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 35,224	\$ 49,430
Accrued liabilities	31,098	29,863
Deferred revenue	1,530	1,375
Total current liabilities	67,852	80,668
Other long-term liabilities	1,932	1,473
Total liabilities	69,784	82,141
Commitments and contingencies (Note 10)		
Stockholders' equity:		
Preferred stock, \$0.0001 par value; 5,000 shares authorized; none issued and outstanding at June 30, 2017 and December 31, 2016	—	—
Common stock, \$0.0001 par value; 150,000 shares authorized; 39,059 and 37,998 shares issued and outstanding at June 30, 2017 and December 31, 2016, respectively	4	4
Additional paid-in capital	309,717	295,893
Accumulated other comprehensive loss	(30)	(16)
Retained earnings	179,287	138,914
Total stockholders' equity	488,978	434,795
Total liabilities and stockholders' equity	\$ 558,762	\$ 516,936

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

ACACIA COMMUNICATIONS, INC.
CONDENSED CONSOLIDATED INCOME STATEMENTS
(in thousands, except per share amounts)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Revenue	\$ 78,898	\$ 116,192	\$ 193,565	\$ 200,681
Cost of revenue	53,516	62,240	111,883	111,323
Gross profit	25,382	53,952	81,682	89,358
Operating expenses:				
Research and development	22,734	21,839	40,462	37,253
Sales, general and administrative	9,368	8,649	18,059	12,703
Gain on disposal of property and equipment	(47)	—	(47)	—
Total operating expenses	32,055	30,488	58,474	49,956
(Loss) income from operations	(6,673)	23,464	23,208	39,402
Other income (expense), net:				
Interest income, net	827	20	1,272	28
Change in fair value of preferred stock warrant liability	—	(3,609)	—	(3,361)
Other expense	(1)	(58)	(39)	(78)
Total other income (expense), net	826	(3,647)	1,233	(3,411)
(Loss) income before (benefit) provision for income taxes	(5,847)	19,817	24,441	35,991
(Benefit) provision for income taxes	(10,511)	2,219	(15,932)	3,796
Net income	\$ 4,664	\$ 17,598	\$ 40,373	\$ 32,195
Accretion of redeemable convertible preferred stock	—	(636)	—	(1,722)
Undistributed earnings attributable to participating securities	—	(6,455)	—	(17,467)
Net income attributable to common stockholders - basic and diluted	\$ 4,664	\$ 10,507	\$ 40,373	\$ 13,006
Net income per share attributable to common stockholders:				
Basic	\$ 0.12	\$ 0.51	\$ 1.05	\$ 0.95
Diluted	\$ 0.11	\$ 0.43	\$ 0.97	\$ 0.77
Weighted-average shares used to compute net income per share attributable to common stockholders:				
Basic	38,756	20,760	38,546	13,751
Diluted	41,582	24,373	41,639	16,927

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

ACACIA COMMUNICATIONS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Net income	\$ 4,664	\$ 17,598	\$ 40,373	\$ 32,195
Other comprehensive income (loss):				
Changes in unrealized gain (loss) on marketable securities, net of income taxes of \$13 and \$(2) for the three and six months ended June 30, 2017, respectively	22	—	(14)	—
Comprehensive income	<u>\$ 4,686</u>	<u>\$ 17,598</u>	<u>\$ 40,359</u>	<u>\$ 32,195</u>

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

ACACIA COMMUNICATIONS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF REDEEMABLE CONVERTIBLE PREFERRED STOCK AND
STOCKHOLDERS' EQUITY
(in thousands)
(Unaudited)

	Redeemable Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total
	Shares	Amount	Shares	Amount				
Balance at December 31, 2015	24,177	\$ 70,780	6,669	\$ 1	\$ —	\$ —	\$ 8,015	\$ 8,016
Accretion of preferred stock issuance costs		94			(94)			(94)
Accretion to redemption value		1,628			(950)		(678)	(1,628)
Conversion of redeemable convertible preferred stock into common stock upon initial public offering	(24,177)	(72,502)	24,177	2	72,500			72,502
Reclassification of preferred stock warrant liability into additional paid-in capital upon conversion to common stock warrants					6,615			6,615
Issuance of common stock in relation to initial public offering, net of offering costs incurred of \$3,824			4,570	1	93,932			93,933
Vesting of restricted common stock			43					—
Exercise of common stock options			200	—	283			283
Stock-based compensation expense					9,461			9,461
Net income							32,195	32,195
Balance at June 30, 2016	—	\$ —	35,659	\$ 4	\$ 181,747	\$ —	\$ 39,532	\$ 221,283
Balance at December 31, 2016	—	\$ —	37,998	\$ 4	\$ 295,893	\$ (16)	\$ 138,914	\$ 434,795
Vesting of restricted common stock			51					—
Exercise of common stock options			523	—	1,903			1,903
Vesting of restricted stock units			457	—				—
Common stock issued under employee stock purchase plan			30	—	1,179			1,179
Stock-based compensation expense					10,742			10,742
Unrealized losses on marketable securities, net of tax of \$(2)						(14)		(14)
Net income							40,373	40,373
Balance at June 30, 2017	—	\$ —	39,059	\$ 4	\$ 309,717	\$ (30)	\$ 179,287	\$ 488,978

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

ACACIA COMMUNICATIONS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

(Unaudited)

	Six Months Ended June 30,	
	2017	2016
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income	\$ 40,373	\$ 32,195
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation	5,841	3,820
Gain on disposal of property and equipment	(47)	—
Stock-based compensation	10,742	9,461
Deferred income taxes	(13,939)	(454)
Other non-cash charges	158	—
Change in fair value of preferred stock warrant liability	—	3,361
Changes in operating assets and liabilities:		
Accounts receivable	25,216	(36,629)
Inventory	(10,005)	4,656
Prepaid expenses and other current assets	(6,435)	(1,026)
Deferred product costs	(286)	1,994
Restricted cash	1,593	—
Other assets	(4,560)	(109)
Accounts payable	(12,364)	22,929
Accrued liabilities	925	2,826
Deferred revenue	155	(672)
Other long-term liabilities	459	568
Net cash provided by operating activities	<u>37,826</u>	<u>42,920</u>
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(8,006)	(8,033)
Purchases of marketable securities	(233,246)	—
Sales and maturities of marketable securities	100,300	—
Deposits	(30)	(23)
Net cash used in investing activities	<u>(140,982)</u>	<u>(8,056)</u>
CASH FLOWS FROM FINANCING ACTIVITIES:		
Payment of capital lease obligation	—	(34)
Proceeds from initial public offering, net of underwriting discounts and commissions	—	97,757
Payment of public offering costs	(201)	(1,471)
Proceeds from the issuance of common stock under stock-based compensation plans	3,082	283
Net cash provided by financing activities	<u>2,881</u>	<u>96,535</u>
Net (decrease) increase in cash and cash equivalents	(100,275)	131,399
Cash and cash equivalents—Beginning of period	206,402	27,610
Cash and cash equivalents—End of period	<u>\$ 106,127</u>	<u>\$ 159,009</u>
Supplemental cash flow disclosures:		
Cash paid for income taxes, net of refunds	\$ 833	\$ 2,819
Supplemental disclosure of non-cash investing and financing activities:		
Capital expenditures incurred but not yet paid	\$ 140	\$ 1,474
Public offering costs incurred but not yet paid	\$ —	\$ 528
Accretion of redemption value on redeemable convertible preferred stock	\$ —	\$ 1,628
Accretion of redeemable convertible preferred stock issuance costs	\$ —	\$ 94
Conversion of redeemable convertible preferred stock into common stock	\$ —	\$ 72,502
Reclassification to additional paid-in capital of fair value of preferred stock warrant liability upon conversion to common stock warrants	\$ —	\$ 6,615

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

Acacia Communications, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

1. NATURE OF THE BUSINESS AND OPERATIONS

Acacia Communications, Inc. was incorporated on June 2, 2009, as a Delaware corporation. Acacia Communications, Inc. and its wholly-owned subsidiaries (the “Subsidiaries”) are collectively referred to as the Company. The Company is a leading provider of high-speed coherent interconnect products that are designed to improve the capacity, performance, intelligence and cost of communications networks relied upon by cloud infrastructure operators and content and communications service providers. The Company’s products include a series of low-power coherent digital signal processors and silicon photonic integrated circuits integrated into families of optical interconnect modules with transmission speeds ranging from 100 to 400 gigabits per second for use in long-haul, metro and inter-data center markets. The Company is also developing optical interconnect modules that will enable transmission speeds of one terabit (1,000 gigabits) per second and above.

The Company is headquartered in Maynard, Massachusetts, and has established wholly-owned subsidiaries in North America, Europe and Asia as part of the Company’s global expansion.

On May 18, 2016, the Company closed its initial public offering (“IPO”), in which the Company issued and sold 4,570,184 shares of common stock and certain selling stockholders sold an additional 604,816 shares, inclusive of the underwriters’ option to purchase additional shares that was exercised in full. The price per share to the public was \$23.00. The Company received aggregate proceeds of approximately \$97.8 million from the IPO, net of underwriters’ discounts and commissions, before deduction of offering expenses of approximately \$4.3 million. The Company received no proceeds from the sale of shares by the selling stockholders. Upon the closing of the IPO, all shares of the Company’s outstanding redeemable convertible preferred stock (the “preferred stock”) automatically converted into 24,177,495 shares of common stock.

On October 13, 2016, the Company closed a follow-on public offering in which the Company issued and sold 1,210,302 shares of common stock and certain selling stockholders sold an additional 3,289,698 shares. The underwriters’ option to purchase up to an additional 675,000 shares from certain of the selling stockholders was not exercised. The price per share to the public was \$100.00. The Company received aggregate proceeds of \$116.8 million from the follow-on offering, net of underwriters’ discounts and commissions, before deduction of offering expenses of approximately \$1.2 million. The Company received no proceeds from the sale of shares by the selling stockholders.

2. BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The unaudited condensed consolidated financial statements include the accounts of Acacia Communications, Inc. and its Subsidiaries and have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”) and pursuant to the rules and regulations of the Securities and Exchange Commission (“SEC”). Accordingly, they do not include all of the information and footnotes required by GAAP for annual financial statements. For further information, these condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and related notes contained in the Company’s Annual Report on Form 10-K for the year ended December 31, 2016, which was filed with the SEC on February 23, 2017. There have been no significant changes in the Company’s accounting policies from those disclosed in the Annual Report on Form 10-K that have had a material impact on the Company’s condensed consolidated financial statements.

The unaudited condensed consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements as of and for the year ended December 31, 2016, and in management’s opinion, include all adjustments, consisting of only normal recurring adjustments, necessary for the fair statement of the Company’s condensed consolidated balance sheet as of June 30, 2017, its condensed consolidated income statements for the three and six months ended June 30, 2017 and 2016, its condensed consolidated statements of comprehensive income for the three and six months ended June 30, 2017 and 2016, its condensed consolidated statements of redeemable convertible preferred stock and stockholders’ equity for the six months ended June 30, 2017 and 2016, and its condensed consolidated statements of cash flows for the six months ended June 30, 2017 and 2016. All intercompany balances and transactions have been eliminated in consolidation. The financial data and the other financial information disclosed in the notes to these condensed consolidated financial statements related to these three- and six-month periods are also unaudited. The results of operations for the three and six months ended June 30, 2017 are not necessarily indicative of the results to be expected for the full fiscal year or any other period.

Use of Estimates

The preparation of unaudited condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the unaudited condensed consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Recently Issued Accounting Pronouncements

In May 2017, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") 2017-09, *Compensation – Stock Compensation (Topic 718): Scope of Modification Accounting* ("ASU 2017-09"). ASU 2017-09 provides clarity about which changes to terms or conditions of a share-based payment award require modification accounting. Specifically, an entity would not apply modification accounting if the fair value, vesting conditions, and classification of the awards are the same immediately before and after the modification. The amendments in ASU 2017-09 are effective for annual periods, and interim periods within those annual periods, beginning after December 15, 2017, with early adoption permitted, and is required to be applied on a prospective basis for awards modified on or after the adoption date. The Company does not expect any material impact of this guidance on its condensed consolidated financial statements due to the infrequency of share-based payment award modifications.

In March 2017, the FASB issued ASU 2017-08, *Receivables – Nonrefundable Fees and Other Costs (Topic 310-20): Premium Amortization on Purchased Callable Debt Securities* ("ASU 2017-08"). ASU 2017-08 amends the amortization period for certain purchased callable debt securities held at a premium to the earliest call date in order to reduce diversity in practice and provide more decision-useful information. The amendments in ASU 2017-08 are effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years with early adoption permitted, and is required to be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. The Company does not anticipate that this guidance will have a material impact on its condensed consolidated financial statements because all of the Company's callable debt securities held at a premium are already amortized to the earliest call date.

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows (Topic 320): Restricted Cash* ("ASU 2016-18"). ASU 2016-18 will require amounts generally described as restricted cash or restricted cash equivalents to be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The amendments in ASU 2016-18 are effective for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years, and must be applied using a retrospective approach with earlier adoption permitted. The Company expects its condensed consolidated statements of cash flows to be impacted by the amount of restricted cash held by the Company in each period.

In October 2016, the FASB issued ASU 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory* ("ASU 2016-16"). ASU 2016-16 requires an entity to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. The amendments in ASU 2016-16 are effective for fiscal years beginning after December 15, 2017, and must be applied using a modified retrospective approach with earlier adoption permitted for annual reporting periods for which financial statements have not yet been issued. The Company does not anticipate that this guidance will have a material impact on its condensed consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* ("ASU 2016-13"). ASU 2016-13 is intended to provide more decision-useful information about expected credit losses on financial instruments and other commitments to extend credit held by a reporting entity at each reporting date. The main provisions include presenting financial assets measured at amortized cost at the amount expected to be collected, which is net of an allowance for credit losses, and recording credit losses related to available-for-sale securities through an allowance for credit losses. The amendments in ASU 2016-13 are effective for fiscal years beginning after December 15, 2019, and must be applied using a modified retrospective approach with earlier adoption permitted for fiscal years beginning after December 15, 2018. The Company is currently evaluating the impact of this guidance on its condensed consolidated financial statements.

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In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* (“ASU 2016-02”). ASU 2016-02 will require lessees to recognize a right-of-use asset and lease liability on the balance sheet for virtually all leases. For the income statement, ASU 2016-02 retains a dual model requiring leases to be classified as either operating or financing leases. Operating leases will result in straight-line expense, and financing leases will have a front-loaded expense pattern with an interest expense component. The amendments in ASU 2016-02 are effective for fiscal years beginning after December 15, 2018, and must be applied using a modified retrospective approach with earlier adoption permitted. The Company is currently evaluating the impact of this guidance on its condensed consolidated financial statements.

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)* (“ASU 2014-09”), which affects any entity that either enters into contracts with customers to transfer goods and services or enters into contracts for the transfer of nonfinancial assets. ASU 2014-09 will replace most existing revenue recognition guidance in GAAP when it becomes effective. The standard’s core principle is that a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. In doing so, companies will need to use more judgment and make more estimates than under the currently effective guidance. These may include identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price, and allocating the transaction price to each separate performance obligation. The new guidance is required to be applied retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of initially applying it recognized at the date of initial application. ASU 2014-09 was initially to be effective for annual periods beginning after December 15, 2016, including interim periods within that period. In August 2015, the FASB issued ASU 2015-14, *Revenue from Contracts with Customers*, which delays the effective date of ASU 2014-09 by one year and allows for early adoption as of the original effective date. In March 2016, the FASB issued ASU 2016-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations*, which clarifies certain principal versus agent considerations. In April 2016, the FASB issued ASU 2016-10, *Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing*, which clarifies certain guidance related to identifying performance obligations and licensing. In May 2016, the FASB issued ASU 2016-12, *Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients*, which addresses improvements to the guidance on collectability, noncash consideration and completed contracts at transition. In December 2016, the FASB issued ASU 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers*, which addresses clarifications and corrections in various areas, including contract costs and disclosures.

The Company has commenced its evaluation of the impact that ASU 2014-09 may have on its condensed consolidated financial statements, including evaluation of the disclosure requirements under the new standard. Although its evaluation is ongoing, the Company does not anticipate that the adoption of this standard will have a significant impact on its condensed consolidated financial statements as, upon adoption, most revenue will continue to be recognized at a point-in-time when control transfers which is similar to the current revenue recognition model. The Company plans to adopt this guidance on January 1, 2018, using the modified retrospective adoption method applied to those contracts that were not completed as of that date. As the Company continues its evaluation, it is also identifying and preparing to implement changes to accounting policies, business processes and internal controls to support the new accounting and disclosure requirements.

3. FINANCIAL INSTRUMENTS

The following tables set forth the Company’s cash, cash equivalents and short- and long-term marketable securities as of June 30, 2017 and December 31, 2016 (in thousands):

	June 30, 2017					
	Amortized Cost	Gross Unrealized		Estimated Fair Value	Cash and Cash Equivalents	Marketable Securities
		Gains	Losses ⁽¹⁾			
Cash	\$ 76,213	\$ —	\$ —	\$ 76,213	\$ 76,213	\$ —
Money market funds	5,018	—	—	5,018	5,018	—
Repurchase agreements	20,000	—	—	20,000	20,000	—
U.S. treasury bonds	12,192	—	(3)	12,189	—	12,189
Commercial paper	55,322	—	(1)	55,321	2,996	52,325
Certificates of deposit	23,448	6	(1)	23,453	1,900	21,553
Asset-backed securities	35,021	4	(7)	35,018	—	35,018
Corporate debt securities	115,735	18	(59)	115,694	—	115,694
Total	\$ 342,949	\$ 28	\$ (71)	\$ 342,906	\$ 106,127	\$ 236,779

(1) Losses represent marketable securities that were in loss positions for less than one year.

December 31, 2016

	Amortized Cost	Gross Unrealized		Estimated Fair Value	Cash and Cash Equivalents	Marketable Securities
		Gains	Losses ⁽¹⁾			
Cash	\$ 81,230	\$ —	\$ —	\$ 81,230	\$ 81,230	\$ —
Money market funds	118,174	—	—	118,174	118,174	—
U.S. treasury bonds	15,017	—	(2)	15,015	—	15,015
Commercial paper	49,673	—	—	49,673	5,997	43,676
Corporate debt securities	46,339	2	(27)	46,314	1,001	45,313
Total	\$ 310,433	\$ 2	\$ (29)	\$ 310,406	\$ 206,402	\$ 104,004

(1) Losses represent marketable securities that were in loss positions for less than one year.

The proceeds from the sales and maturities of marketable securities, which were primarily reinvested and resulted in realized gains and losses, were as follows (in thousands):

	Three Months Ended June 30, 2017	Six Months Ended June 30, 2017
Proceeds from the sales and maturities of marketable securities	\$ 61,400	\$ 100,300
Realized gains	\$ 3	\$ 4
Realized losses	\$ —	\$ —

The contractual maturities of short-term and long-term marketable securities held at June 30, 2017 and December 31, 2016 are as follows (in thousands):

	June 30, 2017		December 31, 2016	
	Amortized Cost Basis	Aggregate Fair Value	Amortized Cost Basis	Aggregate Fair Value
Due within one year	\$ 176,332	\$ 176,293	\$ 104,031	\$ 104,004
Due after 1 year through 2 years	60,491	60,486	—	—
Total	\$ 236,823	\$ 236,779	\$ 104,031	\$ 104,004

At June 30, 2017, the Company believed that the unrealized losses on its available-for-sale investments were temporary. The investments with unrealized losses consisted primarily of corporate debt securities. In making the determination that the decline in fair value of these securities was temporary, the Company considered various factors, including, but not limited to: the length of time each security was in an unrealized loss position; the extent to which fair value was less than cost; the financial condition and near-term prospects of the issuers; and the Company's intent not to sell these securities and the assessment that it is more likely than not that the Company would not be required to sell these securities before the recovery of their amortized cost basis.

4. INVENTORY

Inventory consisted of the following as of June 30, 2017 and December 31, 2016 (in thousands):

	June 30, 2017	December 31, 2016
Raw materials	\$ 24,003	\$ 14,385
Work-in-process	2,917	3,235
Finished goods	14,766	14,061
Inventory	\$ 41,686	\$ 31,681

5. PROPERTY AND EQUIPMENT

Property and equipment consisted of the following as of June 30, 2017 and December 31, 2016 (in thousands):

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	June 30, 2017	December 31, 2016
Engineering laboratory equipment	\$ 35,364	\$ 31,096
Computer software	1,617	1,381
Computer equipment	3,677	2,572
Furniture and fixtures	2,908	408
Leasehold improvements	2,222	1,032
Construction in progress	1,672	5,954
Total property and equipment	47,460	42,443
Less: Accumulated depreciation	(21,695)	(17,319)
Property and equipment, net	\$ 25,765	\$ 25,124

Depreciation expense was \$3.0 million and \$2.1 million for the three months ended June 30, 2017 and 2016, respectively, and \$5.8 million and \$3.8 million for the six months ended June 30, 2017 and 2016, respectively.

6. ACCRUED LIABILITIES

Accrued liabilities consisted of the following as of June 30, 2017 and December 31, 2016 (in thousands):

	June 30, 2017	December 31, 2016
Employee-related liabilities	\$ 5,551	\$ 6,235
Outsourced foundry services	346	1,811
Goods and services received not invoiced	7,977	9,024
Accrued income taxes	464	670
Accrued manufacturing related expenses	6,980	5,255
Warranty reserve	4,859	2,158
Other accrued liabilities	4,921	4,710
Accrued liabilities	\$ 31,098	\$ 29,863

7. FAIR VALUE MEASUREMENT

The Company measures certain financial assets and liabilities at fair value. Fair value is determined based upon the exit price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants, as determined by either the principal market or the most advantageous market. Inputs used in the valuation techniques to derive fair values are classified based on a three-level hierarchy, as follows:

Level 1—Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2—Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities, quoted prices in markets with insufficient volume or infrequent transactions (less active markets), or model-derived valuations in which all significant inputs are observable or can be derived principally from or corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3—Unobservable inputs to the valuation methodology that are significant to the measurement of fair value of assets or liabilities.

The Company considers all highly liquid investments purchased with a remaining maturity of three months or less to be cash equivalents. The Company's cash equivalents consist of money market funds, repurchase agreements, commercial paper, certificates of deposit and corporate debt securities with an original maturity of three months or less. The Company's investments in money market funds, repurchase agreements, commercial paper, certificates of deposit, asset-backed securities, corporate bonds and U.S. government agency debt securities, which are classified as Level 2 within the fair value hierarchy, were initially valued at the transaction price and subsequently valued at each reporting date utilizing market-observable data. The market-observable data included reportable trades, benchmark yields, credit spreads, broker/dealer quotes, bids, offers, current spot rates and other industry and economic events.

The fair value of these assets measured on a recurring basis was determined using the following inputs as of June 30, 2017 and December 31, 2016 (in thousands):

June 30, 2017				
	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
Assets:				
Money market funds	\$ —	\$ 5,018	\$ —	\$ 5,018
Repurchase agreements	—	20,000	—	20,000
U.S. treasury bonds	—	12,189	—	12,189
Commercial paper	—	55,321	—	55,321
Certificates of deposit	—	23,453	—	23,453
Asset-backed securities	—	35,018	—	35,018
Corporate debt securities	—	115,694	—	115,694
Total	<u>\$ —</u>	<u>\$ 266,693</u>	<u>\$ —</u>	<u>\$ 266,693</u>

December 31, 2016				
	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
Assets:				
Money market funds	\$ —	\$ 118,174	\$ —	\$ 118,174
U.S. treasury bonds	—	15,015	—	15,015
Commercial paper	—	49,673	—	49,673
Corporate debt securities	—	46,314	—	46,314
Total	<u>\$ —</u>	<u>\$ 229,176</u>	<u>\$ —</u>	<u>\$ 229,176</u>

There have been no transfers between fair value measurement levels during the three or six months ended June 30, 2017.

For certain other financial instruments, including accounts receivable, restricted cash, accounts payable, and other current liabilities, the carrying amounts approximate their fair value due to the relatively short maturity of these balances.

Preferred Stock Warrants

Prior to the closing of the Company's IPO, the Company remeasured the fair value of its preferred stock warrants at each balance sheet date. Any changes in fair value were recognized as a component of other income (expense) in the condensed consolidated income statements. The valuation technique used to measure fair value for the Company's preferred stock warrants, which were considered Level 3 fair value estimates within the fair value hierarchy, was the Black-Scholes option pricing model. The significant unobservable inputs used in the fair value measurement of the Company's preferred stock warrants was the fair value of the Company's series B and series C preferred stock. The Company also utilized risk-free interest rate, expected dividend yield, expected volatility and expected term as observable inputs with the fair value of the series B and series C preferred stock in determining the fair value of the preferred stock warrants. There is not a direct interrelationship between the unobservable inputs and the observable inputs.

A summary of the changes in the Company's preferred stock warrant liability measured at fair value using significant unobservable inputs (Level 3) for the three and six months ended June 30, 2016 is as follows (in thousands):

	Three Months Ended June 30, 2016	Six Months Ended June 30, 2016
Preferred stock warrant liability at beginning of period	\$ 3,006	\$ 3,254
Change in fair value	3,609	3,361
Reclassification of preferred stock warrant liability to additional paid-in capital upon conversion to common stock warrants	(6,615)	\$ (6,615)
Preferred stock warrant liability at end of period	\$ —	\$ —

The warrants to purchase shares of preferred stock were converted into warrants to purchase shares of common stock upon the closing of the IPO.

8. STOCK COMPENSATION PLANS

The following table summarizes the classification of stock-based compensation in the condensed consolidated income statements for the three and six months ended June 30, 2017 and 2016 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Cost of revenue	\$ 511	\$ 660	\$ 953	\$ 692
Research and development	3,779	5,389	6,771	5,578
Sales, general and administrative	1,820	3,122	3,018	3,191
Total stock-based compensation	\$ 6,110	\$ 9,171	\$ 10,742	\$ 9,461

The following table summarizes stock-based compensation expense by award type for the three and six months ended June 30, 2017 and 2016 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Stock options	\$ 655	\$ 507	\$ 1,321	\$ 768
Restricted stock awards	29	18	58	47
Restricted stock units	5,126	8,495	8,812	8,495
Employee stock purchase plan	300	151	551	151
Total stock-based compensation	\$ 6,110	\$ 9,171	\$ 10,742	\$ 9,461

Stock Options

A summary of stock option activity under the Company's equity incentive plans for the six months ended June 30, 2017 is as follows:

	Number of Options (in thousands)	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2016	2,354	\$ 7.10	7.4	\$ 129,288
Granted	—			
Exercised	(523)	\$ 3.64		\$ 27,050
Cancelled	(8)	\$ 8.42		
Outstanding at June 30, 2017	1,823	\$ 8.08	7.1	\$ 62,255
Vested and expected to vest at:				
June 30, 2017	1,823	\$ 8.08	7.1	\$ 62,255
December 31, 2016	2,354	\$ 7.10	7.4	\$ 129,288
Exercisable at:				
June 30, 2017	819	\$ 3.54	6.2	\$ 31,079
December 31, 2016	975	\$ 1.78	6.1	\$ 58,458

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As of June 30, 2017 and December 31, 2016, there was \$6.2 million and \$7.6 million, respectively, of unrecognized compensation cost related to unvested common stock options, which is expected to be recognized over weighted-average periods of 2.6 years and 3.1 years, respectively.

The weighted-average grant date fair value of stock options granted during the three and six months ended June 30, 2016 was \$22.35 and \$8.97, respectively. No stock options were granted by the Company during the three or six months ended June 30, 2017.

Restricted Stock Units

During the six months ended June 30, 2017, the Company granted 441,000 restricted stock units ("RSUs") to employees and executives under the 2016 Equity Incentive Plan that vest upon the satisfaction of a service condition, generally over four years. The cost of any RSUs with only a service condition is determined using the fair value of the Company's common stock on the date of grant, and compensation is recognized on a straight-line basis over the requisite vesting period.

During the six months ended June 30, 2017, the Company granted 436,000 RSUs to executive officers that include a market condition and a performance condition in addition to a service condition ("performance-based RSUs" or "PRSUs"). Each PRSU represents the right to receive one share of the Company's common stock when and if the applicable vesting conditions are satisfied. The number of PRSUs that are subject to the service condition is determined based on the achievement of certain market and performance objectives over a two-year period running from January 1, 2017 through December 31, 2018 (the "Earned PRSUs"). Thirty-three percent of any Earned PRSUs will vest on the later of (i) March 17, 2019 and (ii) the date that the number of Earned PRSUs is determined by the Compensation Committee after December 31, 2018. Thereafter, an additional 33% of the Earned PRSUs will vest on March 17, 2020 and the remaining 34% of the Earned PRSUs will vest on March 17, 2021. Vesting of Earned PRSUs is subject to the applicable officer's continued provision of services to the Company through the applicable vesting date. The number of PRSUs that become Earned PRSUs will be determined based on the extent to which the Company achieves (i) a revenue growth objective, based on the compound annual growth rate of the Company's total revenue by measuring the Company's revenue for fiscal year 2018 against the Company's revenue for fiscal year 2016 (the "Revenue Growth Objective"), and/or (ii) a stock price objective during the two-year period (the "Stock Price Objective"). If neither the Revenue Growth Objective nor the Stock Price Objective is achieved, none of the PRSUs will become Earned PRSUs. Any PRSUs that do not become Earned PRSUs shall be forfeited once the number of Earned PRSUs is determined by the Compensation Committee after December 31, 2018.

For the PRSUs, the related stock-based compensation expense is amortized using the accelerated method over the vesting period of four years. The Company estimates the fair value of the PRSUs using management's best estimate of whether it is probable or not probable that the Revenue Growth Objective will be satisfied using the most currently available projections of future revenue performance, which is reassessed at each reporting period. Changes in the subjective and probability-based assumptions can materially affect the estimate of fair value of stock-based compensation and consequently, the related amount recognized in the Company's condensed consolidated income statements.

The Company estimated the fair value of the PRSUs using a Monte Carlo valuation model on the date of grant, using the following assumptions:

Risk-free interest rate	1.3%
Expected dividend yield	None
Expected volatility	58.3%
Expected term (in years)	1.8
Grant date fair value of underlying shares	\$55.02

As soon as practicable following each vesting date of RSUs, including PRSUs, the Company will issue to the holder of the RSUs the number of shares of common stock equal to the aggregate number of RSUs that have vested. Notwithstanding the foregoing, the Company may, in its sole discretion, in lieu of issuing shares of common stock to the holder of the RSUs, pay the holder an amount in cash equal to the fair market value of such shares of common stock. To date, the Company has not settled any vested RSUs with cash.

A summary of the changes in the Company's RSUs during the six months ended June 30, 2017 is as follows:

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	RSUs (in thousands)	Weighted-Average Grant Date Fair Value
Outstanding at December 31, 2016	2,034	\$ 21.09
Granted	877	\$ 56.41
Vested	(457)	\$ 16.36
Cancelled	(7)	\$ 32.50
Outstanding at June 30, 2017	2,447	\$ 34.59

The granted amount includes the 436,000 PRSUs which is the maximum number that were granted to executives during the six months ended June 30, 2017.

As of June 30, 2017 and December 31, 2016, there was \$53.5 million and \$32.1 million, respectively, of total unrecognized compensation cost related to unvested RSUs, which is expected to be recognized over weighted-average periods of 3.3 years and 3.4 years, respectively.

9. NET INCOME PER SHARE ATTRIBUTABLE TO COMMON STOCKHOLDERS

Basic and diluted net income per share attributable to common stockholders is presented in conformity with the two-class method required for participating securities. The Company considers its preferred stock to be participating securities. In the event a cash dividend is paid on common stock, the holders of preferred stock are also entitled to a proportionate share of any such dividend as if they were holders of common stock (on an as-if converted basis). The holders of the preferred stock do not have a contractual obligation to share in losses. In accordance with the two-class method, earnings allocated to these participating securities and the related number of outstanding shares of the participating securities, which include contractual participation rights in undistributed earnings, have been excluded from the computation of basic and diluted net income per share attributable to common stockholders. As a result of the conversion of preferred stock on May 18, 2016, no earnings were allocated to participating securities during the three and six months ended June 30, 2017.

The following table sets forth the computation of the Company's basic and diluted net income per share attributable to common stockholders (in thousands, except per share amounts):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Numerator:				
Net income	\$ 4,664	\$ 17,598	\$ 40,373	\$ 32,195
Less: preferred stock accretion	—	(636)	—	(1,722)
Less: undistributed earnings attributable to participating securities	—	(6,455)	—	(17,467)
Net income attributable to common stockholders - basic and diluted	\$ 4,664	\$ 10,507	\$ 40,373	\$ 13,006
Denominator:				
Weighted-average shares used to compute net income per share attributable to common stockholders - basic	38,756	20,760	38,546	13,751
Dilutive effect of stock options, unvested restricted stock and restricted stock units, preferred stock warrants, and employee stock purchase plan	2,826	3,613	3,093	3,176
Weighted-average shares used to compute net income per share attributable to common stockholders - diluted	41,582	24,373	41,639	16,927
Net income per share attributable to common stockholders				
Basic	\$ 0.12	\$ 0.51	\$ 1.05	\$ 0.95
Diluted	\$ 0.11	\$ 0.43	\$ 0.97	\$ 0.77

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The following common stock equivalents (in thousands) were excluded from the computation of diluted net income per share for the periods presented because including them would have been antidilutive:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Options to purchase common stock	90	15	90	270
Unvested restricted stock units and awards	562	20	381	137
Preferred stock warrants	—	245	—	245

As discussed further in Note 8, in March 2017, the Company granted 436,000 PRSUs to executives that include market, performance and service conditions. As the market and performance criteria associated with the vesting of those awards have not been satisfied as of June 30, 2017, the Company has excluded those shares from the table above and the calculation of diluted net income per share attributable to common stockholders.

10. COMMITMENTS AND CONTINGENCIES

Leases

The Company's principal facilities are located in Maynard, Massachusetts and Holmdel, New Jersey and are leased by the Company under non-cancelable operating leases that expire in February 2025, with respect to the Massachusetts facility, and December 2021, with respect to the New Jersey facility. The Company also leases office space in various locations with expiration dates between 2018 and 2021. Several of the lease agreements include leasehold improvement incentives, escalating lease payments, renewal provisions and other provisions which require the Company to pay taxes, insurance and maintenance costs. All of the Company's facility leases are accounted for as operating leases. Rent expense is recorded over each respective lease term on a straight-line basis. Rent expense was \$1.2 million and \$0.3 million for the three months ended June 30, 2017 and 2016, respectively, and \$2.7 million and \$0.6 million for the six months ended June 30, 2017 and 2016, respectively.

Future minimum lease payments due under these non-cancelable lease agreements as of June 30, 2017, are as follows (in thousands):

	Amounts
Remaining 2017	\$ 1,674
2018	3,113
2019	3,047
2020	3,067
2021	3,039
Thereafter	7,387
Total	\$ 21,327

The Holmdel, New Jersey and Maynard, Massachusetts leases entered into during 2016 included tenant improvements which were partially funded by the Company. Under these lease agreements, the Company will not have title to the tenant improvements. Therefore, as the Company funded its portion of the improvements, it recorded a prepaid lease asset that will be amortized over the lease term. As of June 30, 2017, the Company was committed to approximately \$0.6 million of remaining tenant improvement costs related to these leases which is expected to be paid in the third quarter of 2017.

Warranties

The Company's standard warranty obligation to its customers provides for repair or replacement of a defective product at the Company's discretion for a period of time following purchase, generally between 12 and 24 months. Factors that affect the warranty obligation include product failure rates, material usage, and service delivery costs incurred in correcting product failures. In addition, from time to time, specific warranty accruals may be made if unforeseen technical problems arise. The estimated cost associated with fulfilling the Company's warranty obligation to customers is recorded in cost of revenue. Changes in the Company's product warranty liability, which is included as a component of accrued liabilities on the condensed consolidated balance sheets, are set forth in the table below (in thousands). The reserves below do not include reserves established as a result of the manufacturing process quality issue described below under the heading "Manufacturing Process Quality Reserve."

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Warranty reserve, beginning of period	\$ 2,113	\$ 1,147	\$ 2,158	\$ 763
Provisions made to warranty reserve during the period	4,771	1,156	5,971	1,786
Charges against warranty reserve during the period	(2,025)	(997)	(3,270)	(1,243)
Warranty reserve, end of period	\$ 4,859	\$ 1,306	\$ 4,859	\$ 1,306

Manufacturing Process Quality Reserve

In May 2017, the Company announced a quality issue at one of its three contract manufacturers that affected a portion of the approximate 1,300 AC400 units and 5,100 CFP units manufactured by the contract manufacturer over an approximate four month period (the "Quality Issue"). As a result of the Quality Issue, the Company established reserves to cover anticipated costs, including cost estimates for product repairs, rework of component inventory with the contract manufacturer and rescreening costs. The Quality Issue warranty reserve of \$2.8 million was recorded as a component of accrued liabilities in the Company's condensed consolidated balance sheets as of June 30, 2017. An additional \$5.0 million was reserved against estimated affected inventory on-hand at the contract manufacturer and in-transit returns as of June 30, 2017. The Company's estimates of the Quality Issue costs are subject to change as customers return the potentially affected units and final testing is performed.

Legal Contingencies

On January 22, 2016, ViaSat, Inc. filed a suit against the Company alleging, among other things, breach of contract, breach of the implied covenant of good faith and fair dealing and misappropriation of trade secrets. On February 19, 2016, the Company responded to ViaSat's suit and alleged counterclaims against ViaSat including, among other things, patent misappropriation, breach of contract, breach of the implied covenant of good faith and fair dealing, misappropriation of trade secrets and unfair competition, which ViaSat denied in its response filed March 16, 2016. The lawsuit is still pending and discovery is ongoing. The Company is continuing to evaluate ViaSat's claims, but based on the information available to the Company today, the Company currently believes that this suit will not have a material adverse effect on the Company's business or its condensed consolidated financial position, results of operations or cash flows. On July 28, 2017, the Company filed a suit against ViaSat asserting commercial disparagement, libel, slander of title, unfair competition, intentional interference with advantageous relations and intentional interference with contractual relations.

In addition, from time to time the Company may become involved in legal proceedings or be subject to claims arising in the ordinary course of business. Although the results of litigation and claims cannot be predicted with certainty, the Company currently believes that the final outcome of these ordinary course matters will not have a material adverse effect on the Company's business or its condensed consolidated financial position, results of operations or cash flows. Regardless of the outcome, litigation can have an adverse impact on the Company because of defense and settlement costs, diversion of management resources and other factors.

Indemnification

In the ordinary course of business, the Company enters into various agreements containing standard indemnification provisions. The Company's indemnification obligations under such provisions are typically in effect from the date of execution of the applicable agreement through the end of the applicable statute of limitations. During the three and six months ended June 30, 2017 and 2016, the Company did not experience any losses related to these indemnification obligations. The Company does not expect significant claims related to these indemnification obligations, and consequently, has concluded that the fair value of these obligations is not material. Accordingly, as of June 30, 2017 and December 31, 2016, no amounts have been accrued related to such indemnification provisions.

11. INCOME TAXES

The Company is subject to income tax in the United States as well as other tax jurisdictions in which it conducts business. Earnings from non-U.S. activities are subject to local country income tax. The Company does not provide for federal income taxes on the undistributed earnings of its foreign subsidiaries as such earnings are reinvested indefinitely.

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The Company's tax provision for interim periods is determined using an estimate of its annual effective tax rate, adjusted for discrete items arising in that quarter. In each quarter, the Company updates its estimate of the annual effective tax rate, and if the estimated annual tax rate changes, the Company makes a cumulative adjustment in that quarter. The Company's quarterly tax provision, and its quarterly estimate of its annual effective tax rate, are subject to significant volatility due to several factors, including the Company's ability to accurately predict its pre-tax income and loss in multiple jurisdictions, as well as the portions of stock-based compensation that will either not generate tax benefits or the tax benefit is unpredictable and reflected when realized by employees.

For the three months ended June 30, 2017, the Company recorded a benefit for income taxes of \$10.5 million as compared to a tax provision of \$2.2 million for the three months ended June 30, 2016, resulting in an effective tax rate of 179.8% and 11.2% for the three months ended June 30, 2017 and 2016, respectively. For the six months ended June 30, 2017, the Company recorded a benefit from income taxes of \$15.9 million as compared to a tax provision of \$3.8 million for the six months ended June 30, 2016, resulting in an effective tax rate of (65.2)% and 10.5% for the six months ended June 30, 2017 and 2016, respectively. The benefits for income taxes recorded in the three and six months ended June 30, 2017 are mainly due to the favorable effect of foreign statutory tax rates applicable to income earned outside the United States under the Company's corporate structure and the recognition of excess tax benefits from the taxable compensation on share-based awards. The Company's historical provision for income taxes is not necessarily reflective of its future results of operations.

As of June 30, 2017 and December 31, 2016, the Company identified \$3.8 million and \$3.1 million, respectively, of gross uncertain tax positions. Included in those balances as of June 30, 2017 and December 31, 2016 are \$1.9 million and \$1.5 million, respectively, of tax benefits that, if recognized, would impact the effective tax rate. These have been accrued for as long-term liabilities on the Company's condensed consolidated balance sheets. The Company's existing tax positions will continue to generate an increase in unrecognized tax benefits in subsequent periods. The Company's policy is to record interest and penalties related to unrecognized tax benefits as income tax expense. During the three and six months ended June 30, 2017 and 2016, the amounts recorded related to the accrual of interest and penalties were immaterial in each period.

12. SEGMENT INFORMATION AND GEOGRAPHIC DATA

The Company operates as one operating segment. Operating segments are defined as components of an enterprise for which separate financial information is regularly evaluated by the chief operating decision maker ("CODM"), which is the Company's president and chief executive officer, in deciding how to allocate resources and assess performance. The Company's CODM evaluates the Company's financial information and resources and assesses the performance of these resources on a consolidated basis. Since the Company operates in one operating segment, all required financial segment information can be found in the condensed consolidated financial statements.

Revenue by geographic region, based on ship-to destinations, was as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
United States	\$ 23,814	\$ 27,048	\$ 36,227	\$ 40,016
China	29,367	45,968	86,349	87,352
Germany	9,649	25,564	22,615	44,720
Thailand	5,115	—	16,719	—
Other	10,953	17,612	31,655	28,593
Total revenue	\$ 78,898	\$ 116,192	\$ 193,565	\$ 200,681

Total long-lived assets by geographic region consisted of the following as of June 30, 2017 and December 31, 2016 (in thousands):

	June 30, 2017	December 31, 2016
United States	\$ 16,737	\$ 14,026
China	1,420	2,235
Thailand	7,249	8,070
Other	359	793
Total long-lived assets	\$ 25,765	\$ 25,124

13. CONCENTRATIONS OF RISK

Customer Concentration

Customers with revenue equal to or greater than 10% of total revenue for the three and six months ended June 30, 2017 and 2016 were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
A	28%	32%	36%	38%
B	19%	27%	14%	24%
C	15%	10%	*	11%

* Less than 10% of revenue in the period indicated

Customers that accounted for equal to or greater than 10% of accounts receivable at June 30, 2017 and December 31, 2016 were as follows:

	June 30, 2017	December 31, 2016
A	26%	26%
B	11%	19%
C	22%	15%

Supplier Concentration

The Company purchases a substantial portion of its inventory from contract manufacturers and component suppliers located in Japan, Canada, Thailand and the United States. For the three and six months ended June 30, 2017 and 2016, total inventory purchased from each of the suppliers was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
W	11%	*	30%	*
X	20%	46%	23%	44%
Y	*	22%	28%	16%
Z	12%	20%	17%	20%

* Less than 10% of total inventory purchased in the period indicated

The Company also outsources certain engineering projects to a foundry located in the United States. During the three months ended June 30, 2017 and 2016, the Company incurred 21% and 22%, respectively, of its total research and development costs with the U.S. foundry. During the six months ended June 30, 2017 and 2016, the Company incurred 12% and 18%, respectively, of its total research and development costs with the U.S. foundry.

14. RELATED PARTIES

One of the members of the Company's Board of Directors, Vincent Roche, is also the President and Chief Executive Officer and a member of the board of directors of Analog Devices, Inc. ("ADI"). The Company, through its contract manufacturers, periodically purchases supplies from ADI pursuant to purchase orders negotiated on an arm's length basis between ADI and the Company's contract manufacturers at prevailing prices. These purchased supplies are used as content in certain of the Company's manufactured products. During the three and six months ended June 30, 2017 and 2016, the Company's contract manufacturers made purchases from ADI of approximately \$1.0 million, \$2.2 million, \$1.1 million, and \$1.8 million, respectively.

ITEM 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our condensed consolidated financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q and our Annual Report on Form 10-K filed with the SEC on February 23, 2017. As discussed in the section titled “Special Note Regarding Forward-Looking Statements,” the following discussion and analysis contains forward-looking statements that involve risks and uncertainties, as well as assumptions that, if they never materialize or if they prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. Factors that could cause or contribute to these differences include, but are not limited to, those identified below and those discussed in the section titled “Risk Factors” under Part II, Item 1A below.

Company Overview

Our mission is to deliver high-speed coherent optical interconnect products that transform communications networks, relied upon by cloud infrastructure operators and content and communication service providers, through improvements in performance and capacity and a reduction in associated costs. By converting optical interconnect technology to a silicon-based technology, a process we refer to as the siliconization of optical interconnect, we believe we are leading a disruption that is analogous to the computing industry’s integration of multiple functions into a microprocessor. Our products include a series of low-power coherent digital signal processor application-specific integrated circuits, or DSP ASICs, and silicon photonic integrated circuits, or silicon PICs, which we have integrated into families of optical interconnect modules with transmission speeds ranging from 100 to 400 gigabits per second, or Gbps, for use in long-haul, metro and inter-data center markets. We are also developing optical interconnect modules that will enable transmission speeds of one terabit (1,000 gigabits) per second and above. Our modules perform a majority of the digital signal processing and optical functions in optical interconnects and offer low power consumption, high density and high speeds at attractive price points.

For the three and six months ended June 30, 2017 and 2016, we generated 73%, 70%, 80% and 80%, respectively, of our revenue from our five largest customers, the mix of customers varied across each period.

Results of Operations

The following tables set forth the components of our condensed consolidated income statements for each of the periods presented and as a percentage of our revenue for those periods. The period-to-period comparison of operating results is not necessarily indicative of results for future periods.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
	(in thousands)			
Consolidated Income Statement Data:				
Revenue	\$ 78,898	\$ 116,192	\$ 193,565	\$ 200,681
Cost of revenue(1)	53,516	62,240	111,883	111,323
Gross profit	25,382	53,952	81,682	89,358
Operating expenses:				
Research and development(1)	22,734	21,839	40,462	37,253
Sales, general and administrative(1)	9,368	8,649	18,059	12,703
Gain on disposal of property and equipment	(47)	—	(47)	—
Total operating expenses	32,055	30,488	58,474	49,956
(Loss) income from operations	(6,673)	23,464	23,208	39,402
Total other income (expense), net	826	(3,647)	1,233	(3,411)
(Loss) income before (benefit) provision for income taxes	(5,847)	19,817	24,441	35,991
(Benefit) provision for income taxes	(10,511)	2,219	(15,932)	3,796
Net income	\$ 4,664	\$ 17,598	\$ 40,373	\$ 32,195

(1) Stock-based compensation included in the condensed consolidated income statement data was as follows (in thousands):

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	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
	(in thousands)			
Cost of revenue	\$ 511	\$ 660	\$ 953	\$ 692
Research and development	3,779	5,389	6,771	5,578
Sales, general and administrative	1,820	3,122	3,018	3,191
Total stock-based compensation	\$ 6,110	\$ 9,171	\$ 10,742	\$ 9,461

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Revenue	100 %	100 %	100 %	100 %
Cost of revenue	68 %	54 %	58 %	55 %
Gross profit	32 %	46 %	42 %	45 %
Operating expenses:				
Research and development	29 %	19 %	21 %	19 %
Sales, general and administrative	12 %	7 %	9 %	6 %
Gain on disposal of property and equipment	— %	— %	— %	— %
Total operating expenses	41 %	26 %	30 %	25 %
(Loss) income from operations	(8)%	20 %	12 %	20 %
Total other income (expense), net	1 %	(3)%	1 %	(2)%
(Loss) income before (benefit) provision for income taxes	(7)%	17 %	13 %	18 %
(Benefit) provision for income taxes	(13)%	2 %	(8)%	2 %
Net income	6 %	15 %	21 %	16 %

Percentages in the table above are based on actual values. Totals may not sum due to rounding.

Three Months Ended June 30, 2017 Compared to the Three Months Ended June 30, 2016

Revenue

Revenue and the related changes during the three months ended June 30, 2017 and 2016 were as follows:

	Three Months Ended June 30,		Change in	
	2017	2016	\$	%
	(dollars in thousands)			
Revenue	\$ 78,898	\$ 116,192	\$ (37,294)	(32)%

Revenue decreased by \$37.3 million, or 32%, to \$78.9 million in the three months ended June 30, 2017 from \$116.2 million in the three months ended June 30, 2016. The decrease was primarily due to a \$44.7 million decrease in revenue from sales of products within our 100 Gbps product family. This decrease in revenue was partially offset by a \$7.2 million increase in revenue from sales of products within our 200 Gbps family. The quality issue at one of our contract manufacturers, as described in Note 10 to the condensed consolidated financial statements included in this 10-Q, or Quality Issue, caused supply constraints that contributed to the revenue decrease.

Our product sales based on the geographic region of our customers' delivery location are as follows:

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	Three Months Ended	As a % of	Three Months Ended	As a % of	Change in	
	June 30, 2017	Total Revenue	June 30, 2016	Total Revenue	\$	%
(dollars in thousands)						
Americas	\$ 24,132	31%	\$ 27,354	24%	\$ (3,222)	(12)%
EMEA	18,188	23%	33,767	29%	\$ (15,579)	(46)%
APAC	36,578	46%	55,071	47%	\$ (18,493)	(34)%
Total revenue	\$ 78,898	100%	\$ 116,192	100%	\$ (37,294)	(32)%

Americas

Revenue from product sales to customers with delivery locations in the Americas decreased by \$3.2 million, or 12%, to \$24.1 million in the three months ended June 30, 2017 from \$27.4 million in the three months ended June 30, 2016. The decrease was primarily due to a \$3.0 million decrease in sales of products within our 400 Gbps product family, and a \$2.1 million decrease in sales of products within our 100 Gbps product family. This decrease in revenue was partially offset by a \$1.9 million increase in revenue from sales of products within our 200 Gbps family. The Quality Issue caused supply constraints that contributed to the decrease in revenue.

Europe, the Middle East and Africa

Revenue from product sales to customers with delivery locations in Europe, the Middle East and Africa, or EMEA, decreased by \$15.6 million, or 46%, to \$18.2 million in the three months ended June 30, 2017 from \$33.8 million in the three months ended June 30, 2016. The decrease was primarily due to a \$16.7 million decrease in sales of products in our 100 Gbps product family.

Asia Pacific

Revenue from product sales to customers with delivery locations in the Asia Pacific region, or APAC, decreased by \$18.5 million, or 34%, to \$36.6 million in the three months ended June 30, 2017 from \$55.1 million in the three months ended June 30, 2016. The decrease was primarily due to a \$26.0 million decrease in sales of products within our 100 Gbps product family, partially offset by a \$4.8 million increase in sales of products within our 200 Gbps product family and a \$2.7 million increase in sales of products within our 400 Gbps product family. The Quality Issue caused supply constraints that contributed to the decrease in revenue.

Cost of Revenue and Gross Profit

	Three Months Ended June 30,		Change in	
	2017	2016	\$	%
(dollars in thousands)				
Cost of revenue	\$ 53,516	\$ 62,240	\$ (8,724)	(14)%
Gross profit percentage	32.2%	46.4%		

Cost of revenue decreased \$8.7 million, or 14%, to \$53.5 million in the three months ended June 30, 2017 from \$62.2 million in the three months ended June 30, 2016. The decrease was mainly due to decreased sales volume, partially offset by the Quality Issue, which resulted in a \$7.8 million charge to cost of revenue for the estimated cost of repairs.

Our gross profit percentage decreased to 32.2% in the three months ended June 30, 2017 compared to 46.4% in the three months ended June 30, 2016. The decrease was mainly due to the Quality Issue which resulted in a \$7.8 million charge to cost of revenue, and the impact of fixed costs relative to the current period revenue volume.

Research and Development

	Three Months Ended June 30,		Change in	
	2017	2016	\$	%
	(dollars in thousands)			
Research and development	\$ 22,734	\$ 21,839	\$ 895	4%

Research and development expense increased \$0.9 million, or 4%, to \$22.7 million in the three months ended June 30, 2017 from \$21.8 million in the three months ended June 30, 2016, primarily due to a \$1.0 million increase in depreciation expense as we continue investing in future technologies.

Sales, General and Administrative

	Three Months Ended June 30,		Change in	
	2017	2016	\$	%
	(dollars in thousands)			
Sales, general and administrative	\$ 9,368	\$ 8,649	\$ 719	8%

Sales, general and administrative expenses increased \$0.7 million, or 8%, to \$9.4 million in the three months ended June 30, 2017 from \$8.6 million in the three months ended June 30, 2016, mainly due to a \$0.8 million increase in professional services expense.

Other Income (Expense), Net

	Three Months Ended June 30,		Change in	
	2017	2016	\$	%
	(dollars in thousands)			
Total other income (expense), net	\$ 826	\$ (3,647)	\$ 4,473	(123)%

Total other income, net, was \$0.8 million during the three months ended June 30, 2017, as compared to other expense, net of \$3.6 million during the three months ended June 30, 2016. During the three months ended June 30, 2017, other income, net was mainly comprised of interest income from marketable securities of \$0.9 million. During the three months ended June 30, 2016, other expense, net was mainly comprised of a \$3.6 million revaluation of our preferred stock warrant liability. The preferred stock warrants were converted to common stock warrants during the second quarter of 2016 and as a result, there was no fair value adjustment during the three months ended June 30, 2017.

(Benefit) Provision for Income Taxes

	Three Months Ended June 30,		Change in	
	2017	2016	\$	%
	(dollars in thousands)			
(Benefit) provision for income taxes	\$ (10,511)	\$ 2,219	\$ (12,730)	(574)%
Effective tax rate	180%	11%		169%

Benefit from income taxes for the three months ended June 30, 2017 was \$10.5 million compared to a provision for income taxes of \$2.2 million for the three months ended June 30, 2016. The change primarily resulted from the recognition of excess tax benefits from the taxable compensation on share-based awards recognized in the second quarter of 2017.

Six Months Ended June 30, 2017 Compared to the Six Months Ended June 30, 2016

Revenue

Revenue and the related changes during the six months ended June 30, 2017 and 2016 were as follows:

	Six Months Ended June 30,		Change in	
	2017	2016	\$	%
	(dollars in thousands)			
Revenue	\$ 193,565	\$ 200,681	\$ (7,116)	(4)%

Revenue decreased by \$7.1 million, or 4%, to \$193.6 million in the six months ended June 30, 2017 from \$200.7 million in the six months ended June 30, 2016. The decrease was primarily due to a \$50.5 million decrease in revenue from sales of products within our 100 Gbps product family. This decrease in revenue was partially offset by a \$34.2 million increase in revenue from sales of products within our 400 Gbps product family and a \$9.2 million increase in revenue from sales of products within our 200 Gbps product family. The Quality Issue caused supply constraints that contributed to the decrease in revenue.

Our product sales based on the geographic region of our customers' delivery location are as follows:

	Six Months Ended	As a % of	Six Months Ended	As a % of	Change in	
	June 30, 2017	Total Revenue	June 30, 2016	Total Revenue	\$	%
	(dollars in thousands)					
Americas	\$ 37,782	19%	\$ 43,753	22%	\$ (5,971)	(14)%
EMEA	44,295	23%	58,188	29%	\$ (13,893)	(24)%
APAC	111,488	58%	98,740	49%	\$ 12,748	13 %
Total revenue	\$ 193,565	100%	\$ 200,681	100%	\$ (7,116)	(4)%

Americas

Revenue from product sales to customers with delivery locations in the Americas decreased by \$6.0 million, or 14%, to \$37.8 million in the six months ended June 30, 2017 from \$43.8 million in the six months ended June 30, 2016. The decrease was primarily due to a \$6.5 million decrease in sales of products within our 100 Gbps product family. The Quality Issue caused supply constraints that contributed to the decrease in revenue.

Europe, the Middle East and Africa

Revenue from product sales to customers with delivery locations in EMEA decreased by \$13.9 million, or 24%, to \$44.3 million in the six months ended June 30, 2017 from \$58.2 million in the six months ended June 30, 2016. The decrease was primarily due to a \$19.8 million decrease in sales of products within our 100 Gbps product family. This increase was partially offset by a \$5.3 million increase in sales of products in our 400 Gbps product family.

Asia Pacific

Revenue from product sales to customers with delivery locations in APAC increased by \$12.7 million, or 13%, to \$111.5 million in the six months ended June 30, 2017 from \$98.7 million in the six months ended June 30, 2016. The increase was primarily due to a \$30.8 million increase in sales of products within our 400 Gbps product family and a \$6.2 million increase in sales of products within our 200 Gbps product family, partially offset by a \$24.2 million decrease in sales of products within our 100 Gbps product family. The Quality Issue caused supply constraints that contributed to the decrease in revenue.

Cost of Revenue and Gross Profit

	Six Months Ended June 30,		Change in	
	2017	2016	\$	%
	(dollars in thousands)			
Cost of revenue	\$ 111,883	\$ 111,323	\$ 560	1%
Gross profit percentage	42.2%	44.5%		

Cost of revenue increased \$0.6 million, or 1%, to \$111.9 million in the six months ended June 30, 2017 from \$111.3 million in the six months ended June 30, 2016. The increase was mainly due to the Quality Issue, which resulted in a \$7.8 million charge to cost of revenue for the estimated cost of repairs, partially offset by the decreased sales volume during the period.

Our gross profit percentage decreased to 42.2% in the six months ended June 30, 2017 compared to 44.5% in the six months ended June 30, 2016. The decrease was primarily due to the Quality Issue, which resulted in a \$7.8 million charge to cost of revenue.

Research and Development

	Six Months Ended June 30,		Change in	
	2017	2016	\$	%
	(dollars in thousands)			
Research and development	\$ 40,462	\$ 37,253	\$ 3,209	9%

Research and development expense increased \$3.2 million, or 9%, to \$40.5 million in the six months ended June 30, 2017 from \$37.3 million in the six months ended June 30, 2016, primarily due to an \$8.3 million increase in personnel-related costs and other costs and a \$1.6 million increase in depreciation expense as we continue investing in future technologies. These increases were partially offset by a \$5.7 million decrease related to the timing of milestone payments for new ASIC program outsourced development costs and a \$1.0 million decrease in prototype development costs.

Sales, General and Administrative

	Six Months Ended June 30,		Change in	
	2017	2016	\$	%
	(dollars in thousands)			
Sales, general and administrative	\$ 18,059	\$ 12,703	\$ 5,356	42%

Sales, general and administrative expenses increased \$5.4 million, or 42%, to \$18.1 million in the six months ended June 30, 2017 from \$12.7 million in the six months ended June 30, 2016, due to a \$3.6 million increase in personnel-related costs and other costs to support our growth and the requirements of being a public company, and a \$1.7 million increase in professional services expense.

Other Income (Expense), Net

	Six Months Ended June 30,		Change in	
	2017	2016	\$	%
	(dollars in thousands)			
Total other income (expense), net	\$ 1,233	\$ (3,411)	\$ 4,644	(136)%

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Total other income, net, was \$1.2 million during the six months ended June 30, 2017, as compared to other expense, net of \$3.4 million during the six months ended June 30, 2016. During the six months ended June 30, 2017, other income, net was mainly comprised of interest income from marketable securities of \$1.3 million. During the six months ended June 30, 2016, other expense, net was mainly comprised of a \$3.4 million revaluation of our preferred stock warrant liability. The preferred stock warrants were converted to common stock warrants during the second quarter of 2016 and as a result, there was no fair value adjustment during the six months ended June 30, 2017.

(Benefit) Provision for Income Taxes

	Six Months Ended June 30,		Change in	
	2017	2016	\$	%
	(dollars in thousands)			
(Benefit) provision for income taxes	\$ (15,932)	\$ 3,796	\$ (19,728)	(520)%
Effective tax rate	(65)%	11%		(76)%

Benefit from income taxes for the six months ended June 30, 2017 was \$15.9 million compared to a provision for income taxes of \$3.8 million for the six months ended June 30, 2016. The decrease in the effective tax rate of 76% primarily resulted from the recognition of excess tax benefits from the taxable compensation on share-based awards recognized in the first six months of 2017.

Liquidity and Capital Resources

	Six Months Ended June 30,	
	2017	2016
	(in thousands)	
Cash and cash equivalents	\$ 106,127	\$ 159,009
Marketable securities	236,779	—
Working capital	358,286	189,519
Net cash provided by operating activities	37,826	42,920
Net cash used in investing activities	(140,982)	(8,056)
Net cash provided by financing activities	2,881	96,535

We have historically funded our operating and capital expenditures primarily through cash generated from operations. In May 2016, we completed our initial public offering, or IPO, in which we received aggregate proceeds of \$97.8 million, net of underwriters' discounts and commissions, before deducting offering costs of approximately \$4.3 million. In October 2016, we completed a follow-on offering in which we received aggregate proceeds of \$116.8 million, net of underwriters' discounts and commissions, before deducting offering costs of approximately \$1.2 million. As of June 30, 2017, we had cash and cash equivalents totaling \$106.1 million, marketable securities of \$236.8 million and accounts receivable of \$82.9 million.

We intend to reinvest the undistributed earnings of our foreign subsidiaries into our foreign operations as of June 30, 2017, and, accordingly, no U.S. income taxes have been provided thereon. As of June 30, 2017, the amount of cash, cash equivalents, and marketable securities held by our foreign subsidiaries was \$110.4 million. We have not, nor do we anticipate the need to, repatriate funds to the United States to satisfy domestic liquidity needs arising in the ordinary course of business.

We believe our existing cash balances and anticipated cash flow from future operations will be sufficient to meet our working capital and capital expenditure needs for at least the next 12 months and the foreseeable future. Our future capital requirements may vary materially from those currently planned and will depend on many factors, including our rate of revenue growth, the timing and extent of spending on research and development efforts and other business initiatives, purchases of capital equipment to support our growth, the expansion of sales and marketing activities, any expansion of our business through acquisitions of or investments in complementary products, technologies or businesses, the use of working capital to purchase additional inventory, the timing of new product introductions, market acceptance of our products and overall economic conditions. To the extent that current and anticipated future sources of liquidity are insufficient to fund our future business

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activities and requirements, we may be required to seek additional equity or debt financing. In the event additional financing is required from outside sources, we may not be able to raise it on terms acceptable to us or at all.

Operating Activities

Net cash provided by operating activities consists primarily of net income adjusted for certain non-cash items, including depreciation expense, stock-based compensation expense, deferred income taxes, loss on the change in fair value of our preferred stock warrant liability, and other non-cash charges, net, as well as the effect of changes in working capital.

Net cash provided by operating activities was \$37.8 million in the six months ended June 30, 2017 as compared to \$42.9 million in the six months ended June 30, 2016. The decrease of \$5.1 million was primarily due to a \$13.4 million decrease in non-cash expense items primarily consisting of stock-based compensation, depreciation expense, deferred income taxes and the change in fair value of our preferred stock warrant liability, partially offset by a \$8.2 million increase in net income and a \$0.2 million increase in cash related to changes in operating assets and liabilities. Changes in cash flows related to operating assets and liabilities primarily consisted of a \$61.8 million increase in cash due to the timing of accounts receivable collections in the second quarter of 2017, partially offset by a \$9.9 million decrease in prepaid expense and other assets, a \$37.2 million decrease in cash due to the timing of payments associated with our accounts payable and accrued liabilities, and a \$14.7 million decrease in cash due to a decreased inventory balance as compared to December 31, 2016.

Investing Activities

Our investing activities have consisted primarily of purchases, sales and maturities of marketable securities and purchases of lab and computer equipment and software to support the development of new products and increase our manufacturing capacity to meet customer demand for existing products. In addition, our investing activities include expansion of, and improvements to, our leased facilities. As our business expands, we expect that we will continue to invest in these areas.

Net cash used in investing activities in the six months ended June 30, 2017 was \$141.0 million, as compared to \$8.1 million in the six months ended June 30, 2016, which was primarily attributable to the investment of \$132.9 million, net, into marketable securities during the six months ended June 30, 2017.

Financing Activities

Our financing activities have consisted primarily of proceeds received from the completion of our IPO and follow-on offering, net of issuance costs and proceeds from the issuance of common stock under our stock-based compensation plans.

Net cash provided by financing activities during the six months ended June 30, 2017 was \$2.9 million, as compared to \$96.5 million during the six months ended June 30, 2016. The decrease was primarily due to the \$97.8 million of proceeds received from the completion of our IPO, net of underwriters' discounts and commissions, before deduction of offering expenses of approximately \$4.3 million, and partially offset by an increase of \$2.8 million from the issuance of common stock under our stock-based compensation plans.

Contractual Obligations and Commitments

Our principal commitments consist of operating lease payments for our facilities and purchase obligations. The following table summarizes these contractual obligations at June 30, 2017. Future events could cause actual payments to differ from these estimates.

	Payments due by period				
	Total	Less than 1 Year	1-3 Years	3-5 Years	More Than 5 Years
	(in thousands)				
Operating leases (1)	\$ 21,327	\$ 1,674	\$ 6,160	\$ 6,106	\$ 7,387
Purchase obligations (2)	127,337	127,337	—	—	—
Unrecognized tax benefits (3)	1,932	—	—	—	—
Total	<u>\$ 150,596</u>	<u>\$ 129,011</u>	<u>\$ 6,160</u>	<u>\$ 6,106</u>	<u>\$ 7,387</u>

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- (1) Our principal facilities are located in Maynard, Massachusetts and Holmdel, New Jersey and are leased under non-cancelable operating leases that expire in February 2025, with respect to the Massachusetts facility, and December 2021, with respect to the New Jersey facility. We also lease office space in various locations with expiration dates between 2018 and 2021. Several of the lease agreements include leasehold improvement incentives, escalating lease payments, renewal provisions and other provisions which require us to pay taxes, insurance, maintenance costs or defined rent increases. All of our facility leases are accounted for as operating leases. Rent expense is recorded over the lease terms on a straight-line basis. Rent expense for the three and six months ended June 30, 2017 and 2016 was \$1.2 million, \$2.7 million, \$0.3 million and \$0.6 million, respectively.

Future minimum lease payments due under these non-cancelable lease agreements as of June 30, 2017 are as follows (in thousands):

	Amounts
Remaining 2017	\$ 1,674
2018	3,113
2019	3,047
2020	3,067
2021	3,039
Thereafter	7,387
Total	\$ 21,327

As of June 30, 2017, we were committed to approximately \$0.6 million of remaining tenant improvement costs related to these leases that are expected to be paid in the third quarter of 2017.

- (2) Our purchase obligations primarily consist of outstanding purchase orders with our contract manufacturers for inventory and other third parties for the manufacturing of our wafers. Our relationships with these vendors typically allow for the cancellation of outstanding purchase orders, but require payments of all expenses incurred through the date of cancellation. Other obligations include future non-inventory purchases and commitments related to future fixed asset purchases.
- (3) We had \$3.8 million of uncertain tax positions as of June 30, 2017. Included in the balance of unrecognized tax benefits as of June 30, 2017 were \$1.9 million of tax benefits that, if recognized, would impact the effective tax rate, which have been accrued for as a long-term liability on our condensed consolidated balance sheet.

Off-Balance Sheet Arrangements

As of June 30, 2017, we did not have any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of Regulation S-K, such as the use of unconsolidated subsidiaries, structured finance, special purpose entities or variable interest entities.

Recently Issued Accounting Pronouncements

Refer to the “Basis of Presentation and Summary of Significant Accounting Policies” footnote within our condensed consolidated financial statements for analysis of recent accounting pronouncements that are applicable to our business.

Critical Accounting Policies and Estimates

We prepare our condensed consolidated financial statements in accordance with generally accepted accounting principles in the United States. The preparation of condensed consolidated financial statements also requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expenses and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results could differ significantly from the estimates made by our management.

There have been no material changes to our critical accounting policies and estimates from those disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

ITEM 3. Quantitative and Qualitative Disclosures About Market Risk.

Our exposure to changes in interest rates relates primarily to our investment portfolio. As of June 30, 2017, we had cash and cash equivalents of \$106.1 million and marketable securities of \$236.8 million, which consisted primarily of bank deposits, money market funds, repurchase agreements, U.S. government and agency securities, commercial paper, certificates of deposit, asset-backed securities and corporate notes and bonds. The primary objectives of our investment activities are to preserve principal and provide liquidity without significantly increasing risk. Our investment policy specifies credit quality standards for our investments and limits the amount of credit exposure to any single issue, issuer, or type of investment. To date, we have not been exposed, nor do we anticipate being exposed, to material risks due to changes in interest rates. A hypothetical 10% change in interest rates during any of the periods presented would not have had a material impact on our condensed consolidated financial statements.

Our exposure to market risk from changes in foreign currency exchange rates and inflation has not changed materially from our exposure as of December 31, 2016.

ITEM 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures. Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”)), as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on such evaluation, our principal executive officer and principal financial officer have concluded that as of such date, our disclosure controls and procedures were effective.

Changes in Internal Control Over Financial Reporting. There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the period covered by this Quarterly Report on Form 10-Q that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

ITEM 1. Legal Proceedings.

On January 22, 2016, ViaSat, Inc. filed a suit against us alleging, among other things, breach of contract, breach of the implied covenant of good faith and fair dealing and misappropriation of trade secrets. On February 19, 2016, we responded to ViaSat's suit and alleged counterclaims against ViaSat including, among other things, patent misappropriation, breach of contract, breach of the implied covenant of good faith and fair dealing, misappropriation of trade secrets and unfair competition, which ViaSat denied in its response filed March 16, 2016. The lawsuit is still pending and discovery is ongoing. We are continuing to evaluate ViaSat's claims, but based on the information available to us today, we currently believe that this suit will not have a material adverse effect on our business or our condensed consolidated financial position, results of operations or cash flows. On July 28, 2017, we filed a suit against ViaSat asserting commercial disparagement, libel, slander of title, unfair competition, intentional interference with advantageous relations and intentional interference with contractual relations.

In addition, from time to time we may become involved in legal proceedings or be subject to claims arising in the ordinary course of business. Although the results of litigation and claims cannot be predicted with certainty, we currently believe that the final outcome of these ordinary course matters will not have a material adverse effect on our business or our condensed consolidated financial position, results of operations or cash flows. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

ITEM 1A. Risk Factors.

An investment in our common stock involves a high degree of risk. Investors in our common stock should carefully consider the risks and uncertainties described below, together with all of the other information included in this Quarterly Report on Form 10-Q and in our other public filings, including our Annual Report on Form 10-K for the year ended December 31, 2016 filed with the SEC on February 23, 2017, before deciding to invest in our common stock. Our business, financial condition, operating results, cash flow and prospects could be materially and adversely affected by any of these risks or uncertainties, as well as other risks not currently known to us or that we currently consider immaterial. If any of such risks and uncertainties actually occurs, our business, financial condition or operating results could differ materially from the plans, projections and other forward-looking statements included in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in this Quarterly Report on Form 10-Q and in our other public filings. The trading price of our common stock could decline due to any of these risks, and, as a result, investors in our common stock may lose all or part of their investment.

Risks Related to Our Business and Industry

We depend on a limited number of customers for a significant percentage of our revenue and the loss or temporary loss of a major customer for any reason could harm our financial condition.

We have historically generated most of our revenue from a limited number of customers. In 2014, 2015, 2016, the six-month periods ended June 30, 2016 and 2017, our five largest customers in each period (which differed by period) collectively accounted for 78%, 74%, 78%, 80% and 70%, respectively, of our revenue. In 2014, 2015, 2016, the six-month periods ended June 30, 2016 and 2017, ADVA Optical Networking North America, Inc. accounted for 23%, 22%, 26%, 24% and 14%, respectively, of our revenue and ZTE Kangxun Telecom Co. Ltd., or ZTE, accounted for 35%, 28%, 32%, 38% and 36%, respectively, of our revenue. In addition, during 2015 and the six-month period ended June 30, 2016, Coriant, Inc. accounted for 13% and 11%, respectively, of our revenue. As a consequence of the concentrated nature of our customer base, our quarterly revenue and results of operations may fluctuate from quarter to quarter and are difficult to estimate, and any cancellation of orders or any acceleration or delay in anticipated product purchases or the acceptance of shipped products by our larger customers or any government-mandated inability to sell to any of our larger customers could materially affect our revenue and results of operations in any quarterly period.

For example, on March 8, 2016, the U.S. Department of Commerce published a final rule in the Federal Register that amended the Export Administration Regulations by adding ZTE, its parent company and two other affiliated entities to the "Entity List," for actions contrary to the national security and foreign policy interests of the United States. This rule imposed new export licensing requirements on exports, re-exports, and in-country transfers of all U.S.-regulated products, software and technology to the designated ZTE entities, which had the practical effect of preventing us from making any sales to ZTE. On March 24, 2016, the U.S. Department of Commerce issued a temporary general license suspending the enhanced export licensing requirements for ZTE and one of its designated affiliates through June 30, 2016, thereby enabling us to resume sales

to ZTE. The U.S. Department of Commerce extended the temporary general license several times, through March 29, 2017. On March 7, 2017, the U.S. Department of Commerce announced a settlement agreement with ZTE and then removed ZTE from the Entity List on March 29, 2017. This action ended the enhanced export restrictions imposed in March 2016 and eliminated the need for the temporary general license. There can be no guarantee that the U.S. Department of Commerce will not take future regulatory action that may materially interfere with our ability to make sales to ZTE or any of its affiliates or other customers. The loss or temporary loss of such customers as a result of future regulatory activity could materially harm our business, financial condition, results of operations and prospects.

We may be unable to sustain or increase our revenue from our larger customers, grow revenues with new or other existing customers at the rate we anticipate or at all, or offset the discontinuation of concentrated purchases by our larger customers with purchases by new or existing customers. 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 customers' buying patterns. For example, one of our larger customers made significant purchases in each of the second and fourth quarters of 2016; however, orders from that customer were substantially lower in the third quarter of 2016. In addition, we have seen and may in the future see consolidation of our customer base which could result in loss of customers or reduced purchases. The loss or temporary loss of such customers, or a significant delay or reduction in their purchases, could materially harm our business, financial condition, results of operations and prospects.

We generate a significant portion of our revenue from international sales and rely on foreign manufacturers to make our products, and therefore are subject to additional risks associated with our international operations.

Since January 1, 2013, we have shipped our products to customers located in 18 foreign countries. In 2014, 2015, 2016, the six-month period ended June 30, 2016 and the six-month period ended June 30, 2017, we derived 79%, 82%, 82%, 80% and 81%, respectively, of our revenue from sales to customers with delivery locations outside the United States. A significant portion of our international sales are made to customers with delivery locations in China. In 2014, 2015, 2016, the six-month period ended June 30, 2016 and the six-month period ended June 30, 2017, we derived 36%, 36%, 41%, 44% and 45%, respectively, of our revenue from sales to customers with delivery locations in China. We also work with manufacturing facilities outside of the United States. We have expanded, and in the future may further expand, our international operations to locate additional functions related to the development, manufacturing and sale of our products outside of the United States. Our international operations are subject to inherent risks, and our results of operations could be adversely affected by a variety of factors, many of which are beyond our control, including:

- U.S. or foreign governmental action, such as export control or import restrictions, that could prevent or significantly hinder our ability to sell our products to certain customers or customers in certain foreign jurisdictions;
- greater difficulty in enforcing contracts and accounts receivable obligations and longer collection periods;
- difficulties in managing and staffing international offices, and the increased travel, infrastructure and legal compliance costs associated with multiple international locations;
- the impact of general economic and political conditions in economies outside the United States, including the uncertainty arising from the June 2016 referendum vote in the United Kingdom in favor of exiting the European Union and the subsequent formal notification by the United Kingdom of its intention to withdraw from the European Union, and heightened economic and political uncertainty within and among other European Union member states;
- tariff and trade barriers, changes in custom and duties requirements or compliance interpretations and other regulatory requirements or contractual limitations on our ability to sell or develop our products in certain foreign markets;
- 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;
- certification requirements;
- greater difficulty documenting and testing our internal controls;
- reduced protection for intellectual property rights in some countries;
- potentially adverse tax consequences;
- the effects of changes in currency exchange rates;

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- changes in service provider and government spending patterns;
- social, political and economic instability;
- higher incidence of corruption or unethical business practices that could expose us to liability or damage our reputation; and
- natural disasters, health epidemics and acts of war or terrorism.

The current U.S. President and his Administration, and some members of the current U.S. Congress, have signaled a willingness to revise, renegotiate, or terminate various multilateral trade agreements under which U.S. companies currently exchange products and services around the world, and to impose new taxes on certain goods imported into the U.S. Since we rely primarily upon non-U.S. manufacturers to make our products, such steps, if adopted, could make our products more expensive and less competitive in the U.S. market. Such steps, if adopted, could also lead to retaliatory actions by other countries, which could make it more difficult to sell our products in those countries, or make our products more expensive and less competitive in those foreign markets. It is not known what specific measures might be proposed or how they would be implemented or enforced. There can be no assurance that pending or future legislation or executive action in the United States that could significantly increase our cost of manufacturing and, consequently, adversely affect our business, financial condition or results of operations, will not be enacted.

In addition, international customers may also require that we comply with additional testing or customization of our products to conform to local standards, which could materially increase the costs to sell our products in those markets.

As we continue to operate on an international basis, our success will depend, in large part, on our ability to anticipate and effectively manage these and other risks associated with our international operations. Our failure to manage any of these risks could harm our international operations and reduce our international sales.

Our limited operating history makes it difficult to evaluate our current business and future prospects and may increase the risk associated with investments by investors in our common stock.

We were founded in 2009 and shipped our first products in 2011. Our limited operating history, combined with the rapidly evolving and competitive nature and consolidation of our industry, suppliers, manufacturers and customers, make it difficult to evaluate our current business and future prospects. We have encountered and may continue to encounter risks and difficulties frequently experienced by rapidly growing companies in constantly evolving industries, including unpredictable and volatile revenues and increased expenses as we continue to grow our business. If we do not manage these risks and overcome these difficulties successfully, our business, financial condition, results of operations and prospects could be adversely affected, and the market price of our common stock could decline. Further, we have limited historic financial data, and we operate in a rapidly evolving and increasingly competitive 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.

Since we began commercial shipments of our products, our revenue, gross profit and results of operations have varied and are likely to continue to vary from quarter to quarter due to a number of factors, many of which are not within our control. It is difficult for us to accurately forecast our future revenue and gross profit and plan expenses accordingly and, therefore, it is difficult for us to predict our future results of operations.

Our revenue growth is substantially dependent on our successful development and release of new products.

The markets for our products are characterized by changes and improvements in existing technologies and the introduction of new technology approaches. The future of our business will depend in large part upon the continuing relevance of our technological capabilities, our ability to interpret customer and market requirements in advance of product deliveries and our ability to introduce in a timely manner new products that address our customers' requirements for more cost-effective bandwidth solutions. The development of new products is a complex process, and we may experience delays and failures in completing the development and introduction of new products. Our successful product development depends on a number of factors, including the following:

- the accurate prediction of market requirements, changes in technology and evolving standards;
- the availability of qualified product designers and technologies needed to solve difficult design challenges in a cost-effective, reliable manner;
- our ability to design products that meet customers' cost, size, acceptance and specification criteria and performance requirements;

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- our ability to manufacture new products with acceptable quality and manufacturing yields in a sufficient quantity to meet customer demand and according to customer needs;
- our ability to offer new products at competitive prices;
- our dependence on suppliers to deliver in a timely manner materials that are critical components of our products;
- our dependence on third-party manufacturers to successfully manufacture our products;
- the identification of, and entry into, new markets for our products;
- the acceptance of our customers' products by the market and the lifecycle of such products; and
- our ability to deliver products in a timely manner within our customers' product planning and deployment cycle.

In general, a new product development effort may last two years or longer, and requires significant investments in engineering hours, third-party development costs, equipment, prototypes and sample materials, as well as sales and marketing expenses, which will not be recouped if the product launch is unsuccessful. We may not be able to design and introduce new products in a timely or cost-efficient manner, and our new products may be costlier to develop, may fail to meet the requirements of the market or our customers, or may be adopted by customers slower than we expect. In that case, we may not reach our expected level of production orders and may lose market share, which could adversely affect our ability to sustain our revenue growth or maintain our current revenue levels.

If we fail to attract, retain and motivate key personnel, or if we fail to retain and motivate our founders, our business could suffer.

Our business depends on the services of highly qualified employees in a variety of disciplines, including optical systems and networking, digital signal processing, large-scale ASIC design and verification, silicon photonic integration, system software development, hardware design and high-speed electronics design. Our success depends on the skills, experience and performance of these employees, our founders and other members of our senior management team, as well as our ability to attract and retain other highly qualified management and technical personnel. There is intense competition for qualified personnel in our industry and a limited number of qualified personnel with expertise in the areas that are relevant to our business, and as a result we may not be able to attract and retain the personnel necessary for the expansion and success of our business. All of our co-founders are currently employees of our company. The loss of services of any of our founders or of any other officers or key personnel, or our inability to continue to attract qualified personnel, could have a material adverse effect on our business.

We depend on third parties for a significant portion of the fabrication, assembly and testing of our products.

The fabrication, assembly and testing of our products is done by third-party contract manufacturers and foundries. As a result, we face competition for manufacturing capacity in the open market. We rely on foundries to manufacture wafers and on third-party manufacturers to assemble, test and manufacture substantially all of our coherent DSP ASICs, silicon PICs and modules. Our contract manufacturers implement any customer-specific configurations and packaging before customer shipments. Accordingly, we cannot directly control our product delivery schedules and quality assurance. This lack of control could result in product shortages or quality assurance problems. For example, on May 31, 2017, we announced a Quality Issue at one of our three contract manufacturers that affected a portion of the approximate 1,300 AC400 units and 5,100 CFP units manufactured by the contract manufacturer over an approximate four month period. These issues could delay shipments of our products, increase our assembly or testing costs or lead to costly epidemic failure claims. In addition, the consolidation of contract manufacturers and foundries, as well as the increasing capital intensity and complexity associated with fabrication in smaller process geometries, has limited the number of available contract manufacturers and foundries and increased our dependence on a smaller number of contract manufacturers and foundries. The limited number of contract manufacturers or foundries could also increase the costs of components or manufacturing and adversely affect our results of operations, including our gross margins. In addition, to the extent we engage additional contract manufacturers or foundries, introduce new products with new manufacturers or foundries and/or move existing internal or external production lines to new manufacturers or foundries, we could experience supply disruptions during the transition process.

Because we rely on contract manufacturers and foundries, we face several significant risks in addition to those discussed above, including:

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- a lack of guaranteed supply of manufactured wafers and other raw and finished components and potential higher wafer and component prices due to supply constraints;
- the limited availability of, or potential delays in obtaining access to, key process technologies;
- the location of contract manufacturers and foundries in regions that are subject to earthquakes, typhoons, tsunamis and other natural disasters;
- competition with our contract manufacturers' or foundries' other customers when contract manufacturers or foundries allocate capacity or supply during periods of capacity constraint or supply shortages; and
- potential regulatory changes, including in the United States, that could in the future prohibit, or increase our costs relating to, the use of contract manufacturers and foundries in certain regions.

The manufacture of our products is a complex and technologically demanding process that utilizes many state of the art manufacturing processes and specialized components. Our foundries, suppliers, and contract manufacturers have from time to time experienced lower than anticipated manufacturing yields for our wafers or PIC components and modules. This often occurs during the production or assembly of new products or the installation and start-up of new process technologies and can occur even in mature processes due to break downs in mechanical systems, process controls, clean room controls, equipment failures, calibration errors and the handling of the material from station to station as well as damage resulting from the shipment and handling of the products to various points of processing.

We depend on a limited number of suppliers, some of which are sole sources, and our business could be disrupted if they are unable to meet our needs.

We depend on a limited number of suppliers of the key materials, including silicon wafers, substrate materials and components, equipment used to manufacture and test our products, and key design tools used in the design, testing and manufacturing of our products. Some of these suppliers are sole sources. With some of these suppliers, we do not have long-term agreements and instead purchase materials and equipment through a purchase order process. As a result, these suppliers may stop supplying us materials and equipment, limit the allocation of supply and equipment to us due to increased industry demand or significantly increase their prices at any time with little or no advance notice. Our reliance on sole source suppliers or a limited number of suppliers could result in delivery problems, reduced control over product pricing and quality, and our inability to identify and qualify another supplier in a timely manner. Some of our suppliers may experience financial difficulties that could prevent them from supplying us materials, or equipment used in the design and manufacture of our products. In addition, our suppliers, including our sole source suppliers, may experience manufacturing delays or shut downs due to circumstances beyond their control such as labor issues, political unrest or natural disasters. Our suppliers, including our sole source suppliers, could also determine to discontinue the manufacture of materials, equipment and tools that may be difficult for us to obtain from alternative sources. In addition, the suppliers of design tools that we rely on may not maintain or advance the capabilities of their tools in a manner sufficient to meet the technological requirements for us to design advanced products or provide such tools to us at reasonable prices. Further, the industry in which our suppliers operate is subject to a trend of consolidation. To the extent this trend continues, we may become dependent on even fewer suppliers to meet our material and equipment needs. In the event we need to establish relationships with additional suppliers, doing so may be a time-consuming process, and there are no assurances that we would be able to enter into necessary arrangements with these additional suppliers in time to avoid supply constraints in sole sourced components.

Any supply deficiencies or industry allocation shortages relating to the quantities of materials, equipment or tools we use to design and manufacture our products could materially and adversely affect our ability to fulfill customer orders and our results of operations. Lead times for the purchase of certain materials, equipment and tools from suppliers have increased and in some instances have exceeded the lead times provided to us by our customers. In some cases, these lead time increases have limited our ability to respond to or meet customer demand. We have in the past and may in the future, experience delays or reductions in supply shipments, which could reduce our revenue and profitability. In addition, potential regulatory changes, including in the United States, could in the future prohibit, or increase our costs relating to, the use of suppliers in certain regions. If key components or materials are unavailable, our costs would increase and our revenue would decline.

Our revenue growth rate in prior periods may not be indicative of our future growth or performance.

Our revenue growth rate in prior periods may not be indicative of our future growth or performance. We experienced revenue growth rates of 63%, 100% and 91% in 2015, 2016 and the six months ended June 30, 2016, respectively, in each case compared to the corresponding periods in the immediately preceding year. Conversely, in the six months ended June 30, 2017 our revenue declined 4% as compared to the corresponding period in the preceding year. We may not be able to return to similar revenue growth rates in future periods. Our revenue for any prior quarterly or annual period should not be relied upon

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as any 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.

We may not be able to maintain or improve our gross margins.

We may not be able to maintain or improve our gross margins. Factors such as slow introductions of new products, our failure to effectively reduce the cost of existing products, our failure to maintain or improve our product mix or pricing, changes in customer demand, annual, semi-annual or quarterly price reductions and pricing discounts required under the terms of our customer contracts, pricing pressure resulting from increased competition, the availability of superior or lower-cost technologies, market consolidation or the potential for future macroeconomic or market volatility to reduce sales volumes have the potential to adversely impact our gross margins. Our gross margins could also be adversely affected by unfavorable production yields or variances, increases in costs of components and materials, the timing changes in our inventory, warranty costs and related returns, changes in foreign currency exchange rates, potential inability to reduce manufacturing costs in response to any decrease in our revenue, possible exposure to inventory valuation reserves and failure to obtain the anticipated benefits of our tax planning strategies. Our competitors have a history of reducing their prices to increase or avoid losing market share, and if and as we continue to gain market share we may have to reduce our prices to continue to effectively compete. If we are unable to maintain or improve our gross margins, our financial results will be adversely affected.

We have a history of operating losses, and we may not maintain or increase our profitability.

Although we were profitable in 2014, 2015, 2016 and the six months ended June 30, 2016 and 2017, we incurred operating losses in 2009 through 2013. We may not be able to sustain or increase profitability on a quarterly or annual basis and have experienced variability on a quarter to quarter basis. If we are unable to maintain profitability, the market value of our stock may decline, and investors in our common stock could lose all or a part of their investment.

We are exposed to credit risk and fluctuations in the market values of our investment portfolio.

Credit ratings and pricing of our domestic and international investments can be negatively affected by liquidity, credit deterioration, financial results, economic risk, political risk, sovereign risk or other factors. As a result, the value and liquidity of our cash, cash equivalents and marketable securities may fluctuate substantially. Therefore, although we have not realized any significant losses on our cash, cash equivalents and marketable securities, future fluctuations in their value could result in a significant realized loss.

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

We produce complex products that incorporate advanced technologies. Despite our 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 redesigning the products, cause us to lose significant customers, subject us to liability for damages or divert our resources from other tasks, any one of which could materially adversely affect our business, financial condition, results of operations and prospects. For example, on May 31, 2017, we announced a Quality Issue at one of our three contract manufacturers that affected a portion of the approximate 1,300 AC400 units and 5,100 CFP units manufactured by the contract manufacturer over an approximate four month period.

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. Such remediation could have a material effect on our business, financial condition, results of operations and prospects.

We are subject to government regulation, including import, export, economic sanctions, and anti-corruption laws and regulations that may limit our sales opportunities, expose us to liability and increase our costs.

Our products are subject to export controls, including the U.S. Department of Commerce's Export Administration Regulations and economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls, and similar laws and regulations that apply in other jurisdictions in which we distribute or sell our products. Export control and economic sanctions laws and regulations include restrictions and prohibitions on the sale or supply of

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certain products and on our transfer of parts, components, and related technical information and know-how to certain countries, regions, governments, persons and entities. For example, on March 8, 2016, the U.S. Department of Commerce published a final rule in the Federal Register that amended the Export Administration Regulations by adding ZTE, its parent company and two other affiliated entities to the “Entity List,” for actions contrary to the national security and foreign policy interests of the United States. This rule imposed new export licensing requirements on exports, re-exports, and in-country transfers of all U.S.-regulated products, software and technology to the designated ZTE entities, which had the practical effect of preventing us from making any sales to ZTE. On March 24, 2016, the U.S. Department of Commerce issued a temporary general license suspending the enhanced export licensing requirements for ZTE and one of its designated affiliates through June 30, 2016, thereby enabling us to resume sales to ZTE. The U.S. Department of Commerce extended the temporary general license several times, through March 29, 2017. On March 7, 2017, the U.S. Department of Commerce announced a settlement agreement with ZTE and then removed ZTE from the Entity List on March 29, 2017. This action ended the enhanced export restrictions imposed in March 2016 and eliminated the need for the temporary general license. There can be no guarantee that the U.S. Department of Commerce will not take future regulatory action that may materially interfere with our ability to make sales to ZTE or other customers. The loss or temporary loss of such customers as a result of future regulatory activity could materially harm our business, financial condition, results of operations and prospects. In addition, our association with such customers could subject us to actual or perceived reputational harm among current or prospective investors in our common stock, suppliers or customers, customers of our customers, other parties doing business with us, or the general public. Any such reputational harm could result in the loss of investors in our common stock, suppliers or customers, which could harm our business, financial condition, results of operations or prospects.

In addition, various countries regulate the importation of certain products, through import permitting and licensing requirements, and have enacted laws that could limit our ability to distribute our products. The exportation, re-exportation, transfers within foreign countries and importation of our products, including by our partners, must comply with these laws and regulations, with any violations subject to reputational harm, government investigations, penalties, and/or a denial or curtailment of our ability to export our products. Complying with export control and sanctions laws for a particular sale may be time consuming, may increase our costs and may result in the delay or loss of sales opportunities. Although we take precautions to prevent our products from being provided in violation of such laws and regulations, if we are found to be in violation of U.S. sanctions or export control laws, we and the individuals working for us could incur substantial fines and penalties. Changes in export, sanctions or import laws or regulations may delay the introduction and sale of our products in international markets, require us to spend resources to seek necessary government authorizations or to develop different versions of our products, or, in some cases, prevent the export or import of our products to certain countries, regions, governments, persons or entities altogether, which could adversely affect our business, financial condition and operating results.

We are also subject to various domestic and international anti-corruption laws, such as the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act, as well as other similar anti-bribery and anti-kickback laws and regulations. These laws and regulations generally prohibit companies and their intermediaries from offering or making improper payments to non-U.S. officials for the purpose of obtaining, retaining or directing business. Our exposure for violating these laws and regulations increases as our international presence expands and as we increase sales and operations in foreign jurisdictions.

The failure to increase sales to our customers and expand our customer base as anticipated could adversely affect our future revenue growth and adversely affect our business.

We believe that our future success will depend, in part, on our ability to expand sales to our existing customers for use in a customer’s existing or new product offerings and continue to expand our customer base. Our efforts to increase product sales to new and existing customers may generate less revenue than anticipated or take longer than anticipated. If we are unable to increase sales to our new and existing customers and expand our customer base as anticipated, our business, financial condition, results of operations and prospects could be adversely affected.

Quality control problems in manufacturing could result in delays in product shipments to customers or in quality problems with our products which could adversely affect our business.

We have and in the future may again experience quality control problems in our manufacturing operations or the manufacturing operations of our contract manufacturers. For example, on May 31, 2017, we announced a Quality Issue at one of our three contract manufacturers that affected a portion of the approximate 1,300 AC400 units and 5,100 CFP units manufactured by the contract manufacturer over an approximate four month period. If we are unable to promptly identify and correct certain quality issues in our products prior to the products’ being shipped to customers, failure of our deployed products could cause failures in our customers’ products, which could require us to issue a product recall or trigger epidemic failure claims pursuant to our customer contracts, which may require us to indemnify or pay liquidated damages to affected customers, repair or replace damaged products, or discontinue or significantly delay shipments. Quality control problems with materials pr

provided by suppliers may adversely impact our ability to ship our products to customers. Undetected quality problems may prompt unexpected product returns and adversely affect warranty costs. As a result, we could incur additional costs that would adversely affect our gross margins. In addition, even if a problem is identified and corrected at the manufacturing stage, product shipments to our customers could be delayed, which would negatively affect our revenue, competitive position and reputation.

We may not be able to manufacture our products in volumes or at times sufficient to meet customer demands, which could result in delayed or lost revenue and harm to our reputation.

Given the high level of sophisticated functionality embedded in our products, our manufacturing processes are complex and often involve more than one manufacturer. This complexity may result in lower manufacturing yields and may make it more difficult for our current and future contract manufacturers to scale to higher production volumes. If we are unable to manufacture our products in volumes or at times sufficient to meet demand, our customers could postpone or cancel orders or seek alternative suppliers for these products, which would harm our reputation and adversely affect our results of operations.

Customer requirements for new products are increasingly challenging, which could lead to significant executional risk in designing such products. We may incur significant expenses long before we can recognize revenue from new products, if at all, due to the costs and length of research, development and manufacturing process cycles.

Network equipment manufacturers seek increased performance optical interconnect products, at lower prices and in smaller and lower-power designs. These requirements can be technically challenging, and are sometimes customer-specific, which can require numerous design iterations. Because of the complexity of design requirements, including stringent customer-imposed acceptance criteria, executing on our product development goals is difficult and sometimes unpredictable. These difficulties could result in product sampling delays and/or missing targets on key specifications and customer requirements and acceptance criteria. Our failure to meet our customers' requirements could result in our customers seeking alternative suppliers, which would adversely affect our reputation and results of operations.

Additionally, we and our competitors often incur significant research and development and sales and marketing costs for products that, at the earliest, will be purchased by our customers long after much of the cost is incurred and, in some cases, may never be purchased due to changes in industry or customer requirements in the interim.

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

We depend on our direct sales force to increase sales with existing customers and to obtain new 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. 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. Additional personnel 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. 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 increasing sales to our existing customer base or obtaining new customers, our business, financial condition, results of operations and prospects will be adversely affected.

Our sales cycles can be long and unpredictable, and our sales efforts require considerable effort 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 network equipment manufacturer customer and any sale of our products. Customer orders are complex and difficult to complete because prospective customers generally consider a number of factors over an extended period of time before committing to purchase the products we sell. 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 customers devote to their evaluation, contract negotiation and budgeting processes varies significantly. Our products' sales cycles can be lengthy in certain cases. During the sales cycle, we expend significant time and money on sales and marketing

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activities and make investments in evaluation equipment, all of which lower our operating margins, particularly if no sale occurs or if the sale is delayed as a result of extended qualification processes or delays from our customers' customers. Even if a 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 a customer's internal procurement processes.

Even after a customer makes a purchase, there may be circumstances or terms relating to the purchase that delay our ability to recognize revenue from that purchase. For example, the sale of our products may be subject to acceptance testing or may be placed into a remote stocking location. In addition, the significance and timing of our product enhancements, and the introduction of new products by our competitors, may also affect 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.

If we fail to accurately predict market requirements or market demand for our products, our business, competitive position and operating results will suffer.

We operate in a dynamic and competitive industry and use significant resources to develop new products for existing and new markets. After we have developed a product, there is no guarantee that our customers will integrate our product into their equipment or devices and, ultimately, bring the equipment and devices incorporating our product to market. In addition, there is no guarantee that cloud, network and communications service providers will ultimately choose to purchase network equipment that incorporates our products. In these situations, we may never produce or deliver significant quantities of our products, even after incurring substantial development expenses. From the time a customer elects to integrate our interconnect technology into their product, it typically takes 18 to 24 months for high-volume production of that product to commence. After volume production begins, we cannot be assured that the equipment or devices incorporating our product will gain market acceptance by network operators.

If we fail to accurately predict and interpret market requirements or market demand for our new products, our business and growth prospects will be harmed. If high-speed networks are deployed to a lesser extent or more slowly than we currently anticipate, we may not realize anticipated benefits from our investments in research and development. For example, our industry is currently seeing a slowdown in network deployments in the China long-haul and metro network markets, which has resulted in a corresponding slowdown in the order rate of certain of our Chinese customers. As a result, our business, competitive position, market share and operating results will be harmed.

As demand for our products in one market grows, demand in another market may decrease. For example, if we sell our products directly to content providers in addition to network equipment manufacturers, our sales to network equipment manufacturers may decrease due to reduced demand from their customers or due to dissatisfaction by network equipment manufacturers with this change in our business model. Any reduction in demand in one market that is not offset by an increase in demand in another market could adversely affect our market share or results of operations.

Most of our long-term customer contracts do not commit customers to specified purchase commitments, and our customers may decrease, cancel or delay their purchases at any time with little or no advance notice to us.

Most of our customers purchase our products pursuant to individual purchase orders or contracts that do not contain purchase commitments. Although some of our customers have committed to purchase a specified share of their required volume for a particular product from us, monitoring and enforcing these commitments can be difficult. Some customers provide us with their expected forecasts for our products several months in advance, but customers may decrease, cancel or delay purchase orders already in place, and the impact of any such actions may be intensified given our dependence on a small number of large customers. If any of our major customers decrease, stop or delay purchasing our products for any reason, our business and results of operations would be harmed. For example, several of our customers have historically elected to defer purchases scheduled for the fourth quarter into the first quarter of the following year, resulting in a decrease in our anticipated revenue during the fourth quarter. Additionally, in the event that any of our customers lose significant market share with one or more customers within their customer base, those losses could pass through to us and materially and adversely affect our results of operations. Cancellation or delays of such orders may cause us to fail to achieve our short-term and long-term financial and operating goals and result in excess and obsolete inventory.

The markets in which we operate are highly competitive.

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The market for high-speed interconnect is highly competitive. We are aware of a number of companies that have developed or are developing coherent DSP ASICs, non-coherent PICs and 100 Gbps and 400 Gbps modules, among other technologies, that compete directly with some or all of our current and proposed product offerings.

Competitors may be able to more quickly and effectively:

- develop or respond to new technologies or technical standards;
- react to changing customer requirements and expectations;
- devote needed resources to the development, production, promotion and sale of products;
- attain high manufacturing yields on new product designs;
- establish and take advantage of operations in lower-cost regions;
- bring relevant products to the market or enable their customers to bring relevant products to the market through a faster integration cycle; and
- deliver competitive products at lower prices, with lower gross margins or at lower costs than our products.

In order to expand market acceptance of our products, we must differentiate our products from those of our competition. We cannot provide assurance that we will be successful in making this differentiation or increasing acceptance of our products as we have limited resources dedicated to marketing of our products. In addition, established companies in related industries or newly funded companies targeting markets we serve, such as semiconductor manufacturers and data communications providers, may also have significantly more resources than we do and may in the future develop and offer competing products. All of these risks may be increased if the market were to further consolidate through mergers or other business combinations between our competitors or if more capital is invested in the market to create additional competitors.

We may not be able to compete successfully with our competitors and aggressive competition in the market may result in lower prices for our products and/or decreased gross margins. New technology and investments from existing competitors and competitive threats from newly funded companies may erode our technology and product advantages and slow our overall growth and profitability. Any such development could have a material adverse effect on our business, financial condition and results of operations.

Our results of operations may suffer if we do not effectively manage our inventory, and we may continue to incur inventory-related charges.

We need to manage our inventory of component parts and finished goods effectively to meet changing customer requirements. Accurately forecasting customers' product needs is difficult. Our product demand forecasts are based on multiple assumptions, each of which may introduce error into our estimates. In the event we overestimate customer demand, we may allocate resources to manufacturing products that we may not be able to sell. As a result, we could hold excess or obsolete inventory, which would reduce our profit margins and adversely affect our financial results. Conversely, if we underestimate customer demand or if insufficient manufacturing capacity is available, we could forego revenue opportunities, lose market share and damage our customer relationships.

Also, due to our industry's use of management techniques, such as direct order fulfillment, to reduce inventory levels and the period of time inventory is held, any disruption in the supply chain could lead to more immediate shortages in product or component supply. Additionally, any enterprise system failures, including implementing new systems or upgrading existing systems that help us manage our financial, purchasing, inventory, sales, invoicing and product return functions, could harm our ability to fulfill orders and interrupt other billing and logistical processes.

Some of our products and supplies have in the past, and may in the future, become obsolete or be deemed excess while in inventory due to rapidly changing customer specifications, changes to product structure, components or bills of material as a result of engineering changes, or a decrease in customer demand. We also have exposure to contractual liabilities to our contract manufacturers for inventories purchased by them on our behalf, based on our forecasted requirements, which may become excess or obsolete. Our inventory balances also represent an investment of cash. To the extent our inventory turns are slower than we anticipate based on historical practice, our cash conversion cycle extends and more of our cash remains invested in working capital. If we are not able to manage our inventory effectively, we may need to write down the value of some of our existing inventory or write off non-saleable or obsolete inventory. We have from time to time incurred significant inventory-related charges. Any such charges we incur in future periods could materially and adversely affect our results of operations.

Increasingly, our customers may require that we ship our finished products to a central location, which is not controlled by us. If that facility is damaged, or if our relationship with that facility deteriorates, we may suffer losses or be forced to find an alternate facility. In addition, revenue is only recognized once our customers take delivery of the products from this location, rather than when we ship them, which could have an adverse effect on our results of operations. We often lack insight into when customers will take delivery of our products, making it difficult to forecast our revenue.

The industry in which we operate is subject to significant cyclicality.

Industries focused on semiconductor and optical network technologies can be highly cyclical and characterized by constant and rapid technological change and price erosion, evolving technical standards, increasing effects of competition, frequent new product introductions and technology displacement, short product life cycles both for semiconductors and optical technologies and for many of the end products in which they are used. In addition, product demand in the markets in which we compete is tied to the aggregate capital expenditures of telecommunications and network and content service providers as they build out and upgrade their network infrastructure. Capital expenditures can be highly cyclical due to the importance and focus of local initiatives, such as the ongoing telecommunications build out and upgrade in China, government funding and other factors, thus resulting in wide fluctuations in product supply and demand. From time to time, these factors, together with changes in general economic conditions, have caused significant industry upturns and downturns that have had a direct impact on the financial stability of our customers, their customers and our suppliers. Periods of industry downturns have been characterized by diminished demand for products, unanticipated declines in telecommunications and communications system capital expenditures, industry consolidation, excess capacity compared to demand, high inventory levels and periods of inventory adjustment, under-utilization of manufacturing capacity, changes in revenue mix and erosion of average selling prices, any of which could result in an adverse effect on our business, financial condition and results of operations. We expect our business to continue to be subject to cyclical downturns even when overall economic conditions are relatively stable. To the extent we cannot offset recessionary periods or periods of reduced growth that may occur in the industry or in our target markets in particular through increased market share or otherwise, our business can be adversely affected, revenue may decline and our financial condition and results of operations may be harmed. In addition, in any future economic downturn or periods of inflationary increase we may be unable to reduce our costs quickly enough to maintain profitability levels.

If our customers do not qualify our manufacturing lines or the manufacturing lines of our subcontractors for volume shipments, our operating results could suffer.

Our manufacturing lines have passed our qualification standards, as well as our technical standards. However, our customers may also require that our manufacturing lines pass their specific qualification standards and that we, and any subcontractors that we may use, be registered under international quality standards. In addition, many of our customers require that we maintain our ISO certification. In the event we are unable to maintain process controls required to maintain ISO certification, or in the event we fail to pass the ISO certification audit for any reason, we could lose our ISO certification. In addition, we may encounter quality control issues in the future as a result of relocating our manufacturing lines or ramping new products to full volume production. We may be unable to obtain customer qualification of our or our subcontractors' manufacturing lines or we may experience delays in obtaining customer qualification of our or our subcontractors' manufacturing lines. Such delays or failure to obtain qualifications would harm our operating results and customer relationships. If we introduce new contract manufacturers and move any production lines from existing internal or external facilities, the new production lines will likely need to be re-qualified with our customers. Any delay in the qualification of our or our subcontractors' manufacturing lines may adversely affect our operations and financial results. Any delay in the qualification or requalification of our or our subcontractors' manufacturing lines may delay the manufacturing of our products or require us to divert resources away from other areas of our business, which could adversely affect our operations and financial results.

Acquisitions that we may pursue in the future, whether or not consummated, could result in operating and financial difficulties.

We may in the future acquire businesses or assets in an effort to increase our growth, enhance our ability to compete, complement our product offerings, enter new and adjacent markets, obtain access to additional technical resources, enhance our intellectual property rights or pursue other competitive opportunities. If we seek acquisitions, we may not be able to identify suitable acquisition candidates at prices we consider appropriate. We are in an industry that is actively consolidating and, as a result, there is no guarantee that we will successfully and satisfactorily bid against third parties, including competitors, if we identify a target we seek to acquire.

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We cannot readily predict the timing or size of our future acquisitions, or the success of any future acquisitions. Failure to successfully execute on any future acquisition plans could have a material adverse effect on our business, prospects, financial condition and results of operations.

To the extent that we consummate acquisitions, we may face financial risks as a result, including increased costs associated with merged or acquired operations, increased indebtedness, economic dilution to gross and operating profit and earnings per share, or unanticipated costs and liabilities, including the impairment of assets and expenses associated with restructuring costs and reserves, and unforeseen accounting charges. We would also face operational risks, such as difficulties in integrating the operations, retention of key personnel and our ability to maintain and support products of the acquired businesses, disrupting their or our ongoing business, increasing the complexity of our business, failing to successfully further develop the combined, acquired or remaining technology, and impairing management resources and management's relationships with employees and customers as a result of changes in their ownership and management. Further, the evaluation and negotiation of potential acquisitions, as well as the integration of an acquired business, may divert management time and other resources.

We may need additional equity, debt or other financing in the future, which we may not be able to obtain on acceptable terms, or at all, and any additional financing may result in restrictions on our operations or substantial dilution to our stockholders.

We may need to raise funds in the future, for example, to develop new technologies, expand our business or acquire complementary businesses. We may try to raise additional funds through public or private financings, strategic relationships or other arrangements. Our ability to obtain debt or equity funding will depend on a number of factors, including market conditions, interest rates, our operating performance and investor interest. Additional funding may not be available to us on acceptable terms or at all. If adequate funding is not available, we may be required to reduce expenditures, including curtailing our growth strategies and reducing our product development efforts, or forgo acquisition opportunities. If we succeed in raising additional funds through the issuance of equity or convertible securities, then the issuance could result in substantial dilution to existing stockholders. If we raise additional funds through the issuance of debt securities or preferred stock, these new securities would have rights, preferences and privileges senior to those of the holders of our common stock. In addition, any preferred equity issuance or debt financing that we may obtain in the future could have restrictive covenants relating to our capital raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions.

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 stock.

The preparation of our financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in our condensed 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 "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 condensed consolidated financial statements include those related to revenue recognition, stock-based compensation, contract manufacturing liabilities and income taxes. 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 stock.

We may face product liability claims, which could be expensive and time consuming and result in substantial damages to us and increases in our insurance rates.

Despite quality assurance measures, defects may occur in our products. The occurrence of any defects in our products could give rise to product liability or epidemic failure claims, which could divert management's attention from our core business, be expensive to defend, result in the loss of key customer contracts and result in sizable damage awards against us and, depending on the nature or scope of any network outage caused by a defect in or epidemic failure related to our products, could also harm our reputation. Our current insurance coverage may not be sufficient to cover these claims. Moreover, in the future, we may not be able to obtain insurance in amount or scope sufficient to provide us with adequate coverage against potential liabilities. Any product liability claims brought against us, with or without merit, could increase our product liability insurance rates or prevent us from securing continuing coverage, could harm our reputation in the industry and reduce product

sales. We would need to pay any product losses in excess of our insurance coverage out of cash reserves, harming our financial condition and adversely affecting our operating results.

Our business and operating results may be adversely affected by natural disasters, health epidemics or other catastrophic events beyond our control.

Our internal manufacturing headquarters and new product introduction labs, design facilities, assembly and test facilities, and supply chain, and those of our contract manufacturers, are subject to risks associated with natural disasters, such as earthquakes, fires, tsunamis, typhoons, volcanic activity, floods and health epidemics as well as other events beyond our control such as power loss, telecommunications failures and uncertainties arising out of terrorist attacks in the United States and armed conflicts or terrorist attacks overseas. The majority of our semiconductor products are currently fabricated and assembled in Japan, Singapore and Taiwan. The majority of the internal and outsourced assembly and test facilities we utilize or plan to utilize are located in China, New Hampshire and Thailand, and some of our internal design, assembly and test facilities are located in California (design only), New Jersey and Massachusetts, regions with severe weather activity and, in the case of California, above average seismic activity. In addition, our research and development personnel are concentrated primarily in our headquarters in Maynard, Massachusetts and in our research center in Holmdel, New Jersey. Any catastrophic loss or significant damage to any of these facilities or facilities we use in the future would likely disrupt our operations, delay production, and adversely affect our product development schedules, shipments and revenue. In addition, any such catastrophic loss or significant damage could result in significant expense to repair or replace the facility and could significantly curtail our research and development efforts in a particular product area or primary market, which could have a material adverse effect on our operations and operating results.

Breaches of our cybersecurity systems could degrade our ability to conduct our business operations and deliver products to our customers, compromise the integrity of the software embedded in our 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 information technology, or IT, systems to conduct virtually all of our business operations, ranging from our internal operations and product development and manufacturing 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 email services, and misappropriate our proprietary information, provide false or misleading instructions to our personnel, embed malicious code in our products 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-party contractors, including our manufacturers and logistics providers, and our business operations also depend, in part, on the success of our contractors’ own cybersecurity measures. Additionally, we depend upon our employees and contractors 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 cyberattacks 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 employees or business, 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 deliver products could be degraded or disrupted, resulting in delays in revenue recognition; and
- defects and security vulnerabilities could be introduced into the software embedded in or used in the development of our products, thereby damaging the reputation and perceived reliability and security of our products.

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. 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 may not be able to successfully manage the growth of our business if we are unable to improve our internal systems, processes and controls.

Our business is growing rapidly and we anticipate that it will continue to do so in the future. In order to effectively manage our operations and growth, we need to continue to improve our internal systems, processes and controls. We may not be able to successfully implement improvements to these systems, processes and controls in an efficient or timely manner. In addition, our systems and processes may not prevent or detect all errors, omissions or fraud. We may experience difficulties in managing improvements to our systems or processes and controls, which could impair our ability to provide products to our customers in a timely manner, causing us to lose customers, limit us to smaller deployments of our products or increase our technical support costs.

We are subject to environmental, health and safety laws and regulations, which could subject us to liabilities, increase our costs or restrict our business or operations in the future.

Our manufacturing operations and our products are subject to a variety of environmental, health and safety laws and regulations in each of the jurisdictions in which we operate or sell our products. These laws and regulations govern, among other things, the handling and disposal of hazardous substances and wastes, employee health and safety and the use of hazardous materials in, and the recycling of, our products. Failure to comply with present and future environmental, health or safety requirements, or the identification of contamination, could cause us to incur substantial costs, monetary fines, civil or criminal penalties and curtailment of operations. In addition, these laws and regulations have increasingly become more stringent over time. The identification of presently unidentified environmental conditions, more vigorous enforcement of current environmental, health and safety requirements by regulatory agencies, the enactment of more stringent laws and regulations or other unanticipated events could restrict our ability to use or expand our facilities, require us to incur additional expenses or require us to modify our manufacturing processes or the contents of our products, which could have a material adverse effect on our business, financial condition and results of operations.

Changes in industry standards and regulations could make our products obsolete, which would cause our net revenues and results of operations to suffer.

We design our products to conform to regulations established by governments and to standards set by industry standards bodies worldwide. Various industry organizations are currently considering whether and to what extent to create standards applicable to our current products or those under development. Because certain of our products are designed to conform to current specific industry standards, if competing or new standards emerge that are preferred by our customers, we may have to make significant expenditures to develop new products. If our customers adopt new or competing industry standards with which our products are not compatible, or industry groups adopt standards or governments issue regulations with which our products are not compatible, our existing products would become less desirable to our customers and our net revenues and results of operations would suffer.

We implemented a corporate restructuring in 2015, and if we do not achieve the anticipated financial, operational and effective tax rate efficiencies as a result of our new corporate structure, our financial condition and results of operations could be adversely affected.

In 2015, we implemented a reorganization of our corporate structure and intercompany relationships to more closely align our corporate structure with the international nature of our business activities. This corporate restructuring has allowed us to achieve financial and operational efficiencies and to reduce our overall effective tax rate through changes in our international procurement, manufacturing and sales operations, and in the ways we develop, own and use certain intellectual property. This corporate restructuring has also allowed us to achieve financial and operational efficiencies. We cannot provide assurance that these tax benefits and efficiencies will continue into future periods. Our efforts in connection with this corporate restructuring have required and will continue to require us to incur expenses for which we may not realize related benefits. If any of the tax benefits is challenged by the applicable taxing authorities upon audit or if there are adverse changes in domestic or international tax laws, including changes in any proposed legislation to reform U.S. taxation of international business activities and any legislation enacted in pursuance of the Base Erosion and Profit Shifting Initiative, described below, our results of operations may be negatively affected. In addition, if we do not operate our business in a manner that is consistent with this corporate restructuring or any applicable tax laws, we may fail to achieve the financial, operational and effective tax rate efficiencies that we anticipate and our results of operations may be negatively affected.

The implementation of our corporate restructuring increases the likelihood that unfavorable tax law changes, unfavorable government review of our tax returns, changes in our geographic earnings mix or imposition of withholding taxes on repatriated earnings could have an adverse effect on our effective tax rate and our operating results.

We have expanded and will likely continue to expand our operations into multiple non-U.S. jurisdictions in connection with our recent corporate restructuring, including those having lower tax rates than those we are subject to in the United States. As a result, our effective tax rate will be influenced by the amounts of income and expense attributed to each such jurisdiction, which is materially affected by our valuation and pricing of intercompany transactions, both of which can be based on significant management assumptions or estimates. If such amounts were to change so as to increase the amounts of our net income subject to taxation in higher tax jurisdictions, or if we were to commence operations in jurisdictions assessing relatively higher tax rates, our effective tax rate could be adversely affected. The continued availability of lower tax rates in non-U.S. jurisdictions, if any, will be dependent on how we conduct our business operation on a going forward basis across all jurisdictions. As a result of our corporate restructuring, we will be subject to periodic audits or other reviews by tax authorities in the jurisdictions in which we conduct our activities in the future and there is a risk that the tax authorities could challenge our tax positions, including the assumptions and estimates on which we base the valuation and pricing of intercompany transactions. In addition, tax proposals are being considered by the U.S. Congress and the legislative bodies in some of the foreign jurisdictions in which we operate that could affect our effective tax rate, the carrying value of deferred tax assets or our other tax liabilities. We cannot predict the form or timing of potential legislative changes, but any newly enacted tax law could have a material adverse impact on our tax provision, net income and cash flows. This could result in additional tax liabilities or other adjustments to our historical results.

Under GAAP, we currently do not provide for U.S. income taxes on the earnings of our foreign subsidiaries as such earnings are planned to be reinvested indefinitely. Under GAAP, U.S. income taxes will be provided on such earnings if and when they are distributed to our U.S. headquarters in the form of dividends or otherwise or if the shares of the relevant foreign subsidiaries are sold or otherwise transferred. At such time, we would be subject to additional U.S. income taxes, subject to adjustment for foreign tax credits, and foreign withholding taxes on such distributions or sold or transferred shares. If GAAP were to be changed in the future and we were required to provide U.S. income taxes on the earnings of our foreign subsidiaries when earned and not distributed, our effective tax rate would materially increase.

We may determine in the future that it is advisable to repatriate earnings from non-U.S. subsidiaries. Such a repatriation could result in a significant liability for U.S. tax at the higher U.S. corporate tax rate, and credits for the foreign taxes paid on such earnings may or may not be available. In addition, the repatriation of foreign earnings could give rise to the imposition of potentially significant withholding taxes by the jurisdictions in which such amounts were earned, for which foreign tax credits may or may not be available. The imposition of U.S. taxes, the imposition of foreign withholding taxes, and limitations on the availability of foreign tax credits could adversely affect our effective tax rate.

The final determination of our income tax liability may be materially different from our income tax provision.

The final determination of our income tax liability, which includes the impact of our corporate restructuring, may be materially different from our income tax provision. We are subject to income taxes in the United States and, as a result of our corporate restructuring, have become subject to income taxes in international jurisdictions. Significant judgment is required in determining our worldwide provision for income taxes. In the ordinary course of our business, there are some transactions where the ultimate tax determination is uncertain. Additionally, our calculations of income taxes are based on our interpretations of applicable tax laws in the jurisdictions in which we file or will file as a result of the proposed corporate restructuring. Although we believe our tax estimates, which include the impact of anticipated tax benefits in connection with our corporate restructuring, are and will be appropriate, the ultimate tax outcome may materially differ from the tax amounts recorded in our condensed consolidated financial statements and may materially affect our income tax provision, net income or cash flows in the period or periods for which such determination is made.

We are also subject to periodic examination of our income tax returns by the Internal Revenue Service in the United States and will be subject to periodic examination of our income tax returns by taxing authorities in other tax jurisdictions. We assess and will continue to assess on a regular basis the likelihood of adverse outcomes resulting from these examinations to determine the adequacy of our provision for income taxes. The outcomes from these examinations may have an adverse effect on our operating results and financial condition.

Furthermore, our provision for income tax could increase as we further expand our international operations, adopt new products or undertake intercompany transactions in light of acquisitions, changing tax laws, expiring rulings and our current and anticipated business and operational requirements.

Our ability to utilize certain net operating loss carryforwards and tax credit carryforwards may be limited under Sections 382 and 383 of the Internal Revenue Code.

As of December 31, 2016, we had net operating loss carryforward amounts, or NOLs, of approximately \$11.5 million and \$27.6 million, respectively, for U.S. federal and state income tax purposes and tax credit carryforward amounts of approximately \$7.2 million and \$9.1 million, respectively, for U.S. federal and state income tax purposes. The federal and state tax credit carryforwards will expire at various dates beginning in 2018 through 2036 and \$0.2 million of such carryforwards will expire between 2018 and 2019 if not used. The federal and state net operating loss carryforwards will expire at various dates beginning in 2029 through 2036. Utilization of these net operating loss and tax credit carryforward amounts could be subject to a substantial annual limitation if the ownership change limitations under Sections 382 and 383 of the Internal Revenue Code and similar state provisions are triggered by changes in the ownership of our capital stock. Such an annual limitation would result in the expiration of the net operating loss and tax credit carryforward amounts before utilization. Our existing NOLs may be subject to limitations arising from previous ownership changes, including in connection with our initial public offering, or IPO, a follow-on offering in 2016, and any future follow-on public offerings. Future changes in our stock ownership, some of which are outside of our control, could result in an ownership change. There is also a risk that due to regulatory changes, such as suspensions on the use of NOLs, legislation to reform the U.S. taxation of business activities or other unforeseen reasons, our existing NOLs could expire or otherwise be unavailable to offset future income tax liabilities. Additionally, state NOLs generated in one state cannot be used to offset income generated in another state. For these reasons, we may be limited in our ability to fully utilize the tax benefit from the use of our NOLs, even if our profitability would otherwise allow for it.

We are a multinational organization faced with increasingly complex tax issues in many jurisdictions, and we could be obligated to pay additional taxes in various jurisdictions, including in the United States.

As a multinational organization, we are subject to taxation in jurisdictions around the world with increasingly complex tax laws, the application of which can be uncertain. The amount of taxes we pay in these jurisdictions could increase substantially as a result of changes in the applicable tax principles, including increased tax rates, new tax laws or revised interpretations of existing tax laws and precedents, which could have a material adverse effect on our liquidity and operating results. In addition, the authorities in these jurisdictions could review our tax returns and impose additional tax, interest and penalties, and the authorities could claim that various withholding requirements apply to us or our subsidiaries or assert that benefits of tax treaties are not available to us or our subsidiaries, any of which could have a material impact on us and the results of our operations.

There is growing pressure in many jurisdictions (including the United States) and from multinational organizations such as the Organization for Economic Co-operation and Development, or OECD, and the European Union, or EU, to amend existing international tax rules in order to render them more responsive to current global business practices. For example, the OECD has released guidance relating to various international tax related topics in an initiative referred to as Base Erosion and Profit Shifting, or BEPS, that aims to standardize and modernize global tax policy. Depending on the final form of the BEPS guidance and the legislation ultimately enacted by the OECD members, BEPS could have material adverse consequences on our effective tax rate, the amount of tax we pay and on our financial position and results of operations.

In addition, some members of the U.S. Congress have recently begun publicly considering potential tax reform, including the possibility of replacing large parts of the existing federal income tax with a so-called “destination-based cash flow tax” in addition to other potential tax reforms that the recently elected President and members of his administration may be considering.

Although we monitor these developments, due to the unpredictability and interdependency of these potential changes, it is very difficult to assess to what extent these changes may be implemented in the United States and other jurisdictions in which we conduct our business or to what extent these changes may impact the way in which we conduct our business or our effective tax rate. Changes in tax laws and related regulations and practices could have a material adverse effect on our business operations, effective tax rate and financial position and results of operations.

Risks Related to Our Intellectual Property

Our products may infringe the intellectual property rights of others, which could result in expensive litigation or require us to obtain a license to use the technology from third parties, or we may be prohibited from selling certain products in the future.

Companies in the industry in which we operate frequently are sued or receive informal claims of patent infringement or infringement of other intellectual property rights. We have, from time to time, received such claims from companies,

including from competitors, suppliers and customers, some of whom have substantially more resources and have been developing relevant technologies for much longer than us.

Third parties may in the future assert claims against us concerning our existing products or with respect to future products under development, or with respect to products that we may acquire through acquisitions. We have entered into and may in the future enter into indemnification obligations in favor of our customers that could be triggered upon an allegation or finding that we are infringing other parties' proprietary rights. If we do infringe a third party's rights and are unable to provide a sufficient work around, we may need to negotiate with holders of those rights in order to obtain a license to those rights or otherwise settle any infringement claim. A party that makes a claim of infringement against us may obtain an injunction preventing us from shipping products containing the allegedly infringing technology. We have from time to time received notices from third parties alleging infringement of their intellectual property and, in some cases, have entered into license agreements with such third parties with respect to such intellectual property. Any license agreements that we wish to enter into the future with respect to intellectual property rights may not be available to us on commercially reasonable terms, or at all. Generally, a license, if granted, would include payments of up-front fees, ongoing royalties or both. These payments or other terms, including any that restrict our ability to utilize the licensed technology in specified markets or geographic locations, could have a significant adverse effect on our operating results. In addition, in the event we are granted such a license, it is possible the license would be non-exclusive and other parties, including competitors, may be able to utilize such technology. Our larger competitors may be able to obtain licenses or cross-license their technology on better terms than we can, which could put us at a competitive disadvantage. In addition, our larger competitors may be able to buy such technology and preclude us from licensing or using such technology.

We may not in all cases be able to resolve allegations of infringement through licensing arrangements, settlement, alternative designs or otherwise. We may take legal action to determine the validity and scope of the third-party rights or to defend against any allegations of infringement. Holders of intellectual property rights could become more aggressive in alleging infringement of their intellectual property rights and we may be the subject of such claims asserted by a third party. For example, as described further in Item 1 of Part II "Legal Proceedings," on January 21, 2016, ViaSat, Inc. filed a suit against us alleging, among other things, breach of contract, breach of the implied covenant of good faith and fair dealing and misappropriation of trade secrets. In the course of pursuing any of these means or defending against any lawsuits filed against us, we could incur significant costs and diversion of our resources and our management's attention. Due to the competitive nature of our industry, it is unlikely that we could increase our prices to cover such costs. In addition, such claims could result in significant penalties or injunctions that could prevent us from selling some of our products in certain markets or result in settlements or judgments that require payment of significant royalties or damages.

Our intellectual property rights are valuable, and any inability to protect them could reduce the value of our products, services and brand.

Our future success will depend, in large part, upon our intellectual property rights, including patents, copyrights, design rights, trade secrets, trademarks and know-how. We maintain a program of identifying technology appropriate for patent and trade secret protection. Our practice is to require employees and consultants to execute non-disclosure and proprietary rights agreements upon commencement of employment or consulting arrangements. These agreements acknowledge our exclusive ownership of all intellectual property developed by the individuals during their work for us and require that all proprietary information disclosed will remain confidential. Such agreements may not be enforceable in full or in part in all jurisdictions and any breach could have a negative effect on our business and our remedy for such breach may be limited.

Despite our efforts, these measures can only provide limited protection. Unauthorized third parties may try to copy or reverse engineer portions of our products, may breach our cybersecurity defenses or may otherwise obtain and use our intellectual property. Patents owned by us may be invalidated, circumvented or challenged. Any of our pending or future patent applications, whether or not being currently challenged, may not be issued with the scope of the claims we seek, if at all. Legal standards relating to the validity, enforceability and scope of protection of intellectual property rights in other countries are uncertain and may afford little or no effective protection for our proprietary rights. Consequently, we may be unable to prevent our intellectual property rights from being exploited abroad. Policing the unauthorized use of our 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. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating our intellectual property. If we cannot protect our proprietary technology against unauthorized copying or use, we may not remain competitive.

Furthermore, many of our current and potential competitors have the ability to dedicate substantially greater resources to developing and protecting their technology or intellectual property rights than we do. In addition, our attempts to protect our proprietary technology and intellectual property rights may be further limited as our employees may be recruited by our current or future competitors and may take with them significant knowledge of our proprietary information. Consequently, others may develop services and methodologies that are similar or superior to our services and methodologies or may design around our intellectual property.

We may be subject to intellectual property litigation that could divert our resources.

In recent years, there has been significant litigation involving patents and other intellectual property rights in our industry. As we continue to gain greater market visibility, we face a higher risk of being the subject of intellectual property infringement claims. The risk of patent litigation has been amplified by the increase in the number of a type of patent holder, which we refer to as a non-practicing entity, whose sole business is to assert such claims. We could incur substantial costs in prosecuting or defending any intellectual property litigation. If we sue to enforce our rights or are sued by a third party that claims that our products infringe its rights, the litigation could be expensive and could divert our management resources.

Confidentiality arrangements with employees and others may not adequately prevent disclosure of trade secrets and other proprietary information.

We have devoted substantial resources to the development of our technology, business operations and business plans. In order to protect our trade secrets and proprietary information, we rely in significant part on confidentiality arrangements with our employees, licensees, independent contractors, advisers, channel partners, resellers and customers. These arrangements may not be effective to prevent disclosure of confidential information, including trade secrets, and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. In addition, if others independently discover trade secrets and proprietary information, we would not be able to assert trade secret rights against such parties. Effective trade secret protection may not be available in every country in which our services are available or where we have employees or independent contractors. The loss of trade secret protection could make it easier for third parties to compete with our products by copying functionality. In addition, any changes in, or unexpected interpretations of, the trade secret and employment laws in any country in which we operate may compromise our ability to enforce our trade secret and intellectual property rights. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

We may be subject to damages resulting from claims that our employees or contractors have wrongfully used or disclosed alleged trade secrets of their former employees or other parties.

We could in the future be subject to claims that employees or contractors, or we, have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of our competitors or other parties. Litigation may be necessary to defend against these claims. If we fail in defending against such claims, a court could order us to pay substantial damages and prohibit us from using technologies or features that are essential to our products, if such technologies or features are found to incorporate or be derived from the trade secrets or other proprietary information of these parties. In addition, we may lose valuable intellectual property rights or personnel. A loss of key personnel or their work product could hamper or prevent our ability to develop, market and support potential products or enhancements, which could severely harm our business. Even if we are successful in defending against these claims, such litigation could result in substantial costs and be a distraction to management.

We license technology from third parties, and our inability to maintain those licenses could harm our business.

We incorporate technology, including software, which we license from third parties into our products. We cannot be certain that our licensors are not infringing the intellectual property rights of third parties or that our licensors have sufficient rights to the licensed intellectual property in all jurisdictions in which we may sell our products. Some of our agreements with our licensors may be terminated for convenience by them. If we are unable to continue to license any of this technology because of intellectual property infringement claims brought by third parties against our licensors or against us, or if we are unable to continue our license agreements or enter into new licenses on commercially reasonable terms, our ability to develop and sell products containing that technology would be severely limited, and our business could be harmed. Additionally, if we are unable to license necessary technology from third parties, we may be forced to acquire or develop alternative technology of lower quality or performance standards. This would limit and delay our ability to offer new or competitive products and increase our costs of production. As a result, our margins, market share and operating results could be significantly harmed.

The use of open source software in our offerings may expose us to additional risks and harm our intellectual property.

Open source software is typically freely accessible, usable and modifiable. Certain open source software licenses require a user who intends to distribute the open source software as a component of the user's software to disclose publicly part or all of the source code to the user's software. In addition, certain open source software licenses require the user of such software to make any derivative works of the open source code available to others on unfavorable terms or at no cost. This can subject previously proprietary software to open source license terms.

We monitor and control our use of open source software in an effort to avoid unanticipated conditions or restrictions on our ability to successfully commercialize our products and believe that our compliance with the obligations under the various applicable licenses has mitigated the risks that we have triggered any such conditions or restrictions. However, such use may have inadvertently occurred in the development and offering of our products. Additionally, if a third-party software provider has incorporated certain types of open source software into software that we have licensed from such third party, we could be subject to the obligations and requirements of the applicable open source software licenses. This could harm our intellectual property position and have a material adverse effect on our business, results of operations and financial condition.

The terms of many open source software licenses have not been interpreted by U.S. or foreign courts, and there is a risk that those licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to successfully commercialize our products. For example, certain open source software licenses may be interpreted to require that we offer our products that use the open source software for no cost; that we make available the source code for modifications or derivative works we create based upon, incorporating or using the open source software (or that we grant third parties the right to decompile, disassemble, reverse engineer, or otherwise derive such source code); that we license such modifications or derivative works under the terms of the particular open source license; or that otherwise impose limitations, restrictions or conditions on our ability to use, license, host, or distribute our products in a manner that limits our ability to successfully commercialize our products.

We could, therefore, be subject to claims alleging that we have not complied with the restrictions or limitations of the applicable open source software license terms or that our use of open source software infringes the intellectual property rights of a third party. In that event, we could incur significant legal expenses, be subject to significant damages, be enjoined from further sale and distribution of our products that use the open source software, be required to pay a license fee, be forced to reengineer our products, or be required to comply with the foregoing conditions of the open source software licenses (including the release of the source code to our proprietary software), any of which could adversely affect our business. Even if these claims do not result in litigation or are resolved in our favor or without significant cash settlements, the time and resources necessary to resolve them could harm our business, results of operations, financial condition and reputation.

Additionally, the use of open source software can lead to greater risks than the use of third-party commercial software, as open source software does not come with warranties or other contractual protections regarding indemnification, infringement claims or the quality of the code.

Risks Related to the Ownership of Our Common Stock

Our stock price may be volatile and investors in our common stock may be unable to sell their shares at or above the price at which they were purchased.

The trading prices of the securities of technology companies, including technology companies in the industry in which we operate, have been highly volatile. Some of the factors that may cause the market price of our common stock to fluctuate include:

- price and volume fluctuations in the overall stock market from time to time;
- volatility in the market price and trading volume of comparable companies;
- actual or anticipated changes in our earnings or fluctuations in our operating results or in the expectations of securities analysts;
- announcements of technological innovations, new products, strategic alliances, or significant agreements by us or by our competitors;
- announcements by our customers regarding significant increases or decreases in capital expenditures;
- departure of key personnel;
- litigation involving us or that may be perceived as having an impact on our business;

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- changes in general economic, industry and market conditions and trends, including the economic slowdown in China and the uncertainty arising from the June 2016 referendum vote in the United Kingdom in favor of exiting the European Union and the subsequent formal notification by the United Kingdom of its intention to withdraw from the European Union;
- investors' general perception of us;
- significant short interest in our stock;
- sales of large blocks of our stock;
- announcements regarding further industry consolidation; and
- changes in regulations in the United States and other jurisdictions in which we do business.

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. Because of the volatility of our stock price, we may become the target of securities litigation in the future. Securities litigation could result in substantial costs and divert management's attention and resources from our business.

Our quarterly operating results or other operating metrics may fluctuate significantly, which could cause the trading price of our common stock to decline.

Our quarterly operating results and other operating metrics have fluctuated in the past and may continue to fluctuate from quarter to quarter. We expect that this trend will continue as a result of a number of factors, many of which are outside of our control and may be difficult to predict, including:

- the level of demand for our products and our ability to maintain and increase our customer base;
- the timing and success of new product introductions by us or our competitors or any other change in the competitive landscape of our market;
- the mix of products sold in a quarter;
- export control laws or regulations that could impede our ability to sell our products to certain customers or customers in certain foreign jurisdictions;
- pricing pressure as a result of competition or otherwise or price discounts negotiated by our customers;
- our ability to ramp production of new products with our contract manufacturers;
- delays or disruptions in our supply or manufacturing chain;
- our ability to reduce manufacturing costs;
- errors in our forecasting of the demand for our products, which could lead to lower revenue or increased costs;
- seasonal buying patterns of some of our customers;
- introduction of new products, with initial sales at relatively small volumes with resulting higher product costs;
- increases in and timing of sales and marketing, research and development and other operating expenses that we may incur to grow and expand our operations and to remain competitive;
- insolvency, credit, or other difficulties faced by our customers, affecting their ability to purchase or pay for our products;
- insolvency, credit, or other difficulties confronting our suppliers and contract manufacturers leading to disruptions in our supply or distribution chain;
- levels of product returns and contractual price protection rights;
- adverse litigation judgments, settlements or other litigation-related costs;
- product recalls, regulatory proceedings or other adverse publicity about our products;
- fluctuations in foreign exchange rates;
- proposed legislation to reform U.S. taxation of international business activities;

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- costs related to the acquisition of businesses, talent, technologies or intellectual property, including potentially significant amortization costs and possible write-downs; and
- general economic conditions in either domestic or international markets.

Any one of the factors above or the cumulative effect of some of the factors above may result in significant fluctuations in our operating results.

The variability and unpredictability of our quarterly operating results or other operating metrics could result in our failure to meet our expectations or those of any analysts that cover us or investors in our common stock with respect to revenue or other operating results for a particular period. If we fail to meet or exceed such expectations for these or any other reasons, the market price of our common stock could fall substantially, and we could face costly lawsuits, including securities class action suits.

Because we do not expect to pay any dividends on our common stock for the foreseeable future, returns to investors in our common stock will be limited to any increase in the value of our common stock.

We do not anticipate that we will pay any cash dividends to holders of our common stock in the foreseeable future. Instead, we plan to retain any earnings to maintain and expand our existing operations. Accordingly, investors in our common stock must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any return on their investment.

The concentration of our capital stock ownership with insiders will likely limit certain common stock investors' ability to influence corporate matters including the ability to influence the outcome of director elections and other matters requiring stockholder approval.

As of July 28, 2017, our directors and executive officers and their affiliates beneficially owned, in the aggregate, more than 36% of our outstanding common stock. As a result, these stockholders, acting together, could have significant influence over the outcome of matters submitted to our stockholders for approval, including the election of directors and any merger, consolidation or sale of all or substantially all of our assets, and over the management and affairs of our company. This concentration of ownership may also have the effect of delaying or preventing a change in control of our company and might affect the market price of our common stock.

A significant portion of our total outstanding shares may be sold into the public market at any time, which could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time, subject to periodic trading restrictions imposed on our executive officers, directors and other insiders under our insider trading policy and other securities regulations. These sales, or the market perception that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. As of July 28, 2017, we had 39,228,125 shares of common stock outstanding, all of which were available for sale, subject to any applicable volume limitations under federal securities laws with respect to affiliate sales.

In addition, as of July 28, 2017, there were 1,808,170 shares subject to outstanding options, 2,514,660 shares subject to outstanding restricted stock units, or RSUs, and an additional 3,459,248 shares reserved for future issuance under our equity incentive plans that will become eligible for sale in the public market to the extent permitted by any applicable vesting requirements and the restrictions imposed on our affiliates under Rule 144.

Moreover, the holders of an aggregate of approximately 15,768,158 shares of our common stock as of July 28, 2017 have rights, subject to some conditions, to require us to file one or more registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. If we were to register these shares for resale, they could be freely sold in the public market. If these additional shares are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

Anti-takeover provisions in our restated certificate of incorporation and our amended and restated bylaws, as well as provisions of Delaware law, might discourage, delay or prevent a change in control of our company or changes in our management and, therefore, depress the trading price of our common stock.

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Our restated certificate of incorporation and amended and restated bylaws and Delaware law contain provisions that may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which an investor in our common stock might otherwise receive a premium for their shares of our common stock. These provisions may also prevent or delay attempts by our stockholders to replace or remove our management. Our corporate governance documents include provisions:

- establishing a classified board of directors with staggered three-year terms so that not all members of our board are elected at one time;
- providing that directors may be removed by stockholders only for cause and only with a vote of the holders of at least 75% of the issued and outstanding shares of voting stock;
- limiting the ability of our stockholders to call and bring business before special meetings and to take action by written consent in lieu of a meeting;
- requiring advance notice of stockholder proposals for business to be conducted at meetings of our stockholders and for nominations of candidates for election to our board of directors;
- authorizing blank check preferred stock, which could be issued with voting, liquidation, dividend and other rights superior to our common stock; and
- limiting the liability of, and providing indemnification to, our directors and officers.

As a Delaware corporation, we are also subject to provisions of Delaware law, including Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders holding more than 15% of our outstanding voting stock from engaging in certain business combinations with us. Any provision of our amended and restated certificate of incorporation or amended and restated by-laws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors in our common stock are willing to pay for our common stock.

The existence of the foregoing provisions and anti-takeover measures could limit the price that investors in our common stock might be willing to pay in the future for shares of our common stock. They could also deter potential acquirers of our company, thereby reducing the likelihood that an investor in our common stock could receive a premium for their common stock in an acquisition.

Our restated certificate provides that the Court of Chancery of the State of Delaware will be the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our restated certificate provides that the Court of Chancery of the State of Delaware is the exclusive forum for any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our certificate of incorporation or our bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. The choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. Alternatively, if a court were to find the choice of forum provision contained in our certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could adversely affect our business and financial condition.

We are currently an "emerging growth company," and the reduced disclosure requirements applicable to emerging growth companies may make our common stock less attractive to investors.

We are currently an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. For so long as we remain an emerging growth company, we are permitted, and intend, to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include reduced disclosure obligations regarding executive compensation and exemptions from the requirements of holding a non-binding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, and not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, we will be subject to new or revised accounting standards at the same time that they become applicable to other public companies that are not emerging growth companies. Accordingly, we will incur additional costs in connection with complying with the accounting standards applicable to public companies and may incur further costs when the accounting standards are revised and updated. Based on the market value of our common stock held by non-affiliates as of June 30, 2017, we expect we will cease to be an emerging growth company as of December 31, 2017.

Our management team has limited experience managing a public company.

Several members of our management team have limited experience managing a publicly traded company, interacting with public company investors and complying with the increasingly complex laws pertaining to public companies. Our management team may not successfully or efficiently manage our operation as a public company subject to significant regulatory oversight and reporting obligations under the federal securities laws and the scrutiny of securities analysts and investors. These new obligations and constituents will require significant attention from our management team and could divert their attention away from the day-to-day management of our business, which could adversely affect our business, financial condition and operating results.

We have incurred and expect that we will continue to incur increased costs and demands upon management as a result of complying with the laws and regulations affecting public companies, particularly after we are no longer an “emerging growth company.” These increased costs and demands could adversely affect our business, operating results and financial condition.

As a public company, and particularly after we cease to be an “emerging growth company,” we will continue to incur significant legal, accounting and other expenses. We are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, and the rules and regulations of the NASDAQ Global Select Market, or NASDAQ. These requirements have increased and will continue to increase our legal, accounting and financial compliance costs and have made and will continue to make some activities more time consuming and costly.

The Sarbanes-Oxley Act requires, among other things, that we assess the effectiveness of our internal control over financial reporting annually and the effectiveness of our disclosure controls and procedures quarterly. In particular, for the year ending December 31, 2017, Section 404 of the Sarbanes-Oxley Act, or Section 404, will require us to perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on, and our independent registered public accounting firm potentially to attest to, the effectiveness of our internal control over financial reporting.

We are currently evaluating our internal controls, identifying and remediating deficiencies in those internal controls and documenting the results of our evaluation, testing and remediation. As an emerging growth company, we avail ourselves of the exemption from the requirement that our independent registered public accounting firm attest to the effectiveness of our internal control over financial reporting under Section 404. However, we may no longer avail ourselves of this exemption when we cease to be an emerging growth company. Based on the market value of our common stock held by non-affiliates as of June 30, 2017, we expect we will cease to be an emerging growth company as of December 31, 2017. When our independent registered public accounting firm is required to undertake an assessment of our internal control over financial reporting, the cost of our compliance with Section 404 will correspondingly increase. Our compliance with applicable provisions of Section 404 will require that we incur substantial accounting expense and expend significant management time on compliance-related issues as we implement additional corporate governance practices and comply with reporting requirements. Moreover, if we are not able to comply with the requirements of Section 404 applicable to us in a timely manner, or if we or our independent registered public accounting firm identifies deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by the SEC or other regulatory authorities, which would require additional financial and management resources.

Furthermore, investor perceptions of our company may suffer if deficiencies are found, and this could cause a decline in the market price of our stock. Irrespective of compliance with Section 404, any failure of our internal control over financial reporting could have a material adverse effect on our stated operating results and harm our reputation. If we are unable to implement these requirements effectively or efficiently, it could harm our operations, financial reporting, or financial results and could result in an adverse opinion on our internal controls from our independent registered public accounting firm.

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In addition, changing laws, regulations and standards relating to corporate governance and public disclosure 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 have and will continue to invest resources to comply with evolving laws, regulations and standards, and this investment has and 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 may be harmed.

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

None.

ITEM 3. Defaults Upon Senior Securities.

None.

ITEM 4. Mine Safety Disclosures.

Not applicable.

ITEM 5. Other Information.

None.

ITEM 6. Exhibits.

The exhibits listed below are filed or incorporated by reference into this Quarterly Report on Form 10-Q.

Exhibit Number	Description
31.1*	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	XBRL Instance Document.
101.SCH*	XBRL Taxonomy Extension Schema Document.
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document.

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- * Filed herewith.
 - ** Fumished herewith.

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

In connection with the Quarterly Report on Form 10-Q of Acacia Communications, Inc. (the "Company") for the period ended June 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Murugesan Shanmugaraj, as President and Chief Executive Officer of the Company, hereby certifies, as of the date hereof, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company at the dates and for the periods indicated.

Acacia Communications, Inc.

Date: August 3, 2017

By: _____
/s/ Murugesan Shanmugaraj
Murugesan Shanmugaraj
President and Chief Executive Officer

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

In connection with the Quarterly Report on Form 10-Q of Acacia Communications, Inc. (the "Company") for the period ended June 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), John F. Gavin, as Chief Financial Officer of the Company, hereby certifies, as of the date hereof, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company at the dates and for the periods indicated.

Acacia Communications, Inc.

Date: August 3, 2017

By: _____
/s/ John F. Gavin
John F. Gavin
Chief Financial Officer