

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

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 24, 2016
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: 001-34674

Calix, Inc.
(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

68-0438710
(I.R.S. Employer
Identification No.)

1035 N. McDowell Blvd., Petaluma, CA 94954
(Address of Principal Executive Offices) (Zip Code)

(707) 766-3000
(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) 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 or a smaller reporting company. See definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer	<input type="checkbox"/>	Accelerated Filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting Company)	Smaller Reporting Company	<input type="checkbox"/>

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 October 24, 2016, there were 48,789,247 shares of the Registrant's common stock, par value \$0.025 outstanding.

Calix, Inc.

Form 10-Q

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PART I. FINANCIAL INFORMATION

ITEM 1. Financial Statements

CALIX, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except par value and share data)

	September 24, 2016	December 31, 2015
	(Unaudited)	(See Note 1)
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 31,764	\$ 23,626
Marketable securities	29,554	49,964
Accounts receivable, net	57,256	47,155
Inventory	40,190	47,667
Deferred cost of revenue	14,718	4,918
Prepaid expenses and other current assets	15,700	9,470
Total current assets	<u>189,182</u>	<u>182,800</u>
Property and equipment, net	16,017	17,149
Goodwill	116,175	116,175
Intangible assets, net	1,627	6,618
Other assets	937	1,144
Total assets	<u>\$ 323,938</u>	<u>\$ 323,886</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 19,340	\$ 19,603
Accrued liabilities	49,019	35,512
Deferred revenue	16,226	12,124
Total current liabilities	<u>84,585</u>	<u>67,239</u>
Long-term portion of deferred revenue	19,850	19,569
Other long-term liabilities	979	1,293
Total liabilities	<u>105,414</u>	<u>88,101</u>
Commitments and contingencies (See Note 7)		
Stockholders' equity:		
Preferred stock, \$0.025 par value; 5,000,000 shares authorized; no shares issued and outstanding as of September 24, 2016 and December 31, 2015	—	—
Common stock, \$0.025 par value; 100,000,000 shares authorized; 54,118,410 shares issued and 48,788,593 shares outstanding as of September 24, 2016, and 53,049,781 shares issued and 49,509,251 shares outstanding as of December 31, 2015	1,353	1,326
Additional paid-in capital	830,225	818,754
Accumulated other comprehensive loss	(226)	(195)
Accumulated deficit	(572,842)	(556,923)
Treasury stock, 5,329,817 shares and 3,540,530 shares as of September 24, 2016 and December 31, 2015, respectively	(39,986)	(27,177)
Total stockholders' equity	<u>218,524</u>	<u>235,785</u>
Total liabilities and stockholders' equity	<u>\$ 323,938</u>	<u>\$ 323,886</u>

See accompanying notes to condensed consolidated financial statements.

CALIX, INC.

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(In thousands, except per share data)
(Unaudited)

	Three Months Ended		Nine Months Ended	
	September 24, 2016	September 26, 2015	September 24, 2016	September 26, 2015
Revenue	\$ 121,187	\$ 112,297	\$ 326,987	\$ 302,464
Cost of revenue:				
Products and services ⁽¹⁾	66,830	57,096	174,665	152,308
Amortization of intangible assets	813	2,088	3,290	6,264
Total cost of revenue	<u>67,643</u>	<u>59,184</u>	<u>177,955</u>	<u>158,572</u>
Gross profit	53,544	53,113	149,032	143,892
Operating expenses:				
Research and development ⁽¹⁾	28,119	22,120	75,925	66,885
Sales and marketing ⁽¹⁾	20,575	18,424	58,850	57,398
General and administrative ⁽¹⁾	8,615	9,140	32,940	28,728
Amortization of intangible assets	—	2,552	1,701	7,656
Litigation settlement gain	(4,500)	—	(4,500)	—
Total operating expenses	<u>52,809</u>	<u>52,236</u>	<u>164,916</u>	<u>160,667</u>
Income (loss) from operations	735	877	(15,884)	(16,775)
Interest and other income (expense), net:				
Interest income	184	297	611	1,014
Interest expense	(155)	(263)	(489)	(921)
Other income (expense), net	81	196	297	273
Income (loss) before provision for income taxes	845	1,107	(15,465)	(16,409)
Provision for income taxes	209	185	454	378
Net income (loss)	<u>\$ 636</u>	<u>\$ 922</u>	<u>\$ (15,919)</u>	<u>\$ (16,787)</u>
Net income (loss) per common share:				
Basic	<u>\$ 0.01</u>	<u>\$ 0.02</u>	<u>\$ (0.33)</u>	<u>\$ (0.32)</u>
Diluted	<u>\$ 0.01</u>	<u>\$ 0.02</u>	<u>\$ (0.33)</u>	<u>\$ (0.32)</u>
Weighted-average number of shares used to compute net income (loss) per common share:				
Basic	<u>48,773</u>	<u>51,756</u>	<u>48,578</u>	<u>51,814</u>
Diluted	<u>49,309</u>	<u>52,016</u>	<u>48,578</u>	<u>51,814</u>
Net income (loss)	\$ 636	\$ 922	\$ (15,919)	\$ (16,787)
Other comprehensive income (loss), net of tax:				
Unrealized gains (losses) on available-for-sale marketable securities, net	(9)	30	97	66
Foreign currency translation adjustments, net	(87)	(196)	(128)	(177)
Total other comprehensive income (loss), net of tax	<u>(96)</u>	<u>(166)</u>	<u>(31)</u>	<u>(111)</u>
Comprehensive income (loss)	<u>\$ 540</u>	<u>\$ 756</u>	<u>\$ (15,950)</u>	<u>\$ (16,898)</u>

⁽¹⁾ Includes stock-based compensation as follows:

Cost of revenue	\$ 174	\$ 163	\$ 484	\$ 549
Research and development	1,573	964	3,719	3,659
Sales and marketing	1,661	688	3,323	3,769
General and administrative	1,269	775	2,840	2,616

See accompanying notes to condensed consolidated financial statements.

CALIX, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(Unaudited)

	Nine Months Ended	
	September 24, 2016	September 26, 2015
Operating activities:		
Net loss	\$ (15,919)	\$ (16,787)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	6,282	7,602
Loss on retirement of property and equipment	—	14
Amortization of intangible assets	4,991	13,920
Amortization of premiums related to available-for-sale securities	337	743
Stock-based compensation	10,366	10,593
Changes in operating assets and liabilities:		
Restricted cash	—	295
Accounts receivable, net	(10,104)	(17,443)
Inventory	7,477	2,983
Deferred cost of revenue	(9,800)	2,082
Prepaid expenses and other assets	(6,058)	4,181
Accounts payable	(356)	(6,841)
Accrued liabilities	13,974	(1,055)
Deferred revenue	4,383	(1,312)
Other long-term liabilities	(313)	(167)
Net cash provided by (used in) operating activities	<u>5,260</u>	<u>(1,192)</u>
Investing activities:		
Purchases of property and equipment	(5,364)	(5,943)
Purchases of marketable securities	—	(46,750)
Maturities of marketable securities	20,170	51,265
Net cash provided by (used in) investing activities	<u>14,806</u>	<u>(1,428)</u>
Financing activities:		
Proceeds from exercise of stock options	14	625
Proceeds from employee stock purchase plan	2,905	2,865
Payments for repurchases of common stock	(12,809)	(11,124)
Taxes paid for awards vested under equity incentive plans	(1,787)	(2,093)
Net cash used in financing activities	<u>(11,677)</u>	<u>(9,727)</u>
Effect of exchange rate changes on cash and cash equivalents	(251)	(288)
Net increase (decrease) in cash and cash equivalents	8,138	(12,635)
Cash and cash equivalents at beginning of period	23,626	48,829
Cash and cash equivalents at end of period	<u>\$ 31,764</u>	<u>\$ 36,194</u>

See accompanying notes to condensed consolidated financial statements.

CALIX, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. Company and Basis of Presentation

Company

Calix, Inc. (together with its subsidiaries, "Calix," the "Company," "our," "we," or "us") was incorporated in August 1999, and is a Delaware corporation. The Company is a leading global provider of broadband communications access systems and software for fiber- and copper-based network architectures that enable communications service providers ("CSPs") to transform their networks and connect to their residential and business subscribers. The Company enables CSPs to provide a wide range of revenue-generating services, from basic voice and data to advanced broadband services, over legacy and next-generation access networks. The Company focuses solely on CSP access networks, the portion of the network that governs available bandwidth and determines the range and quality of services that can be offered to subscribers. The Company develops and sells carrier-class hardware and software products, referred to as the Unified Access portfolio, which are designed to enhance and transform CSP access networks to meet the changing demands of subscribers rapidly and cost-effectively.

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements, including the accounts of Calix, Inc. and its wholly-owned subsidiaries, have been prepared in accordance with the requirements of the U.S. Securities and Exchange Commission ("SEC") for interim reporting. As permitted under those rules, certain footnotes or other financial information that are normally required by U.S. generally accepted accounting principles ("GAAP") can be condensed or omitted. In the opinion of management, the financial statements include all normal and recurring adjustments that are considered necessary for the fair presentation of the Company's financial position and operating results. All significant intercompany balances and transactions have been eliminated in consolidation. The Condensed Consolidated Balance Sheet at December 31, 2015 has been derived from the audited financial statements at that date.

The results of the Company's operations can vary during each quarter of the year. Therefore, the results and trends in these interim financial statements may not be the same as those for the full year or any future periods. The information included in this Quarterly Report on Form 10-Q should be read in conjunction with the audited financial statements included in the Company's Form 10-K for the year ended December 31, 2015.

The Company's fiscal year begins on January 1st and ends on December 31st. Quarterly periods are based on a 4-4-5 fiscal calendar with the first, second and third fiscal quarters ending on the 13th Saturday of each fiscal period. As a result, the Company had one fewer day in the nine months ended September 24, 2016 than in the nine months ended September 26, 2015. The preparation of financial statements in conformity with GAAP for interim financial reporting requires management to make estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

2. Significant Accounting Policies

The Company's significant accounting policies are disclosed in our Annual Report on Form 10-K for the year ended December 31, 2015. Our significant accounting policies did not change during the nine months ended September 24, 2016.

Concentration of Customer Risk

The Company had two customers that each accounted for more than 10% of its total revenue for the three and nine months ended September 24, 2016 and one of these customers accounted for more than 10% of the Company's total revenue for the three and nine months ended September 26, 2015. These two customers together represented 37% and 34% of the Company's total revenue for the three and nine months ended September 24, 2016, respectively, and 27% and 26% of the Company's total revenue for the three and nine months ended September 26, 2015, respectively. Each of these two customers represented more than 10% of the Company's accounts receivable as of September 24, 2016 and one of these customers represented more than 10% of the Company's accounts receivable as of December 31, 2015.

Recent Accounting Pronouncements

In March 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update No. 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting ("ASU 2016-09"), which simplifies several aspects of the accounting for employee share-based payment transactions for both public and nonpublic entities, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. ASU 2016-09 will be effective for the Company beginning in the first quarter of fiscal 2017. Early application is permitted in any interim or annual period, with any adjustments reflected as of the beginning of the fiscal year of adoption. The Company is currently assessing the potential impact of adopting this new guidance on its consolidated financial statements.

In February 2016, the FASB issued Accounting Standards Update No. 2016-02, Leases (Topic 842) ("ASU 2016-02"), which requires recognition of an asset and liability for lease arrangements longer than twelve months. ASU 2016-02 will be effective for the Company beginning in the first quarter of fiscal 2019. Early application is permitted, and it is required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. The Company is currently assessing the potential impact of adopting this new guidance on its consolidated financial statements.

In July 2015, the FASB issued Accounting Standards Update No. 2015-11, Inventory (Topic 330): Simplifying the Measurement of Inventory ("ASU 2015-11"), which requires measurement of inventory at lower of cost and net realizable value, versus lower of cost or market. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. ASU 2015-11 will be effective for the Company beginning in the first quarter of fiscal 2017. Early application is permitted, and the guidance should be applied prospectively. The Company is currently assessing the potential impact of adopting this new guidance on its consolidated financial statements.

In May 2014, the FASB issued Accounting Standards Update No. 2014-09, Revenue from Contracts with Customers (Topic 606) ("ASU 2014-09"), which provides guidance for revenue recognition. ASU 2014-09 supersedes the revenue recognition requirements in Topic 605, Revenue Recognition, and most industry-specific guidance. Additionally, it supersedes some cost guidance included in Subtopic 605-35, Revenue Recognition-Construction-Type and Production-Type Contracts, and creates new Subtopic 340-40, Other Assets and Deferred Costs-Contracts with Customers. 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 previous 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. On August 12, 2015, the FASB issued Accounting Standards Update No. 2015-14, Revenue from Contracts with Customers (Topic 606), Deferral of the Effective Date ("ASU 2015-14") to defer the effective date of ASU 2014-09 by one year. As a result, the standard will be effective for the Company in the first quarter of fiscal 2018. ASU 2015-14 permits early adoption of the new revenue standard, but not before its original effective date. The Company is currently assessing the method of adoption and the potential impact of adopting this new guidance on its consolidated financial statements.

3. Cash, Cash Equivalents and Marketable Securities

The Company has invested its excess cash primarily in money market funds and highly liquid marketable securities such as corporate debt instruments, U.S. government agency securities and commercial paper. The Company considers all investments with maturities of three months or less when purchased to be cash equivalents. Marketable securities represent highly liquid corporate debt instruments, U.S. government agency securities and commercial paper with maturities greater than 90 days at date of purchase. Marketable securities with maturities greater than one year are classified as current because management considers all marketable securities to be available for current operations.

Cash equivalents are stated at amounts that approximate fair value based on quoted market prices. Marketable securities are recorded at their fair values.

The Company's investments have been classified and accounted for as available-for-sale. Such investments are recorded at fair value and unrealized holding gains and losses are reported as a separate component of accumulated other comprehensive income (loss) in the stockholders' equity until realized. Realized gains and losses on sales of marketable securities, if any, are determined on the specific identification method and are reclassified from accumulated other comprehensive income (loss) to results of operations as other income (expense).

The Company, to date, has not determined that any of the unrealized losses on its investments are considered to be other-than-temporary. The Company reviews its investment portfolio to determine if any security is other-than-temporarily impaired, which would require the Company to record an impairment charge in the period any such determination is made. In making this judgment, the Company evaluates, among other things: the duration and extent to which the fair value of a security is less than its cost; the financial condition of the issuer and any changes thereto; and the Company's intent and ability to hold its investment for a period of time sufficient to allow for any anticipated recovery in market value, or whether the Company will more likely than not be required to sell the security before recovery of its amortized cost basis. The Company has evaluated its investments as of September 24, 2016 and has determined that no investments with unrealized losses are other-than-temporarily impaired. No investments have been in a continuous loss position greater than one year.

Cash, cash equivalents and marketable securities consisted of the following (in thousands):

	September 24, 2016	December 31, 2015
Cash and cash equivalents:		
Cash	\$ 17,708	\$ 13,378
Money market funds	14,056	10,248
Total cash and cash equivalents	<u>31,764</u>	<u>23,626</u>
Marketable securities:		
Corporate debt securities	23,051	35,799
U.S. government agency securities	6,503	10,520
Commercial paper	—	3,645
Total marketable securities	<u>29,554</u>	<u>49,964</u>
Total cash, cash equivalents and marketable securities	<u>\$ 61,318</u>	<u>\$ 73,590</u>

The carrying amounts of our money market funds approximate their fair values due to their nature, duration and short maturities.

As of September 24, 2016, the amortized cost and fair value of marketable securities were as follows (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Corporate debt securities	\$ 23,050	\$ 4	\$ (3)	\$ 23,051
U.S. government agency securities	6,501	2	—	6,503
Total marketable securities	<u>\$ 29,551</u>	<u>\$ 6</u>	<u>\$ (3)</u>	<u>\$ 29,554</u>

As of December 31, 2015, the amortized cost and fair value of marketable securities were as follows (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Corporate debt securities	\$ 35,869	\$ 2	\$ (72)	\$ 35,799
U.S. government agency securities	10,544	—	(24)	10,520
Commercial paper	3,645	—	—	3,645
Total marketable securities	<u>\$ 50,058</u>	<u>\$ 2</u>	<u>\$ (96)</u>	<u>\$ 49,964</u>

As of September 24, 2016, the amortized cost and fair value of marketable securities by contractual maturity were as follows (in thousands):

	Amortized Cost	Fair Value
Due in 1 year or less	\$ 29,551	\$ 29,554

4. Fair Value Measurements

In accordance with Accounting Standard Codification (“ASC”) Topic 820, *Fair Value Measurements and Disclosures*, (“ASC Topic 820”), the Company measures its cash equivalents and marketable securities at fair value on a recurring basis. ASC Topic 820 clarifies that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, ASC Topic 820 establishes a three-tier value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1 – Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2 – Observable inputs other than quoted prices included in Level 1 for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-driven valuations in which all significant inputs and significant value drivers are observable in active markets.

Level 3 – Unobservable inputs to the valuation derived from fair valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

The following table sets forth the Company's financial assets measured at fair value on a recurring basis as of September 24, 2016 and December 31, 2015, based on the three-tier fair value hierarchy (in thousands):

As of September 24, 2016	Level 1	Level 2	Total
Money market funds	\$ 14,056	\$ —	\$ 14,056
Corporate debt securities	—	23,051	23,051
U.S. government agency securities	—	6,503	6,503
Total	<u>\$ 14,056</u>	<u>\$ 29,554</u>	<u>\$ 43,610</u>

As of December 31, 2015	Level 1	Level 2	Total
Money market funds	\$ 10,248	\$ —	\$ 10,248
Corporate debt securities	—	35,799	35,799
U.S. government agency securities	—	10,520	10,520
Commercial paper	—	3,645	3,645
Total	<u>\$ 10,248</u>	<u>\$ 49,964</u>	<u>\$ 60,212</u>

The fair values of money market funds classified as Level 1 were derived from quoted market prices as active markets for these instruments exist. The fair values of corporate debt securities, U.S. government agency securities and commercial paper classified as Level 2 were derived from quoted market prices for similar instruments indexed to prevailing market yield rates. The Company has no Level 3 financial assets. The Company did not have any transfers between Level 1 and Level 2 of the fair value hierarchy during the nine months ended September 24, 2016 and September 26, 2015.

5. Goodwill and Intangible Assets

Goodwill

Goodwill was recorded as a result of the Company's acquisitions of Occam Networks, Inc. ("Occam") in February 2011 and Optical Solutions, Inc. ("OSI") in February 2006. This goodwill is not deductible for tax purposes, and there have been no adjustments to goodwill since the acquisition dates.

Goodwill is not amortized but instead is subject to an annual impairment test or more frequently if events or changes in circumstances indicate that it may be impaired. We evaluate goodwill on an annual basis at the end of the second quarter of each year. Management has determined that we operate as a single reporting unit and, therefore, evaluates goodwill impairment at the enterprise level. Management assessed qualitative factors to determine whether it was more likely than not (that is, a likelihood of more than 50 percent) that the fair value of the Company was less than its carrying amount, including goodwill, as of June 25, 2016. In assessing the qualitative factors, management considered the impact of these key factors: macro-economic conditions, industry and market environment, overall financial performance of the Company, cash flow from operating activities, market capitalization and stock price. Management concluded that the fair value of the Company was more likely than not greater than its carrying amount as of June 25, 2016. As such, it was not necessary to perform the two-step goodwill impairment test at the time.

There have been no significant events or changes in circumstances subsequent to the 2016 annual impairment test that would more likely than not indicate that the carrying value of goodwill may have been impaired as of September 24, 2016. Therefore, there was no impairment to the carrying value of the Company's goodwill as of September 24, 2016.

Intangible Assets

Intangible assets are carried at cost, less accumulated amortization. The details of intangible assets as of September 24, 2016 and December 31, 2015 are disclosed in the following table (in thousands):

	September 24, 2016			December 31, 2015		
	Gross Carrying Amount	Accumulated Amortization	Net	Gross Carrying Amount	Accumulated Amortization	Net
Core developed technology	\$ 68,964	\$ (67,337)	\$ 1,627	\$ 68,964	\$ (64,047)	\$ 4,917
Customer relationships	54,740	(54,740)	—	54,740	(53,039)	1,701
Total intangible assets, excluding goodwill	<u>\$ 123,704</u>	<u>\$ (122,077)</u>	<u>\$ 1,627</u>	<u>\$ 123,704</u>	<u>\$ (117,086)</u>	<u>\$ 6,618</u>

Amortization expense was \$0.8 million and \$4.6 million for the three months ended September 24, 2016 and September 26, 2015, respectively. Amortization expense was \$5.0 million and \$13.9 million for the nine months ended September 24, 2016 and September 26, 2015, respectively.

As of September 24, 2016, expected future amortization expense for the fiscal years indicated is as follows (in thousands):

<u>Period</u>	<u>Expected Amortization Expense</u>
Remainder of 2016	\$ 814
2017	813
Total	<u>\$ 1,627</u>

6. Balance Sheet Details

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

	<u>September 24, 2016</u>	<u>December 31, 2015</u>
Accounts receivable	\$ 58,752	\$ 48,319
Allowance for doubtful accounts	(629)	(501)
Product return reserve	(867)	(663)
Accounts receivable, net	<u>\$ 57,256</u>	<u>\$ 47,155</u>

Inventory consisted of the following (in thousands):

	<u>September 24, 2016</u>	<u>December 31, 2015</u>
Raw materials	\$ 2,035	\$ 2,209
Finished goods	38,155	45,458
Total inventory	<u>\$ 40,190</u>	<u>\$ 47,667</u>

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

	<u>September 24, 2016</u>	<u>December 31, 2015</u>
Test equipment	\$ 42,038	\$ 39,035
Computer equipment and software	29,176	27,736
Furniture and fixtures	2,457	1,833
Leasehold improvements	6,570	6,554
Total	<u>80,241</u>	<u>75,158</u>
Accumulated depreciation and amortization	(64,224)	(58,009)
Property and equipment, net	<u>\$ 16,017</u>	<u>\$ 17,149</u>

Accrued liabilities consisted of the following (in thousands):

	September 24, 2016	December 31, 2015
Accrued compensation and related benefits	\$ 21,394	\$ 13,809
Accrued warranty	11,373	9,564
Accrued professional and consulting fees	5,887	2,813
Accrued customer rebates	2,029	784
Accrued excess and obsolete inventory at contract manufacturers	1,084	1,011
Accrued insurance	946	—
Accrued non income related taxes	849	905
Accrued business travel expenses	837	580
Advance customer payments	709	1,094
Accrued rent	412	381
Accrued freight	296	486
Accrued hosting services	248	466
Income taxes payable	—	322
Accrued other	2,955	3,297
Total accrued liabilities	<u>\$ 49,019</u>	<u>\$ 35,512</u>

Deferred revenue consisted of the following (in thousands):

	September 24, 2016	December 31, 2015
Current:		
Product and services	\$ 12,988	\$ 8,937
Extended warranty	3,238	3,187
	<u>16,226</u>	<u>12,124</u>
Non-current:		
Product and services	46	58
Extended warranty	19,804	19,511
	<u>19,850</u>	<u>19,569</u>
Total deferred revenue	<u>\$ 36,076</u>	<u>\$ 31,693</u>

Deferred cost of revenue consisted of costs incurred for products and services for which revenues have been deferred.

7. Commitments and Contingencies

Commitments

The Company's principal commitments consist of obligations under operating leases for office space and non-cancelable outstanding purchase obligations. These commitments as of December 31, 2015 are disclosed in our Annual Report on Form 10-K, and have not changed materially during the nine months ended September 24, 2016.

Contingencies

The Company evaluates the circumstances regarding outstanding and potential litigation and other contingencies on a quarterly basis to determine whether there is at least a reasonable possibility that a loss exists requiring accrual or disclosure, and if so, whether an estimate of the possible loss or range of loss can be made, or whether such an estimate cannot be made. When a loss is probable and reasonably estimable, the Company accrues for such amount based on its estimate of the probable loss considering information available at the time. When a loss is reasonably possible, the Company discloses the estimated possible loss or range of loss in excess of amounts accrued if material. Except as otherwise disclosed below, the Company does not believe that there was a reasonable possibility that a material loss may have been incurred during the period presented with respect to the matters disclosed.

Accrued Warranty

The Company provides a standard warranty for its hardware products. Hardware generally has a one, three or five-year standard warranty from the date of shipment. The Company accrues for potential warranty claims based on the Company's historical product failure rates and historical costs incurred in correcting product failures along with other relevant information. The Company's warranty accruals are

based on estimates of losses that are probable based on information available. The adequacy of the accrual is reviewed on a periodic basis and adjusted, if necessary, based on additional information as it becomes available.

Changes in the Company's warranty reserve were as follows (in thousands):

	Three Months Ended		Nine Months Ended	
	September 24, 2016	September 26, 2015	September 24, 2016	September 26, 2015
Balance at beginning of period	\$ 9,152	\$ 9,325	\$ 9,564	\$ 9,553
Warranty charged to cost of revenue	3,180	781	6,292	2,929
Utilization of warranty	(948)	(722)	(4,073)	(3,098)
Adjustments to pre-existing warranty	(11)	(400)	(410)	(400)
Balance at end of period	\$ 11,373	\$ 8,984	\$ 11,373	\$ 8,984

Litigation

From time to time, the Company is involved in various legal proceedings arising from the normal course of business activities.

Steinhardt v. Howard-Anderson, et al.

As previously disclosed, in connection with the Company's February 22, 2011 merger transaction with Occam Networks, Inc. ("Occam") a complaint was filed on October 6, 2010 by stockholders of Occam in the Delaware Court of Chancery styled as *Steinhardt v. Howard-Anderson, et al.* (Case No. 5878-VCL). The complaint, as initially amended, sought injunctive relief rescinding the merger transaction and an award of damages in an unspecified amount, as well as plaintiffs' costs, attorney's fees, and other relief, and also alleged that Occam (which has since merged into Calix), each Occam director and the Occam CFO breached their fiduciary duties by failing to attempt to obtain the best purchase price for Occam and failing to disclose certain allegedly material facts about the merger transaction in the preliminary proxy statement and prospectus included in the Registration Statement on Form S-4 for the transaction. In July 2015, the complaint was amended to add Wilson Sonsini Goodrich & Rosati, P.C. ("Wilson Sonsini"), Occam's counsel and former defense counsel in this lawsuit. Trial on the matter commenced on April 11, 2016 before the Delaware Court of Chancery.

On April 14, 2016, the parties entered into a memorandum of understanding of a settlement in principle ("Settlement") to resolve all of the claims pending before the Delaware Court of Chancery and related claims for a total settlement consideration of \$35.0 million. The Settlement was made without any admission of any wrongdoing on the part of the Company or its officers and directors. Further, the Settlement terms provide that neither the Company nor any of its officers or directors would be required to make any contribution to the settlement consideration of \$35 million to be paid for the benefit of the plaintiff class. On May 31, 2016, the parties signed a global settlement agreement reflecting the terms of the Settlement and filed the agreement for court approval. The court approved the global settlement at a hearing held on August 26, 2016 and, on September 7, 2016, issued its Order and Final Judgment, terminating the case before the Delaware Court of Chancery.

The Company did not previously accrue any estimated loss in connection with this action and, as a result of the Settlement, will not recognize any loss related to this action. The Company incurred defense costs related to this litigation in connection with its obligations, under certain circumstances, to hold harmless and indemnify each of the former Occam directors and officers named as defendants in this action against judgments, fines, settlements and expenses related to claims against such directors and officers to the fullest extent permitted under Delaware law and Occam's bylaws and certificate of incorporation. In addition, the Company has paid fees and expenses incurred by Jefferies in connection with this matter pursuant to Jefferies indemnity demand under the engagement letter between Occam and Jefferies. Defense costs that were in excess of available insurance coverage or for which the Company's insurance carriers denied coverage were recorded as operating expense in the Company's Consolidated Statement of Comprehensive Income (Loss) in the periods incurred. Until the Settlement was reached, the Company continued to incur significant litigation expenses, including expenses that were not covered by insurance, to defend and litigate this matter. For the nine months ended September 24, 2016, the Company recorded litigation defense costs and expenses in excess of its insurance coverage of \$6.4 million as operating expense in the accompanying Condensed Consolidated Statements of Comprehensive Income (Loss). The deadline for appeal of the Order and Final Judgment was October 7, 2016. No appeals were filed and the Company expects to receive the \$4.5 million cash payment on or before November 22, 2016.

Under the terms of the Settlement (and separate from the settlement consideration), the Company will receive a cash payment of \$4.5 million in partial recovery of its out-of-pocket expenses incurred in the litigation, payable to the Company within 45 days of the court's order entering judgment in the litigation. As disclosed above, the Delaware court issued its Order and Final Judgment on September 7, 2016. Accordingly, during the fiscal quarter ended September 24, 2016, the Company accrued \$4.5 million as "Litigation settlement gain", presented as a reduction to operating expenses in the accompanying Condensed Consolidated Statements of Comprehensive Income (Loss).

The Company is not currently a party to any other legal proceedings that, if determined adversely to the Company, in management's opinion, is currently expected to individually or in the aggregate have a material adverse effect on the Company's business, operating results or financial condition taken as a whole.

Guarantees

The Company from time to time enters into contracts that require it to indemnify various parties against claims from third parties. These contracts primarily relate to (i) certain real estate leases, under which the Company may be required to indemnify property owners for

environmental and other liabilities, and other claims arising from the Company's use of the applicable premises, (ii) agreements with the Company's officers, directors, and certain employees, under which the Company may be required to indemnify such persons for liabilities arising out of their relationship with the Company, (iii) contracts under which the Company may be required to indemnify customers against third-party claims that a Company product infringes a patent, copyright, or other intellectual property right and (iv) procurement or license agreements, under which the Company may be required to indemnify licensors or vendors for certain claims that may be brought against them arising from the Company's acts or omissions with respect to the supplied products or technology.

Because any potential obligation associated with these types of contractual provisions are not quantified or stated, the overall maximum amount of the obligation cannot be reasonably estimated. Historically, the Company has not been required to make payments under these obligations, and no liabilities have been recorded for these obligations in the accompanying Condensed Consolidated Balance Sheets.

8. Net Income (Loss) per Common Share

The following table sets forth the computation of basic and diluted net income (loss) per common share for the periods indicated (in thousands, except per share data):

	Three Months Ended		Nine Months Ended	
	September 24, 2016	September 26, 2015	September 24, 2016	September 26, 2015
Numerator:				
Net income (loss)	\$ 636	\$ 922	\$ (15,919)	\$ (16,787)
Denominator:				
Weighted-average common shares outstanding used to compute basic net income (loss) per share	48,773	51,756	48,578	51,814
Effect of dilutive common stock equivalents	536	260	—	—
Weighted-average common shares outstanding used to compute diluted net income (loss) per share	49,309	52,016	48,578	51,814
Basic net income (loss) per common share	\$ 0.01	\$ 0.02	\$ (0.33)	\$ (0.32)
Diluted net income (loss) per common share	\$ 0.01	\$ 0.02	\$ (0.33)	\$ (0.32)
Potentially dilutive shares, weighted average	3,951	5,244	5,794	6,062

For the three and nine months ended September 26, 2015, unvested restricted stock awards are included in the calculation of weighted-average common shares outstanding because such shares are participating securities; however, the impact was immaterial. All restricted stock awards completed their vesting on July 20, 2015.

Potentially dilutive shares have been excluded from the computation of diluted net loss per common share when their effect is antidilutive. These antidilutive shares were primarily from stock options, restricted stock units and performance restricted stock awards. For periods presented where the Company reported a net loss, the effect of all potentially dilutive securities would be antidilutive, and as a result diluted net loss per common share is the same as basic net loss per common share.

9. Stockholders' Equity

Equity Incentive Plans

The Company currently maintains two equity incentive plans, the 2002 Stock Plan and the 2010 Equity Incentive Award Plan (together, the "Plans"). These plans were approved by the stockholders and are described in the Company's Form 10-K filed with the SEC on February 26, 2016. The Company also maintains a Long Term Incentive Program, under the 2010 Equity Incentive Award Plan. Under the Long Term Incentive Program, certain key employees of the Company are eligible for equity awards based on the Company's stock price performance. To date, awards granted under the Plans consist of stock options, restricted stock units ("RSUs"), restricted stock awards ("RSAs"), and performance restricted stock units ("PRSUs").

Stock Options

During the three and nine months ended September 24, 2016, the Company granted 380,000 stock options at a weighted-average grant date fair value of \$3.29 per share as determined using the Black-Scholes option-pricing model. During the three months ended September 24, 2016, no stock options were exercised. During the nine months ended September 24, 2016, 2,312 stock options were exercised at a weighted-average exercise price of \$5.85 per share. As of September 24, 2016, unrecognized stock-based compensation expense of \$3.1 million related to stock options, net of estimated forfeitures, is expected to be recognized over a weighted-average period of 2.6 years.

Restricted Stock Units

During the three months ended September 24, 2016, 102,200 RSUs were granted with a weighted-average grant date fair value of \$7.84 per share. During the nine months ended September 24, 2016, 1,094,513 RSUs were granted with a weighted-average grant date fair value of \$7.01 per share. During the three months ended September 24, 2016, 58,444 RSUs vested, net of shares withheld at the then-current

value equivalent to the employees' minimum statutory obligation for applicable income and other employment taxes, and were converted to an equivalent number of shares of common stock. Taxes withheld from employees of \$0.2 million were remitted to the relevant taxing authorities during the three months ended September 24, 2016. During the nine months ended September 24, 2016, 546,534 RSUs vested, net of shares withheld at the then-current value equivalent to the employees' minimum statutory obligation for applicable income and other employment taxes, and were converted to an equivalent number of shares of common stock. Taxes withheld from employees of \$1.7 million were remitted to the relevant taxing authorities during the nine months ended September 24, 2016. As of September 24, 2016, unrecognized stock-based compensation expense of \$14.6 million related to RSUs, net of estimated forfeitures, was expected to be recognized over a weighted-average period of 2.6 years.

Performance Restricted Stock Units

In 2012, 2013 and 2014, the Company granted PRSUs to its executives with two-year and three-year performance periods. The performance criterion is based on the relative total shareholder return ("TSR") of Calix common stock as compared to the TSR of the Company's peer group and accounted for as a market condition. The TSR is calculated by dividing (a) the average closing trading price for the 90-day period ending on the last day of the applicable performance period by (b) the average closing trading price for the 90-day period immediately preceding the first day of the applicable performance period. This TSR is then used to derive the achievement ratio, which is then multiplied by the number of units in the grant to derive the common stock to be issued for each performance period, which may equal from zero percent (0%) to two hundred percent (200%) of the target award.

During the three months ended September 24, 2016, no PRSUs were granted to executives. During the nine months ended September 24, 2016, the Company granted 550,000 PRSUs to its executives with a weighted-average grant date fair value of \$7.42 per share. These particular performance-based awards contain a one-year performance period and a subsequent two-year service period. The performance target is based on the Company's revenue during the performance period and accounted for as a performance condition. After the one-year performance period, if the performance target is met and subject to certification by the Compensation Committee, each PRSU award shall vest in respect to 50% of the PRSUs subject to the award in February 2017, 25% in February 2018 and 25% in February 2019, subject to the executive's continuous service with the Company from the grant date through the respective vesting dates. If the performance target is not met, all PRSUs granted under this award shall be immediately forfeited and canceled without vesting of any shares.

During the three months ended September 24, 2016, no PRSUs vested and were converted into shares of common stock. During the nine months ended September 24, 2016, 44,992 PRSUs vested and were converted into 26,557 shares of common stock, net of shares withheld at the then-current value equivalent to the employees' minimum statutory obligation for applicable income and other employment taxes. Taxes withheld from employees of \$0.1 million were remitted to the relevant taxing authorities during the nine months ended September 24, 2016. As of September 24, 2016, unrecognized stock-based compensation expense of \$2.2 million related to PRSUs, net of estimated forfeitures, is expected to be recognized over a weighted-average period of 1.1 years.

Employee Stock Purchase Plan

The Company's Amended and Restated Employee Stock Purchase Plan ("ESPP") allows employees to purchase shares of the Company's common stock through payroll deductions of up to 15 percent of their annual compensation subject to certain Internal Revenue Code limitations. In addition, no participant may purchase more than 2,000 shares of common stock in each offering period.

Prior to 2015, the offering periods under the 2010 ESPP are six-month periods commencing on June 1 and December 1 of each year. In January 2015, the Compensation Committee of the Company's Board of Directors approved a change in those six-month period commencement dates to November 2 and May 2 of each year, effective November 2, 2015. In July 2016, the Compensation Committee of the Company's Board of Directors approved a change in those six-month period commencement dates to May 15 and November 15 of each year, effective May 15, 2017. The ending date of the ESPP offering period commencing on November 2, 2016 will be extended until May 14, 2017 as a result of this change. The price of common stock purchased under the plan is 85 percent of the lower of the fair market value of the common stock on the commencement date and the end date of each six-month offering period. As of September 24, 2016, there were 635,913 shares available for issuance under the ESPP.

During the three and nine months ended September 24, 2016, 493,226 shares were purchased under the ESPP. As of September 24, 2016, unrecognized stock-based compensation expense of \$0.2 million related to the ESPP is expected to be recognized over a remaining service period of 1 month.

Stock-Based Compensation Expense

Stock-based compensation expense associated with stock options, RSUs, PRSUs, RSAs, and purchase rights under the ESPP is measured at the grant date based on the fair value of the award, and is recognized, net of forfeitures, as expense over the remaining requisite service period on a straight-line basis.

The Company values RSUs and RSAs at the closing market price of the Company's common stock on the date of grant.

Stock-based compensation expense associated with PRSUs with graded vesting features and which contain both a performance and a service condition is measured based on the closing market price of the Company's common stock on the date of grant, and is recognized, net of forfeitures, as expense over the requisite service period using the graded vesting attribution method. Compensation expense is only recognized if the Company has determined that it is probable that the performance condition will be met. The Company reassesses the probability of vesting at each reporting period and adjusts compensation expense based on its probability assessment. The probability of meeting the performance condition related to PRSUs granted to executives in February 2016 was assessed to be unlikely in prior quarters, as

such, no stock-based compensation expense was recognized for this award in prior quarters. Based on the most recent assessment made by the Company as of September 24, 2016, the performance condition is now determined to be probable of being met. Accordingly, the corresponding stock-based compensation expense from the grant date to September 24, 2016 of \$1.7 million was recorded during the quarter ended September 24, 2016.

The fair value of PRSUs with a market condition is estimated on the date of award, using a Monte Carlo simulation model to estimate the TSR of the Company's stock in relation to the peer group over each performance period. Compensation cost on PRSUs with a market condition is not adjusted for subsequent changes in the Company's stock performance or the level of ultimate vesting.

Stock Repurchase

On April 26, 2015, the Company's Board of Directors approved a program to repurchase up to \$40 million of its common stock from time to time.

Stock may be purchased under this program in open market or private transactions, through block trades, and/or pursuant to any trading plan adopted in accordance with Rule 10b5-1 of the Securities Exchange Act of 1934, as amended ("Exchange Act"). Any open market purchases will be made in accordance with the limitations set out in Rule 10b-18 of the Exchange Act. The decision to consummate any repurchases (including any decision to adopt a 10b5-1 plan for this purpose) will be made at management's discretion at prices management considers to be attractive and in the best interests of the Company and its stockholders.

The stock repurchase commenced in May 2015 and the program was completed in March 2016.

During the nine months ended September 24, 2016, the Company repurchased 1,789,287 shares of common stock for \$12.8 million at an average price of \$7.16 per share. The Company has completed the \$40 million stock repurchase program and has repurchased a total of 5,329,817 shares of common stock from May 2015 to March 2016 at an average price of \$7.50 per share. The Company uses the cost method to account for common stock repurchases held in treasury. The price paid for the stock is charged to the treasury stock account shown separately within stockholders' equity as a contra-equity account.

10. Accumulated Other Comprehensive Income (Loss)

The table below summarizes the changes in accumulated other comprehensive income (loss) by component for the periods indicated (in thousands).

	Three Months Ended					
	September 24, 2016			September 26, 2015		
	Unrealized Gains and Losses on Available-for-Sale Marketable Securities	Foreign Currency Translation Adjustments	Total	Unrealized Gains and Losses on Available-for-Sale Marketable Securities	Foreign Currency Translation Adjustments	Total
Balance at beginning of period	\$ 12	\$ (142)	\$ (130)	\$ (22)	\$ 157	\$ 135
Other comprehensive income (loss)	(9)	(87)	(96)	30	(196)	(166)
Balance at end of period	\$ 3	\$ (229)	\$ (226)	\$ 8	\$ (39)	\$ (31)

	Nine Months Ended					
	September 24, 2016			September 26, 2015		
	Unrealized Gains and Losses on Available-for-Sale Marketable Securities	Foreign Currency Translation Adjustments	Total	Unrealized Gains and Losses on Available-for-Sale Marketable Securities	Foreign Currency Translation Adjustments	Total
Balance at beginning of period	\$ (94)	\$ (101)	\$ (195)	\$ (58)	\$ 138	\$ 80
Other comprehensive income (loss)	97	(128)	(31)	66	(177)	(111)
Balance at end of period	\$ 3	\$ (229)	\$ (226)	\$ 8	\$ (39)	\$ (31)

Realized gains and losses on sales of available-for-sale marketable securities, if any, are reclassified from accumulated other comprehensive income (loss) to "Other income (expense)" in the accompanying Condensed Consolidated Statements of Comprehensive Income (Loss).

11. Credit Facility

The Company had a revolving credit facility ("Prior Credit Facility") of \$30.0 million with Silicon Valley Bank based upon a percentage of eligible accounts receivable, which matured on June 30, 2013. After the Prior Credit Facility matured on June 30, 2013, the Company cash collateralized any outstanding letters of credit with Silicon Valley Bank. During the first quarter of 2015, Silicon Valley Bank subsequently released the \$0.3 million cash restricted for collateralizing the outstanding letters of credit reported as "restricted cash" in the Company's Consolidated Balance Sheet as of December 31, 2014.

The Company entered into a credit agreement with Bank of America, N.A. on July 29, 2013 (as amended on December 23, 2015, the "Credit Agreement"). The Credit Agreement is structured such that other financial institutions can at a later time become party to the Credit Agreement through an amendment via a syndication process (collectively, together with Bank of America, N.A., the "Lenders"). The Credit Agreement provides for a revolving facility in the aggregate principal amount of up to \$50.0 million, with any borrowings limited to a maximum consolidated leverage ratio of consolidated funded indebtedness to consolidated EBITDA (as defined in the Credit Agreement). In addition, the Credit Agreement includes a \$20.0 million sublimit for the issuance of letters of credit and a \$10.0 million sublimit for a swingline facility. Subject to customary conditions, up to \$25.0 million of the revolving facility may be converted to a term loan facility at any time prior to the maturity of the revolving facility. The revolving facility matures on September 30, 2018. The credit facility is secured by substantially all of the assets of the Company, including its intellectual property. Proceeds of the credit facility may be used for general corporate purposes and permitted acquisitions.

Loans under the credit facility bear interest at an annual rate equal to the base rate plus 0.75% to 1.25% or LIBOR plus 2.00% to 2.50% based on a consolidated leverage ratio of consolidated funded indebtedness to consolidated EBITDA (as defined in the Credit Agreement). Interest on the revolving facility is due quarterly, and any outstanding interest and principal is due on the maturity date of the revolving facility. The Company is required to repay principal on a term loan in twenty equal quarterly payments from the date the Company enters into a term loan, and all outstanding principal and accrued interest is due on the revolving facility maturity date. Swingline loans must be repaid on the earlier of (i) ten business days after a loan is made and (ii) the revolving facility maturity date. The Company is also required to pay commitment fees of 0.25% per year on any unused portions of this facility.

The credit facility includes affirmative and negative covenants applicable to the Company that are typical for credit facilities of this type. Furthermore, the Credit Agreement requires us to maintain certain financial covenants, including a maximum consolidated leverage ratio, and a minimum consolidated liquidity ratio of cash, cash equivalents and accounts receivable to consolidated funded indebtedness. As of September 24, 2016, the Company was in compliance with these requirements. The credit facility also includes customary events of default, the occurrence and continuation of which would provide the Lenders with the right to demand immediate repayment of any principal and unpaid interest under the credit facility, and to exercise remedies against us and the collateral securing the loans under the credit facility.

As of September 24, 2016, no revolving loans were drawn under the Credit Agreement, as amended.

The Company incurred debt issuance costs that were directly attributable to the original issuance and amendment of this credit facility of \$0.3 million in 2013 and \$0.1 million in 2015, respectively. These costs are amortized over the extended term of the credit facility. As of September 24, 2016, the unamortized balance of debt issuance costs were \$145.1 thousand, of which \$72.6 thousand were included within "Prepaid expenses and other current assets" and \$72.6 thousand were included within "Other assets" in the Company's Condensed Consolidated Balance Sheets.

12. Income Taxes

The following table presents the provision for income taxes from continuing operations and the effective tax rates for the periods indicated (in thousands, except percentages):

	Three Months Ended		Nine Months Ended	
	September 24, 2016	September 26, 2015	September 24, 2016	September 26, 2015
Provision for income taxes	\$ 209	\$ 185	\$ 454	\$ 378
Effective tax rate	24.7%	16.7%	(2.9)%	(2.3)%

The income tax provision for the three and nine months ended September 24, 2016 and September 26, 2015 consisted primarily of foreign income taxes. The effective tax rate for the three and nine months ended September 24, 2016 and September 26, 2015 was determined using an estimated annual effective tax rate adjusted for discrete items, if any, that occurred during the respective periods. The Company's effective tax rate for the three and nine months ended September 24, 2016 and September 26, 2015 is impacted by the change in foreign income tax expense.

Deferred tax assets are recognized if realization of such assets is more likely than not. The Company has established and continues to maintain a full valuation allowance against its net deferred tax assets, with the exception of certain foreign deferred tax assets, as the Company does not believe that realization of those assets is more likely than not.

Our effective tax rate may be subject to fluctuation during the year as new information is obtained, which may affect the assumptions used to estimate the annual effective tax rate, including factors such as the mix of forecasted pre-tax earnings in the various jurisdictions in which we operate, valuation allowances against deferred tax assets, the recognition or de-recognition of tax benefits related to uncertain tax positions, and changes in or the interpretation of tax laws in jurisdictions where we conduct business.

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

This report includes "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Securities and Exchange Act of 1934, as amended. All statements other than statements of historical facts are "forward-looking statements" for purposes of these provisions, including any projections of earnings, revenues or other financial items, any statement of or concerning the following: the plans and objectives of management for future operations, proposed new products or licensing, product development, anticipated customer demand or capital expenditures, future economic and/or market conditions or performance, and assumptions underlying any of the above. In some cases, forward-looking statements can be identified by the use of terminology such as "may," "will," "expects," "believes," "intends," "plans," "anticipates," "estimates," "potential," or "continue" or the negative thereof or other comparable terminology. Although we believe that the expectations reflected in the forward-looking statements contained herein are reasonable, there can be no assurance that such expectations or any of the forward-looking statements will prove to be correct, and actual results could differ materially from those projected or assumed in the forward-looking statements. Our future financial condition and results of operations, as well as any forward-looking statements, are subject to inherent risks and uncertainties, including those identified in the Risk Factors discussed in Part II, Item 1A, in the discussion below, as well as in other sections of this report and in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015. All forward-looking statements and reasons why results may differ included in this report are made as of the date hereof, and we assume no obligation to update these forward-looking statements or reasons why actual results might differ.

Overview

We are a leading global provider of broadband communications access systems and software for fiber- and copper-based network architectures that enable communications service providers to connect to their residential and business subscribers. We enable CSPs to provide a wide range of revenue-generating services, from basic voice and data to advanced broadband services, over legacy and next-generation access networks. We focus solely on CSP access networks, the portion of the network that governs available bandwidth and determines the range and quality of services that can be offered to subscribers. We develop and sell carrier-class hardware and software products, which we refer to as the Unified Access portfolio, that are designed to enhance and transform CSP access networks to meet the changing demands of subscribers rapidly and cost-effectively.

We market our access systems and related software to CSPs globally through our direct sales force as well as a growing number of resellers. At the end of the third quarter of 2016, over 22 million ports of our Unified Access portfolio have been deployed at a growing number of CSPs worldwide, whose networks serve over 100 million subscriber lines in total. Our customers include many of the world's largest communications providers. In addition, we have over 1,200 customers who have deployed gigabit passive optical network, Active Ethernet and point-to-point Ethernet fiber access networks.

Our revenue was \$121.2 million and \$327.0 million for the three and nine months ended September 24, 2016, respectively, compared to \$112.3 million and \$302.5 million for the three and nine months ended September 26, 2015. Our revenue levels and continued revenue growth will depend on our ability to continue to sell our access systems and software to existing customers and to attract new customers, including in particular, large CSPs and customers in international markets. Since 2015, we have seen increased market demand for turnkey solutions that include professional services together with equipment and materials, including a project we commenced in 2015 with one of our existing customers that has continued to ramp up during the third quarter of 2016 and other smaller professional services projects. Revenue for such projects are generally recognized only when project requirements are completed, typically over longer periods depending on the nature and scope of the project. Similarly, some of the costs incurred by us in the delivery of professional services, including labor and related costs, are deferred and recognized to cost of revenue when the associated revenue is recognized.

Revenue fluctuations result from many factors, including but not limited to: increases or decreases in customer orders for our products and services, customer purchase agreements with provisions that delay revenue recognition, varying budget cycles and seasonal buying patterns of our customers. More specifically, our customers tend to spend less in the first fiscal quarter as they are finalizing their annual budgets and in certain regions customers are also challenged by winter weather conditions that inhibit fiber deployment in the outside plant. Our revenue levels are also dependent upon our customers' timing of purchases and capital expenditure plans, including expenditure plans for turnkey solutions projects, which are generally non-recurring in nature. As of September 24, 2016, our deferred revenue of \$36.1 million primarily included extended warranty services contracts that are recognized ratably over the period during which the services are to be performed, as well as those relating to turnkey projects that are recognized only upon acceptance by customers. The timing of recognition of deferred revenue may cause significant fluctuations in our revenue and operating results from period to period. For the three and nine months ended September 24, 2016, we had a net income of \$0.6 million and a net loss of \$15.9 million, respectively, compared to a net income of \$0.9 million and a net loss of \$16.8 million for the three and nine months ended September 26, 2015, respectively. Since our inception we have incurred significant losses and, as of September 24, 2016, we had an accumulated deficit of \$572.8 million.

Cost of revenue is strongly correlated to revenue and tends to fluctuate from all of the above factors that could impact revenue. Other factors that impact cost of revenue include: changes in the mix of products delivered, increases in services as a mix of total revenue as well as timing of completion of professional services project requirements, customer location, changes in product warranty cost, changes in the cost of our inventory and inventory write-downs. Cost of revenue includes fixed expenses related to our internal operations, which could impact our cost of revenue as a percentage of revenue if there are large fluctuations in revenue.

Our gross profit and gross margin have been, and will likely continue to be, impacted by several factors, including new product introduction or upgrades to existing products, changes in customer mix, changes in the mix of products demanded and sold (and any related write-downs of existing inventory), increases in mix of revenue from channel sales rather than direct sales, shipment volumes and any related volume discounts, changes in our product costs, changes in product warranty costs, changes in pricing and the extent of customer rebates and incentive programs. Our gross margin could increase due to favorable changes in these factors, for example, increases in sales of our advanced E-Series access systems, new introductions of our GigaFamily products and reductions in the impact of rebate or similar programs.

Our gross margin could decrease due to unfavorable changes in factors such as increased product costs, pricing decreases due to competitive pressure and unfavorable customer or product mix. Changes in these factors could have a material impact on our future average selling prices and unit costs. Services revenues typically have higher associated costs and lower margins and we expect that an increase in services as a mix of total revenue would result in lower gross margins. In addition, we expect costs associated with our turnkey professional services projects to be relatively higher as we ramp up our professional services business to meet demand for turnkey professional services solutions. Gross margins for turnkey professional services projects may also be impacted due to higher than anticipated costs and project delays. Moreover, to the extent that deferred cost of revenue particularly relating to the professional services portion of turnkey projects is determined to be unrecoverable, we adjust deferred cost of revenue with a charge to cost of revenue in the current period. The timing of our recognition of deferred revenue and related deferred costs could also have a material impact on our gross profit and gross margin results. The timing of recognition and the relative size of these arrangements could cause large fluctuations in our gross profit from period to period. Additionally, our gross margin could be impacted by inventory write-downs.

Our operating expenses have fluctuated based on the following factors: changes in headcount and personnel costs, timing of variable compensation expenses due to fluctuations in order volumes, timing of research and development expenses including prototype builds and outsourced development projects, fluctuations in stock-based compensation expenses due to fluctuations in equity grants or other factors affecting vesting, changes in acquisition-related expenses, and timing of legal fees and other expenses incurred in connection with the Occam litigation. In particular, in September 2016, we accrued litigation settlement gain of \$4.5 million as a reduction in operating expense for recoveries made in settling Occam litigation. We have incurred increased compensation costs due to the additional headcount. We anticipate that our operating expenses will increase in absolute dollar amounts but will decline as a percentage of revenue over time.

As a result of the fluctuations described above and a number of other factors, many of which are outside our control, our quarterly operating results fluctuate from period to period. Comparing our operating results on a period-to-period basis may not be meaningful, and you should not rely on our past results as an indication of our future performance.

Critical Accounting Policies and Estimates

Our financial statements are prepared in accordance with U.S. GAAP. These accounting principles require us to make certain estimates and judgments that can affect the reported amounts of assets and liabilities as of the date of the financial statements, as well as the reported amounts of revenue and expenses during the periods presented. Management bases its estimates, assumptions and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances. To the extent there are material differences between these estimates and actual results, our financial statements will be affected. Our management evaluates its estimates, assumptions and judgments on an ongoing basis.

Our critical accounting policies and estimates are described under “Critical Accounting Policies and Estimates” in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in our Annual Report on Form 10-K for the year ended December 31, 2015. During the nine months ended September 24, 2016, there have been no significant changes in our critical accounting policies and estimates.

Recent Accounting Pronouncements

See Note 2 to the unaudited condensed consolidated financial statements set forth in Part I, Item 1 of this report for a full description of recent accounting pronouncements, including the expected dates of adoption and estimated effects on results of operations and financial condition, which is incorporated herein by reference.

Results of Operations

Comparison of the Three and Nine Months Ended September 24, 2016 and September 26, 2015

Revenue

The following table sets forth our revenue (in thousands, except percentages):

	Three Months Ended				Nine Months Ended			
	September 24, 2016	September 26, 2015	Variance in Dollars	Variance in Percent	September 24, 2016	September 26, 2015	Variance in Dollars	Variance in Percent
Revenue	\$ 121,187	\$ 112,297	\$ 8,890	8%	\$ 326,987	\$ 302,464	\$ 24,523	8%

Our revenue increased to \$121.2 million for the three months ended September 24, 2016, from \$112.3 million for the three months ended September 26, 2015. Our revenue increased to \$327.0 million for the nine months ended September 24, 2016, from \$302.5 million for the nine months ended September 26, 2015. We experienced stronger bookings and shipments in certain territories during those 2016 fiscal periods, compared to the same periods in fiscal 2015 mainly due to increased customer demand and partly attributed to the mix of product and service offerings led by the ramp of revenue associated with our turnkey projects. This was partially offset by lower revenue derived from contracts funded by the Broadband Stimulus Programs under the American Recovery and Reinvestment Act of 2009 as we completed and closed our existing contracts. The extended date for completion of projects funded under the Broadband Initiatives Program, which is administered by the RUS, ended on July 31, 2015.

Our revenue is principally derived in the United States. During the three and nine months ended September 24, 2016, revenue generated in the United States was \$111.8 million and \$298.8 million, respectively, and represented approximately 92% and 91% of our total revenue, compared to \$97.9 million and \$270.4 million, respectively, or approximately 87% and 89% of our total revenue for the same periods in 2015. International revenue was \$9.4 million and \$28.1 million or approximately 8% and 9% of our total revenue for the three and nine months ended September 24, 2016, respectively, compared to \$14.4 million and \$32.0 million, or approximately 13% and 11% of our total revenue for the same periods in 2015.

We had two customers representing more than 10% of revenue during the three months ended September 24, 2016. See Note 2 to the unaudited condensed consolidated financial statements set forth in Part I, Item 1 of this report for more details on concentration of revenue for the periods presented.

Cost of Revenue and Gross Profit

The following table sets forth our cost of revenue (in thousands, except percentages):

	Three Months Ended				Nine Months Ended			
	September 24, 2016	September 26, 2015	Variance in Dollars	Variance in Percent	September 24, 2016	September 26, 2015	Variance in Dollars	Variance in Percent
Cost of revenue:								
Products and services	\$ 66,830	\$ 57,096	\$ 9,734	17 %	\$ 174,665	\$ 152,308	\$ 22,357	15 %
Amortization of intangible assets	813	2,088	(1,275)	(61)%	3,290	6,264	(2,974)	(47)%
Total cost of revenue	\$ 67,643	\$ 59,184	\$ 8,459	14 %	\$ 177,955	\$ 158,572	\$ 19,383	12 %
Gross profit	\$ 53,544	\$ 53,113	\$ 431	1 %	\$ 149,032	\$ 143,892	\$ 5,140	4 %
Gross margin	44%	47%			46%	48%		

The increase in cost of product and services revenue by \$9.7 million and \$22.4 million during the three and nine months ended September 24, 2016 compared with the corresponding period in fiscal 2015 was primarily attributed to an increase in product cost of revenue of \$4.1 million and \$12.7 million for those respective periods mainly due to higher shipments. Our professional services cost of revenue also increased by \$4.6 million and \$9.2 million for those respective periods as we continue to ramp up our professional services business to meet demand for turnkey professional services solutions. Additionally, our warranty costs also increased by approximately \$2.4 million and \$3.4 million for those respective periods primarily driven by certain warranty charges for two specific product families. This was partially offset by a decrease in inventory write-downs attributed to slow moving inventories by approximately \$2.0 million and \$3.2 million for those respective periods.

Amortization of intangible assets decreased by \$1.3 million and \$3.0 million during the three and nine months ended September 24, 2016 compared with the corresponding periods in fiscal 2015 as one intangible asset reached completion of its amortization period before the end of the first quarter of fiscal 2016. Hence, we have a shorter amortization period for that particular intangible asset during those fiscal 2016 periods as compared with full amortization during the same periods in fiscal 2015.

Including amortization of intangible assets, gross margin decreased to 44% and 46% during the three and nine months ended September 24, 2016, from 47% and 48% during the corresponding periods in fiscal 2015. The decrease in gross margin during the three and nine months ended September 24, 2016 was primarily attributed to lower margins in services revenue. Services revenue typically have higher associated costs and lower margins. The decrease in gross margin was partially offset by the impact of lower amortization of intangible assets during the three and nine months ended September 24, 2016 compared with the corresponding periods in fiscal 2015.

Operating Expenses

Research and Development Expenses

The following table sets forth our research and development expenses (in thousands, except percentages):

	Three Months Ended				Nine Months Ended			
	September 24, 2016	September 26, 2015	Variance in Dollars	Variance in Percent	September 24, 2016	September 26, 2015	Variance in Dollars	Variance in Percent
Research and development	\$ 28,119	\$ 22,120	\$ 5,999	27%	\$ 75,925	\$ 66,885	\$ 9,040	14%
Percent of total revenue	23%	20%			23%	22%		

The increase in research and development expenses by \$6.0 million and \$9.0 million during the three and nine months ended September 24, 2016 compared with the corresponding periods in fiscal 2015 was primarily due to an increase in compensation and employee benefits of \$2.3 million and \$3.9 million, respectively. We increased our research and development efforts to support our growing product portfolio, strategic investment in new solutions, including next generation solutions and new customer segments, and international market expansion, hence, we increased our research and development workforce by hiring new full time employees which led to higher compensation cost. Professional services expenses mainly relating to outside development services also increased by \$2.1 million and \$3.2 million during the three and nine months ended September 24, 2016, respectively, compared with the corresponding periods in fiscal 2015

primarily due to relatively larger scale consulting projects. Expenditures relating to prototype and expendable equipment used for research and development activities also increased by approximately \$0.8 million and \$2.0 million for those respective periods. Additionally, stock-based compensation expense related to research and development employees also increased by approximately \$0.6 million during the three months ended September 24, 2016 compared with the corresponding period in fiscal 2015 primarily due to performance-based executive equity awards granted in 2016. During the nine months ended September 24, 2016, stock-based compensation expense related to research and development employees was relatively flat as the increase attributed to performance-based executive equity awards granted in 2016 was substantially offset by the impact of equity awards that completed vesting in 2015.

We are continuing our strategic investments in our Unified Access portfolio. We intend to continue to invest in research and development to support our systems and software platforms in anticipation of expected growth opportunities.

Sales and Marketing Expenses

The following table sets forth our sales and marketing expenses (in thousands, except percentages):

	Three Months Ended				Nine Months Ended			
	September 24, 2016	September 26, 2015	Variance in Dollars	Variance in Percent	September 24, 2016	September 26, 2015	Variance in Dollars	Variance in Percent
Sales and marketing	\$ 20,575	\$ 18,424	\$ 2,151	12%	\$ 58,850	\$ 57,398	\$ 1,452	3%
Percent of total revenue	17%	16%			18%	19%		

The increase in sales and marketing expenses by \$2.2 million and \$1.5 million during the three and nine months ended September 24, 2016, respectively, compared with the corresponding periods in fiscal 2015 was partially due to \$0.2 million and \$1.1 million increase in commissions for those respective periods attributed to higher shipments. Expenses relating to marketing events, trade shows and product giveaways also increased by \$0.3 million and \$0.6 million during the three and nine months ended September 24, 2016 compared with the corresponding periods in fiscal 2015. Additionally, stock-based compensation expense related to sales and marketing employees also increased by approximately \$1.0 million during the three months ended September 24, 2016 compared with the corresponding period in fiscal 2015 primarily due to performance-based executive equity awards granted in 2016. During the nine months ended September 24, 2016, stock-based compensation expense related to sales and marketing employees decreased by \$0.4 million as the increase attributed to performance-based executive equity awards granted in 2016 was more than offset by the impact of equity awards that completed vesting in 2015.

We expect to continue our investments in sales and marketing in order to extend our market reach and grow our business in support of our key strategic initiatives.

General and Administrative Expenses

The following table sets forth our general and administrative expenses (in thousands, except percentages):

	Three Months Ended				Nine Months Ended			
	September 24, 2016	September 26, 2015	Variance in Dollars	Variance in Percent	September 24, 2016	September 26, 2015	Variance in Dollars	Variance in Percent
General and administrative	\$ 8,615	\$ 9,140	\$ (525)	(6)%	\$ 32,940	\$ 28,728	\$ 4,212	15%
Percent of total revenue	7%	8%			10%	9%		

General and administrative expenses decreased by \$0.5 million during the three months ended September 24, 2016 and increased by \$4.2 million during the nine months ended September 24, 2016 compared with the corresponding periods in fiscal 2015, primarily due to professional services which decreased by \$0.9 million and increased by \$2.7 million for those respective periods. This was mainly attributed to a \$0.7 million decrease and \$3.6 million increase in legal fees and expenses during those respective periods related to defense costs in the Occam litigation that were not reimbursable under our Directors & Officers liability insurance or were otherwise in excess of the insurance coverage, partially offset by lower consulting and contracted labor services which decreased by \$0.7 million during the nine months ended September 24, 2016. Additionally, our compensation and employee benefits also increased by \$0.4 million and \$1.6 million during the three and nine months ended September 24, 2016 compared with the same periods in fiscal 2015 mainly relating to increases in headcount.

Amortization of Intangible Assets

The following table sets forth our amortization of intangible assets included in operating expenses (in thousands, except percentages):

	Three Months Ended				Nine Months Ended			
	September 24, 2016	September 26, 2015	Variance in Dollars	Variance in Percent	September 24, 2016	September 26, 2015	Variance in Dollars	Variance in Percent
Amortization of intangible assets	\$ —	\$ 2,552	\$ (2,552)	(100)%	\$ 1,701	\$ 7,656	\$ (5,955)	(78)%
Percent of total revenue	—%	2%			1%	3%		

The decrease in amortization of intangible assets by \$2.6 million and \$6.0 million during the three and nine months ended September 24, 2016 compared with the corresponding periods in fiscal 2015 was due to an intangible asset that had reached completion of its amortization period before the end of the first quarter of fiscal 2016. Hence, we have a shorter amortization period for that particular intangible asset in fiscal 2016 periods as compared with full amortization during the same periods in fiscal 2015.

Litigation Settlement Gain

The following table sets forth our litigation settlement gain (in thousands, except percentages):

	Three Months Ended				Nine Months Ended			
	September 24, 2016	September 26, 2015	Variance in Dollars	Variance in Percent	September 24, 2016	September 26, 2015	Variance in Dollars	Variance in Percent
Litigation settlement gain	\$ (4,500)	\$ —	\$ (4,500)	100%	\$ (4,500)	\$ —	\$ (4,500)	100%
Percent of total revenue	(4)%	—%			(1)%	—%		

During the three and nine months ended September 24, 2016, we recognized litigation settlement gain of \$4.5 million as a reduction to operating expense. This litigation settlement gain consisted of a litigation settlement accrual of \$4.5 million in partial recovery of out-of-pocket costs incurred by the Company related to Occam litigation which is disclosed and described in further detail in Note 7 to the unaudited condensed consolidated financial statements.

Provision for Income Taxes

The following table sets forth our provision for income taxes (in thousands, except percentages):

	Three Months Ended				Nine Months Ended			
	September 24, 2016	September 26, 2015	Variance in Dollars	Variance in Percent	September 24, 2016	September 26, 2015	Variance in Dollars	Variance in Percent
Provision for income taxes	\$ 209	\$ 185	\$ 24	13%	\$ 454	\$ 378	\$ 76	20%
Effective tax rate	24.7%	16.7%			(2.9)%	(2.3)%		

The income tax provision for the three and nine months ended September 24, 2016 and September 26, 2015 consisted primarily of foreign income taxes. The effective tax rate for the three and nine months ended September 24, 2016 and September 26, 2015 was determined using an estimated annual effective tax rate adjusted for discrete items, if any, that occurred during the respective periods. The Company's effective tax rate for the three and nine months ended September 24, 2016 and September 26, 2015 is impacted by the change in foreign income tax expense.

Deferred tax assets are recognized if realization of such assets is more likely than not. The Company has established and continues to maintain a full valuation allowance against its net deferred tax assets, with the exception of certain foreign deferred tax assets, as the Company does not believe that realization of those assets is more likely than not.

Our effective tax rate may be subject to fluctuation during the year as new information is obtained, which may affect the assumptions used to estimate the annual effective tax rate, including factors such as the mix of forecasted pre-tax earnings in the various jurisdictions in which we operate, valuation allowances against deferred tax assets, the recognition or de-recognition of tax benefits related to uncertain tax positions, and changes in or the interpretation of tax laws in jurisdictions where we conduct business.

Liquidity and Capital Resources

We have funded our operations and investing activities primarily through cash generated from operations. At September 24, 2016, we had cash, cash equivalents and marketable securities of \$61.3 million, which consisted of deposits held at banks, money market mutual funds held at major financial institutions and highly liquid marketable securities such as corporate debt instruments and U.S. government agency securities. This includes \$5.7 million of cash held by our foreign subsidiaries. Our current intent is to permanently reinvest our earnings from foreign operations outside the U.S., and our current plans do not demonstrate a need to repatriate the earnings from foreign operations to fund our U.S. operations.

Operating Activities

Net cash provided by operations of \$5.3 million in the nine months ended September 24, 2016 consisted of a net loss of \$15.9 million and \$0.8 million of cash flow decreases reflected in the net change in assets and liabilities, more than offset by \$22.0 million of non-cash charges. Cash flow decreases resulting from the net change in assets and liabilities primarily consisted of a \$10.1 million increase in accounts receivable mainly due to higher revenue in 2016, a \$6.1 million increase in prepaid expenses and other assets mainly due to litigation settlement gain accrual, a \$5.4 million net decrease in deferred revenue and deferred cost of revenue as a result of revenue and cost recognition for previous shipments related to certain turnkey projects and RUS-funded contracts, and a \$0.4 million decrease in accounts payable primarily due to the timing of inventory receipts and payments to our manufacturers. This was partially offset by a \$13.7 million increase in accrued expenses and other liabilities primarily due to the timing of our payroll, sales commissions and other expenses accruals and payout, and a \$7.5 million decrease in inventories primarily due to higher inventory turnover. Non-cash charges primarily consisted of

\$10.4 million of stock-based compensation, \$5.0 million of amortization of intangible assets, \$6.3 million of depreciation and amortization and \$0.3 million of amortization of premiums related to available-for-sale securities.

Net cash used in operations of \$1.2 million in the nine months ended September 26, 2015 consisted of a net loss of \$16.8 million and \$17.2 million of cash flow decreases reflected in the net change in assets and liabilities, partially offset by \$32.8 million of non-cash charges. Cash flow decreases resulting from the net change in assets and liabilities primarily consisted of a \$17.4 million increase in accounts receivable, a \$6.8 million decrease in accounts payable due to payments to our manufacturers, and a \$1.3 million decrease in accrued expenses and other liabilities primarily due to the timing of our sales commissions payout. This was partially offset by a \$3.0 million decrease in inventories primarily due to higher inventory turnover, a \$4.2 million decrease in prepaid expenses and other assets, a release of \$0.3 million restricted cash previously used to collateralize outstanding letters of credit with Silicon Valley Bank, and a \$0.8 million net increase in deferred revenue and deferred cost of revenue as a result of certain RUS-funded and BBS contracts recognized during the period. Non-cash charges primarily consisted of \$13.9 million of amortization of intangible assets, \$10.6 million of stock-based compensation, \$7.6 million of depreciation and amortization and \$0.7 million of amortization of premiums related to available-for-sale securities.

Investing Activities

Net cash provided by investing activities of \$14.8 million in the nine months ended September 24, 2016 consisted of \$20.2 million in maturities of marketable securities, partially offset by \$5.4 million in capital expenditures for purchases of test equipment, computer equipment and software.

Our cash used in investing activities of \$1.4 million in the nine months ended September 26, 2015 consisted of \$5.9 million in capital expenditures for purchases of test equipment, computer equipment and software, partially offset by \$4.5 million in net maturities of marketable securities, which provide higher yields than money market funds.

Financing Activities

Net cash used in financing activities of \$11.7 million in the nine months ended September 24, 2016 primarily consisted of \$12.8 million in repurchases of common stock and \$1.8 million in payment of payroll taxes for the vesting of awards under equity incentive plans, offset by \$2.9 million of proceeds from the issuance of common stock under the employee stock purchase plan ("ESPP") and \$14.0 thousand in proceeds from the exercises of stock options.

Net cash used in financing activities of \$9.7 million in the nine months ended September 26, 2015 consisted of \$11.1 million repurchases of common stock and \$2.1 million in payment of payroll taxes for the vesting of awards under equity incentive plans, offset by \$2.9 million of proceeds from the issuance of common stock under the ESPP and \$0.6 million in proceeds from the exercises of stock options.

Stock Repurchase Program

On April 26, 2015, our Board of Directors approved a program to repurchase up to \$40 million of our common stock from time to time.

Stock may be purchased under this program in open market or private transactions, through block trades, and/or pursuant to any trading plan adopted in accordance with Rule 10b5-1 of the Exchange Act. Any open market purchases will be made in accordance with the limitations set out in Rule 10b-18 of the Exchange Act. The decision to consummate any repurchases (including any decision to adopt a 10b5-1 plan for this purpose) will be made at management's discretion at prices management considers to be attractive and in the best interests of the company and its stockholders.

Our stock repurchase commenced in May 2015 and the program was completed in March 2016.

During the nine months ended September 24, 2016, we repurchased 1,789,287 shares of common stock for \$12.8 million at an average price of \$7.16 per share. We have completed the \$40 million stock repurchase program and have repurchased a total of 5,329,817 shares of common stock from May 2015 to March 2016 at an average price of \$7.50 per share.

Working Capital and Capital Expenditure Needs

We currently have no material cash commitments, except for normal recurring trade payables, expense accruals, operating leases and non-cancelable firm purchase commitments. We expect our working capital needs to increase related to turnkey arrangements where we may purchase some equipment, components and materials and pay our subcontractors at the outset of a project, but we generally do not expect payment from our customers until completion and acceptance of the associated services, which may be one or more quarters later. In addition, we believe that our outsourced approach to manufacturing provides us significant flexibility in both managing inventory levels and financing our inventory. In the event that our revenue plan does not meet our expectations, we may eliminate or curtail expenditures to mitigate the impact on our working capital.

We have a credit facility with an aggregate principal amount of up to \$50.0 million. The credit facility matures in September 2018, as amended. Proceeds of the credit facility may be used for general corporate purposes and permitted acquisitions. As of September 24, 2016, no revolving loans were drawn under this credit facility.

We believe based on our current operating plan, our existing cash, cash equivalents, marketable securities and amounts available under our credit facility will be sufficient to meet our anticipated cash needs for at least the next twelve months. Our future capital requirements will depend on many factors including our rate of revenue growth, the timing, extent and size of turnkey professional services projects, the timing and extent of spending to support development efforts, the expansion of sales and marketing activities, the timing of introductions of new products and enhancements to existing products, the acquisition of new capabilities or technologies and the continued market acceptance of

our products. In the event that additional financing is required from outside sources, we may not be able to raise it on terms acceptable to us or at all. If we are unable to raise additional capital when desired, our business, operating results and financial condition would be harmed.

Contractual Obligations and Commitments

The Company's principal commitments consist of obligations under operating leases for office space and non-cancelable outstanding purchase obligations. These commitments are disclosed in our Annual Report on Form 10-K for the year ended December 31, 2015, and have not changed materially during the nine months ended September 24, 2016.

Off-Balance Sheet Arrangements

As of September 24, 2016 and December 31, 2015, we did not have any off-balance sheet arrangements.

ITEM 3. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk

The primary objectives of our investment activity are to preserve principal, provide liquidity and maximize income without significantly increasing risk. By policy, we do not enter into investments for trading or speculative purposes. At September 24, 2016, we had cash, cash equivalents and marketable securities of \$61.3 million, which was held primarily in cash, money market funds and highly liquid marketable securities such as corporate debt instruments and U.S. government agency securities. Due to the nature of these money market funds and highly liquid marketable securities, we believe that we do not have any material exposure to changes in the fair value of our cash equivalents and marketable securities as a result of changes in interest rates.

Our exposure to interest rate risk also relates to the amount of interest we must pay on our borrowings, if any, under our credit facility, which allows us to borrow up to a maximum amount of \$50.0 million. Borrowings under this credit facility will accrue interest at a variable rate based upon the applicable base rate or LIBOR plus a margin depending on the Company's consolidated leverage ratio of consolidated funded indebtedness to consolidated EBITDA (as defined in the Credit Agreement). As of September 24, 2016, we had no borrowings under the credit facility.

Foreign Currency Exchange Risk

Our primary foreign currency exposures are described below.

Economic Exposure

The direct effect of foreign currency fluctuations on our sales and expenses have not been material because they are primarily denominated in U.S. dollars. However, we are indirectly exposed to changes in foreign currency exchange rates to the extent of our use of foreign contract manufacturers whom we pay in U.S. dollars. Changes in the local currency rates of these vendors in relation to the U.S. dollar could cause an increase in the price of products that we purchase. Additionally, if the U.S. dollar strengthens relative to other currencies, such strengthening could have an indirect effect on our sales to the extent it raises the cost of our products to non-U.S. customers and thereby reduces demand. A weaker U.S. dollar could have the opposite effect. The precise indirect effect of currency fluctuations is difficult to measure or predict because our sales are influenced by many factors in addition to the impact of such currency fluctuations.

Translation Exposure

Our sales contracts are primarily denominated in U.S. dollars and, therefore, the majority of our revenues are not subject to foreign currency risk. We are directly exposed to changes in foreign exchange rates to the extent such changes affect our expenses related to our foreign assets and liabilities with our subsidiary in Brazil, China and the United Kingdom, whose functional currencies are the Brazilian Real ("BRL"), Chinese Renminbi ("RMB") and British Pounds Sterling ("GBP"), respectively.

Our operating expenses are incurred primarily in the United States, with a small portion of expenses incurred in Brazil associated with sales and marketing expenses, China associated with our research and development operations maintained there, and in the United Kingdom where our international sales and services office is located. Our international operating expenses are generally denominated in the functional currencies of our subsidiaries in which the operations are located. For the nine months ended September 24, 2016, approximately 88% of our operating expenses were U.S.-dollar denominated, 7% were denominated in RMB, 4% were denominated in GBP and 1% were in BRL. If the U.S. dollar had appreciated or depreciated by 10%, relative to RMB, GBP and BRL, our operating expenses for the first nine months of 2016 would have decreased or increased by approximately \$2.0 million, or approximately 1%. We do not currently enter into forward exchange contracts to hedge exposure denominated in foreign currencies or any derivative financial instruments. In the future, we may consider entering into hedging transactions to help mitigate our foreign currency exchange risk.

Foreign exchange rate fluctuations may also adversely impact our financial position as the assets and liabilities of our foreign operations are translated into U.S. dollars in preparing our Condensed Consolidated Balance Sheets. The effect of foreign exchange rate fluctuations on our consolidated financial position for the nine months ended September 24, 2016 was a net translation loss of approximately \$0.1 million. This loss is recognized as an adjustment to stockholders' equity through accumulated other comprehensive loss.

Transaction Exposure

We have certain assets and liabilities, primarily receivables and accounts payable (including inter-company transactions) that are denominated in currencies other than the relevant entity's functional currency. In certain circumstances, changes in the functional currency value of these assets and liabilities create fluctuations in our reported consolidated financial position, cash flows and results of operations. Transaction gains and losses on these foreign currency denominated assets and liabilities are recognized each period within other income (expense), net in our Condensed Consolidated Statements of Comprehensive Income (Loss). During the nine months ended September 24, 2016, the net gain we recognized related to these foreign exchange assets and liabilities was approximately \$0.1 million.

ITEM 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Based on their evaluation as of September 24, 2016, our Chief Executive Officer and Chief Financial Officer, with the participation of our management, have concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) were effective at the reasonable assurance level.

Limitations on the Effectiveness of Controls

Our disclosure controls and procedures provide our Chief Executive Officer and Chief Financial Officer reasonable assurance that our disclosure controls and procedures will achieve their objectives. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate, to allow timely decisions regarding required disclosure. Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal control over financial reporting can or will prevent all human error. Our management recognizes that a control system, no matter how well designed and implemented, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Furthermore, the design of a control system must reflect the fact that there are internal resource constraints, and the benefit of controls must be weighed relative to their corresponding costs. Because of the limitations in all control systems, no evaluation of controls can provide complete assurance that all control issues and instances of error, if any, within our company are detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur due to human error or mistake. Additionally, controls, no matter how well designed, could be circumvented by the individual acts of specific persons within the organization. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated objectives under all potential future conditions.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the period covered by this report 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

For a description of our material pending legal proceedings, please refer to Note 7 “Commitments and Contingencies – Litigation” of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q, which is incorporated by reference.

ITEM 1A. Risk Factors

We have identified the following additional risks and uncertainties that may affect our business, financial condition and/or results of operations. The risks described below include any material changes to and supersede the description of the risk factors disclosed in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2015, as filed with the Securities and Exchange Commission on February 26, 2016. Investors should carefully consider the risks described below, together with the other information set forth in this Quarterly Report on Form 10-Q, before making any investment decision. The risks described below are not the only ones we face. Additional risks not currently known to us or that we currently believe are immaterial may also significantly impair our business operations. Our business could be harmed by any of these risks. The trading price of our common stock could decline due to any of these risks, and investors may lose all or part of their investment.

Risks Related to Our Business and Industry

Our markets are rapidly changing, which make it difficult to predict our future revenue and plan our expenses appropriately.

We compete in markets characterized by rapid technological change, changing needs of communications service providers, or CSPs, evolving industry standards and frequent introductions of new products and services. In addition, on an ongoing basis we expect to be required to reposition our product and service offerings and introduce new products and services as we encounter rapidly changing CSP requirements and increasing competitive pressures. We may not be successful in doing so in a timely and responsive manner, or at all. As a result, it is difficult to forecast our future revenues and plan our operating expenses appropriately, which makes it difficult to predict our future operating results.

We have a history of losses, and we may not be able to generate positive operating income and maintain positive cash flows in the future.

We have experienced net losses in each year of our existence. For the years ended December 31, 2015, 2014 and 2013, we incurred net losses of \$26.3 million, \$20.8 million, and \$17.3 million, respectively. For the first nine months of 2016, we incurred a net loss of \$15.9 million. As of September 24, 2016 and December 31, 2015, we had an accumulated deficit of \$572.8 million and \$556.9 million, respectively.

We expect to continue to incur significant expenses for research and development, sales and marketing, customer support and general and administrative functions as we expand our operations and target new customer segments, including larger CSPs and MSOs. Given our growth rate and the intense competitive pressures we face, we may be unable to control our operating costs.

We cannot guarantee that we will achieve profitability in the future. We will have to generate and sustain significant and consistent increased revenue, while continuing to control our expenses, in order to achieve and then maintain profitability. We may also incur significant losses in the future for a number of reasons, including the risks discussed in this “Risk Factors” section and other factors that we cannot anticipate. If we are unable to generate positive operating income and maintain positive cash flows from operations, our liquidity, results of operations and financial condition will be adversely affected.

Our quarterly and annual operating results may fluctuate significantly, which may make it difficult to predict our future performance and could cause the market price of our stock to decline.

A number of factors, many of which are outside of our control, may cause or contribute to significant fluctuations in our quarterly and annual operating results. These fluctuations may make financial planning and forecasting difficult. Comparing our operating results on a period-to-period basis may not be meaningful, and you should not rely on our past results as an indication of our future performance. If our revenue or operating results fall below the expectations of investors or securities analysts, or below any guidance we may provide to the market, the market price of our stock would likely decline. Moreover, we may experience delays in recognizing revenue under applicable revenue-recognition rules, particularly from government-funded contracts, such as those funded by U.S. Department of Agriculture’s RUS. The extent of these delays and their impact on our revenues can fluctuate considerably depending on the number and size of purchase orders under these contracts for a given time period. In addition, unanticipated decreases in our available liquidity due to fluctuating operating results could limit our growth and delay implementation of our expansion plans.

In addition to the other risk factors listed in this “Risk Factors” section, factors that have in the past and may continue to contribute to the variability of our operating results include:

- our ability to predict our revenue and plan our expenses appropriately;
- our ability to increase our sales to larger North American as well as international CSPs;
- the capital spending patterns of CSPs and any decrease or delay in capital spending by CSPs due to macro-economic conditions, regulatory implementation or uncertainties, or other reasons;

- the impact of government-sponsored programs on our customers;
- intense competition;
- our ability to develop new products or enhancements that support technological advances and meet changing CSP requirements;
- our ability to achieve market acceptance of our products and CSPs' willingness to deploy our new products;
- the concentration of our customer base;
- the length and unpredictability of our sales cycles and timing of orders;
- our focus on CSPs with limited revenue potential;
- our lack of long-term, committed-volume purchase contracts with our customers;
- our exposure to the credit risks of our customers;
- fluctuations in our gross margin;
- the interoperability of our products with CSP networks;
- our dependence on sole-, single- and limited-source suppliers;
- our ability to manage our relationships with our contract manufacturers and suppliers;
- our ability to forecast our manufacturing requirements and manage our inventory;
- our products' compliance with industry standards;
- our ability to expand our international operations;
- our ability to protect our intellectual property and the cost of doing so;
- the quality of our products, including any undetected hardware defects or bugs in our software;
- our ability to estimate future warranty obligations due to product failure rates;
- our ability to obtain necessary third-party technology licenses at reasonable costs;
- the regulatory and physical impacts of climate change and other natural events;
- the attraction and retention of qualified employees and key management personnel;
- our ability to build and sustain the proper information technology infrastructure; and
- our ability to maintain proper and effective internal controls.

Our business is dependent on the capital spending patterns of CSPs, and any decrease or delay in capital spending by CSPs in response to economic conditions, uncertainties associated with the implementation of regulatory reforms, or otherwise would reduce our revenues and harm our business.

Demand for our products depends on the magnitude and timing of capital spending by CSPs as they construct, expand, upgrade and maintain their access networks. Any future economic downturn may cause a slowdown in telecommunications industry spending, including in the specific geographies and markets in which we operate. In response to reduced consumer spending, challenging capital markets or declining liquidity trends, capital spending for network infrastructure projects of CSPs could be delayed or canceled. In addition, capital spending is cyclical in our industry, sporadic among individual CSPs and can change on short notice. As a result, we may not have visibility into changes in spending behavior until nearly the end of a given quarter.

CSP spending on network construction, maintenance, expansion and upgrades is also affected by reductions in their budgets, delays in their purchasing cycles, access to external capital (such as government grants and loan programs or the capital markets), and seasonality and delays in capital allocation decisions. For example, our CSP customers tend to spend less in the first fiscal quarter as they are still finalizing their annual budgets. Also, softness in demand across any of our customer markets, including due to macro-economic conditions beyond our control or uncertainties associated with the implementation of regulatory reforms, has in the past and could in the future lead to unexpected slowdown in capital expenditures by service providers. In some countries where we do business, such as Russia, the weakened economy has resulted in economic instability which has had negative effects, including a decrease in purchasing power due to currency devaluations as well as generally more cautious purchasing decisions.

Many factors affecting our results of operations are beyond our control, particularly in the case of large CSP orders and network infrastructure deployments involving multiple vendors and technologies where the achievement of certain thresholds for acceptance is subject to the readiness and performance of the CSP or other providers and changes in CSP requirements or installation plans. Further, CSPs may not pursue infrastructure upgrades that require our access systems and software. Infrastructure improvements may be delayed or prevented by a variety of factors including cost, regulatory obstacles (including uncertainties associated with the implementation of regulatory reforms), mergers, lack of consumer demand for advanced communications services and alternative approaches to service delivery. Reductions in capital expenditures by CSPs, particularly CSPs that are significant customers, may have a material negative impact on our revenues and results of operations and slow our rate of revenue growth. As a consequence, our results for a particular period may be difficult to predict, and our prior results are not necessarily indicative of results in future periods.

Government-sponsored programs could impact the timing and buying patterns of CSPs, which may cause fluctuations in our operating results.

Many of our U.S. customers are Independent Operating Companies ("IOCs"), which have revenues that are particularly dependent upon interstate and intrastate access charges and federal and state subsidies. The Federal Communications Commission ("FCC") and some states are considering changes to such payments and subsidies, and these changes could reduce IOC revenues. Furthermore, many IOCs use or expect to use government-supported loan programs or grants, such as RUS loans and grants, to finance capital spending. Changes to these programs could reduce the ability of IOCs to access capital and thus reduce our revenue opportunities.

Many of our customers were awarded grants or loans under government stimulus programs such as the Broadband Stimulus ("BBS") programs under the American Recovery and Reinvestment Act of 2009 ("ARRA") and have purchased and will continue to purchase products from us or other suppliers while such programs and funding are available. However, customers may substantially curtail future purchases of products as ARRA funding winds down or because all purchases have been completed. For example, the Broadband Initiatives Program administered by RUS ended on July 31, 2015, the date by which funded projects were to be completed.

Under the terms of a RUS equipment contract that includes installation services, the customer does not take possession and control and title does not pass until formal acceptance is obtained from the customer. Under this type of arrangement, we do not recognize revenue until we have received formal acceptance from the customer. The timing of revenue recognition related to the sales of our products to CSPs who have received RUS funds may create significant fluctuations in our revenue and operating results from period to period, which could harm our financial results for certain periods. In addition, any changes in government regulations and subsidies could cause our customers to change their purchasing decisions, which could have an adverse effect on our operating results and financial condition.

We face intense competition that could reduce our revenue and adversely affect our financial results.

The market for our products is highly competitive, and we expect competition from both established and new companies to increase. Our competitors include companies such as ADTRAN, Inc., Alcatel-Lucent S.A. (now part of Nokia), Arris Group, Inc., Ciena Corporation, Huawei Technologies Co. Ltd., ZTE Corporation and DASAN Zhong Solutions, Inc., among others.

Our ability to compete successfully depends on a number of factors, including:

- the successful development of new products;
- our ability to anticipate CSP and market requirements and changes in technology and industry standards;
- our ability to differentiate our products from our competitors' offerings based on performance, cost-effectiveness or other factors;
- our ongoing ability to successfully integrate acquired product lines and customer bases into our business;
- our ability to gain customer acceptance of our products; and
- our ability to market and sell our products.

The broadband access equipment market has undergone consolidation in recent years, as participants have merged, made acquisitions or entered into partnerships or other strategic relationships with one another to offer more comprehensive solutions than they individually had offered. Examples include our acquisitions of Occam in February 2011 and Ericsson's fiber access assets in November 2012; Adtran's acquisition of Nokia Siemens's broadband access line business in May 2012; Arris's acquisitions of BigBand Networks in October 2011, Motorola Mobility's Home Unit from Google in December 2012 and Pace plc in January 2016; and Nokia's acquisition of Alcatel-Lucent in January 2016. In addition, Zhong Technologies announced in April 2016 that it had signed a definitive agreement to merge with DASAN Network Solutions. We expect this trend to continue as companies attempt to strengthen or maintain their market positions in an evolving industry.

Many of our current or potential competitors have longer operating histories, greater name recognition, larger customer bases and significantly greater financial, technical, sales, marketing and other resources than we do and are better positioned to acquire and offer complementary products and services. Many of our competitors have broader product lines and can offer bundled solutions, which may appeal to certain customers. Our competitors may also invest additional resources in developing more compelling product offerings. Potential customers may also prefer to purchase from their existing suppliers rather than a new supplier, regardless of product performance or features, because the products that we and our competitors offer require a substantial investment of time and funds to install.

Some of our competitors may offer substantial discounts or rebates to win new customers or to retain existing customers. If we are forced to reduce prices in order to secure customers, we may be unable to sustain gross margins at desired levels or achieve profitability. Competitive pressures could result in increased pricing pressure, reduced profit margins, increased sales and marketing expenses and failure to increase, or the loss of, market share, any of which could reduce our revenue and adversely affect our financial results.

Product development is costly and if we fail to develop new products or enhancements that meet changing CSP requirements, we could experience lower sales.

Our market is characterized by rapid technological advances, frequent new product introductions, evolving industry standards and unanticipated changes in subscriber requirements. Our future success will depend significantly on our ability to anticipate and adapt to such changes, and to offer, on a timely and cost-effective basis, products and features that meet changing CSP demands and industry standards. We intend to continue making significant investments in developing new products and enhancing the functionality of our existing products. Developing our products is expensive, complex and involves uncertainties. We may not have sufficient resources to successfully manage lengthy product development cycles. For the years ended December 31, 2015, 2014 and 2013, our research and development expenses were \$89.7 million, or 22% of our revenue, \$80.3 million, or 20% of our revenue, and \$79.3 million, or 21% of our revenue, respectively. For the first nine months of 2016, our research and development expenses were \$75.9 million, or 23% of our revenue. We believe that we must continue to dedicate a significant amount of resources to our research and development efforts to maintain our competitive position. These investments may take several years to generate positive returns, if ever. In addition, we may experience design, manufacturing, marketing and other difficulties that could delay or prevent the development, introduction or marketing of new products and enhancements. If we fail to meet our development targets, demand for our products will decline.

In addition, the introduction of new or enhanced products also requires that we manage the transition from older products to these new or enhanced products in order to minimize disruption in customer ordering patterns, fulfill ongoing customer commitments and ensure that adequate supplies of new products are available for delivery to meet anticipated customer demand. If we fail to maintain compatibility with

other software or equipment found in our customers' existing and planned networks, we may face substantially reduced demand for our products, which would reduce our revenue opportunities and market share. Moreover, as customers complete infrastructure deployments, they may require greater levels of service and support than we have provided in the past. We may not be able to provide products, services and support to compete effectively for these market opportunities. If we are unable to anticipate and develop new products or enhancements to our existing products on a timely and cost-effective basis, we could experience lower sales, which would harm our business.

Our new products are early in their life cycles and subject to uncertain market demand. If our customers are unwilling to install our new products or deploy our new services or we are unable to achieve market acceptance of our new products, our business and financial results will be harmed.

Our new products are early in their life cycles and subject to uncertain market demand. They also may face obstacles in manufacturing, deployment and competitive response. Potential customers may choose not to invest the additional capital required for initial system deployment of new products. In addition, demand for new products is dependent on the success of our customers in deploying and selling advanced services to their subscribers. Our products support a variety of advanced broadband services, such as high-speed Internet, Internet protocol television, mobile broadband, high-definition video and online gaming. If subscriber demand for such services does not grow as expected or declines or our customers are unable or unwilling to deploy and market these services, demand for our products may decrease or fail to grow at rates we anticipate.

Our customer base is concentrated, and there are a limited number of potential customers for our products. The loss of any of our key customers, a decrease in purchases by our key customers or our inability to grow our customer base would adversely impact our revenues.

Historically, a large portion of our sales has been to a limited number of customers. For example, for the years ended December 31, 2015, 2014 and 2013, CenturyLink accounted for 22%, 23% and 26%, respectively, of our revenue. However, we cannot anticipate the level of CenturyLink's purchases in the future. Any decrease or delay in purchases and/or capital expenditure plans of CenturyLink or other key customers, or our inability to grow our sales with existing customers, may have a material negative impact on our revenues and results of operations.

We anticipate that a large portion of our revenues will continue to depend on sales to a limited number of customers. In addition, some larger customers may demand discounts and rebates or desire to purchase their access systems and software from multiple providers. As a result of these factors, our future revenue opportunities may be limited, our margins could be reduced, and our profitability may be adversely impacted. The loss of, or reduction in, orders from any key customer would significantly reduce our revenues and harm our business.

Furthermore, in recent years, the CSP market has undergone substantial consolidation. Industry consolidation generally has negative implications for equipment suppliers, including a reduction in the number of potential customers, a decrease in aggregate capital spending, and greater pricing leverage on the part of CSPs over equipment suppliers. Continued consolidation of the CSP industry and among the ILEC and IOC customers, who represent a large part of our business, could make it more difficult for us to grow our customer base, increase sales of our products and maintain adequate gross margins.

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

The timing of our revenues is difficult to predict. Our sales efforts often involve educating CSPs about the use and benefits of our products. CSPs typically undertake a significant evaluation process, which frequently involves not only our products but also those of our competitors and results in a lengthy sales cycle. Sales cycles for larger customers are relatively longer and require considerably more time and expense. We spend substantial time, effort and money in our sales efforts without any assurance that our efforts will produce sales. In addition, product purchases are frequently subject to budget constraints, multiple approvals and unplanned administrative, processing and other delays. The timing of revenues related to sales of products and services that have installation requirements may be difficult to predict due to interdependencies that may be beyond our control, such as CSP testing and turn-up protocols or other vendors' products, services or installations of equipment upon which our products and services rely. In addition, larger projects may have longer periods between project commencement and completion and recognition of revenues. Such delays may result in fluctuations in our quarterly revenues. If sales expected from a specific customer for a particular quarter are not realized in that quarter or at all, we may not achieve our revenue forecasts and our financial results would be adversely affected.

Our focus on CSPs with relatively small networks limits our revenues from sales to any one customer and makes our future operating results difficult to predict.

A large portion of our sales efforts continue to be focused on CSPs with relatively small networks, cable multiple system operators ("MSOs") and selected international CSPs. Our current and potential customers generally operate small networks with limited capital expenditure budgets. Accordingly, we believe the potential revenues from the sale of our products to any one of these customers are limited. As a result, we must identify and sell products to new customers each quarter to continue to increase our sales. In addition, the spending patterns of many of our customers are characterized by small and sporadic purchases. As a consequence, we have limited backlog and will likely continue to have limited visibility into future operating results.

We do not have long-term, committed-volume purchase contracts with our customers, and therefore have no guarantee of future revenues from any customer.

We typically have not entered into long-term, committed-volume purchase contracts with our customers, including our key customers which account for a material portion of our revenues. As a result, any of our customers may cease to purchase our products at any time. In addition, our customers may attempt to renegotiate terms of sale, including price and quantity. If any of our key customers stop purchasing our access systems and software for any reason, our business and results of operations would be harmed.

Our efforts to increase our sales to larger North American as well as international CSPs, including MSOs, may be unsuccessful.

Our sales and marketing efforts have been focused on CSPs, including cable MSOs, in North America. Part of our long-term strategy is to increase sales to larger North American as well as international CSPs, including MSOs. We have devoted and continue to devote substantial technical, marketing and sales resources to the pursuit of these larger CSPs, who have lengthy equipment qualification and sales cycles, without any assurance of generating sales. In particular, sales to these larger CSPs may require us to upgrade our products to meet more stringent performance criteria and interoperability requirements, develop new customer-specific features or adapt our product to meet international standards. For example, we have been recently invited by a large CSP to engage in initial testing and laboratory trials for our NG-PON2 technology along with our partner Ericsson. We have invested considerable time, effort and money, including investment in product research and development, related to this opportunity without any assurance that our efforts will produce orders or revenues. If we are unable to successfully increase our sales to larger CSPs, our operating results, financial condition and long-term growth may be negatively impacted.

We are exposed to the credit risks of our customers; if we have inadequately assessed their creditworthiness, we may have more exposure to accounts receivable risk than we anticipate. Failure to collect our accounts receivable in amounts that we anticipate could adversely affect our operating results and financial condition.

In the course of our sales to customers, we may encounter difficulty collecting accounts receivable and could be exposed to risks associated with uncollectible accounts receivable. We maintain an allowance for doubtful accounts for estimated losses resulting from the inability or unwillingness of our customers to make required payments. However, these allowances are based on our judgment and a variety of factors and assumptions.

We perform credit evaluations of our customers' financial condition. However, our evaluation of the creditworthiness of customers may not be accurate if they do not provide us with timely and accurate financial information, or if their situations change after we evaluate their credit. While we attempt to monitor these situations carefully, adjust our allowances for doubtful accounts as appropriate and take measures to collect accounts receivable balances, we have written down accounts receivable and written off doubtful accounts in prior periods and may be unable to avoid additional write-downs or write-offs of doubtful accounts in the future. Such write-downs or write-offs could negatively affect our operating results for the period in which they occur, and could harm our financial condition.

Our gross margins may fluctuate over time, and our current level of gross margins may not be sustainable.

Our current level of gross margins may not be sustainable and may be adversely affected by numerous factors, including:

- changes in customer, geographic or product mix, including the mix of configurations within each product group;
- increased price competition, including the impact of customer discounts and rebates;
- our inability to reduce and control product costs;
- changes in component pricing;
- changes in contract manufacturer rates;
- charges incurred due to inventory holding periods if parts ordering does not correctly anticipate product demand;
- introduction of new products;
- an increase in revenue mix toward services, which typically have lower margins;
- changes in shipment volume;
- changes in or increased reliance on distribution channels;
- increased expansion efforts into new or emerging markets;
- increased warranty costs;
- excess and obsolete inventory and inventory holding charges;
- expediting costs incurred to meet customer delivery requirements; and
- potential costs associated with liquidated damages obligations under customer contractual terms.

Our products must interoperate with many software applications and hardware products found in our customers' networks. If we are unable to ensure that our products interoperate properly, our business would be harmed.

Our products must interoperate with our customers' existing and planned networks, which often have varied and complex specifications, utilize multiple protocol standards, include software applications and products from multiple vendors and contain multiple generations of products that have been added over time. As a result, we must continually ensure that our products interoperate properly with these existing and planned networks. To meet these requirements, we must undertake development efforts that require substantial capital investment and employee resources. We may not accomplish these development goals quickly or cost-effectively, if at all. If we fail to maintain compatibility with other software or equipment found in our customers' existing and planned networks, we may face substantially reduced demand for our products, which would reduce our revenue opportunities and market share.

We have entered into interoperability arrangements with a number of equipment and software vendors for the use or integration of their technology with our products. These arrangements give us access to and enable interoperability with various products that we do not otherwise offer. If these relationships fail, we may have to devote substantially more resources to the development of alternative products and processes and our efforts may not be as effective as the combined solutions under our current arrangements. In some cases, these other vendors are either companies that we compete with directly or companies that have extensive relationships with our existing and potential customers and may have influence over the purchasing decisions of those customers. Some of our competitors have stronger relationships with some of our existing and potential other interoperability partners, and as a result, our ability to have successful interoperability arrangements with these companies may be harmed. Our failure to establish or maintain key relationships with third-party equipment and software vendors may harm our ability to successfully sell and market our products.

We do not have manufacturing capabilities, and therefore we depend upon a small number of outside contract manufacturers. We do not have supply contracts with all of these contract manufacturers; consequently, our operations could be disrupted if we encounter problems with any of these contract manufacturers.

We do not have internal manufacturing capabilities, and rely upon a small number of contract manufacturers to build our products. In particular, we rely on Flextronics for the manufacture of most of our products. Our reliance on a small number of contract manufacturers makes us vulnerable to possible capacity constraints and reduced control over component availability, delivery schedules, manufacturing yields and costs.

We do not have supply contracts with some of our contract manufacturers. Consequently, these contract manufacturers are not obligated to supply products to us for any specific period, in any specific quantity or at any certain price. In addition, we have limited control over our contract manufacturers' quality systems and controls, and therefore may not be able to ensure levels of quality manufacture suitable for our customers.

The revenues that Flextronics and other contract manufacturers generate from our orders represent a relatively small percentage of those manufacturers' overall revenues. As a result, fulfilling our orders may not be considered a priority if such manufacturers are constrained in their ability to fulfill all of their customer obligations in a timely manner. In addition, a substantial part of our manufacturing is done in our contract manufacturer facilities that are located outside of the United States. We believe that the location of these facilities outside of the United States increases supply risk, including the risk of supply interruptions or reductions in manufacturing quality or controls.

If Flextronics or any of our other contract manufacturers were unable or unwilling to continue manufacturing our products in required volumes and at high quality levels, we would have to identify, qualify and select acceptable alternative contract manufacturers. An alternative contract manufacturer may not be available to us when needed or may not be in a position to satisfy our production requirements at commercially reasonable prices and quality. Any significant interruption in manufacturing would require us to reduce our supply of products to our customers, which in turn would reduce our revenues and harm our relationships with our customers.

We and our business partners, including our contract manufacturers and suppliers, depend on sole-source, single-source and limited-source suppliers for some key components. If we and our business partners are unable to source these components on a timely basis, we will not be able to deliver our products to our customers.

We and our business partners, including our contract manufacturers and suppliers, depend on sole-source, single-source and limited-source suppliers for some key components of our products. For example, certain of our application-specific integrated circuit processors and resistor networks are purchased from sole-source suppliers.

Any of the sole-source, single-source and limited-source suppliers upon whom we or our business partners rely could stop producing our components, cease operations, or enter into exclusive arrangements with our competitors. In addition, purchase volumes of such components may be too low for Calix to be considered a priority customer by these suppliers. As a result, these suppliers could stop selling to us and our business partners at commercially reasonable prices, or at all. Any such interruption or delay may force us and our business partners to seek similar components from alternative sources, which may not be available. Switching suppliers could also require that we redesign our products to accommodate new components, and could require us to re-qualify our products with our customers, which would be costly and time-consuming. Any interruption in the supply of sole-source, single-source or limited-source components for our products would adversely affect our ability to meet scheduled product deliveries to our customers, could result in lost revenue or higher expenses and would harm our business.

We utilize domestic and international third parties to design and manufacture certain of our products. If these manufacturers fail to provide these products, we could incur additional costs and delays or lose revenue.

From time to time we enter into original design manufacturer ("ODM") and original equipment manufacturer ("OEM") agreements for the design and manufacture of certain products in order to enable us to offer products on an accelerated basis. For example, a third party assisted in the design of and currently manufactures portions of our E-series systems and nodes family. If any of these ODMs or OEMs stop producing these products, for any reason, we would have to obtain similar products from alternative sources, which may not be available on commercially reasonable terms, if at all. We also have limited control over disruptions, such as supply interruptions or manufacturing quality, that may occur at ODM and OEM facilities located outside of the United States. In addition, switching manufacturers could require us to re-qualify our products with our customers, which would also be costly and time-consuming. Any interruption in the supply of products would adversely affect our ability to meet scheduled product deliveries to our customers, could result in lost revenue or higher expenses and would harm our business.

If we fail to forecast our manufacturing requirements accurately or fail to properly manage our inventory with our contract manufacturers, we could incur additional costs, experience manufacturing delays and lose revenue.

We bear inventory risk under our contract manufacturing arrangements and our ODM and OEM agreements. Lead times for the materials and components that we order through our manufacturers vary significantly and depend on numerous factors, including the specific supplier, contract terms and market demand for a component at a given time. Lead times for certain key materials and components incorporated into our products are currently lengthy, requiring our manufacturers to order materials and components several months in advance of manufacture.

If we overestimate our production requirements, our manufacturers may purchase excess components and build excess inventory. If our manufacturers, at our request, purchase excess components that are unique to our products or build excess products, we could be required to pay for these excess parts or products and their storage costs. Historically, we have reimbursed our primary contract manufacturers for a portion of inventory purchases when our inventory has been rendered excess or obsolete. Examples of when inventory may be rendered excess or obsolete include manufacturing and engineering change orders resulting from design changes or in cases where inventory levels greatly exceed projected demand. If we incur payments to our manufacturers associated with excess or obsolete inventory, this would have an adverse effect on our gross margins, financial condition and results of operations.

We have experienced unanticipated increases in demand from customers, which resulted in delayed shipments and variable shipping patterns. If we underestimate our product requirements, our manufacturers may have inadequate component inventory, which could interrupt manufacturing of our products and result in delays or cancellation of sales.

As the market for our products evolves, changing customer requirements may adversely affect the valuation of our inventory.

Customer demand for our products can change rapidly in response to market and technology developments. Demand can be affected not only by customer- or market-specific issues, but also by broader economic and/or geopolitical factors. We may, from time to time, adjust inventory valuations downward in response to our assessment of demand from our customers for specific products or product lines.

An increase in revenue mix towards services may adversely affect our gross margins.

Customers are demanding greater professional and support services for our products, which usually have a lower gross margin than product purchases. Revenue recognized from professional and support services may be delayed because fees are often not due until a project or milestone is completed. Additionally, if we are unable to meet project deadlines for professional and support services due to a supplier's inability to meet our demands for components, we may have to pay a higher premium from another supplier to source such components, which would directly impact our gross margins. Consequently, as more of our revenue mix includes a greater proportion of professional services, our gross margins may not be sustainable or may be negatively impacted. Moreover, our recent increases in revenue mix towards services have resulted in increased deferred costs, including costs directly associated with the delivery of the professional services for the arrangement, that are recognized as cost of revenue only when all revenue recognition criteria are met for the arrangement. In the event some or all of such deferred costs are deemed unrecoverable, we will incur additional charges to cost of revenue in the period such deferred costs are determined to be unrecoverable. Any charge to cost of revenue for deferred costs determined to be unrecoverable would negatively impact our gross margins.

If we fail to comply with evolving industry standards, sales of our existing and future products would be adversely affected.

The markets for our products are characterized by a significant number of standards, both domestic and international, which are evolving as new technologies are developed and deployed. As we expand into adjacent markets and increase our international footprint, we are likely to encounter additional standards. Our products must comply with these standards in order to be widely marketable. In some cases, we are compelled to obtain certifications or authorizations before our products can be introduced, marketed or sold in new markets or to customers that we have not historically served. For example, our ability to maintain Operations System Modification for Intelligent Network Elements ("OSMINE") certification for our products will affect our ongoing ability to continue to sell our products to CenturyLink and other Tier 1 CSPs.

In addition, our ability to expand our international operations and create international market demand for our products may be limited by regulations or standards adopted by other countries that may require us to redesign our existing products or develop new products suitable for sale in those countries. Although we believe our products are currently in compliance with domestic and international standards and regulations in countries in which we currently sell, we may not be able to design our products to comply with evolving standards and regulations in the future. This ongoing evolution of standards may directly affect our ability to market or sell our products. Further, the cost of complying with the evolving standards and regulations or the failure to obtain timely domestic or foreign regulatory approvals or certification could prevent us from selling our products where these standards or regulations apply, which would result in lower revenues and lost market share.

We may be unable to successfully expand our international operations. In addition, we may be subject to a variety of international risks that could harm our business.

We currently generate most of our sales from customers in North America and have limited experience marketing, selling and supporting our products and services outside North America or managing the administrative aspects of a worldwide operation. While we are in the process of expanding our international operations, we may not be able to create or maintain international market demand for our products. In addition, as we expand our operations internationally, our support organization will face additional challenges including those associated with delivering support, training and documentation in languages other than English. If we invest substantial time and resources to

expand our international operations and are unable to do so successfully and in a timely manner, our business, financial condition and results of operations will suffer.

In the course of expanding our international operations and operating overseas, we will be subject to a variety of risks, including:

- differing regulatory requirements, including tax laws, trade laws, labor regulations, tariffs, export quotas, custom duties or other trade restrictions;
- liability or damage to our reputation resulting from corruption or unethical business practices in some countries;
- fluctuation in currency exchange rates;
- longer collection periods and difficulties in collecting accounts receivable;
- greater difficulty supporting and localizing our products;
- different or unique competitive pressures as a result of, among other things, the presence of local equipment suppliers;
- challenges inherent in efficiently managing an increased number of employees over large geographic distances, including the need to implement appropriate systems, policies, compensation and benefits and compliance programs;
- limited or unfavorable intellectual property protection;
- risk of change in international political or economic conditions, terrorist attacks or acts of war; and
- restrictions on the repatriation of earnings.

We engage resellers to promote, sell, install and support our products to some customers in North America and internationally. Their failure to do so or our inability to recruit or retain appropriate resellers may reduce our sales and thus harm our business.

We engage some value added resellers ("VARs"), who provide sales and support services for our products. In particular, the non-exclusive reseller agreement entered into with Ericsson in 2012 has provided us with an extensive global reseller channel. More recently we have partnered with Ericsson on larger customer opportunities. We compete with other telecommunications systems providers for our VARs' business and many of our VARs, including Ericsson, are free to market competing products. Our use of VARs and other third-party support partners and the associated risks of doing so are likely to increase as we expand sales outside of North America. If Ericsson or any other VAR promotes a competitor's products to the detriment of our products or otherwise fails to market our products and services effectively, we could lose market share. In addition, the loss of a key VAR or the failure of VARs to provide adequate customer service could have a negative effect on customer satisfaction and could cause harm to our business. If we do not properly recruit and train VARs to sell, install and service our products, our business, financial condition and results of operations may suffer.

The results of the United Kingdom's referendum on withdrawal from the European Union may have a negative effect on global economic conditions, financial markets and our business.

In June 2016, a majority of voters in the United Kingdom elected to withdraw from the European Union in a national referendum. The referendum was advisory, and the terms of any withdrawal are subject to a negotiation period that could last at least two years after the government of the United Kingdom formally initiates a withdrawal process. Nevertheless, the referendum has created significant uncertainty about the future relationship between the United Kingdom and the European Union, including with respect to the laws and regulations that will apply as the United Kingdom determines which European Union laws to replace or replicate in the event of a withdrawal. The referendum has also given rise to calls for the governments of other European Union member states to consider withdrawal. These developments, or the perception that any of them could occur, have had and may continue to have a material adverse effect on global economic conditions and the stability of global financial markets, and may significantly reduce global market liquidity and restrict the ability of key market participants to operate in certain financial markets. Any of these factors could depress economic activity and restrict our access to capital, or the access to capital of our customers or partners, which could have a material adverse effect on our business, financial condition and results of operations and reduce the price of our securities.

We may have difficulty managing our growth, which could limit our ability to increase sales.

We have experienced significant growth in sales and operations in recent years. We expect to continue to expand our research and development, sales, marketing and support activities. Our historical growth has placed and planned future growth is expected to continue to place significant demands on our management as well as our financial and operational resources, to:

- manage a larger organization;
- expand our manufacturing and distribution capacity;
- increase our sales and marketing efforts;
- broaden our customer-support capabilities;
- implement appropriate operational and financial systems; and
- maintain effective financial disclosure controls and procedures.

If we cannot grow, or fail to manage our growth effectively, we may not be able to execute our business strategies and our business, financial condition and results of operations would be adversely affected.

We may not be able to protect our intellectual property, which could impair our ability to compete effectively.

We depend on certain proprietary technology for our success and ability to compete. We rely on intellectual property laws as well as nondisclosure agreements, licensing arrangements and confidentiality provisions to establish and protect our proprietary rights. U.S. patent, copyright and trade secret laws afford us only limited protection, and the laws of some foreign countries do not protect proprietary rights to

the same extent. Our pending patent applications may not result in issued patents, and our issued patents may not be enforceable. Any infringement of our proprietary rights could result in significant litigation costs. Further, any failure by us to adequately protect our proprietary rights could result in our competitors offering similar products, resulting in the loss of our competitive advantage and decreased sales.

Despite our efforts to protect our proprietary rights, attempts may be made to copy or reverse engineer aspects of our products or to obtain and use information that we regard as proprietary. Accordingly, we may be unable to protect our proprietary rights against unauthorized third-party copying or use. Furthermore, policing the unauthorized use of our intellectual property is difficult and costly. Litigation may be necessary in the future to enforce our intellectual property rights, to protect our trade secrets or to determine the validity and scope of the proprietary rights of others. Litigation could result in substantial costs, diversion of resources and harm to our business.

We could become subject to litigation regarding intellectual property rights that could harm our business.

We may be subject to intellectual property infringement claims that are costly to defend and could limit our ability to use some technologies in the future. Third parties may assert patent, copyright, trademark or other intellectual property rights to technologies or rights that are important to our business. Such claims may originate from non-practicing entities, patent holding companies or other adverse patent owners who have no relevant product revenue, and therefore, our own issued and pending patents may provide little or no deterrence to suit from these entities.

We have received in the past and expect that in the future we may receive communications from competitors and other companies alleging that we may be infringing their patents, trade secrets or other intellectual property rights; offering licenses to such intellectual property; threatening litigation or requiring us to act as a third-party witness in litigation. In addition, we have agreed, and may in the future agree, to indemnify our customers for expenses or liabilities resulting from certain claimed infringements of patents, trademarks or copyrights of third parties. Any claims asserting that our products infringe the proprietary rights of third parties, with or without merit, could be time-consuming, result in costly litigation and divert the efforts of our engineering teams and management. These claims could also result in product shipment delays or require us to modify our products or enter into royalty or licensing agreements. Such royalty or licensing agreements, if required, may not be available to us on acceptable terms, if at all.

The quality of our support and services offerings is important to our customers, and if we fail to continue to offer high quality support and services, we could lose customers, which would harm our business.

Once our products are deployed within our customers' networks, they depend on our support organization to resolve any issues relating to those products. A high level of support is critical for the successful marketing and sale of our products. If we do not effectively assist our customers in deploying our products, succeed in helping them quickly resolve post-deployment issues or provide effective ongoing support, it could adversely affect our ability to sell our products to existing customers and harm our reputation with potential new customers. As a result, our failure to maintain high quality support and services could result in the loss of customers, which would harm our business.

Our products are highly technical and may contain undetected hardware defects or software bugs, which could harm our reputation and adversely affect our business.

Our products are highly technical and when deployed, are critical to the operation of many networks. Our products have contained and may contain undetected defects, bugs or security vulnerabilities. Some defects in our products may only be discovered after a product has been installed and used by customers, and may in some cases only be detected under certain circumstances or after extended use. Any errors, bugs, defects or security vulnerabilities discovered in our products after commercial release could result in loss of revenues or delay in revenue recognition, loss of customers and increased service and warranty cost, any of which could adversely affect our business, operating results and financial condition. In addition, we could face claims for product liability, tort or breach of warranty. Our contracts with customers contain provisions relating to warranty disclaimers and liability limitations, which may not be upheld. Defending a lawsuit, regardless of its merit, is costly and may divert management's attention and adversely affect the market's perception of us and our products. In addition, if our business liability insurance coverage proves inadequate or future coverage is unavailable on acceptable terms or at all, our business, operating results and financial condition could be adversely impacted.

Our estimates regarding future warranty obligations may change due to product failure rates, shipment volumes, field service obligations and rework costs incurred in correcting product failures. If our estimates change, the liability for warranty obligations may be increased, impacting future cost of revenue.

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

- cost associated with fixing software or hardware defects;
- high service and warranty expenses;
- high inventory obsolescence expense;
- delays in collecting accounts receivable;
- payment of liquidated damages for performance failures; and

- declining sales to existing customers.

Our use of open source software could impose limitations on our ability to commercialize our products.

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

If we are unable to obtain necessary third-party technology licenses, our ability to develop new products or product enhancements may be impaired.

While our current licenses of third-party technology generally relate to commercially available off-the-shelf technology, we may from time to time be required to license additional technology from third parties to develop new products or product enhancements. These third-party licenses may be unavailable to us on commercially reasonable terms, if at all. Our inability to obtain necessary third-party licenses may force us to obtain substitute technology of lower quality or performance standards or at greater cost, or may increase the time-to-market of our products or product enhancements, any of which could harm the competitiveness of our products and result in lost revenues.

Our failure or the failure of our manufacturers to comply with environmental and other legal regulations could adversely impact our results of operations.

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

Regulatory and physical impacts of climate change and other natural events may affect our customers and our contract manufacturers, resulting in adverse effects on our operating results.

As emissions of greenhouse gases continue to alter the composition of the atmosphere, affecting large-scale weather patterns and the global climate, any new regulation of greenhouse gas emissions may result in additional costs to our customers and our contract manufacturers. In addition, the physical impacts of climate change and other natural events, including changes in weather patterns, drought, rising ocean and temperature levels, earthquakes and tsunamis may impact our customers, suppliers, contract manufacturers, and our operations. These potential physical effects may adversely affect our revenues, costs, production and delivery schedules, and cause harm to our results of operations and financial condition.

We have in the past pursued, and may in the future continue to pursue, acquisitions which involve a number of risks and uncertainties. If we are unable to address and resolve these risks and uncertainties successfully, such acquisitions could disrupt our business and result in higher costs than we anticipate.

We acquired Occam Networks in 2011 and Ericsson's fiber access assets in 2012. We may in the future acquire other businesses, products or technologies to expand our product offerings and capabilities, customer base and business. We have evaluated and expect to continue to evaluate a wide array of potential strategic transactions. We have limited experience making such acquisitions or integrating these businesses after such acquisitions. Unanticipated costs to us from these historical transactions as well as both anticipated and unanticipated costs to us related to any future transactions could exceed amounts that are covered by insurance and could have a material adverse impact on our financial condition and results of operations. For example, the Occam acquisition resulted in litigation with defense costs that were in excess of available Directors & Officers liability insurance coverage, including costs for which coverage was denied by our insurance carriers. Although the Delaware Court of Chancery approved a global settlement on the matter at a hearing on August 26, 2016 and, on September 7, 2016, issued its Order and Final Judgment, terminating the case before the court, our indemnity obligations, including our defense costs, in excess of such insurance coverage have been material, as described further in Note 7, "Commitments and Contingencies - Litigation" of the Notes to Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q. In addition, the anticipated benefit of any acquisitions we do may never materialize or the process of integrating acquired businesses, products or technologies may create unforeseen operating difficulties and expenditures.

Some of the areas where we have experienced and may in the future experience acquisition-related risks include:

- expenses and distractions, including diversion of management time related to litigation;
- expenses and distractions related to potential claims resulting from any possible future acquisitions, whether or not they are completed;
- retaining and integrating employees from acquired businesses;
- issuance of dilutive equity securities or incurrence of debt;

- integrating various accounting, management, information, human resource and other systems to permit effective management;
- incurring possible write-offs, impairment charges, contingent liabilities, amortization expense of intangible assets or impairment of goodwill and intangible assets with finite useful lives;
- difficulties integrating and supporting acquired products or technologies;
- unexpected capital expenditure requirements;
- insufficient revenues to offset increased expenses associated with the acquisition; and
- opportunity costs associated with committing capital to such acquisitions.

If our goodwill or intangible assets with finite useful lives become impaired, we may be required to record a significant charge to earnings. We review our goodwill and intangible assets with finite useful lives for impairment when events or changes in circumstances indicate the carrying value may not be recoverable, such as a sustained or significant decline in stock price and market capitalization. We test goodwill for impairment at least annually. If the carrying values of such assets were deemed to be impaired, an impairment loss equal to the amount by which the carrying amount exceeds the estimated fair value would be recognized. Any such impairment could materially and adversely affect our financial condition and results of operations.

Foreign acquisitions would involve risks in addition to those mentioned above, including those related to integration of operations across different cultures and languages, currency risks and the particular economic, political and regulatory risks associated with specific countries. We may not be able to address these risks and uncertainties successfully, or at all, without incurring significant costs, delays or other operating problems.

Our inability to address or anticipate any of these risks and uncertainties could disrupt our business and could have a material impact on our financial condition and results of operations.

Our use of and reliance upon development resources in China may expose us to unanticipated costs or liabilities.

We operate a wholly foreign owned enterprise in Nanjing, China, where a dedicated team of engineers performs product development, quality assurance, cost reduction and other engineering work. We also outsource a portion of our software development to a team of software engineers based in Shenyang, China. Our reliance upon development resources in China may not enable us to achieve meaningful product cost reductions or greater resource efficiency. Further, our development efforts and other operations in China involve significant risks, including:

- difficulty hiring and retaining appropriate engineering resources due to intense competition for such resources and resulting wage inflation;
- the knowledge transfer related to our technology and exposure to misappropriation of intellectual property or confidential information, including information that is proprietary to us, our customers and third parties;
- heightened exposure to changes in the economic, security and political conditions of China;
- fluctuation in currency exchange rates and tax risks associated with international operations; and
- development efforts that do not meet our requirements because of language, cultural or other differences associated with international operations, resulting in errors or delays.

Difficulties resulting from the factors above and other risks related to our operations in China could expose us to increased expense, impair our development efforts, harm our competitive position and damage our reputation.

Our customers are subject to government regulation, and changes in current or future laws or regulations that negatively impact our customers could harm our business.

The FCC has jurisdiction over all of our U.S. customers. FCC regulatory policies that create disincentives for investment in access network infrastructure or impact the competitive environment in which our customers operate may harm our business. For example, future FCC regulation affecting providers of broadband Internet access services could impede the penetration of our customers into certain markets or affect the prices they may charge in such markets. Furthermore, many of our customers are subject to FCC rate regulation of interstate telecommunications services and are recipients of Connect America Fund capital incentive payments, which are intended to subsidize broadband and telecommunications services in areas that are expensive to serve. In early October 2011, the then-chairman of the FCC outlined a plan to transform the Universal Service Fund, an \$8 billion fund that is paid for by telephone customers in the U.S. and was used to subsidize basic telephone service in rural areas, into one that will help expand broadband Internet service to 18 million Americans who lack high-speed access. In late 2013, the new FCC chairman shared plans to review the implementation of this program, and some slight modifications were made in 2014. Changes to these programs that could affect the ability of IOCs to access capital, and which could in turn reduce our revenue opportunities, remain possible.

In addition, many of our customers are subject to state regulation of intrastate telecommunications services, including rates for such services, and may also receive funding from state universal service funds. Changes in rate regulations or universal service funding rules, either at the U.S. federal or state level, could adversely affect our customers' revenues and capital spending plans. In addition, various international regulatory bodies have jurisdiction over certain of our non-U.S. customers. Changes in these domestic and international standards, laws and regulations, or judgments in favor of plaintiffs in lawsuits against CSPs based on changed standards, laws and regulations could adversely affect the development of broadband networks and services. This, in turn, could directly or indirectly adversely impact the communications industry in which our customers operate.

Many jurisdictions, including international governments and regulators, are also evaluating, implementing and enforcing regulations relating to cyber security, privacy and data protection, which can affect the market and requirements for networking and communications

equipment. To the extent our customers are adversely affected by laws or regulations regarding their business, products or service offerings, our business, financial condition and results of operations would suffer.

Privacy concerns relating to our products and services could affect our business practices, damage our reputation and deter customers from purchasing our products and services.

Government and regulatory authorities in the U.S. and around the world have implemented and are continuing to implement laws and regulations concerning data protection. For example, in July 2016, the European Commission adopted the EU-U.S. Privacy Shield to replace Safe Harbor as a compliance mechanism for the transfer of personal data from the European Union to the United States. The interpretation and application of these data protection laws and regulations are often uncertain and in flux, and it is possible that they may be interpreted and applied in a manner that is inconsistent with our data practices. Complying with these various laws could cause us to incur substantial costs or require us to change our business practices in a manner adverse to our business.

Concerns about or regulatory actions involving our practices with regard to the collection, use, disclosure, or security of customer information or other privacy related matters, even if unfounded, could damage our reputation and adversely affect operating results. While we strive to comply with all data protection laws and regulations, the failure or perceived failure to comply may result in inquiries and other proceedings or actions against us by government entities or others, or could cause us to lose customers, which could potentially have an adverse effect on our business.

We may be subject to governmental export and import controls that could subject us to liability or impair our ability to compete in additional international markets.

Our products are subject to U.S. export and trade controls and restrictions. International shipments of certain of our products may require export licenses or are subject to additional requirements for export. In addition, the import laws of other countries may limit our ability to distribute our products, or our customers' ability to buy and use our products, in those countries. Changes in our products or changes in export and import regulations or duties may create delays in the introduction of our products in international markets, prevent our customers with international operations from deploying our products or, in some cases, prevent the export or import of our products to certain countries altogether. Any change in export or import regulations, duties or related legislation, shift in approach to the enforcement or scope of existing regulations, or change in the countries, persons or technologies targeted by such regulations, could negatively impact our ability to sell, profitably or at all, our products to existing or potential international customers.

If we lose any of our key personnel, or are unable to attract, train and retain qualified personnel, our ability to manage our business and continue our growth would be negatively impacted.

Our success depends, in large part, on the continued contributions of our key management, engineering, sales and marketing personnel, many of whom are highly skilled and would be difficult to replace. None of our senior management or key technical or sales personnel is bound by a written employment contract to remain with us for a specified period. In addition, we do not currently maintain key person life insurance covering our key personnel. If we lose the services of any key personnel, our business, financial condition and results of operations may suffer.

Competition for skilled personnel, particularly those specializing in engineering and sales, is intense. We cannot be certain that we will be successful in attracting and retaining qualified personnel, or that newly hired personnel will function effectively, both individually and as a group. In particular, we must continue to expand our direct sales force, including hiring additional sales managers, to grow our customer base and increase sales. In addition, if we offer employment to personnel employed by competitors, we may become subject to claims of unfair hiring practices and incur substantial costs in defending ourselves against these claims, regardless of their merit. If we are unable to effectively recruit, hire and utilize new employees, execution of our business strategy and our ability to react to changing market conditions may be impeded, and our business, financial condition and results of operations may suffer.

Volatility or lack of performance in our stock price may also affect our ability to attract and retain our key personnel. Our executive officers and employees hold a substantial number of shares of our common stock and vested stock options. Employees may be more likely to leave us if the shares they own or the shares underlying their equity awards decline in value, or if the exercise prices of stock options that they hold are significantly above the market price of our common stock. If we are unable to retain our employees, our business, operating results and financial condition will be harmed.

If we fail to maintain proper and effective internal controls, our ability to produce accurate financial statements on a timely basis could be impaired, which would adversely affect our operating results, our ability to operate our business and our stock price.

Ensuring that we have adequate internal financial and accounting controls and procedures in place to produce accurate financial statements on a timely basis is a costly and time-consuming effort that needs to be re-evaluated frequently. We have in the past discovered, and may in the future discover areas of our internal financial and accounting controls and procedures that need improvement.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles. Our management does not expect that our internal control over financial reporting will prevent or detect all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within our company will have been detected.

We are required to comply with Section 404 of the Sarbanes-Oxley Act ("SOX"), which requires us to expend significant resources in developing the required documentation and testing procedures. We cannot be certain that the actions we have taken and are taking to improve our internal controls over financial reporting will be sufficient to maintain effective internal controls over financial reporting in subsequent reporting periods or that we will be able to implement our planned processes and procedures in a timely manner. In addition, new and revised accounting standards and financial reporting requirements may occur in the future and implementing changes required by new standards, requirements or laws may require a significant expenditure of our management's time, attention and resources which may adversely affect our reported financial results. If we are unable to produce accurate financial statements on a timely basis, investors could lose confidence in the reliability of our financial statements, which could cause the market price of our common stock to decline and make it more difficult for us to finance our operations and growth.

Interruptions, failures or material breaches in our information technology and communications systems could harm our business, customer relations and financial condition.

Information technology helps us operate efficiently, interface with customers, maintain financial accuracy and efficiency and accurately produce our financial statements. If we do not allocate and effectively manage the resources necessary to build and sustain the proper technology infrastructure, we could be subject to transaction errors, processing inefficiencies, the loss of customers, business disruptions or the loss of or damage to intellectual property through security breach. If our data management systems do not effectively collect, store, process and report relevant data for the operation of our business, whether due to equipment malfunction or constraints, software deficiencies or human error, our ability to effectively plan, forecast and execute our business plan and comply with laws and regulations will be impaired, perhaps materially. Any such impairment could materially and adversely affect our financial condition, results of operations, cash flows and the timeliness with which we internally and externally report our operating results.

We have applied multiple layers of security to control access to our information technology systems. We also use encryption and authentication technologies to secure the transmission and storage of data. These security measures may be compromised as a result of third-party security breaches, employee error, malfeasance, faulty password management or other irregularity, and result in persons obtaining unauthorized access to our data or accounts. Third parties may attempt to fraudulently induce employees into disclosing user names, passwords or other sensitive information, which may in turn be used to access our information technology systems.

While we seek to apply best practice policies and devote significant resources to network security, data encryption and other security measures to protect our information technology and communications systems and data, these security measures cannot provide absolute security. We may experience a breach of our systems and be unable to protect sensitive data. The costs to us to eliminate or alleviate network security problems, bugs, viruses, worms, malicious software programs and security vulnerabilities could be significant, and our efforts to address these problems may not be successful and could result in unexpected interruptions, delays and cessation of service which may harm our business operations.

Although our systems have been designed around industry-standard architectures to reduce downtime in the event of outages or catastrophic occurrences, they remain vulnerable to damage or interruption from earthquakes, floods, fires, power loss, telecommunication failures, terrorist attacks, cyber-attacks, viruses, denial-of-service attacks, human error, hardware or software defects or malfunctions, and similar events or disruptions. Some of our systems are not fully redundant, and our disaster recovery planning is not sufficient for all eventualities. Our systems are also subject to break-ins, sabotage, and intentional acts of vandalism. Despite any precautions we may take, the occurrence of a natural disaster, a decision by any of our third-party hosting providers to close a facility we use without adequate notice for financial or other reasons, or other unanticipated problems at our hosting facilities could cause system interruptions and delays which may result in loss of critical data and lengthy interruptions in our services.

We incur significant costs as a result of operating as a public company, which may adversely affect our operating results and financial condition.

As a public company, we incur significant accounting, legal and other expenses, including costs associated with our public company reporting requirements. We also anticipate that we will continue to incur costs associated with corporate governance requirements, including requirements and rules under SOX and the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") among other rules and regulations implemented by the SEC, as well as listing requirements of the New York Stock Exchange (the "NYSE"). Furthermore, these laws and regulations could make it difficult or costly for us to obtain certain types of insurance, including director and officer liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these requirements could also make it difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

New laws and regulations as well as changes to existing laws and regulations affecting public companies, including the provisions of SOX and the Dodd-Frank Act and rules adopted by the SEC and the NYSE, would likely result in increased costs to us as we respond to their requirements. We continue to invest resources to comply with evolving laws and regulations, and this investment may result in increased general and administrative expense.

Risks Related to Ownership of Our Common Stock

Our stock price may be volatile, and the value of an investment in our common stock may decline.

The trading price of our common stock has been, and is likely to continue to be, volatile, which means that it could decline substantially within a short period of time and could fluctuate widely in response to various factors, some of which are beyond our control. These factors include those discussed in the "Risk Factors" section of this report, and others such as:

- quarterly variations in our results of operations or those of our competitors;
- failure to meet any guidance that we have previously provided regarding our anticipated results;
- changes in earnings estimates or recommendations by securities analysts;
- failure to meet securities analysts' estimates;
- announcements by us or our competitors of new products, significant contracts, commercial relationships, acquisitions or capital commitments;
- developments with respect to intellectual property rights;
- our ability to develop and market new and enhanced products on a timely basis;
- our commencement of, or involvement in, litigation and developments relating to such litigation;
- changes in governmental regulations; and
- a slowdown in the communications industry or the general economy.

In recent years, the stock market in general, and the market for technology companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Broad market and industry factors may seriously affect the market price of our common stock, regardless of our actual operating performance. In addition, in the past, following periods of volatility in the overall market and the market price of a particular company's securities, securities class action litigation has often been instituted against these companies. This litigation, if instituted against us, could result in substantial costs and a diversion of our management's attention and resources.

If securities or industry analysts do not publish research or reports about our business or if they issue an adverse or misleading opinion regarding our stock, our stock price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. If any of the analysts who cover us issue an adverse or misleading opinion regarding our stock, our stock price would likely decline. If several of these analysts cease coverage of our company or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

Provisions in our charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable and may lead to entrenchment of our management and board of directors.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could have the effect of delaying or preventing changes in control or changes in our management or our board of directors. These provisions include:

- a classified board of directors with three-year staggered terms, which may delay the ability of stockholders to change the membership of a majority of our board of directors;
- no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- the ability of our board of directors to issue shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- the requirement that a special meeting of stockholders may be called only by the chairman of the board of directors, the chief executive officer or the board of directors, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors; and
- advance notice procedures that stockholders must comply with in order to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of us.

We are also subject to certain anti-takeover provisions under Delaware law. Under Delaware law, a corporation may not, in general, engage in a business combination with any holder of 15% or more of its capital stock unless the holder has held the stock for three years or, among other things, the board of directors has approved the transaction.

We may need additional capital in the future to finance our business.

We may need to raise additional capital to fund operations in the future. Although we believe that, based on our current level of operations and anticipated growth, our existing cash, cash equivalents and marketable securities will provide adequate funds for ongoing operations, planned capital expenditures and working capital requirements for at least the next 12 months, we may need additional capital if our current plans and assumptions change. If future financings involve the issuance of equity securities, our then-existing stockholders would suffer dilution. If we raise additional debt financing, we may be subject to restrictive covenants that limit our ability to conduct our business. We may not be able to raise sufficient additional funds on terms that are favorable to us, if at all. If we fail to raise sufficient funds and continue to incur losses, our ability to fund our operations, take advantage of strategic opportunities, develop products or technologies or otherwise respond to competitive pressures could be significantly limited. Any failure to obtain financing when and as required could force us to curtail our operations, which would harm our business.

We do not currently intend to pay dividends on our common stock and, consequently, our stockholders' ability to achieve a return on their investment will depend on appreciation in the price of our common stock.

We do not currently intend to pay any cash dividends on our common stock for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth. Additionally, the terms of our credit facility restrict our ability to pay dividends under certain circumstances. Therefore, our stockholders are not likely to receive any dividends on our common stock for the foreseeable future.

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

On April 26, 2015, our Board of Directors approved a program to repurchase up to \$40 million of our common stock from time to time.

Stock may be purchased under this program in open market or private transactions, through block trades, and/or pursuant to any trading plan adopted in accordance with Rule 10b5-1 of the Exchange Act. Any open market purchases will be made in accordance with the limitations set out in Rule 10b-18 of the Exchange Act. The decision to consummate any repurchases (including any decision to adopt a 10b5-1 plan for this purpose) will be made at management's discretion at prices management considers to be attractive and in the best interests of the company and its stockholders.

Our stock repurchase commenced in May 2015 and the program was completed in March 2016. We have completed the \$40 million stock repurchase program and have repurchased a total of 5,329,817 shares of common stock from May 2015 to March 2016 at an average price of \$7.50 per share.

ITEM 3. Defaults Upon Senior Securities

None.

ITEM 4. Mine Safety Disclosures

Not applicable.

ITEM 5. Other Information

None.

ITEM 6. Exhibits

Exhibit Number	Description
10.1*	Amendment to Consulting Agreement effective as of September 3, 2016 by and between Calix, Inc. and Kevin Peters.
31.1	Certification of Chief Executive Officer of Calix, Inc. Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer of Calix, Inc. Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Chief Executive Officer and Chief Financial Officer of Calix, Inc. 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

* Indicates management contract or compensatory plan or arrangement.

AMENDMENT TO CONSULTING AGREEMENT

This AMENDMENT TO CONSULTING AGREEMENT (the "Amendment") is made effective as of September 3, 2016 by and between CALIX, INC., a Delaware corporation ("Company") and KEVIN PETERS, an individual ("Consultant") to amend the Consulting Agreement (and the Exhibit A thereto) dated August 26, 2016 (the "Agreement") between the Parties. Except as otherwise stated, capitalized terms shall have the meaning ascribed in the Agreement.

The Parties agree as follows:

1. Extension Term. The Agreement term shall be extended by an additional four (4) weeks commencing September 3, 2016 and ending September 30, 2016 (the "Extension Term") pursuant to Section 4 of the Agreement.
2. Expenses to be reimbursed. Reasonable and necessary expenses related to travel and other direct expenses incurred in connection with rendering the Work to be Performed, not to exceed \$12,000 for the Extension Term unless approved in advance by the Company in writing.
3. Maximum amount Company is required to pay. The maximum amount the Company is required to pay under the Agreement as stated in Exhibit A of the Agreement shall be amended in its entirety to state:
"Not in any event to exceed \$110,000 (inclusive of fees and expenses)."
4. Except as set forth in this Amendment, the terms and conditions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment with effect as of the date first set forth above.

CALIX, INC.

KEVIN PETERS

By: /s/ Suzanne Tom
Name: Suzanne Tom
Title: VP, General Counsel
Date: September 22, 2016

By: /s/ Kevin Peters
Name: Kevin Peters
Date: September 28, 2016

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

I, Carl Russo, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Calix, Inc. for the quarter ended September 24, 2016;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 2, 2016

/s/ Carl Russo

Carl Russo

Chief Executive Officer

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

I, William J. Atkins, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Calix, Inc. for the quarter ended September 24, 2016;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 2, 2016

/s/ William J. Atkins

William J. Atkins

EVP & Chief Financial Officer

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

I, Carl Russo, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of Calix, Inc. (the "Company") on Form 10-Q for the fiscal quarter ended September 24, 2016 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of the Company.

Date: November 2, 2016

/s/ Carl Russo

Carl Russo

Chief Executive Officer

I, William J. Atkins, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of Calix, Inc. (the "Company") on Form 10-Q for the fiscal quarter ended September 24, 2016 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of the Company.

Date: November 2, 2016

/s/ William J. Atkins

William J. Atkins

EVP & Chief Financial Officer

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Calix, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.