

LATTICE SEMICONDUCTOR CORP

Form 10-Q

August 10, 2017

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

FOR THE QUARTERLY PERIOD ENDED JULY 1, 2017

OR

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

FOR THE TRANSITION PERIOD FROM \_\_\_\_\_ TO \_\_\_\_\_

Commission file number 000-18032

LATTICE SEMICONDUCTOR CORPORATION

(Exact name of Registrant as specified in its charter)

State of Delaware 93-0835214

(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)

111 SW Fifth Ave, Ste 700, Portland, OR 97204

(Address of principal executive offices) (Zip Code)

(503) 268-8000

(Registrant's telephone number, including area code)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period as 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 the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer

Non-accelerated filer  (Do not check if a smaller reporting company)

Smaller reporting company

Emerging growth company

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

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

Number of shares of common stock outstanding as of August 7, 2017

122,971,647

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Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These involve estimates, assumptions, risks, and uncertainties. Any statements about our expectations, beliefs, plans, objectives, assumptions, or future events or performance are not historical facts and may be forward-looking. We use words or phrases such as “anticipates,” “believes,” “could,” “estimates,” “expects,” “intends,” “plans,” “predicts,” “projects,” “should,” “continue,” “ongoing,” “future,” “potential,” and similar words or phrases to identify forward-looking statements.

Examples of forward-looking statements include, but are not limited to, statements about: our transitions to newly adopted accounting standards; our strategies and beliefs regarding the markets we serve or may serve; growth opportunities and growth in markets we may serve; the advantages our products provide to our customers, including advanced features in an increasingly intense global technology market; our future product development and marketing plans; our intention to continually introduce new products and enhancements and reduce manufacturing costs; the anticipation that we will become increasingly dependent on revenue from newer products; our expectation of production volumes and the associated revenue stream for certain mobile handset providers; acceptance of our devices; our continued participation in consortia that develop and promote the High-Definition Multimedia Interface ("HDMI"), Mobile High-Definition Link ("MHL") and WirelessHD specifications, and our participation in other standard setting initiatives; the effect of termination of our agent functions regarding the HDMI consortium, related reduction in adopter fees, impairment charges and any other changes in the agreements relating to various intellectual property or standards consortia and their sharing of past or present fees or royalties; the likelihood of bankruptcy of certain distributors; our making significant future investments in research and development at approximately the percentage of revenue realized in the second quarter of fiscal 2017; the costs of making and developing various products; our expectation that we will continue to transition to increasingly smaller geometry process technologies and the difficulties in transitioning; our need and ability to maintain or develop successful foundry relationships to produce new products; the adequacy of assembly and test capacity commitments; the impact of products, customers and downward pressure on pricing and effects on gross margin; the expected cost and timing of our internal restructuring plans; our expectations regarding protection of and defenses to claims against our intellectual property; our defenses to claims and the finalization and settlement of litigation or administrative proceedings; the impact of our global tax structure and expectations regarding taxes and tax adjustments; our conclusion that we should maintain a valuation allowance against certain tax assets; our belief that we may recognize certain tax benefits during the next twelve months; our ability to forecast uncertain tax positions; our ability to forecast future sales and the relative product mix of those revenues; our expectation that we may consider acquisition opportunities to further extend our product or technology portfolios and further expand our product offerings; the impact of our adoption of new accounting pronouncements on our financial statements; our beliefs regarding the adequacy of our liquidity and facilities, our ability to meet our operating and capital requirements and obligations, and the sufficiency of our financial resources to meet our working capital needs through at least the next 12 months; our ability to implement a company-wide enterprise resource planning system; and any expectation that the closing conditions to the proposed acquisition of the outstanding shares of the Company by Canyon Bridge Acquisition Company, Inc. will be satisfied.

Forward-looking statements involve estimates, assumptions, risks, and uncertainties that could cause actual results to differ materially from those expressed in the forward-looking statements. The key factors, among others, that could cause our actual results to differ materially from the forward-looking statements included global economic conditions and uncertainty, the concentration of our sales in the Mobile and Consumer and Communications and Computing end markets, particularly as it relates to the concentration of our sales in the Asia Pacific region, market acceptance and demand for our new products, our ability to license our intellectual property, any disruption of our distribution channels, the impact of competitive products and pricing, unexpected charges, delays or results relating to our restructuring plans, unexpected changes to our implementation of a company-wide enterprise resource planning system, the effect of the downturn in the economy on capital markets and credit markets, unanticipated taxation

requirements or positions of the U.S. Internal Revenue Service, or unexpected impacts of recent accounting guidance. In addition, actual results are subject to other risks and uncertainties that relate more broadly to our overall business, including those more fully described herein and that are otherwise described from time to time in our filings with the Securities and Exchange Commission, including, but not limited to, the items discussed in “Risk Factors” in Item 1A of Part II of this Quarterly Report on Form 10-Q.

You should not unduly rely on forward-looking statements because our actual results could differ materially from those expressed in any forward-looking statements made by us. In addition, any forward-looking statement applies only as of the date on which it is made. We do not plan to, and undertake no obligation to, update any forward-looking statements to reflect events or circumstances that occur after the date on which such statements are made or to reflect the occurrence of unanticipated events.

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## PART I. FINANCIAL INFORMATION

## ITEM 1. FINANCIAL STATEMENTS

LATTICE SEMICONDUCTOR CORPORATION  
CONSOLIDATED STATEMENTS OF OPERATIONS  
(unaudited)

(In thousands, except per share data)	Three Months Ended		Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
Revenue:				
Product	\$83,168	\$89,335	\$175,837	\$177,558
Licensing and services	10,969	9,874	22,887	18,163
Total revenue	94,137	99,209	198,724	195,721
Costs and expenses:				
Cost of product revenue	40,749	40,710	82,363	79,717
Cost of licensing and services revenue	2,179	73	4,320	474
Research and development	26,820	30,915	54,209	63,523
Selling, general, and administrative	21,938	23,005	45,843	46,613
Amortization of acquired intangible assets	8,737	8,311	17,251	17,032
Restructuring charges	1,576	2,568	1,642	7,999
Acquisition related charges	867	—	2,527	94
Total costs and expenses	102,866	105,582	208,155	215,452
Loss from operations	(8,729 )	(6,373 )	(9,431 )	(19,731 )
Interest expense	(4,656 )	(5,062 )	(10,224 )	(10,022 )
Other income, net	564	2,532	416	3,349
Loss before income taxes and equity in net loss of an unconsolidated affiliate	(12,821 )	(8,903 )	(19,239 )	(26,404 )
Income tax expense	47	4,539	565	6,439
Equity in net loss of an unconsolidated affiliate, net of tax	(154 )	(368 )	(493 )	(678 )
Net loss	\$(13,022)	\$(13,810)	\$(20,297)	\$(33,521)
Net loss per share, basic and diluted	\$(0.11 )	\$(0.12 )	\$(0.17 )	\$(0.28 )
Shares used in per share calculations, basic and diluted	122,390	119,445	122,095	119,125

See Accompanying Notes to Unaudited Consolidated Financial Statements.

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LATTICE SEMICONDUCTOR CORPORATION  
 CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS  
 (unaudited)

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(In thousands)	Three Months Ended		Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
Net loss	\$(13,022)	\$(13,810)	\$(20,297)	\$(33,521)
Other comprehensive loss:				
Unrealized (loss) gain related to marketable securities, net of tax	(28 )	1	(71 )	(27 )
Reclassification adjustment for losses related to marketable securities included in other income, net of tax	30	36	200	38
Translation adjustment, net of tax	676	(678 )	950	(441 )
Change in actuarial valuation of defined benefit pension	(47 )	141	(47 )	141
Comprehensive loss	\$(12,391)	\$(14,310)	\$(19,265)	\$(33,810)

See Accompanying Notes to Unaudited Consolidated Financial Statements.

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LATTICE SEMICONDUCTOR CORPORATION  
CONSOLIDATED BALANCE SHEETS  
(unaudited)

(In thousands, except share and par value data)	July 1, 2017	December 31, 2016
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$74,416	\$ 106,552
Short-term marketable securities	10,470	10,308
Accounts receivable, net of allowance for doubtful accounts	86,791	99,637
Inventories	78,479	79,168
Prepaid expenses and other current assets	18,421	19,035
Total current assets	268,577	314,700
Property and equipment, less accumulated depreciation of \$131,858 at July 1, 2017 and \$134,786 at December 31, 2016	49,356	49,481
Intangible assets, net of amortization	97,817	118,863
Goodwill	269,758	269,758
Deferred income taxes	379	372
Other long-term assets	11,394	13,709
Total assets	\$697,281	\$ 766,883
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable and accrued expenses (includes restructuring)	\$67,945	\$ 80,933
Accrued payroll obligations	7,971	9,865
Current portion of long-term debt	15,318	33,767
Deferred income and allowances on sales to sell-through distributors	24,915	32,257
Deferred licensing and services revenue	398	728
Total current liabilities	116,547	157,550
Long-term debt	286,979	300,855
Other long-term liabilities	34,990	38,048
Total liabilities	438,516	496,453
Contingencies (Note 15)	—	—
Stockholders' equity:		
Preferred stock, \$.01 par value, 10,000,000 shares authorized, none issued and outstanding	—	—
Common stock, \$.01 par value, 300,000,000 shares authorized; 122,730,000 shares issued and outstanding as of July 1, 2017 and 121,645,000 shares issued and outstanding as of December 31, 2016	1,227	1,216
Additional paid-in capital	688,259	680,315
Accumulated deficit	(427,597 )	(406,945 )
Accumulated other comprehensive loss	(3,124 )	(4,156 )
Total stockholders' equity	258,765	270,430
Total liabilities and stockholders' equity	\$697,281	\$ 766,883
See Accompanying Notes to Unaudited Consolidated Financial Statements.		



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LATTICE SEMICONDUCTOR CORPORATION  
CONSOLIDATED STATEMENTS OF CASH FLOWS  
(unaudited)

(In thousands)	Six Months Ended	
	July 1, 2017	July 2, 2016
Cash flows from operating activities:		
Net loss	\$(20,297)	\$(33,521)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation and amortization	30,497	32,352
Amortization of debt issuance costs and discount	1,354	659
Loss on sale or maturity of marketable securities	200	72
Gain on forward contracts	(26)	(4)
Stock-based compensation expense	6,772	7,798
(Gain) Loss on disposal of fixed assets	(61)	314
Gain on sale of business unit	(300)	(2,646)
Equity in net loss of an unconsolidated affiliate, net of tax	493	678
Changes in assets and liabilities:		
Accounts receivable, net	12,846	3,524
Inventories	689	(10,847)
Prepaid expenses and other assets	2,822	18
Accounts payable and accrued expenses (includes restructuring)	(13,554)	23,901
Accrued payroll obligations	(1,894)	574
Income taxes payable	(355)	(253)
Deferred income and allowances on sales to sell-through distributors	(7,342)	10,155
Deferred licensing and services revenue	(330)	(117)
Net cash provided by operating activities	11,514	32,657
Cash flows from investing activities:		
Proceeds from sales of and maturities of short-term marketable securities	7,200	11,960
Purchases of marketable securities	(7,420)	(2,944)
Capital expenditures	(7,035)	(10,102)
Proceeds from sale of business unit, net of cash sold	300	1,972
Cash paid for a non-marketable equity method investment	(1,000)	—
Cash paid for software licenses	(4,149)	(5,672)
Net cash used in investing activities	(12,104)	(4,786)
Cash flows from financing activities:		
Restricted stock unit withholdings	(1,748)	(1,427)
Proceeds from issuance of common stock	2,931	3,326
Repayment of debt	(33,679)	(3,404)
Net cash used in financing activities	(32,496)	(1,505)
Effect of exchange rate change on cash	950	(441)
Net (decrease) increase in cash and cash equivalents	(32,136)	25,925
Beginning cash and cash equivalents	106,552	84,606
Ending cash and cash equivalents	\$74,416	\$110,531
Supplemental cash flow information:		
Change in unrealized loss related to marketable securities, net of tax, included in Accumulated other comprehensive loss	\$71	\$27

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Income taxes paid, net of refunds	\$976	\$4,864
Interest paid	\$12,094	\$9,264
Accrued purchases of plant and equipment	\$2,216	\$1,585

See Accompanying Notes to Unaudited Consolidated Financial Statements.

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LATTICE SEMICONDUCTOR CORPORATION  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
(Unaudited)

Note 1 - Basis of Presentation and Significant Accounting Policies

The accompanying Consolidated Financial Statements are unaudited and have been prepared by Lattice Semiconductor Corporation ("Lattice," the "Company," "we," "us," or "our") pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC") and in our opinion include all adjustments, consisting only of normal recurring adjustments, necessary for the fair statement of results for the interim periods. Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP") have been condensed or omitted pursuant to such rules and regulations. These Consolidated Financial Statements should be read in conjunction with our audited financial statements and notes thereto included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

Fiscal Reporting Period

We report based on a 52 or 53-week fiscal year ending on the Saturday closest to December 31. Our second quarter of fiscal 2017 and second quarter of fiscal 2016 ended on July 1, 2017 and July 2, 2016, respectively. All references to quarterly or six months ended financial results are references to the results for the relevant 13-week or 26-week fiscal period.

Principles of Consolidation and Presentation

The accompanying Consolidated Financial Statements include the accounts of Lattice and its subsidiaries after the elimination of all intercompany balances and transactions.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts and classification of assets, such as marketable securities, accounts receivable, inventory, goodwill (including the assessment of reporting units), intangible assets, current and deferred income taxes, accrued liabilities (including restructuring charges and bonus arrangements), deferred income and allowances on sales to sell-through distributors, disclosure of contingent assets and liabilities at the date of the financial statements, amounts used in acquisition valuations and purchase accounting, and the reported amounts of product revenue, licensing and services revenue, and expenses during the fiscal periods presented. Actual results could differ from those estimates.

Cash Equivalents and Marketable Securities

We consider all investments that are readily convertible into cash and have original maturities of three months or less to be cash equivalents. Cash equivalents consist primarily of highly liquid investments in time deposits or money market accounts and are carried at cost. We account for marketable securities as available-for-sale investments, as defined by U.S. GAAP, and record unrealized gains or losses to Accumulated other comprehensive loss on our Consolidated Balance Sheets, unless losses are considered other than temporary, in which case, those are recorded directly to the Consolidated Statements of Operations and Statements of Comprehensive Loss. Deposits with financial institutions at times exceed Federal Deposit Insurance Corporation insurance limits.

Fair Value of Financial Instruments

We invest in various financial instruments, which may include corporate and government bonds, notes, and commercial paper. We value these instruments at their fair value and monitor our portfolio for impairment on a periodic basis. In the event that the carrying value of an investment exceeds its fair value and the decline in value is determined to be other than temporary, we would record an impairment charge and establish a new carrying value. We assess other than temporary impairment of marketable securities in accordance with Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) 820, “Fair Value Measurements and Disclosures.” The framework under the provisions of ASC 820 establishes three levels of inputs that may be used to measure fair value. Each level of input has different levels of subjectivity and difficulty involved in determining fair value.

Level 1 instruments generally represent quoted prices for identical assets or liabilities in active markets. Therefore, determining fair value for Level 1 instruments generally does not require significant management judgment, and the estimation is not difficult. Our Level 1 instruments consist of U.S. Government agency obligations, corporate notes and bonds, and commercial paper that are traded in active markets and are classified as Short-term marketable securities on our Consolidated Balance Sheets.

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Level 2 instruments include inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices for identical instruments in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Our Level 2 instruments consist of certificates of deposit and foreign currency exchange contracts, entered into to hedge against fluctuation in the Japanese yen.

Level 3 instruments include unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. As a result, the determination of fair value for Level 3 instruments requires significant management judgment and subjectivity. We did not have any Level 3 instruments during the periods presented.

## Foreign Exchange and Translation of Foreign Currencies

While our revenues and the majority of our expenses are denominated in U.S. dollars, we have international subsidiary and branch operations that conduct some transactions in foreign currencies, and we collect an annual Japanese consumption tax refund in yen. Gains or losses from foreign exchange rate fluctuations on balances denominated in foreign currencies are reflected in Other income, net. Realized and unrealized gains or losses on foreign currency transactions were not significant for the periods presented. We translate accounts denominated in foreign currencies in accordance with ASC 830, "Foreign Currency Matters," using the current rate method under which asset and liability accounts are translated at the current rate, while stockholders' equity accounts are translated at the appropriate historical rates, and revenue and expense accounts are translated at average monthly exchange rates. Translation adjustments related to the consolidation of foreign subsidiary financial statements are reflected in Accumulated other comprehensive loss in Stockholders' equity.

## Derivative Financial Instruments

We mitigate foreign currency exchange rate risk by entering into foreign currency forward exchange contracts, details of which are presented in the following table:

	July 1, December 31,	
	2017	2016
Total cost of contracts for Japanese yen (thousands)	\$ 1,005	\$ 2,323
Number of contracts	1	2
Settlement month	June 2018	June 2017

Although these hedges mitigate our foreign currency exchange rate exposure from an economic perspective, they were not designated as "effective" hedges for accounting purposes and as such are adjusted to fair value through Other income, net, with gains of less than \$0.1 million and approximately \$0.2 million, respectively, for the fiscal quarters ended July 1, 2017 and December 31, 2016. We do not hold or issue derivative financial instruments for trading or speculative purposes.

## Concentration Risk

Potential exposure to concentration risk may impact revenue, trade receivables, marketable securities, and supply of wafers for our products.

Customer concentration risk may impact revenue. The percentage of total revenue attributable to our top five end customers and largest end customer is presented in the following table:

	Three Months Ended July 1, 2017	July 2, 2016	Six Months Ended July 1, 2017	July 2, 2016
Revenue attributable to top five end customers	27%	20%	32%	22%
Revenue attributable to largest end customer	9%	7%	10%	6%

No other end customer accounted for more than 10% of total revenue during these periods.

Sales through distributors have historically accounted for a significant portion of our total revenue. Revenue attributable to resale of products by sell-through distributors as a percentage of total revenue is presented in the following table:

	Three Months Ended July 1, 2017	July 2, 2016	Six Months Ended July 1, 2017	July 2, 2016
Revenue attributable to sell-through distributors	66%	59%	63%	56%

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Our two largest distributor groups also account for a substantial portion of our trade receivables. At July 1, 2017 and December 31, 2016, one distributor group accounted for 37% and 38%, respectively, and the other accounted for 30% and 24%, respectively, of gross trade receivables. No other distributor group or end customer accounted for more than 10% of gross trade receivables at these dates.

Concentration of credit risk with respect to trade receivables is mitigated by our credit and collection process, including active management of collections, credit limits, routine credit evaluations for essentially all customers, and secure transactions with letters of credit or advance payments where appropriate. We regularly review our allowance for doubtful accounts and the aging of our accounts receivable.

Accounts receivable do not bear interest and are shown net of allowances for doubtful accounts of \$9.3 million at both July 1, 2017 and December 31, 2016. During the third quarter of fiscal 2016, we received notice from one of our distributor groups that indicated a high likelihood of their bankruptcy. As a result, we recorded a full allowance on our accounts receivable, net of deferred revenue, from that distributor group, which accounts for \$9.0 million of the allowance for doubtful accounts. Bad debt expense was negligible for the second quarter and first six months of both fiscal 2017 and fiscal 2016.

We place our investments primarily through one financial institution and mitigate the concentration of credit risk by limiting the maximum portion of the investment portfolio which may be invested in any one instrument. Our investment policy defines approved credit ratings for investment securities. Investments on-hand in marketable securities consisted primarily of money market instruments, "AA" or better corporate notes and bonds and commercial paper, and U.S. government agency obligations. See Note 3 for a discussion of the liquidity attributes of our marketable securities.

We rely on a limited number of foundries for our wafer purchases, including Fujitsu Limited, Seiko Epson Corporation, Taiwan Semiconductor Manufacturing Company, Ltd, and United Microelectronics Corporation. We seek to mitigate the concentration of supply risk by establishing, maintaining and managing multiple foundry relationships; however, certain of our products are sourced from a single foundry and changing from one foundry to another can have a significant cost.

## Revenue Recognition and Deferred Income

### Product Revenue

We sell our products directly to end customers, through a network of independent manufacturers' representatives, and indirectly through a network of independent sell-in and sell-through distributors. Distributors provide periodic data regarding the product, price, quantity, and end customer when products are resold, as well as the quantities of our products they still have in stock.

Revenue from sales to original equipment manufacturers ("OEMs") and sell-in distributors is generally recognized upon shipment. Reserves for sell-in stock rotations, where applicable, are estimated based primarily on historical experience and provided for at the time of shipment. Revenue from sales by our sell-through distributors is recognized at the time of reported resale. Under both types of revenue recognition, persuasive evidence of an arrangement exists, the price is fixed or determinable, title has transferred, collection of resulting receivables is reasonably assured, and there are no remaining customer acceptance requirements and no remaining significant performance obligations.

Orders from our sell-through distributors are initially recorded at published list prices; however, for a majority of our sales, the final selling price is determined at the time of resale and in accordance with a distributor price agreement. For this reason, we do not recognize revenue until products are resold by sell-through distributors to an end customer.

In certain circumstances, we allow sell-through distributors to return unsold products. At times, we protect our sell-through distributors against reductions in published list prices.

At the time of shipment to sell-through distributors, we (a) record accounts receivable at published list price since there is a legally enforceable obligation from the distributor to pay us currently for product delivered, (b) relieve inventory for the carrying value of goods shipped since legal title has passed to the distributor, and (c) record deferred revenue and deferred cost of sales in deferred income and allowances on sales to sell-through distributors in the liability section of our Consolidated Balance Sheets. Revenue and cost of sales to sell-through distributors are deferred until either the product is resold by the distributor or, in certain cases, return privileges terminate, at which time Revenue and Cost of products sold are reflected in Net loss, and Accounts receivable, net is adjusted to reflect the final selling price.

The components of Deferred income and allowances on sales to sell-through distributors are presented in the following table:

(In thousands)	July 1, 2017	December 31, 2016
Inventory valued at published list prices and held by sell-through distributors with right of return	\$81,837	\$ 86,218
Allowance for distributor advances	(45,130 )	(37,090 )
Deferred cost of sales related to inventory held by sell-through distributors	(11,792 )	(16,871 )
Total Deferred income and allowances on sales to sell-through distributors	\$24,915	\$ 32,257



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### Licensing and Services Revenue

Our licensing and services revenue is comprised of revenue from our intellectual property ("IP") core licensing activity, patent monetization activities, and royalty and adopter fee revenue from our standards activities. These activities are complementary to our product sales and help us monetize our IP and accelerate market adoption curves associated with our technology and standards.

From time to time we enter into patent sale and licensing agreements to monetize and license a broad portfolio of our patented inventions. Such licensing agreements may include upfront license fees and ongoing royalties. The contractual terms of the agreements generally provide for payments of upfront license fees and/or royalties over an extended period of time. Revenue from such license fees is recognized when payments become due and payable as long as all other revenue recognition criteria are met, while revenue from royalties is recognized when reported to us by customers.

We enter into IP licensing agreements that generally provide licensees the right to incorporate our IP components into their products pursuant to terms and conditions that vary by licensee. Revenue earned under these agreements is classified as licensing and services revenue. Our IP licensing agreements generally include multiple elements, which may include one or more off-the-shelf or customized IP licenses bundled with support services covering a fixed period of time, generally one year. If the different elements of a multiple-element arrangement qualify as separate units of accounting, we allocate the total arrangement consideration to each element based on relative selling price.

Amounts allocated to off-the-shelf IP licenses are recognized at the time of sale provided the other conditions for revenue recognition have been met. Amounts allocated to the support services are deferred and recognized on a straight-line basis over the support period, generally one year. Certain licensing agreements provide for royalty payments based on agreed-upon royalty rates, which may be fixed or variable depending on the terms of the agreement. The amount of revenue we recognize is based on a specified time period or on the agreed-upon royalty rate multiplied by the reported number of units shipped by the customer.

From time to time, we enter into IP licensing agreements that involve significant modification, customization or engineering services. Revenues derived from these contracts are accounted for using the percentage-of-completion method or completed contract method. The completed contract method is used for contracts where there is a risk associated with final acceptance by the customer or for short-term contracts.

HDMI royalty revenue is determined by a contractual allocation formula agreed to by the Founders of the HDMI consortium. Evidence of an arrangement, as it relates to HDMI royalty revenue, is deemed complete when all of the Founders agree on the royalty sharing formula. The contractual allocation formula is subject to periodic adjustment, generally every three years. The most recent agreement expired on December 31, 2016 and a new agreement has not yet been entered into covering the period beginning January 1, 2017. As a result, the HDMI agent is unable to distribute the majority of the royalties collected to the Founders and, given the lack of evidence of an arrangement, we are unable to recognize all of the HDMI royalty revenue for the three and six months ended July 1, 2017.

We acted as the agent of the HDMI consortium until December 31, 2016. From time to time, as the agent, we performed audits on royalty reporting customers to ensure compliance. As a result of those compliance efforts, we entered into settlement agreements for the payment of unreported royalties. The contractual terms of those agreements provided for upfront payment of unreported royalties or payment over a period of time, generally not to exceed one year. Revenue from those arrangements was recognized when the agreement was executed by both parties, as long as price was fixed and determinable and collection was reasonably assured.

### Property and Equipment

Property and equipment are stated at cost. Depreciation and amortization are computed using the straight-line method for financial reporting purposes over the estimated useful lives of the related assets, generally three to five years for equipment and software, one to three years for tooling, and thirty years for buildings and building space. Leasehold improvements are amortized over the shorter of the non-cancelable lease term or the estimated useful life of the assets. Upon disposal of property and equipment, the accounts are relieved of the costs and related accumulated depreciation and amortization, and resulting gains or losses are reflected in the Consolidated Statements of Operations for recognized gains and losses or in the Consolidated Balance Sheets for deferred gains and losses. Repair and maintenance costs are expensed as incurred.

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### New Accounting Pronouncements

#### Recently Adopted Accounting Standards

In October 2016, the FASB issued ASU 2016-16, Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory. This update is intended to recognize the income tax consequences of intra-entity transfers of assets other than inventory when they occur by removing the exception to postpone recognition until the asset has been sold to an outside party. For public business entities, this guidance is effective for interim and annual periods beginning after December 15, 2017. Early adoption is permitted, and it is required to be applied on a modified retrospective basis through a cumulative-effect adjustment to the balance sheet as of the beginning of the fiscal year of adoption. We early adopted this accounting standard in the first quarter of fiscal 2017 and recorded a nominal amount to accumulated deficit based on the guidance, as detailed in Note 10.

#### Recently Issued Accounting Standards

In May 2014, the FASB issued Accounting Standards Update (ASU) No. 2014-09, Revenue from Contracts with Customers, which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. In August 2015, the FASB issued ASU 2015-14 deferring the effective date of ASU 2014-09 to periods beginning on or after December 15, 2017, with early adoption permitted for annual reporting periods beginning after December 15, 2016, and interim periods within that year. We intend to adopt ASU 2014-09 on December 31, 2017 which is the first day of our fiscal 2018. The new standard allows for two transition methods - (i) a full retrospective method applied to each prior reporting period presented, or (ii) a modified retrospective method applied with the cumulative effect of adoption recognized on December 31, 2017, the first day of our fiscal 2018. We currently anticipate adopting this guidance using the modified retrospective transition method, which would result in an adjustment to accumulated deficit for the cumulative effect of applying this guidance to contracts in process as of the adoption date. Under this approach, we would not restate the prior financial statements presented. This guidance requires us to provide additional disclosures of the amount by which each financial statement line item is affected in the current reporting period during 2018 as compared to the guidance that was in effect before the change, and an explanation of the reasons for significant changes.

We have been executing against a project plan developed early in 2017 and believe that we are on schedule to be substantially complete with our implementation efforts by the first quarter of fiscal 2018. Key ongoing elements of our project plan include the quantification of the impacts of the standard to revenues, contract acquisition costs, income taxes and various balance sheet accounts, and the design and implementation of relevant internal controls. Based on our current assessment, we believe the most significant impact of the new standard will be to accelerate the timing of revenue recognition on product shipments to our sell-through distributors. Assuming all other revenue recognition criteria have been met, the new guidance would require us to recognize revenue and costs relating to such sales upon shipment to the distributor - subject to reductions for estimated reserves for price adjustments and returns - rather than upon the ultimate sale by the distributor to its end customer, as is our current practice. Revenue to our sell-through distributors accounted for 75% and 71% of our product revenue and 66% and 63% of our total revenue for the three and six months ended July 1, 2017, respectively, as compared to approximately 66% of product revenue and approximately 60% of total revenue during the year ended December 31, 2016.

In January 2016, the FASB issued ASU No. 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities, to mainly change the accounting for investments in equity securities and financial liabilities carried at fair value as well as to modify the presentation and disclosure requirements for financial instruments. The ASU is effective for interim and annual periods beginning after December 15, 2017, with early adoption permitted. Adoption of the ASU is retrospective with a cumulative adjustment to retained earnings or accumulated deficit as of the adoption date. We are currently evaluating the impact of ASU 2016-01 on our consolidated financial statements

and related disclosures.

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842), which requires that substantially all leases, including current operating leases, be recognized by lessees on their balance sheet as a right-of-use asset and corresponding lease liability. For public business entities, the standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early application is permitted for all entities. We are currently evaluating the impact of ASU 2016-02 on our consolidated financial statements and related disclosures.

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments. The new guidance is intended to reduce diversity in practice in how cash receipts and cash payments are classified in the statement of cash flows. For public business entities, this guidance will be effective for interim and annual periods beginning after December 15, 2017. Early adoption is permitted. We are currently evaluating the impact of ASU 2016-15 on our consolidated financial statements and related disclosures.

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In January 2017, the FASB issued ASU No. 2017-01, Clarifying the Definition of a Business, which narrows the existing definition of a business and provides a framework for evaluating whether a transaction should be accounted for as an acquisition (or disposal) of assets or a business. This update requires an entity to evaluate if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or a group of similar identifiable assets; if so, the set of transferred assets and activities (collectively, the set) is not a business. To be considered a business, the set would need to include an input and a substantive process that together significantly contribute to the ability to create outputs. The standard also narrows the definition of outputs. The definition of a business affects areas of accounting such as acquisitions, disposals and goodwill. Under the new guidance, fewer acquired sets are expected to be considered businesses. For public business entities, this guidance is effective for interim and annual periods beginning after December 15, 2017. We are currently evaluating the impact of ASU 2017-01 on our consolidated financial statements and related disclosures.

In January 2017, the FASB issued ASU 2017-04, Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment, which simplifies the subsequent measurement of goodwill by eliminating step two from the goodwill impairment test. Under the new guidance, an entity will recognize an impairment charge for the amount by which the carrying value exceeds the fair value. This standard is effective for annual or any interim goodwill impairment tests in fiscal years beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017 and requires a prospective transition method. We are currently evaluating the impact of ASU 2017-04 on our consolidated financial statements and related disclosures.

In May 2017, the FASB issued ASU 2017-09, Compensation—Stock Compensation (Topic 718): Scope of Modification Accounting, which provides clarity on which changes to the terms or conditions of share-based payment awards require entities to apply the modification accounting provisions required in Topic 718. This standard is effective for all entities for annual reporting periods beginning after December 15, 2017, with early adoption permitted, including adoption in any interim period for which financial statements have not yet been issued. We are currently evaluating the impact of ASU 2017-09 on our consolidated financial statements and related disclosures.

## Note 2 - Net Loss per Share

We compute basic net loss per share by dividing net loss by the weighted average number of common shares outstanding during the period. To determine diluted share count, we apply the treasury stock method to determine the dilutive effect of outstanding stock option shares, restricted stock units ("RSUs"), and Employee Stock Purchase Plan ("ESPP") shares. Our application of the treasury stock method includes, as assumed proceeds, the average unamortized stock-based compensation expense for the period and the impact of the pro forma deferred tax benefit or cost associated with stock-based compensation expense. When we are in a net loss position, we do not include dilutive securities as their inclusion would reduce the net loss per share.

A summary of basic and diluted net loss per share is presented in the following table:

(in thousands, except per share data)	Three Months Ended		Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
Basic and diluted net loss	\$(13,022)	\$(13,810)	\$(20,297)	\$(33,521)
Shares used in basic and diluted net loss per share	122,390	119,445	122,095	119,125
Basic and diluted net loss per share	\$(0.11 )	\$(0.12 )	\$(0.17 )	\$(0.28 )

The computation of diluted net loss per share excludes the effects of stock options, RSUs, and ESPP shares that are antidilutive, aggregating approximately the following number of shares:

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	Three Months Ended July 1, July 2, 2017 2016	Six Months Ended July 1, July 2, 2017 2016
(in thousands)		
Stock options, RSUs, and ESPP shares excluded as they are antidilutive	6,000 7,579	5,946 7,781

Stock options, RSUs, and ESPP shares are considered antidilutive when the aggregate of exercise price and unrecognized stock-based compensation expense are greater than the average market price for our common stock during the period or when the Company is in a net loss position, as the effects would reduce the loss per share. Stock options, RSUs, and ESPP shares that are antidilutive at July 1, 2017 could become dilutive in the future.

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## Note 3 - Marketable Securities

We classify our marketable securities as short-term based on their nature and availability for use in current operations. Our short-term marketable securities currently have contractual maturities of up to two years. The following table summarizes the remaining maturities of our marketable securities at fair value:

(In thousands)	July 1, 2017	December 31, 2016
Short-term marketable securities:		
Maturing within one year	\$7,989	\$ 10,308
Maturing between one and two years	2,481	—
Total marketable securities	\$10,470	\$ 10,308

The following table summarizes the composition of our marketable securities at fair value:

(In thousands)	July 1, 2017	December 31, 2016
Short-term marketable securities:		
Corporate and government bonds and notes, and commercial paper	\$10,382	\$ 10,230
Certificates of deposit	88	78
Total marketable securities	\$10,470	\$ 10,308

## Note 4 - Fair Value of Financial Instruments

(In thousands)	Fair value measurements as of July 1, 2017				Fair value measurements as of December 31, 2016			
	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
Short-term marketable securities	\$10,470	\$10,382	\$88	\$ —	—\$10,308	\$10,230	\$78	\$ —
Foreign currency forward exchange contracts, net	26	—	26	—	184	—	184	—
Total fair value of financial instruments	\$10,496	\$10,382	\$114	\$ —	—\$10,492	\$10,230	\$262	\$ —

We invest in various financial instruments that may include corporate and government bonds and notes, commercial paper, and certificates of deposit. In addition, we enter into foreign currency forward exchange contracts to mitigate our foreign currency exchange rate exposure. We carry these instruments at their fair value in accordance with ASC 820, "Fair Value Measurements and Disclosures." The framework under the provisions of ASC 820 establishes three levels of inputs that may be used to measure fair value. Each level of input has different levels of subjectivity and difficulty involved in determining fair value, as summarized in Note 1. There were no transfers between any of the levels during the first six months of fiscal 2017 or 2016.

In accordance with ASC 320, "Investments-Debt and Equity Securities," we recorded an unrealized loss of less than \$0.1 million during each of the six months ended July 1, 2017 and July 2, 2016 on certain short-term marketable securities (Level 1 instruments), which have been recorded in accumulated other comprehensive loss. Future fluctuations in fair value related to these instruments that we deem to be temporary, including any recoveries of previous write-downs, would be recorded to accumulated other comprehensive loss. If we were to determine in the future that any further decline in fair value is other-than-temporary, we would record an impairment charge, which could have a material adverse effect on our operating results. If we were to liquidate our position in these securities, it is likely that the amount of any future realized gain or loss would be different from the unrealized gain or loss reported in accumulated other comprehensive loss.

Note 5 - Inventories

(In thousands)	July 1, 2017	December 31, 2016
Work in progress	\$52,790	\$ 50,688
Finished goods	25,689	28,480
Total inventories	\$78,479	\$ 79,168



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## Note 6 - Goodwill

Goodwill represents the excess of the purchase price over the fair value of the underlying net tangible and intangible assets. Goodwill is not amortized, but is instead tested for impairment annually or more frequently if certain indicators of impairment are present. We do not expect goodwill impairment to be tax deductible for income tax purposes. No impairment charges relating to goodwill were recorded for the first six months of fiscal 2017 or fiscal 2016 as no indicators of impairment were present.

In the first quarter of 2016, we finalized our valuation and allocation of purchase price consideration related to the acquisition of Silicon Image, Inc. ("Silicon Image") resulting in \$2.1 million of additional long-term liabilities related to an uncertain tax position with an equivalent revision to Goodwill, which is reflected in the Consolidated Balance Sheets for the period ended December 31, 2016.

The goodwill balance of approximately \$269.8 million at both July 1, 2017 and December 31, 2016 is comprised of approximately \$44.8 million from prior acquisitions combined with the approximately \$237.6 million from the acquisition of Silicon Image, reduced by the fiscal 2015 goodwill impairment charge of approximately \$12.7 million.

## Note 7 - Intangible Assets

In connection with our acquisitions of Silicon Image in March 2015 and SiliconBlue in December 2011 we recorded identifiable intangible assets related to developed technology, customer relationships, licensed technology, patents, and in-process research and development based on guidance for determining fair value under the provisions of ASC 820, "Fair Value Measurements and Disclosures." Additionally, during fiscal 2015, we licensed additional third-party technology.

On our Consolidated Balance Sheets, intangible assets are shown net of accumulated amortization of \$93.8 million and \$78.5 million at July 1, 2017 and December 31, 2016, respectively.

During the first quarter of fiscal 2017, we sold a portfolio of patents that had been acquired from Silicon Image. As a result of this transaction, intangible assets, net of amortization was reduced by approximately \$3.5 million on our Consolidated Balance Sheets.

We monitor the carrying value of our intangible assets for potential impairment and test the recoverability of such assets annually during the fourth quarter and whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. No impairment charges related to intangible assets were recorded for the first six months of either fiscal 2017 or fiscal 2016 as no indicators of impairment were present.

We recorded amortization expense related to intangible assets on the Consolidated Statements of Operations as presented in the following table:

	Three Months Ended		Six Months Ended	
(In thousands)	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
Research and development	\$141	\$187	\$314	\$373
Amortization of acquired intangible assets	8,737	8,311	17,251	17,032
	\$8,878	\$8,498	\$17,565	\$17,405

## Note 8 - Equity Method Investment

During fiscal 2015, we purchased a series of preferred stock ownership interests in a privately-held company that designs human-computer interaction technology for total consideration of \$5.0 million. This gross investment constituted a 22.7% ownership interest. As a result of the ownership interest and after considering the level of our participation in the management of and interaction with the investee, we determined that we have the ability to exert significant influence over the investee. Accordingly, we have accounted for the investment by the equity method and have recognized our proportionate share of the investee's operating results in the Consolidated Statements of Operations.

In the third quarter of fiscal 2016, we made an additional investment of \$1.0 million via a convertible debt instrument, bringing our gross investment in the investee to \$6.0 million. We have determined that this additional investment is an in-substance common stock and has been included in our equity method accounting.

In the second quarter of fiscal 2017, we advanced the investee \$1.0 million through a short-term instrument. As this investment is due and payable in the fourth quarter of fiscal 2017, it is included in prepaid expenses and other current assets in our Consolidated Balance Sheet.

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Applying the equity method, the proportionate share of the investee's net loss that we have recognized in the Consolidated Statements of Operations is presented in the following table:

(In thousands)	Three Months		Six Months	
	Ended July 1, 2017	July 2, 2016	Ended July 1, 2017	July 2, 2016
Equity in net loss of an unconsolidated affiliate, net of tax	\$(154)	\$(368)	\$(493)	\$(678)

Through July 1, 2017, we have reduced the value of our investment by approximately \$2.4 million, representing our cumulative proportionate share of the privately-held company's net loss accumulated to that date. The net balance of our investment included in other long-term assets in the Consolidated Balance Sheets is detailed in the following table:

(In thousands)	Total
Balance at December 31, 2016	\$4,049
Equity in net loss of an unconsolidated affiliate, net of tax	(493 )
Balance at July 1, 2017	\$3,556

## Note 9 - Accounts Payable and Accrued Expenses

Included in accounts payable and accrued expenses are the following balances:

(In thousands)	July 1, 2017	December 31, 2016
Trade accounts payable	\$39,591	\$ 37,800
Liability for non-cancelable contracts	5,073	5,744
Payable to members of the MHL and HDMI consortia*	115	9,698
Other accrued expenses	23,166	27,691
Total accounts payable and accrued expenses	\$67,945	\$ 80,933

\* As an agent of the MHL consortium, we administer royalty reporting and distributions to the members of this consortium.

This excludes amounts payable to us, and is payable quarterly based on collections from MHL customers. Our role as the agent of the HDMI consortium terminated on January 1, 2017 and, therefore, the balance as of July 1, 2017 is due to MHL consortium members only.

## Note 10 - Changes in Stockholders' Equity and Accumulated Other Comprehensive Loss

(In thousands)	Common stock	Additional Paid-in capital	Accumulated deficit	Accumulated other comprehensive loss	Total
Balances, December 31, 2016	\$ 1,216	\$ 680,315	\$ (406,945 )	\$ (4,156 )	\$ 270,430
Net loss for the six months ended July 1, 2017	—	—	(20,297 )	—	(20,297 )
Unrealized loss related to marketable securities, net of tax	—	—	—	(71 )	(71 )
Recognized loss on redemption of marketable securities, previously unrealized	—	—	—	200	200
Translation adjustments, net of tax	—	—	—	950	950
	11	1,172	—	—	1,183

Common stock issued in connection with the exercise of stock options, ESPP and vested RSUs, net of tax

Stock-based compensation expense related to stock options, ESPP and RSUs	—	6,772	—	—	6,772
Defined benefit pension, net of actuarial losses	—	—	—	(47)	(47)
Accounting method transition adjustment	—	—	(355)	—	(355)
Balances, July 1, 2017	\$ 1,227	\$ 688,259	\$ (427,597)	\$ (3,124)	\$ 258,765

In the first quarter of fiscal 2017, we early adopted ASU 2016-16, Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory. This guidance is required to be applied on a modified retrospective basis through a cumulative-effect adjustment to the balance sheet as of the beginning of the fiscal year of adoption. As a result of this adoption, we recorded a nominal amount to accumulated deficit, as detailed in the table above.

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Note 11 - Income Taxes

For the three months ended July 1, 2017 and July 2, 2016, we recorded an income tax provision of less than \$0.1 million and \$4.5 million, respectively. For the six months ended July 1, 2017 and July 2, 2016, we recorded an income tax provision of approximately \$0.6 million and \$6.4 million, respectively. The income tax provision for the three and six months ended July 1, 2017 represents tax at the federal, state, and foreign statutory tax rates adjusted for withholding taxes, changes in uncertain tax positions, changes in the U.S. valuation allowance, as well as other non-deductible items in the United States and foreign jurisdictions. The difference between the U.S. federal statutory tax rate of 35% and our negative effective tax rates for the three and six months ended July 1, 2017 is primarily due to a valuation allowance increase that offsets the otherwise expected tax benefit from the pretax loss in the United States, and to the zero tax rate in Bermuda which results in no tax benefit for the pretax loss in Bermuda.

Through July 1, 2017, we evaluated the existing valuation allowance position in the United States and concluded that we should continue to maintain a valuation allowance against our federal and state deferred tax assets. We will continue to evaluate both positive and negative evidence in future periods to determine if we should recognize more deferred tax assets. We don't have a valuation allowance in any foreign jurisdictions as it has been concluded it is more-likely-than-not that we will realize the net deferred tax assets in future periods.

We are subject to federal and state income tax as well as income tax in the various foreign jurisdictions in which we operate. Additionally, the years that remain subject to examination are 2013 for federal income taxes, 2012 for state income taxes, and 2010 for foreign income taxes, including years ending thereafter. However, to the extent allowed by law, the tax authorities may have the right to examine prior periods where net operating losses or tax credits were generated and carried forward, and make adjustments up to the amount of the net operating losses or credit carryforward amount.

Our income tax return for India is currently under examination for the fiscal year ended March 31, 2015. We are not under examination in any other jurisdiction.

We believe that it is reasonably possible that \$1.6 million of unrecognized tax benefits and \$0.1 million of associated interest and penalties could be recognized during the next twelve months. The \$1.6 million potential change would represent a decrease in unrecognized tax benefits, comprised of items related to tax filings for years that will no longer be subject to examination under expiring statutes of limitations.

At December 31, 2016, we had U.S. federal net operating loss ("NOL") carryforwards (pretax) of approximately \$367.0 million that expire at various dates between 2025 and 2036. We had state NOL carryforwards (pretax) of approximately \$193.3 million that expire at various dates from 2017 through 2036. We also had federal and state credit carryforwards of \$49.2 million and \$56.7 million, respectively. Of the total \$105.9 million credit carryforwards, \$55.5 million do not expire. The remaining credits expire at various dates from 2017 through 2036.

Our liability for uncertain tax positions (including penalties and interest) was \$27.8 million and \$29.6 million at July 1, 2017 and December 31, 2016, respectively, and is recorded as a component of other long-term liabilities on our Consolidated Balance Sheets. The remainder of our uncertain tax position exposure is netted against deferred tax assets.

We are not currently paying U.S. federal income taxes and do not expect to pay such taxes until we fully utilize our tax NOL and credit carryforwards. We expect to pay a nominal amount of state income tax. We are paying foreign income and withholding taxes, which are reflected in income tax expense in our Consolidated Statements of Operations and are primarily related to the cost of operating offshore activities and subsidiaries. We accrue interest and penalties related to uncertain tax positions in income tax expense.

Note 12 - Restructuring

In March 2015, our Board of Directors approved an internal restructuring plan (the "March 2015 Plan"), in connection with our acquisition of Silicon Image. The March 2015 Plan was designed to realize synergies from the acquisition by eliminating redundancies created as a result of combining the two companies. This included reductions in our worldwide workforce, consolidation of facilities, and cancellation of software contracts and engineering tools. The March 2015 Plan is substantially complete subject to certain remaining expected costs that we do not expect to be material and any changes in sublease assumptions should they occur, which will be expensed as incurred. Under this plan, approximately \$0.4 million of credit and \$2.4 million of expense was incurred during the three months ended July 1, 2017 and July 2, 2016, respectively, and approximately \$0.1 million of credit and \$5.9 million of expense was incurred during the six months ended July 1, 2017 and July 2, 2016, respectively. Approximately \$20.5 million of total expense has been incurred through July 1, 2017 under the March 2015 Plan, and we expect the total cost to be approximately \$21.0 million.

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In September 2015, we implemented a further reduction of our worldwide workforce (the "September 2015 Reduction") separate from the March 2015 Plan. The September 2015 Reduction was designed to resize the company in line with the market environment and to better balance our workforce with the long-term strategic needs of our business. The September 2015 Reduction is substantially complete subject to certain remaining expected costs, which we do not expect to be material but which will be expensed as incurred. Under this reduction, approximately \$0.5 million of credit and \$0.2 million of expense were incurred during the three months ended July 1, 2017 and July 2, 2016, respectively, and approximately \$0.7 million of credit and \$2.1 million of expense was incurred during the six months ended July 1, 2017 and July 2, 2016, respectively. Approximately \$7.2 million of total expense has been incurred through July 1, 2017 under the September 2015 Reduction, and we expect the total cost to be approximately \$8.0 million.

In June 2017, our Board of Directors approved an additional internal restructuring plan (the "June 2017 Plan"), which resulted in the sale of our Hyderabad, India subsidiary and certain assets related to non-core businesses, a worldwide workforce reduction, and an initiative to reduce our infrastructure costs. These actions are part of an overall plan to achieve financial targets and to enhance our financial and competitive position by better aligning our revenue and operating expenses. Approximately \$2.4 million of total expense has been incurred through July 1, 2017 under the June 2017 Plan, and we expect the total cost to be approximately \$8.0 million to \$19.0 million.

The approximately \$2.4 million of expense related to the June 2017 Plan has been offset by credits from the March 2015 Plan and the September 2015 Reduction discussed above totaling approximately \$0.8 million for both the second quarter and first six months of fiscal 2017, resulting in the net charge of approximately \$1.6 million recorded to restructuring charges on our Consolidated Statements of Operations. The restructuring accrual balance is presented in accounts payable and accrued expenses (includes restructuring) on our Consolidated Balance Sheets.

The following table displays the combined activity related to the restructuring actions described above:

(In thousands)	Severance & related *	Lease Termination	Software Contracts & Engineering Tools **	Other	Total
Balance at January 2, 2016	\$ 3,696	\$ 1,005	\$ 377	\$ —	\$ 5,078
Restructuring charges	1,878	2,234	1,931	1,956	7,999
Costs paid or otherwise settled	(4,406 )	(1,402 )	(2,111 )	(1,940)	(9,859 )
Balance at July 2, 2016	\$ 1,168	\$ 1,837	\$ 197	\$ 16	\$ 3,218
Balance at December 31, 2016	\$ 801	\$ 1,036	\$ 25	\$ 12	\$ 1,874
Restructuring charges	1,276	57	—	309	1,642
Costs paid or otherwise settled	(52 )	(616 )	(25 )	(301 )	(994 )
Balance at July 1, 2017	\$ 2,025	\$ 477	\$ —	\$ 20	\$ 2,522

\* Includes employee relocation costs

\*\*Includes cancellation of contracts, asset impairments, and accelerated depreciation on certain enterprise resource planning and customer relationship management systems

#### Note 13 - Long-Term Debt

On March 10, 2015, we entered into a secured credit agreement (the "Credit Agreement") with Jefferies Finance, LLC and certain other lenders for purposes of funding, in part, our acquisition of Silicon Image. The Credit Agreement provided for a \$350 million term loan (the "Term Loan") maturing on March 10, 2021 (the "Term Loan Maturity Date"). We received \$346.5 million net of an original issue discount of \$3.5 million and we paid debt issuance costs of

\$8.3 million. The Term Loan bears variable interest equal to the one-month LIBOR as of July 1, 2017, subject to a 1.00% floor if necessary, plus a spread of 4.25%. The current effective interest rate on the Term Loan is 5.99%.

The Term Loan is payable through a combination of (i) quarterly installments of approximately \$0.9 million, (ii) annual excess cash flow payments as defined in the Credit Agreement, which are due 95 days after the last day of our fiscal year, and (iii) any payments due upon certain issuances of additional indebtedness and certain asset dispositions, with any remaining outstanding principal amount due and payable on the Term Loan Maturity Date. The percentage of excess cash flow we are required to pay ranges from 0% to 75%, depending on our leverage and other factors as defined in the Credit Agreement. Currently, the Credit Agreement would require a 75% excess cash flow payment.

In the first quarter of fiscal 2017, we made a required additional principal payment of \$9.9 million due to a sale of patents. In the second quarter of fiscal 2017, we made another required additional principal payment of \$8.3 million due to a sale of patents, and a required annual excess cash flow payment of \$13.7 million. Over the next twelve months, our principal payments will be comprised mainly of regular quarterly installments and a required annual excess cash flow payment.



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While the Credit Agreement does not contain financial covenants, it does contain informational covenants and certain restrictive covenants, including limitations on liens, mergers and consolidations, sales of assets, payment of dividends, and indebtedness. We were in compliance with all such covenants at July 1, 2017.

The original issue discount and the debt issuance costs have been accounted for as a reduction to the carrying value of the Term Loan on our Consolidated Balance Sheets and are being amortized to interest expense in our Consolidated Statements of Operations over the contractual term, using the effective interest method.

The fair value of the Term Loan approximates the carrying value, which is reflected in our Consolidated Balance Sheets as follows:

(In thousands)	July 1, 2017	December 31, 2016
Principal amount	\$308,542	\$ 342,221
Unamortized original issue discount and debt costs	(6,245 )	(7,599 )
Less: Current portion of long-term debt	(15,318 )	(33,767 )
Long-term debt	\$286,979	\$ 300,855

Interest expense related to the Term Loan was included in Interest expense on our Consolidated Statements of Operations as follows:

(In thousands)	Three Months Ended		Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
Contractual interest	\$4,167	\$4,615	\$8,710	\$9,235
Amortization of debt issuance costs and discount	421	418	1,354	659
Total Interest expense related to the Term Loan	\$4,588	\$5,033	\$10,064	\$9,894

As of July 1, 2017, expected future principal payments on the Term Loan were as follows:

Fiscal year	(in thousands)
2017 (remaining 6 months)	\$ 1,750
2018	17,527
2019	18,748
2020	81,093
2021	189,424
	\$ 308,542

## Note 14 - Stock-Based Compensation

Total stock-based compensation expense included in our Consolidated Statements of Operations is presented in the following table:

(In thousands)	Three Months Ended		Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
Cost of products sold	\$180	\$166	\$408	\$425
Research and development	1,299	1,468	3,149	3,927
Selling, general and administrative	1,450	1,608	3,215	3,446

Total stock-based compensation    \$2,929   \$3,242   \$6,772   \$7,798

We granted stock options with a market condition to certain executives in fiscal years 2015 and 2016. The options have a two year vesting and vest between 0% and 200% of the target amount, based on the Company's relative Total Shareholder Return (TSR) when compared to the TSR of a component of companies of the PHLX Semiconductor Sector Index over a two year period. TSR is a measure of stock price appreciation plus dividends paid, if any, in the performance period. The fair values of the options were determined and fixed on the date of grant using a lattice-based option-pricing valuation model, which incorporates a Monte-Carlo simulation, and considered the likelihood that we would achieve the market condition.

Of these grants with a market condition, approximately 596,600 were outstanding and unvested at December 31, 2016. In the first quarter of fiscal 2017, approximately 91,500 grants vested, and approximately 183,200 were canceled due to the expiration of the vesting period for the 2015 tranche. During the second quarter of fiscal 2017, approximately 9,200 vested options were exercised, while 28,000 unvested options were canceled due to termination. A total of approximately 376,200 stock options were

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outstanding as of July 1, 2017, which includes the approximately 82,300 that vested but were not exercised. We incurred stock compensation expense related to these market condition awards of less than \$0.1 million and approximately \$0.3 million in the second quarter and first six months, respectively, of fiscal 2017 and less than \$0.1 million and approximately \$0.2 million in the second quarter and first six months, respectively, of fiscal 2016.

## Note 15 - Contingencies

## Legal Matters

In February 2016, we filed a complaint against Technicolor SA and its affiliates in the United States District Court for the Northern District of California alleging that Technicolor had infringed on certain patents relating to the HDMI specification. Technicolor filed an answer to our complaint on April 11, 2016, which included various defenses to the alleged patent infringement. In November 2016, Technicolor amended its answer and asserted a counterclaim, alleging that the Company's action constituted a breach of the HDMI Founders Agreement to provide licenses on fair, reasonable and non-discriminatory terms. Technicolor seeks declaratory relief and compensation for the alleged breach. At this stage of the proceedings, we do not have an estimate of the likelihood or the amount of any financial consequences to us.

From time to time, we are exposed to certain other asserted and unasserted potential claims. Periodically, we review the status of each significant matter and assess its potential financial exposure. If the potential loss from any claim or legal proceeding is considered probable and a range of possible losses can be estimated, we then accrue a liability for the estimated loss. Legal proceedings are subject to uncertainties, and the outcomes are difficult to predict. Because of such uncertainties, accruals are based only on the best information available at the time. As additional information becomes available, we reassess the potential liability related to pending claims and litigation and may revise estimates.

## Note 16 - Segment and Geographic Information

## Segment Information

As of July 1, 2017, Lattice had one operating segment: the core Lattice business, which includes IP and semiconductor devices. Qterics, a discrete software-as-a-service business unit, was previously an immaterial operating segment in the Lattice legal entity structure. In April 2016, we sold Qterics to an unrelated third party for net proceeds of \$2.0 million, net of cash sold, resulting in a gain of \$2.6 million. The gain was included in Other income, net in the Consolidated Statements of Operations in the period of sale. In the second quarter of fiscal 2017, we received a final escrow payment of \$0.3 million related to the sale of Qterics, which was included as a gain in Other income, net in the Consolidated Statements of Operations for the current period.

## Geographic Information

Our revenue by major geographic area, based on ship-to location, is presented in the following table:

	Three Months Ended			Six Months Ended				
(In thousands)	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016				
Asia	\$64,946	69 %	\$67,655	68 %	\$138,404	70 %	\$133,167	68 %
Europe	10,579	11	14,729	15	21,659	11	30,738	16
Americas	18,612	20	16,825	17	38,661	19	31,816	16
Total revenue	\$94,137	100%	\$99,209	100%	\$198,724	100%	\$195,721	100%

We assign revenue to geographies based on the customer ship-to address at the point where revenue is recognized. In the case of sell-in distributors and OEM customers, revenue is typically recognized, and geography is assigned, when

products are shipped to our distributor or customer. In the case of sell-through distributors, revenue is recognized when resale occurs and geography is assigned based on the customer location on the resale reports provided by the distributor.

There were no material changes to property and equipment by major geographic area as of July 1, 2017 as compared to December 31, 2016.

Note 17 - Subsequent Event

On July 27, 2017, we announced our agreement to sell certain assets, including our Hyderabad, India subsidiary and our Simplay Labs testing and certification business to Invecas, Inc. for the purchase price of \$5.0 million, plus or minus cash net of agreed upon pre-close liabilities (the "Invecas Transaction"). The Invecas Transaction is subject to a number of closing conditions. In connection with the Invecas Transaction, approximately 150 employees in the U.S., China, and India, primarily working on HDMI and related products, will be offered employment by Invecas, Inc. or an affiliate. We are currently evaluating the impact of this transaction on our consolidated financial statements.

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

#### Overview

Lattice Semiconductor (“Lattice,” the “Company,” “we,” “us,” or “our”) engages in smart connectivity solutions, providing intellectual property (“IP”) and low-power, small form-factor devices that enable global customers to quickly deliver innovative and differentiated cost and power efficient products. Our broad end-market exposure extends from mobile devices and consumer electronics to industrial and automotive equipment, communications and computing infrastructure, and licensing. Lattice was founded in 1983 and is headquartered in Portland, Oregon.

#### Plan of Merger and Reorganization

On November 3, 2016, we entered into an Agreement and Plan of Merger (the “Merger Agreement”) with Canyon Bridge Acquisition Company, Inc., a Delaware corporation (“Parent”), and Canyon Bridge Merger Sub, Inc., a Delaware corporation and wholly owned subsidiary of Parent (“Merger Sub”), providing for the merger of Merger Sub with and into the Company (the “Merger”), with the Company surviving the Merger as a wholly owned subsidiary of Parent.

At the effective time of the Merger, each share of common stock, par value \$0.01 per share, of the Company (the “Shares”) that is outstanding immediately prior to such time (other than (i) Shares owned by Parent, Merger Sub, the Company (including any Shares held in the treasury of the Company) or by any direct or indirect wholly owned subsidiary of Parent, Merger Sub or the Company, or (ii) Shares held by stockholders of the Company who have not voted in favor of the Merger and who are entitled to demand and properly demand their statutory rights of appraisal in accordance with the Delaware General Corporation Law) will be canceled and extinguished and automatically converted into the right to receive cash in an amount equal to \$8.30 per share (without interest and subject to deduction for any required withholding tax).

Completion of the Merger is subject to various conditions, including the receipt of any required regulatory clearances related to the Merger from the Committee on Foreign Investment in the United States (“CFIUS”) by September 30, 2017, which is the timeframe provided in the Merger Agreement. On June 9, 2017, to allow more time of review and discussion with CFIUS in connection with the Merger, the Company announced that it withdrew and re-filed the joint voluntary notice to CFIUS under the Defense Production Act of 1950, as amended.

#### Fiscal 2017 Transactions

In July 2017, we announced our agreement to sell certain assets, including our Simplay Labs testing and certification business to Invecas, Inc. for the purchase price of \$5.0 million, plus or minus cash net of agreed upon pre-close liabilities (the “Invecas Transaction”). The Invecas Transaction is subject to a number of closing conditions. In connection with the Invecas Transaction, approximately 150 employees in the U.S., China, and India, primarily working on HDMI and related products, will be offered employment by Invecas, Inc. or an affiliate. This transaction is part of an overall plan to reduce operating expenses by approximately 10%, and to enhance our competitive position by better aligning our revenue and operating expenses.

#### Critical Accounting Policies and Estimates

Critical accounting policies are those that are both most important to the portrayal of a company's financial condition and results and require management's most difficult, subjective, and complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. Management believes that there have been no significant changes to the items that we disclosed as our critical accounting policies and estimates in Management's

Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on form 10-K for the fiscal year ended December 31, 2016.

#### Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles ("U.S. GAAP") requires management to make estimates and assumptions that affect the reported amounts and classification of assets, such as marketable securities, accounts receivable, inventory, goodwill (including the assessment of reporting unit), intangible assets, current and deferred income taxes, accrued liabilities (including restructuring charges and bonus arrangements), deferred income and allowances on sales to sell-through distributors, disclosure of contingent assets and liabilities at the date of the financial statements, amounts used in acquisition valuations and purchase accounting, and the reported amounts of product revenue, licensing and services revenue, and expenses during the fiscal periods presented. Actual results could differ from those estimates.

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## Results of Operations

Key elements of our Consolidated Statements of Operations are presented in the following table:

(In thousands)	Three Months Ended				Six Months Ended			
	July 1, 2017		July 2, 2016		July 1, 2017		July 2, 2016	
Revenue	\$94,137	100.0 %	\$99,209	100.0 %	\$198,724	100.0 %	\$195,721	100.0 %
Gross margin	51,209	54.4	58,426	58.9	112,041	56.4	115,530	59.0
Research and development	26,820	28.5	30,915	31.2	54,209	27.3	63,523	32.5
Selling, general and administrative	21,938	23.3	23,005	23.2	45,843	23.1	46,613	23.8
Amortization of acquired intangible assets	8,737	9.3	8,311	8.4	17,251	8.7	17,032	8.7
Restructuring charges	1,576	1.7	2,568	2.6	1,642	0.8	7,999	4.1
Acquisition related charges	867	0.9	—	—	2,527	1.3	94	—
Loss from operations	\$(8,729) (9.3)%		\$(6,373) (6.4)%		\$(9,431) (4.7)%		\$(19,731) (10.1)%	

## Revenue by End Market

The end market data below is derived from data provided to us by our distributors and end customers. With a diverse base of customers who may manufacture end products spanning multiple end markets, the assignment of revenue to a specific end market requires the use of estimates and judgment. Therefore, actual results may differ from those reported. Our Licensing and services end market includes revenue from the licensing of our IP, the collection of certain royalties, patent sales, the revenue related to our participation in consortia and standard-setting activities, and services. While Licensing products are primarily sold into the Mobile and Consumer market, Licensing and services revenue is reported separately as it has characteristics that differ from other categories, most notably its higher gross margin.

The following are examples of end market applications:

Communications and Computing	Mobile and Consumer	Industrial and Automotive	Licensing and Services
Wireless	Smartphones	Security and Surveillance	IP Royalties
Wireline	Cameras	Machine Vision	Adopter Fees
Data Backhaul	Displays	Industrial Automation	IP Licenses
Computing	Tablets	Human Machine Interface	Patent Sales
Servers	Wearables	Automotive	Testing Services
Data Storage	Televisions and Home Theater	Drones	

The composition of our revenue by end market is presented in the following table:

(In thousands)	Three Months Ended				Six Months Ended			
	July 1, 2017		July 2, 2016		July 1, 2017		July 2, 2016	
Communications and Computing	\$27,039	29 %	\$28,531	29 %	\$57,049	29 %	\$61,549	31 %
Mobile and Consumer	25,119	27	24,309	24	56,918	29	49,176	25
Industrial and Automotive	31,010	32	36,495	37	61,870	30	66,833	35
Licensing and Services	10,969	12	9,874	10	22,887	12	18,163	9
Total revenue	\$94,137 100%		\$99,209 100%		\$198,724 100%		\$195,721 100%	

Revenue from the Communications and Computing end market decreased by 5% for the second quarter of fiscal 2017 compared to the second quarter of fiscal 2016, and decreased 7% for the first six months of fiscal 2017 compared to the first six months of

fiscal 2016 as additional purchases by a certain large customer in Asia in the prior year periods did not recur in the current year periods.



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Revenue from the Mobile and Consumer end market increased 3% for the second quarter of fiscal 2017 compared to the second quarter of fiscal 2016, and increased 16% for the first six months of fiscal 2017 compared to the first six months of fiscal 2016. For both periods, the increase compared to respective prior year periods was predominately due to a significant increase in volume for a major mobile handset provider. The production volume for this mobile handset appears to have peaked in the fourth quarter of fiscal 2016, and we expect the associated revenue stream to decline in future quarters as the end product completes its lifecycle. These increases were substantially offset by declines in revenue from HDMI devices used in Digital Television ("DTV") and Home Theater related products and from MHL devices used in Mobile handsets.

Revenue from the Industrial and Automotive end market decreased approximately 15% for the second quarter of fiscal 2017 compared to the second quarter of fiscal 2016, and decreased 7% for the first six months of fiscal 2017 compared to the first six months of fiscal 2016. For both periods, this revenue decrease is primarily a reversing effect of the line item reduction and complex programmable logic device ("CPLD") conversion program, for which shipments predominately occurred in fiscal 2016 but did not recur in fiscal 2017.

Revenue from the Licensing and Services end market increased 11% for the second quarter of fiscal 2017 compared to the second quarter of fiscal 2016, and increased 26% for the first six months of fiscal 2017 compared to the first six months of fiscal 2016. For both periods, this increase was predominantly due to a patent sale transaction recognized in two installments of \$10.0 million and \$8.0 million in the first and second quarters, respectively, of fiscal 2017, substantially offset by lower revenue from HDMI licensing and adopter fees as a new royalty sharing agreement had not been finalized, and by the termination of our role as agent for HDMI. While a new royalty sharing agreement is being negotiated, the HDMI agent is collecting royalties but is unable to distribute a majority of the royalties to the Founders. Given the lack of evidence of an arrangement, we are unable to recognize all of the HDMI royalty revenue until a new royalty sharing agreement is fully executed. As a result, revenue attributable to HDMI licensing and adopter fees is down \$5.0 million and \$10.3 million, respectively, for the second quarter and first six months of fiscal 2017 relative to the comparable periods of fiscal 2016.

## Revenue by Geography

We assign revenue to geographies based on customer ship-to address at the point where revenue is recognized. In the case of sell-in distributors and OEM customers, revenue is typically recognized, and geography is assigned, when products are shipped to our distributor or OEM customer. In the case of sell-through distributors, revenue is recognized when resale to the end customer occurs and geography is assigned based on the end customer location on the resale reports provided by the distributor. Both foreign and domestic sales are denominated in U.S. dollars.

The composition of our revenue by geography, based on ship-to location, is presented in the following table:

(In thousands)	Three Months Ended		Six Months Ended			
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016		
Asia	\$64,946 69 %	\$67,655 68 %	\$138,404 70 %	\$133,167 68 %		
Europe	10,579 11	14,729 15	21,659 11	30,738 16		
Americas	18,612 20	16,825 17	38,661 19	31,816 16		
Total revenue	\$94,137 100%	\$99,209 100%	\$198,724 100%	\$195,721 100%		

Revenue in Asia decreased 4% for the second quarter of fiscal 2017 compared to the second quarter of fiscal 2016, and increased 4% for the first six months of fiscal 2017 compared to the first six months of fiscal 2016. For both the second quarter and first six months of fiscal 2017 relative to the respective periods in fiscal 2016, Asia revenue was heavily affected by revenue from both the Mobile and Consumer and the Communications and Computing end markets. For the second quarter of fiscal 2017 relative to the second quarter of fiscal 2016, the Mobile and Consumer end market saw decreased revenue from DTV and Home Theater related devices in Japan, Korea, and, to a lesser

extent, in China, which was substantially offset by increased handset content revenues in China and Taiwan. In the Communications and Computing end market, Asia revenue decreased due to reductions from a single large telecommunications customer in the region. For the first six months of fiscal 2017 relative to the first six months of fiscal 2016, the increase was predominantly due to a significant increase in volume for a major mobile handset provider. The production volume for this mobile handset began in the second half of fiscal 2016 and appears to have peaked in the fourth quarter of fiscal 2016, and we expect the associated revenue stream to decline in future quarters as the device completes its lifecycle. This was substantially offset by a significant decrease in Communications and Computing end market revenue from major telecommunications customers whose business was affected by government regulations and by conversion of materials from 200mm to 300mm wafers.

Revenue in Europe decreased 28% for the second quarter of fiscal 2017 compared to the second quarter of fiscal 2016, and decreased 30% for the first six months of fiscal 2017 compared to the first six months of fiscal 2016. For both periods, this revenue decrease is primarily a reversing effect of the line item reduction and CPLD conversion program, for which shipments predominately occurred in fiscal 2016 but did not recur in fiscal 2017.

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Revenue from the Americas increased 11% for the second quarter of fiscal 2017 compared to the second quarter of fiscal 2016, and increased 22% for the first six months of fiscal 2017 compared to the first six months of fiscal 2016. For both periods, this increase was predominantly due to a patent sale transaction recognized in two installments over the first and second quarters of fiscal 2017, partially offset by a reversing effect of the line item reduction and CPLD conversion program, for which shipments predominately occurred in fiscal 2016 but did not recur in fiscal 2017.

## Revenue from End Customers

Our top five end customers constituted approximately 27% of our revenue for the second quarter of fiscal 2017, compared to approximately 20% for the second quarter of fiscal 2016. Our top five end customers constituted approximately 32% of our revenue for the first six months of fiscal 2017, compared to approximately 22% for the first six months of fiscal 2016.

Our largest end customer accounted for approximately 9% of total revenue in the second quarter of fiscal 2017 and 10% of total revenue in the first six months of fiscal 2017. Our largest end customer accounted for approximately 7% of total revenue in the second quarter of fiscal 2016 and approximately 6% of total revenue first six months of fiscal 2016. No other customers accounted for more than 10% of total revenue during these periods.

## Revenue from Sell-Through Distributors

Sales through distributors have historically accounted for a significant portion of our total revenue. Revenue attributable to resale of products by our primary sell-through distributors is presented in the following table:

	% of Total Revenue Three Months Ended July 1, 2017		% of Total Revenue Six Months Ended July 2, 2016	
Arrow Electronics Inc.	23%	28%	22%	28%
Weikeng Group	26	15	27	13
All others	17	16	14	15
All sell-through distributors	66%	59%	63%	56%

Revenue from sell-through distributors increased to 66% of total revenue in the second quarter of fiscal 2017 from 59% in the second quarter of fiscal 2016. Revenue from sell-through distributors increased to 63% of total revenue in the first six months of fiscal 2017 from 56% in the first six months of fiscal 2016.

The increase on a percentage basis of revenue from sell-through distributors in both the second quarter and first six months of fiscal 2017 compared to the second quarter and first six months of fiscal 2016 was due primarily to volume for a major mobile handset provider through a sell-through distributor occurring in the second quarter and first six months of fiscal 2017 that had not been present in the respective periods of fiscal 2016. The production volume for this mobile handset appears to have peaked in the fourth quarter of fiscal 2016, and we expect the associated revenue stream to decline in future quarters as the end product completes its lifecycle.

## Gross Margin

The composition of our gross margin, including as a percentage of revenue, is presented in the following table:

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(In thousands)	Three Months Ended		Six Months Ended		
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016	
Gross margin	\$51,209	\$58,426	\$112,041	\$115,530	
Percentage of net revenue	54.4	% 58.9	% 56.4	% 59.0	%
Product gross margin %	51.0	% 54.4	% 53.2	% 55.1	%
Licensing and services gross margin %	80.1	% 99.3	% 81.1	% 97.4	%

For the second quarter and first six months of fiscal 2017 compared to the second quarter and first six months of fiscal 2016, gross margin decreased, respectively, by 4.5 and 2.6 percentage points due to decreases in both product gross margin and licensing and services gross margin. The primary contributor to the 3.4 and 1.9 percentage point decreases for the respective periods in product gross margin was a change in overall sales mix, with increased revenue from the lower margin mobile and consumer end market combined with a reduction in sales for certain higher margin legacy product lines.

The primary contributor to the 19.2 and 16.3 percentage point decrease for the respective periods in licensing and services gross margin was due to the patent sale that was recognized in two installments during the first and second quarters of fiscal 2017.

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The costs associated with the patent sale, primarily the net book value of the patents acquired from Silicon Image, were greater than usual for this category and had a substantial impact on licensing and services gross margin.

Because of its higher margin, the licensing and services portion of our overall revenue can have a disproportionate impact on gross margin and profitability. For programmable and standard products, we expect that product, end market, and customer mix will subject our gross margin to fluctuation, while we expect downward pressure on average selling price to adversely affect our gross margin in the future. If we are unable to realize additional or sufficient product cost reductions in the future to balance changes in product and customer mix, we may experience degradation in our product gross margin.

## Operating Expenses

## Research and Development Expense

The composition of our research and development expense, including as a percentage of revenue, is presented in the following table:

(In thousands)	Three Months Ended			Six Months Ended		
	July 1, 2017	July 2, 2016	% change	July 1, 2017	July 2, 2016	% change
Research and development	\$ 26,820	\$ 30,915	(13)	\$ 54,209	\$ 63,523	(15)
Percentage of revenue	28.5	% 31.2	%	27.3	% 32.5	%
Mask costs included in Research and development	\$ 897	\$ 1,038	(14)	\$ 1,060	\$ 2,544	(58)

Research and development expense includes costs for compensation and benefits, stock compensation, development masks, engineering wafers, depreciation, licenses, and outside engineering services. These expenditures are for the design of new products, IP cores, processes, packaging, and software to support new products.

The decrease in research and development expense for the second quarter of fiscal 2017 compared to the second quarter of fiscal 2016 is due mainly to the cost reductions realized from the restructuring actions and integration of operations undertaken since the acquisition of Silicon Image. These savings were predominantly from headcount reductions and site consolidations, along with lower bonus expense and reductions in mask costs, partially offset by higher IP insourcing expenses. The decrease in research and development expense for the first six months of fiscal 2017 compared to the first six months of fiscal 2016 is due mainly to the cost reductions realized from the restructuring actions and integration of operations undertaken since the acquisition of Silicon Image. These savings were predominantly from headcount reductions and site consolidations, along with reductions in mask costs and outside services.

We believe that a continued commitment to research and development is essential to maintaining product leadership and providing innovative new product offerings and, therefore, we expect to continue to make significant future investments in research and development at approximately the percentage of revenue realized in the second quarter of fiscal 2017.

## Selling, General, and Administrative Expense

The composition of our selling, general, and administrative expense, including as a percentage of revenue, is presented in the following table:

(In thousands)	Three Months Ended			Six Months Ended		
	July 1, 2017	July 2, 2016	% change	July 1, 2017	July 2, 2016	% change

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Selling, general, and administrative	\$21,938	\$23,005	(5)	\$45,843	\$46,613	(2)
Percentage of revenue	23.3	% 23.2	%	23.1	% 23.8	%

Selling, general, and administrative expense includes costs for compensation and benefits related to selling, general, and administrative employees, commissions, depreciation, professional and outside services, trade show, and travel expenses.

The decrease in selling, general, and administrative expense for the second quarter of fiscal 2017 compared to the second quarter of fiscal 2016 is due mainly to decreases in bonus expense and legal fees, partially offset by increases in outside services and royalty expenses. The decrease in selling, general, and administrative expense for the first six months of fiscal 2017 compared to the first six months of fiscal 2016 is due mainly to decreases in legal and accounting fees, and bonus expense, substantially offset by increases in royalty expenses.

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## Amortization of Acquired Intangible Assets

The composition of our amortization of acquired intangible assets, including as a percentage of revenue, is presented in the following table:

(In thousands)	Three Months Ended			Six Months Ended		
	July 1, 2017	July 2, 2016	% change	July 1, 2017	July 2, 2016	% change
Amortization of acquired intangible assets	\$8,737	\$8,311	5	\$17,251	\$17,032	1
Percentage of revenue	9.3	% 8.4	%	8.7	% 8.7	%

For the second quarter of fiscal 2017 compared to the second quarter of fiscal 2016, amortization of acquired intangible assets increased approximately \$0.4 million. This is comprised of approximately \$1.2 million of additional amortization due to the completion of certain in-process research and development projects acquired from Silicon Image, partially offset by \$0.8 million less expense due to the reduction of certain intangibles as a result of patent sales and impairment charges. For the first six months of fiscal 2017 compared to the first six months of fiscal 2016, amortization of acquired intangible assets increased approximately \$0.2 million. This is comprised of approximately \$2.0 million of additional amortization due to the completion of certain in-process research and development projects acquired from Silicon Image, partially offset by \$1.8 million less expense due to the reduction of certain intangibles as a result of patent sales, impairment charges, and sale of the Qterics business unit.

## Restructuring Charges

The composition of our restructuring charges, including as a percentage of revenue, is presented in the following table:

(In thousands)	Three Months Ended			Six Months Ended		
	July 1, 2017	July 2, 2016	% change	July 1, 2017	July 2, 2016	% change
Restructuring charges	\$1,576	\$2,568	(39)	\$1,642	\$7,999	(79)
Percentage of revenue	1.7	% 2.6	%	0.8	% 4.1	%

Restructuring charges include expenses resulting from reductions in our worldwide workforce, consolidation of our facilities, and cancellation of software contracts and engineering tools.

In March 2015, our Board of Directors approved an internal restructuring plan (the "March 2015 Plan"), in connection with our acquisition of Silicon Image. The March 2015 Plan was designed to realize synergies from the acquisition by eliminating redundancies created as a result of combining the two companies. The March 2015 Plan is substantially complete subject to certain remaining expected costs that we do not expect to be material and any changes in sublease assumptions should they occur, which will be expensed as incurred according to U.S. GAAP. Approximately \$20.5 million of total expense has been incurred through July 1, 2017 under the March 2015 Plan, and we expect the total cost to be approximately \$21.0 million.

In September 2015, we implemented a further reduction of our worldwide workforce (the "September 2015 Reduction") separate from the March 2015 Plan. The September 2015 Reduction was designed to resize the company in line with the market environment and to better balance our workforce with the long-term strategic needs of our business. The September 2015 Reduction is substantially complete, subject to certain remaining expected costs that we do not expect to be material, which will be expensed as incurred according to U.S. GAAP. Approximately \$7.2 million of total expense has been incurred through July 1, 2017 under the September 2015 Reduction, and we expect

the total cost to be approximately \$8.0 million.

In June 2017, our Board of Directors approved an additional internal restructuring plan (the "June 2017 Plan"), which resulted in the sale of our Hyderabad, India subsidiary and certain assets related to non-core businesses, a worldwide workforce reduction, and an initiative to reduce our infrastructure costs. These actions are part of an overall plan to achieve financial targets and to enhance our financial and competitive position by better aligning our revenue and operating expenses. Approximately \$2.4 million of total expense has been incurred through July 1, 2017 under the June 2017 Plan, and we expect the total cost to be approximately \$8.0 million to \$19.0 million.

The \$1.0 million and \$6.4 million decreases in restructuring expense in the second quarter of fiscal 2017 compared to the second quarter of fiscal 2016 and in the first six months of fiscal 2017 compared to the first six months of fiscal 2016, respectively, are driven by significant headcount-related, lease and systems restructuring charges in the prior year related to the March 2015 Plan versus a smaller charge in the current year primarily driven by the workforce reduction in the second quarter of 2017 under the July 2017 Plan.



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## Acquisition Related Charges

The composition of our acquisition related charges, including as a percentage of revenue, is presented in the following table:

(In thousands)	Three Months Ended			Six Months Ended		
	July 1, 2017	July 2, 2016	% change	July 1, 2017	July 2, 2016	% change
Acquisition related charges	\$867	\$ —	+100	\$2,527	\$94	+100
Percentage of revenue	0.9 %	— %		1.3 %	— %	

Acquisition related charges include legal and professional fees directly related to acquisitions. For the second quarter and first six months of fiscal 2017, acquisition related charges were entirely attributable to legal fees and outside services in connection with our pending acquisition by Canyon Bridge Acquisition Company, Inc. For the second quarter of fiscal 2016, there were no acquisition related charges, while for the first six months of fiscal 2017 there were only residual expenses related to consolidation of legal entities due to our acquisition of Silicon Image in March 2015.

## Interest Expense

Interest expense, including as a percentage of revenue, is presented in the following table:

(In thousands)	Three Months Ended			Six Months Ended		
	July 1, 2017	July 2, 2016	% change	July 1, 2017	July 2, 2016	% change
Interest expense	\$(4,656)	\$(5,062)	(8)	\$(10,224)	\$(10,022)	2
Percentage of revenue	(4.9 %)	(5.1 %)		(5.1 %)	(5.1 %)	

The decrease in interest expense for the second quarter of fiscal 2017 compared to the second quarter of fiscal 2016 was primarily driven by the reduction in the principal balance of our long-term debt as a result of the additional principal payments made during the second quarter of fiscal 2017.

The increase in interest expense for the first six months of fiscal 2017 compared to the first six months of fiscal 2016 is a result of increased amortization of the original issue discount and debt issuance costs related to our long-term debt. This amortization is based on the effective interest method and the increase was the result of the relative timing of principal payments during the periods. See the Credit Arrangements section under Liquidity and Capital Resources for further discussion of the debt. For the six-month period, this increase in amortization expense was partially offset by the reduction of interest expense as a result of the additional principal payments during the first six months of fiscal 2017.

## Other income, net

The composition of our other income, net, including as a percentage of revenue, is presented in the following table:

(In thousands)	Three Months Ended			Six Months Ended		
	July 1, 2017	July 2, 2016	% change	July 1, 2017	July 2, 2016	% change
Other income, net	\$564	\$2,532	(78)	\$416	\$3,349	(88)
Percentage of revenue	0.6 %	2.6 %		0.2 %	1.7 %	

For the second quarter of fiscal 2017 compared to the second quarter of fiscal 2016, the change in other income, net is primarily driven by the \$2.6 million gain on the sale of Qterics to an unrelated third party in the second quarter of fiscal 2016, and an escrow payment received in the second quarter of fiscal 2017 related to the sale of Qterics, combined with the impact of foreign exchange gains in the current quarter versus exchange losses in the second quarter of fiscal 2016.

For the first six months of fiscal 2017 compared to the first six months of fiscal 2016, the change in other income, net is primarily driven by a combination of the \$2.6 million gain on sale of Qterics to an unrelated third party in the second quarter of fiscal 2016, proceeds received from the bankruptcy settlement distribution of a prior customer in the first quarter of fiscal 2016, an escrow payment received in the second quarter of fiscal 2017 related to the sale of Qterics, foreign exchange losses for the six months of fiscal 2017 versus exchange gains for the six months of fiscal 2016, and the loss on sale of assets in the prior year, not recurring in the current year.

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## Income Taxes

The composition of our income taxes is presented in the following table:

(In thousands)	Three Months Ended			Six Months Ended		
	July 1, 2017	July 2, 2016	% change	July 1, 2017	July 2, 2016	% change
Income tax expense	\$47	\$4,539	(99)	\$565	\$6,439	(91)

Our tax expense for the second quarter and first six months of fiscal 2017 decreased as compared to the second quarter and first six months of fiscal 2016, respectively, primarily due to the decrease in foreign withholding taxes as a result of the termination of our role as the HDMI agent.

We are not currently paying U.S. federal income taxes and do not expect to pay such taxes until we fully utilize our tax net operating loss and credit carryforwards. We expect to pay a nominal amount of state income tax. We are paying foreign income taxes, which are primarily related to withholding taxes on income from foreign royalties, and related to foreign sales and to the cost of operating offshore research and development, marketing, and sales subsidiaries. We accrue interest and penalties related to uncertain tax positions in income tax expense on our Consolidated Statements of Operations.

The inherent uncertainties related to the geographical distribution and relative level of profitability among various high and low tax jurisdictions make it difficult to estimate the impact of the global tax structure on our future effective tax rate.

## Equity in net loss of an unconsolidated affiliate

The composition of our equity in net loss of an unconsolidated affiliate is presented in the following table:

(In thousands)	Three Months Ended			Six Months Ended		
	July 1, 2017	July 2, 2016	% change	July 1, 2017	July 2, 2016	% change
Equity in net loss of an unconsolidated affiliate, net of tax	\$(154)	\$(368)	(58)	\$(493)	\$(678)	(27)

As of July 1, 2017, we held a 22.7% preferred stock ownership interest in a privately-held company that designs human-computer interaction technology for a total investment of \$6.0 million. Due to the level of our ownership interest and after considering the nature of our participation in the management and interaction with the investee, we have determined that we have the ability to exert significant influence on the investee. Accordingly, we have accounted for the investment using the equity method and have recognized our proportionate share of the investee's net loss in the Consolidated Statements of Operations. Through July 1, 2017, we have reduced the value of our investment by approximately \$2.4 million, representing our proportionate share of the privately-held company's net loss accumulated to that date.

## Liquidity and Capital Resources

The following sections discuss the effects of changes in our Consolidated Balance Sheets and the effects of our credit arrangements and contractual obligations on our liquidity and capital resources, as well as our non-GAAP measures.

We classify our marketable securities as short-term based on their nature and availability for use in current operations. Our cash equivalents and short-term marketable securities consist primarily of high quality, investment-grade securities.

We have historically financed our operating and capital resource requirements through cash flows from operations. Cash provided by or used in operating activities will fluctuate from period to period due to fluctuations in operating results, the timing and collection of accounts receivable, and required inventory levels, among other things.

We believe that our financial resources will be sufficient to meet our working capital needs through at least the next 12 months. As of July 1, 2017, we did not have significant long-term commitments for capital expenditures. In the future, and to the extent our Credit Agreement permits, we may continue to consider acquisition opportunities to further extend our product or technology portfolios and further expand our product offerings. In connection with funding capital expenditures, completing other acquisitions, securing additional wafer supply, or increasing our working capital, we may seek to obtain equity or additional debt financing, or advance purchase payments or similar arrangements with wafer manufacturers. We may also need to obtain equity or additional debt financing if we experience downturns or cyclical fluctuations in our business that are more severe or longer than we anticipated when determining our current working capital needs, which financing may now be more difficult to obtain in light of our indebtedness related to the Credit Agreement.

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## Cash and cash equivalents and Short-term marketable securities

(In thousands)	July 1, 2017	December 31, 2016	\$ Change
Cash and cash equivalents	\$74,416	\$ 106,552	\$(32,136)
Short-term marketable securities	10,470	10,308	162
Total Cash and cash equivalents and Short-term marketable securities	\$84,886	\$ 116,860	\$(31,974)

As of July 1, 2017, we had total cash and cash equivalents and short-term marketable securities of \$84.9 million, of which approximately \$53.8 million in cash and cash equivalents was held by our foreign subsidiaries. We manage our global cash requirements considering (i) available funds among the subsidiaries through which we conduct business, (ii) the geographic location of our liquidity needs, and (iii) the cost to access international cash balances. The repatriation of non-U.S. earnings may have adverse tax consequences as we may be required to pay and record income tax expense on those funds to the extent they were previously considered permanently reinvested. As of July 1, 2017, we could access all cash held by our foreign subsidiaries without incurring significant additional expense.

The net decrease in cash and cash equivalents and short-term marketable securities of \$32.0 million between December 31, 2016 and July 1, 2017 was primarily driven by \$33.7 million cash used in the repayment of debt and \$11.2 million of cash used in capital expenditures and payment for software licenses, offset by \$11.5 million in cash provided by operations, which includes a total \$18.0 million received in the six months ended July 1, 2017 from a patent sale transaction.

## Accounts receivable, net

(In thousands)	July 1, 2017	December 31, 2016	Change
Accounts receivable, net	\$86,791	\$ 99,637	\$(12,846)
Days sales outstanding - Overall	84	77	7
Days sales outstanding - Product	93	75	18
Days sales outstanding - Licensing and services	17	106	(89 )

Accounts receivable, net as of July 1, 2017 decreased by \$12.8 million, or 13%, compared to December 31, 2016. A majority of the decrease resulted from a reduction of receivables related to licensing and services. The termination of our role as agent for the HDMI consortium accounted for \$6.3 million of the decrease, and collections of other licensing and services receivables outstanding at December 31, 2016 contributed another \$1.1 million to the reduction in receivables during the six months ended July 1, 2017. The remaining decrease in receivables was due to a decrease in product billings, net of credits, during the period mainly to our sell-through customers.

Overall days sales outstanding at July 1, 2017 was 84 days, an increase of 7 days from 77 days at December 31, 2016. Days sales outstanding at July 1, 2017 related to Product revenue was 93 days, an increase of 18 days from 75 days at December 31, 2016, as product revenue for the quarter ending July 1, 2017 relative to the quarter ending December 31, 2016 decreased by a greater percent than product accounts receivable decreased between these two dates. Days sales outstanding at July 1, 2017 related to Licensing and services revenue was 17 days, a decrease of 89 days from 106 days at December 31, 2016, due to an increase in cash sales, mainly related to the patent sale transaction and a decrease in HDMI related receivables during the six months ended July 1, 2017 due to the termination of our role as agent for the HDMI consortium.

## Inventories

(In thousands)	July 1, 2017	December 31, 2016	Change
Inventories	\$78,479	\$ 79,168	\$(689 )

Months of inventory on hand 5.5      4.3      1.2

Inventories as of July 1, 2017 decreased \$0.7 million, or 1%, compared to December 31, 2016, primarily as inventory related to a major consumer product declined in response to the ramp down of this product's sales program. This decrease was substantially offset by increases in inventory for other product lines to support forecasted sales and new product demand, and as a major customer pushed out its demand.

The months of inventory on hand ratio compares the inventory balance at the end of a quarter to the cost of sales in that quarter. Our months of inventory on hand increased to 5.5 months at July 1, 2017 from 4.3 months at December 31, 2016, as the cost of sales decreased by 21% between these periods, while the sales-driven decreases to inventory were offset by increases in inventory to support forecasted sales and new product demand, and as a major customer pushed out its demand.

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### Credit Arrangements

On March 10, 2015, we entered into a secured credit agreement (the "Credit Agreement") with Jefferies Finance, LLC and certain other lenders for purposes of funding, in part, our acquisition of Silicon Image. The Credit Agreement provided for a \$350 million term loan (the "Term Loan") maturing on March 10, 2021 (the "Term Loan Maturity Date"). We received \$346.5 million, net of an original issue discount of \$3.5 million and we paid debt issuance costs of \$8.3 million. The Term Loan bears variable interest equal to the one-month LIBOR, subject to a 1.00% floor if necessary, plus a spread of 4.25%. The current effective interest rate on the Term Loan is 5.99%.

The Term Loan is payable through a combination of (i) quarterly installments of approximately \$0.9 million, (ii) annual excess cash flow payments as defined in the Credit Agreement, which are due 95 days after the last day of our fiscal year, and (iii) any payments due upon certain issuances of additional indebtedness and certain asset dispositions, with any remaining outstanding principal amount due and payable on the Term Loan Maturity Date. The percentage of excess cash flow we are required to pay ranges from 0% to 75%, depending on our leverage and other factors as defined in the Credit Agreement. Currently, the Credit Agreement would require a 75% excess cash flow payment.

In the first quarter of fiscal 2017, we made a required additional principal payment of \$9.9 million due to a sale of patents. In the second quarter of fiscal 2017, we made another required additional principal payment of \$8.3 million due to a sale of patents, and a required annual excess cash flow payment of \$13.7 million. Over the next twelve months, our principal payments will be comprised mainly of regular quarterly installments and a required annual excess cash flow payment.

While the Credit Agreement does not contain financial covenants, it does contain informational covenants and certain restrictive covenants, including limitations on liens, mergers and consolidations, sales of assets, payment of dividends, and indebtedness. We were in compliance with all such covenants at July 1, 2017.

As of July 1, 2017, we had no significant long-term purchase commitments for capital expenditures or existing used or unused credit arrangements.

### Contractual Cash Obligations

There have been no significant changes to our contractual obligations outside of the ordinary course of business in the first six months of fiscal 2017 as summarized in Management's Discussion and Analysis of Financial Condition and Results of Operations in the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

### Off-Balance Sheet Arrangements

As of July 1, 2017, we did not have any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of SEC Regulation S-K.

### Non-GAAP Financial Measures

To supplement our consolidated financial results presented in accordance with U.S. Generally Accepted Accounting Principles ("GAAP"), we also present non-GAAP financial measures which are adjusted from the most directly comparable U.S. GAAP financial measures. The non-GAAP measures set forth below exclude charges and adjustments primarily related to stock-based compensation, restructuring charges, acquisition-related charges, amortization of acquired intangible assets, purchase accounting adjustments, and the estimated tax effect of these items. These charges and adjustments may be nonrecurring in nature but are a result of periodic or non-core operating activities of the company.

Management believes that these non-GAAP financial measures provide an additional and useful way of viewing aspects of our performance that, when viewed in conjunction with our U.S. GAAP results, provide a more comprehensive understanding of the various factors and trends affecting our ongoing financial performance and operating results than GAAP measures alone. In particular, investors may find the non-GAAP measures useful in reviewing our operating performance without the significant accounting charges resulting from the Silicon Image acquisition, alongside the comparably adjusted prior year results. Management also uses these non-GAAP measures for strategic and business decision-making, internal budgeting, forecasting, and resource allocation processes and believes that investors should have access to similar data when making their investment decisions. In addition, these non-GAAP financial measures facilitate management's internal comparisons to our historical operating results and comparisons to competitors' operating results.

These non-GAAP measures are included solely for informational and comparative purposes and are not meant as a substitute for GAAP and should be considered together with the consolidated financial information located in this report. Pursuant to the requirements of Regulation S-K and to make clear to our investors the adjustments we make to U.S. GAAP measures, we have provided the following reconciliations of the non-GAAP measures to the most directly comparable U.S. GAAP financial measures.



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## Reconciliation of U.S. GAAP to Non-GAAP Financial Measures

(In thousands, except per share data) (unaudited)	Three Months Ended		Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
<b>Gross Margin Reconciliation</b>				
GAAP Gross margin	\$51,209	\$58,426	\$112,041	\$115,530
Acquisition related inventory fair value effect (1)	—	—	—	523
Stock-based compensation expense - gross margin	180	166	408	425
Non-GAAP Gross margin	\$51,389	\$58,592	\$112,449	\$116,478
<b>Gross Margin % Reconciliation</b>				
GAAP Gross margin %	54.4	% 58.9	% 56.4	% 59.0
Cumulative effect of non-GAAP Gross Margin adjustments	0.2	% 0.2	% 0.2	% 0.5
Non-GAAP Gross margin %	54.6	% 59.1	% 56.6	% 59.5
<b>Operating Expenses Reconciliation</b>				
GAAP Operating expenses	\$59,938	\$64,799	\$121,472	\$135,261
Amortization of acquired intangible assets	(8,737 )	(8,311 )	(17,251 )	(17,032 )
Restructuring charges	(1,576 )	(2,568 )	(1,642 )	(7,999 )
Acquisition related charges (2)	(867 )	—	(2,527 )	(94 )
Stock-based compensation expense - operations	(2,749 )	(3,076 )	(6,364 )	(7,373 )
Non-GAAP Operating expenses	\$46,009	\$50,844	\$93,688	\$102,763
<b>Income (Loss) from Operations Reconciliation</b>				
GAAP Loss from operations	\$(8,729 )	\$(6,373 )	\$(9,431 )	\$(19,731 )
Acquisition related inventory fair value effect (1)	—	—	—	523
Stock-based compensation expense - gross margin	180	166	408	425
Amortization of acquired intangible assets	8,737	8,311	17,251	17,032
Restructuring charges	1,576	2,568	1,642	7,999
Acquisition related charges (2)	867	—	2,527	94
Stock-based compensation expense - operations	2,749	3,076	6,364	7,373
Non-GAAP Income from operations	\$5,380	\$7,748	\$18,761	\$13,715

(1) Fair value adjustment for inventory step-up from purchase accounting

(2) Legal fees and outside services in connection with our pending acquisition by Canyon Bridge Acquisition Company, Inc.

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## Reconciliation of U.S. GAAP to Non-GAAP Financial Measures

(In thousands, except per share data) (unaudited)	Three Months Ended		Six Months Ended	
	July 1, 2017	July 2, 2016	July 1, 2017	July 2, 2016
<b>Income (Loss) from Operations % Reconciliation</b>				
GAAP Loss from operations %	(9.3	)% (6.4	)% (4.7	)% (10.1
Cumulative effect of non-GAAP Gross Margin and Operating adjustments	15.0	%	14.2	%
Non-GAAP Income from operations %	5.7	%	7.8	%
<b>Income Tax Expense Reconciliation</b>				
GAAP Income tax expense	\$47	\$4,539	\$565	\$6,439
Estimated tax effect of non-GAAP Adjustments (3)	663	(2,499	)	360
Non-GAAP Income tax expense	\$710	\$2,040	\$925	\$4,488
<b>Net Income (Loss) Reconciliation</b>				
GAAP Net loss	\$(13,022)	\$(13,810)	\$(20,297)	\$(33,521)
Acquisition related inventory fair value effect (1)	—	—	—	523
Stock-based compensation expense - gross margin	180	166	408	425
Amortization of acquired intangible assets	8,737	8,311	17,251	17,032
Restructuring charges	1,576	2,568	1,642	7,999
Acquisition related charges (2)	867	—	2,527	94
Stock-based compensation expense - operations	2,749	3,076	6,364	7,373
Gain on sale of Qterics	(300	)	(2,646	)
Estimated tax effect of non-GAAP Adjustments (3)	(663	)	2,499	)
Non-GAAP Net income (loss)	\$124	\$164	\$7,235	\$(770
<b>Net Income (Loss) Per Share Reconciliation</b>				
GAAP Net loss per share - basic and diluted	\$(0.11	)	\$(0.12	)
Cumulative effect of Non-GAAP adjustments	0.11	0.12	0.23	0.27
Non-GAAP Net income (loss) per share - basic and diluted	\$—	\$—	\$0.06	\$(0.01
<b>Shares used in per share calculations:</b>				
Basic	122,390	119,445	122,095	119,125
Diluted - GAAP	122,390	119,445	122,095	119,125
Diluted - non-GAAP (4)	124,527	120,871	124,276	119,125

(1) Fair value adjustment for inventory step-up from purchase accounting

(2) Legal fees and outside services in connection with our pending acquisition by Canyon Bridge Acquisition Company, Inc.

(3) We calculate non-GAAP tax expense by applying our tax provision model to year-to-date and projected income after adjusting for non-GAAP items. The difference between calculated values for GAAP and non-GAAP tax expense has been included as the “Estimated tax effect of non-GAAP adjustments.”

(4) Diluted shares are calculated using the GAAP treasury stock method. In a loss position, diluted shares equal basic shares.

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## ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

## Foreign Currency Exchange Rate Risk

We collect an annual Japanese consumption tax refund in yen, and as a result of having various international subsidiary and branch operations, our financial position and results of operations are subject to foreign currency exchange rate risk.

We mitigate the resulting foreign currency exchange rate exposure by entering into foreign currency forward exchange contracts, details of which are presented in the following table:

	July 1, December 31,	
	2017	2016
Total cost of contracts for Japanese yen (thousands)	\$1,005	\$ 2,323
Number of contracts	1	2
Settlement month	June 2018	June 2017

Although these hedges mitigate our foreign currency exchange rate exposure from an economic perspective, they were not designated as "effective" hedges under U.S. GAAP and as such are adjusted to fair value through Other (expense) income, net. We do not engage in speculative trading in any financial or capital market.

The net fair value of these contracts was favorable by less than \$0.1 million at July 1, 2017 and favorable by approximately \$0.2 million at December 31, 2016. A hypothetical 10% unfavorable exchange rate change in the yen against the U.S. dollar would have resulted in an unfavorable change in net fair value of approximately \$0.1 million at July 1, 2017 and approximately \$0.2 million at December 31, 2016. Changes in fair value resulting from foreign exchange rate fluctuations would be substantially offset by the change in value of the underlying hedged transactions.

## Interest Rate Risk

At July 1, 2017, we had \$308.5 million outstanding on the original \$350 million term loan outstanding under our Credit Agreement, with a variable contractual interest rate based on the one-month LIBOR as of July 1, 2017, subject to a 1.00% floor if necessary, plus a spread of 4.25%. A hypothetical 10% increase in the one-month LIBOR would not have had a material impact on Interest expense for the six month period ended July 1, 2017.

## ITEM 4. CONTROLS AND PROCEDURES

## Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Based on management's evaluation (with the participation of our principal executive officer and principal financial officer), as of the end of the period covered by this report, our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, (the "Exchange Act")) are effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in Securities and Exchange Commission rules and forms and is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

## Changes in Internal Control over Financial Reporting

On March 10, 2015, we acquired Silicon Image, which had operated under its own set of systems and internal controls. Through April 1, 2017, our financial reporting control environment included Silicon Image's systems and much of its continuing control environment, which we maintained until we incorporated those processes into our implementation of a new company-wide enterprise resource planning ("ERP") system.

At the beginning of the second quarter of fiscal 2017, we converted to our new ERP system, which replaced several legacy operational and financial systems. This ERP conversion has materially affected our internal control over financial reporting. We implemented controls to monitor the ongoing reliability of the system and our financial reporting, and we believe the controls, as implemented, are appropriate and functioning effectively. This plan was reviewed as part of management's evaluation and conclusion noted above in "Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures."

Other than as described above, there were no changes in our internal controls over financial reporting (as defined in Rules 13a - 15(f) and 15(d) - 15(f) under the Exchange Act) that occurred during the second quarter of fiscal 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

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PART II. OTHER INFORMATION

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ITEM 1. LEGAL PROCEEDINGS

The information set forth above under Note 15 contained in the “Notes to Consolidated Financial Statements” is incorporated herein by reference.

ITEM 1A. Risk Factors

The following risk factors and other information included in this Report include any material changes to and supersede the description of the risk factors associated with our business previously disclosed in our Annual Report on Form 10-K for the year ended December 31, 2016 and should be carefully considered before making an investment decision relating to our common stock. If any of the following risks occur, our business, financial condition, operating results, and cash flows could be materially adversely affected. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations and financial results.

The announcement and pendency of our proposed acquisition by Canyon Bridge Acquisition Company, Inc. could materially adversely affect our business, financial condition, and results of operations.

On November 3, 2016, Lattice Semiconductor Corporation and Canyon Bridge Capital Partners, Inc. (“Canyon Bridge”) announced that the Company and Canyon Bridge Acquisition Company, Inc. (“Parent”), an affiliate of Canyon Bridge, have signed a definitive agreement (the “Merger Agreement”) under which Parent will acquire all outstanding shares of Lattice for approximately \$1.3 billion inclusive of Lattice’s net debt, or \$8.30 per share in cash. The transaction (the “Merger”) was unanimously approved by both companies’ boards of directors and is subject to customary closing conditions and regulatory approval. If completed, Lattice would become a wholly owned subsidiary of Parent. The announcement and pendency of our proposed acquisition by Parent could disrupt our business and create uncertainty about our future, which could have a material and negative impact on our business, financial condition, and results of operations, regardless of whether the acquisition is completed. These risks to our business, all of which could be exacerbated by any delay in the closing of the acquisition, include:

- restrictions in the Merger Agreement on the conduct of our business prior to the closing of the acquisition, which prevent us from taking specified actions without the prior consent of Parent, which actions we might otherwise take in the absence of the Merger Agreement;
- the attention of our management may be directed towards the closing of the acquisition and may be diverted from our day-to-day business operations, and matters related to the acquisition may require commitments of time and resources that could otherwise have been devoted to other opportunities that might have been beneficial to us;
- our customers, suppliers and other third parties may decide not to renew or seek to terminate, change or renegotiate their relationships with us, whether pursuant to the terms of their existing agreements with us or otherwise;
- our employees may experience uncertainty regarding their future roles, which might adversely affect our ability to retain, recruit and motivate key personnel; and
- potential litigation relating to the merger and the related costs.

Any of these matters could adversely affect our stock price, business, financial condition, results of operations, or business prospects.

The parties may be unable to satisfy the conditions to the closing of our acquisition by Parent and the acquisition may not be consummated, and the failure of the acquisition to be completed may adversely affect our business and our

share price.

Consummation of our acquisition by Parent is subject to various closing conditions, including, among other things, (i) the absence of any legal restraints or prohibitions on the consummation of the Merger, and (ii) approval from the Committee on Foreign Investment in the United States (CFIUS) and other regulatory approvals. The obligation of each party to consummate the Merger is also conditioned upon the other party's representations and warranties being true and correct (subject to certain materiality exceptions), and the other party having performed in all material respects its obligations under the Merger Agreement. The obligation of Parent to consummate the Merger is also conditioned upon our not having suffered a Company Material Adverse Effect (as defined in the Merger Agreement). These and other conditions to the consummation of the Merger may fail to be satisfied and may take longer than expected. The satisfaction of all of the required conditions could delay the completion of the Merger for a significant period of time or prevent it from occurring. Thus, there can be no assurance that the conditions to the Merger will be satisfied or waived or that the Merger will be consummated. On June 9, 2017, to allow more time of review and discussion with CFIUS in connection with the Merger, the Company announced that it withdrew and re-filed the joint voluntary notice to CFIUS under the Defense Production Act of 1950, as amended.

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In addition, the Merger Agreement may be terminated under specified circumstances. Failure to complete the Merger could adversely affect our business and the market price of our common stock in a number of ways, including:

- our current stock price may reflect a market assumption that the proposed acquisition will occur, meaning that a failure to complete the proposed transaction could result in a decline in the price of our common stock;
- we are subject to legal proceedings related to the Merger;
- the failure of the Merger to be consummated may result in negative publicity and a negative impression of us in the investment community;
- any disruptions to our business resulting from the announcement and pendency of the Merger, including any adverse changes in our relationships with our customers, vendors and employees, may continue or intensify in the event the Merger is not consummated;
- we may not be able to take advantage of alternative business opportunities or effectively respond to competitive pressures;
- we may be required to pay a termination fee of \$34.18 million if the Merger Agreement is terminated under certain circumstances;
- we expect to incur substantial transaction costs in connection with the proposed transaction, whether or not it is completed; and
- we may not be entitled to receive a termination payment from Parent in all circumstances where the Merger Agreement is terminated due to Parent's breach of its obligations under the Merger Agreement or where we fail to obtain CFIUS approval.

Litigation challenging the Merger Agreement may prevent the Merger from being consummated at all or within the expected timeframe.

Lawsuits have been filed and additional lawsuits may be filed against us, our Board of Directors and other parties to the Merger Agreement, challenging our acquisition by Parent. Although we have been successful in obtaining the dismissal of lawsuits that have been filed to date, one of the conditions to the consummation of the Merger is that no order will be in effect that prevents, makes illegal or prohibits the consummation of the Merger. As such, if any of the plaintiffs in any potential lawsuits are successful in obtaining an injunction prohibiting the defendants from completing the Merger on the agreed upon terms, then such injunction may prevent the Merger from becoming effective, or from becoming effective within the expected timeframe.

We rely on a limited number of independent suppliers for the manufacture of all of our products and a failure by our suppliers to provide timely, cost-effective, and quality products could adversely affect our operations and financial results.

We depend on independent foundries to supply silicon wafers for our products. These foundries include Fujitsu in Japan and United Microelectronics Corporation in Taiwan, which supply the majority of our programmable logic wafers, and Taiwan Semiconductor Manufacturing, which supplies most of our HDMI and MHL integrated circuits. We negotiate wafer volumes, prices, and other terms with our foundry partners and their respective affiliates on a periodic basis typically resulting in short-term agreements which do not ensure long-term supply or allocation commitments. We rely on our foundry partners to produce wafers with competitive performance attributes. If the foundries that supply our wafers experience manufacturing problems, including unacceptable yields, delays in the realization of the requisite process technologies, or difficulties due to limitations of new and existing process technologies, our operating results could be adversely affected.

If for any reason the foundries are unable to, or do not manufacture sufficient quantities of our products or continue to manufacture a product for the full life of the product, we may be required to prematurely limit or discontinue the sales

of certain products or incur significant costs to transfer products to other foundries, and our customer relationships and operating results could be adversely affected. In addition, weak economic conditions may adversely impact the financial health and viability of the foundries and cause them to limit or discontinue their business operations, resulting in shortages of supply and an inability to meet their commitments to us, which could adversely affect our financial condition and operating results.

A disruption of one or more of our foundry partners' operations as a result of a fire, earthquake, act of terrorism, political or labor unrest, governmental uncertainty, war, disease, or other natural disaster or catastrophic event, or any other reason, could disrupt our wafer supply and could adversely affect our operating results.

Establishing, maintaining and managing multiple foundry relationships requires the investment of management resources as well as additional costs. If we fail to maintain our foundry relationships, or elect or are required to change foundries, we will incur significant costs and manufacturing delays. The success of certain of our next generation products is dependent upon our ability to successfully partner with Fujitsu, Taiwan Semiconductor, Seiko Epson, and other foundry partners. If for any reason one or more of our foundry partners does not provide its facilities and support for our development efforts, we may be unable to effectively develop new products in a timely manner.

Should a change in foundry relationships be required, we may be unsuccessful in establishing new foundry relationships for our current or next generation products, or we may incur substantial cost and or manufacturing delays until we form and ramp relationships and migrate products, each of which could adversely affect our operating results.

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The Mobile and Consumer end market is rapidly changing and cyclical, and a downturn in this end market or our failure to accurately predict the frequency, duration, timing, and severity of these cycles could adversely affect our financial condition and results.

With the acquisition of Silicon Image, the Mobile and Consumer end market has increased in importance to us. Revenue from the Mobile and Consumer end market accounted for 29% of our revenue in the first six months of fiscal 2017. Revenue from the Mobile and Consumer end market consists primarily of revenue from our products designed and used in a broad range of consumer electronics products including smartphones, tablets and e-readers, wearables, accessories such as chargers and docks, Ultra High-Definition (UHD) TVs, Digital SLR cameras, drones, and other connected devices. This market is characterized by rapidly changing requirements and product features and volatility in consumer demand. Our success in this market will depend principally on our ability to:

- meet the market windows for consumer products;
- predict technology and market trends;
- develop IP cores to meet emerging market needs;
- develop products on a timely basis;
- maintain multiple design wins across different markets and customers to dampen the effects of market volatility;
- be designed into our customers' products; and
- avoid cancellations or delay of products.

Our inability to accomplish any of the foregoing, or to offset the volatility of this end market through diversification into other markets, could materially and adversely affect our business, financial condition, and results of operations. Cyclicity in the Mobile and Consumer end market could periodically result in higher or lower levels of revenue and revenue concentration with a single or small number of customers. In addition, rapid changes in this market may affect demand for our products, and may cause our revenue derived from sales in this market to vary significantly over time, adversely affecting our financial results.

A downturn in the Communications and Computing end market could cause a meaningful reduction in demand for our products and limit our ability to maintain revenue levels and operating results.

Revenue from the Communications and Computing end market accounted for 29% of our revenue in the first six months of fiscal 2017. Three of our top five programmable logic customers participate primarily in the Communications and Computing end market. In the past, cyclical weakening in demand for programmable logic products from customers in the Communications and Computing end market has adversely affected our revenue and operating results. In addition, telecommunication equipment providers are building network infrastructure for which we compete for product sales. Any deterioration in the Communications and Computing end market, our end customers' reduction in spending, or a reduction in spending by their customers to support this end market or use of our competitors' products could lead to a reduction in demand for our products which could adversely affect our revenue and results of operations. This type of decline impacted our results in the past and could do so again in the future.

We depend on a concentrated group of customers for a significant portion of our revenues. If any of these customers reduce their use of our products, our revenue could decrease significantly.

A significant portion of our revenue depends on sales to a limited number of customers. In the second quarter and first six months of fiscal 2017, our largest end customer accounted for approximately 9% and 10%, respectively, of our total revenue, and our top five end customers accounted for approximately 27% and 32%, respectively, of our total revenue. For the full year of fiscal 2016, our largest end customers accounted for approximately 10% of our total revenue, and our top five end customers accounted for approximately 27% of our total revenue. If any of these

relationships were to diminish, if these customers were to develop their own solutions or adopt alternative solutions or competitors' solutions, or if our relationship with any future customer which accounts for a significant portion of our revenue were to diminish due to these factors, our results could be adversely affected.

While we strive to maintain strong relationships with our customers, their continued use of our products is frequently reevaluated, as certain of our customers' product life cycles are relatively short and they continually develop new products. The selection process for our products to be included in our customers' new products is highly competitive. There are no guarantees that our products will be included in the next generation of products introduced by these customers. For example, one of our largest customers from the second half of 2016 through the first half of 2017 is a major mobile handset provider. The production volume for this mobile handset appears to have peaked in the fourth quarter of fiscal 2016, and we expect the associated revenue stream to decline in future quarters as the end product completes its lifecycle. At this time, there is no guarantee that our products will be included in this provider's next generation handset, nor in any of their other devices. Any significant loss of, or a significant reduction in purchases by, one or more of these customers or their failure to meet their commitments to us, could have an adverse effect on our financial condition and results of operations. If any one or more of our concentrated groups of customers were to experience significantly adverse financial conditions, our financial condition and business could be adversely affected as well.

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Our outstanding indebtedness could reduce our strategic flexibility and liquidity and may have other adverse effects on our results of operations.

In connection with our acquisition of Silicon Image, we entered into a secured Credit Agreement providing for a \$350 million term loan. Our obligations under the Credit Agreement are guaranteed by our U.S. subsidiaries. Our obligations include a requirement to pay up to 75% of our excess cash flow toward repayment of the facility. The Credit Agreement also contains certain restrictive covenants, including limitations on liens, mergers and consolidations, sales of assets, payment of dividends, and additional indebtedness. The amount and terms of our indebtedness, as well as our credit rating, could have important consequences, including the following:

- we may be more vulnerable to economic downturns, less able to withstand competitive pressures, and less flexible in responding to changing business and economic conditions;
- our cash flow from operations may be allocated to the payment of outstanding indebtedness, and not to research and development, operations or business growth;
- we might not generate sufficient cash flow from operations or other sources to enable us to meet our payment obligations under the facility and to fund other liquidity needs;
- our ability to make distributions to our stockholders in a sale or liquidation may be limited until any balance on the facility is repaid in full; and
- our ability to incur additional debt, including for working capital, acquisitions, or other needs, is more limited.

If we breach a loan covenant, the lenders could accelerate the repayment of the term loan. We might not have sufficient assets to repay such indebtedness upon acceleration. If we are unable to repay the indebtedness, the lenders could initiate a bankruptcy proceeding against us or collection proceedings with respect to our assets and subsidiaries securing the facility, which could materially decrease the value of our common stock.

We depend on distributors to generate a significant portion of our revenue and complete order fulfillment and any adverse change in our relationship or our distributors' financial health, reduction of selling efforts, or inaccuracy in resale reports could harm our sales or result in misreporting our results.

We depend on our distributors to sell our products to end customers, complete order fulfillment, and maintain sufficient inventory of our products. Our distributors also provide technical support and other value-added services to our end customers. Resales through sell-through distributors accounted for 63% of our total revenue in the first six months of fiscal 2017, with two distributors accounting for 49% of our total revenue in the first six month of fiscal 2017.

We expect our distributors to generate a significant portion of our revenue in the future. Any adverse change to our relationships with our distributors or a failure by one or more of our distributors to perform its obligations to us could have a material impact on our business. In addition, a significant reduction of effort by a distributor to sell our products or a material change in our relationship with one or more distributors may reduce our access to certain end customers and adversely affect our ability to sell our products.

The financial health of our distributors is important to our success. Economic conditions may adversely impact the financial health of one or more of our distributors. This could result in the inability of distributors to finance the purchase of our products or cause the distributors to delay payment of their obligation to us and increase our credit risk. If the financial health of our distributors impairs their performance and we are unable to secure alternate distributors, our financial condition and results of operations may be negatively impacted.

Since we have limited ability to forecast inventory levels of our end customers, it is possible that there may be significant build-up of inventories in the distributor channel, with the OEM or the OEM's contract manufacturer. Such

a buildup could result in a slowdown in orders, requests for returns from customers, or requests to move out planned shipments. This could adversely affect our revenues and profits. Any failure to manage these challenges could disrupt or reduce sales of our products and unfavorably impact our financial results.

We depend on the timeliness and accuracy of resale reports from our distributors. Late or inaccurate resale reports could have a detrimental effect on our ability to properly recognize revenue and our ability to predict future sales.

We rely on information technology systems, and failure of these systems to function properly may cause business disruptions.

We rely in part on various information technology ("IT") systems to manage our operations, including financial reporting, and we regularly make changes to improve them as necessary by periodically implementing new, or upgrading or enhancing existing, operational and IT systems, procedures, and controls. We have undergone a significant integration and systems implementation following the acquisition of Silicon Image.

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We have recently implemented a new enterprise resource planning ("ERP") system to standardize our processes worldwide and adopt best-in-class capabilities. We converted to the new ERP system at the beginning of the second quarter of fiscal 2017. We have committed significant resources to this new ERP system, which replaces multiple legacy systems, and realizing the full functionality of this conversion is extremely complex, in part, because of the wide range of processes and the multiple legacy systems that must be integrated.

As a result of the conversion process and during our initial use of the new ERP system, we may experience delays or disruptions in the integration of our new or enhanced systems, procedures, or controls. We may also encounter errors in data, an inability to accurately process or record transactions, and security or technical reliability issues. All of these could harm our ability to conduct core operating functions such as processing invoices, shipping and receiving, recording and reporting financial and management information on a timely and accurate basis, and could impact our internal control compliance efforts. If the technical solution or end user training are inadequate, it could limit our ability to manufacture and ship products as planned.

These systems are also subject to power and telecommunication outages or other general system failures. Failure of our IT systems or difficulties or delays in managing and integrating them could impact the company's ability to perform necessary operations, which could materially adversely affect our business.

Acquisitions, strategic investments and strategic partnerships present risks, and we may not realize the goals that were contemplated at the time of a transaction.

On March 10, 2015, we acquired Silicon Image, and we may make further acquisitions and strategic investments in the future. Acquisitions and strategic investments, including our acquisition of Silicon Image, present risks, including:

- our ongoing business may be disrupted and our management's attention may be diverted by investment, acquisition, transition, or integration activities;
- an acquisition or strategic investment may not perform as well or further our business strategy as we expected, and we may not integrate an acquired company or technology as successfully as we expected;
- we may incur unexpected costs, claims, or liabilities that we assume from an acquired company or technology or that are otherwise related to an acquisition;
- we may discover adverse conditions post-acquisition that are not covered by representations and warranties;
- we may increase some of our risks, such as increasing customer or end product concentration;
- we may have difficulty incorporating acquired technologies or products with our existing product lines;
- we may have higher than anticipated costs in continuing support and development of acquired products, and in general and administrative functions that support such products;
- we may have difficulty integrating and retaining key personnel;
- we may have difficulty integrating business systems, processes, and tools, such as accounting software, inventory management systems, or revenue systems which may have an adverse effect on our business;
- our liquidity and/or capital structure may be adversely impacted;
- our strategic investments may not perform as expected;
- we may experience unexpected changes in how we are required to account for our acquisitions and strategic investments pursuant to U.S. GAAP;
- we may have difficulty integrating acquired entities into our global tax structure with potentially negative impacts on our effective tax rate;
- if the acquisition or strategic investment does not perform as projected, we might take a charge to earnings due to impaired goodwill;
  - we may divest certain assets of acquired businesses, leading to charges against earnings;
  -

we may experience unexpected negative responses from vendors or customers to the acquisition, which may adversely impact our operations; and  
• we may have difficulty integrating the processes and control environment from Silicon Image.

The occurrence of any of these risks could have a material adverse effect on our business, results of operations, financial condition, or cash flows, particularly in the case of a larger acquisition or several concurrent acquisitions or strategic investments. In addition, we may enter into strategic partnerships with third parties with the goal of gaining access to new and innovative products and technologies. Strategic partnerships pose many of the same risks as acquisitions or investments.

We cannot guarantee that we will be able to complete any future acquisitions or that we will realize any anticipated benefits from any of our past or future acquisitions, strategic investments, or strategic partnerships. We may not be able to find suitable acquisition opportunities that are available at attractive valuations, if at all. A sustained decline in the price of our common stock may make it more difficult and expensive to initiate or complete additional acquisitions on commercially acceptable terms.

We are required under U.S. GAAP to test goodwill for possible impairment on an annual basis and to test goodwill and long-lived assets, including amortizable intangible assets, for impairment at any other time that circumstances arise indicating the carrying value may not be recoverable. For purposes of testing for impairment, the Company currently operates as one reporting unit: the core Lattice ("Core") business, which includes intellectual property and semiconductor devices. No impairment charges were recorded in the second quarter of fiscal 2017, no impairment charges related to goodwill were



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recorded in fiscal 2016, and no impairment charges were recorded for the Core segment in fiscal 2015. There is no assurance that future impairment tests will indicate that goodwill will be deemed recoverable. As we continue to review our business operations and test for impairment or in connection with possible sales of assets, we may have impairment charges in the future, which may be material.

Our success and future revenue depends on our ability to innovate, develop and introduce new products that achieve customer and market acceptance and to successfully compete in the highly competitive semiconductor industry, and failure to do so could have a material adverse effect on our financial condition and results of operations.

The semiconductor industry is highly competitive and many of our direct and indirect competitors have substantially greater financial, technological, manufacturing, marketing, and sales resources. Consolidation in our industry may increasingly mean that our competitors have greater resources, or other synergies, that could put us at a competitive disadvantage. We currently compete directly with companies that have licensed our technology or have developed similar products, as well as numerous semiconductor companies that offer products based on alternative solutions, such as applications processor, application specific standard product, microcontroller, analog, and digital signal processing technologies. Competition from these semiconductor companies may intensify as we offer more products in any of our end markets. These competitors include established, multinational semiconductor companies, as well as emerging companies.

The markets in which we compete are characterized by rapid technology and product evolution, generally followed by a relatively longer process of ramping up to volume production on advanced technologies. Our markets are also characterized by evolving industry standards, frequent new product introduction, short product life cycles, and increased demand for higher levels of integration and smaller process geometry. Our competitive position and success depends on our ability to innovate, develop, and introduce new products that compete effectively on the basis of price, density, functionality, power consumption, form factor, and performance addressing the evolving needs of the markets we serve. These new products typically are more technologically complex than their predecessors.

Our future growth and the success of new product introductions depend upon numerous factors, including:

- timely completion and introduction of new product designs;
- ability to generate new design opportunities and design wins, including those which result in sales of significant volume;
- availability of specialized field application engineering resources supporting demand creation and customer adoption of new products;
- ability to utilize advanced manufacturing process technologies;
- achieving acceptable yields and obtaining adequate production capacity from our wafer foundries and assembly and test subcontractors;
- ability to obtain advanced packaging;
- availability of supporting software design tools;
- utilization of predefined IP logic;
- market acceptance of our MHL-enabled and wireless mobile products, and our 60 GHz wireless products;
- customer acceptance of advanced features in our new products;
- availability of competing alternative technologies; and
- market acceptance of our customers' products.

Our product innovation and development efforts may not be successful; our new products, MHL-enabled products, and 60GHz wireless products may not achieve market or customer acceptance; and we may not achieve the necessary volume of production to achieve acceptable cost. Revenue relating to our mature products is expected to decline in the future, which is normal for our product life cycles. As a result, we may be increasingly dependent on revenue derived

from our newer products as well as anticipated cost reductions in the manufacture of our current products. We rely on obtaining yield improvements and corresponding cost reductions in the manufacture of existing products and on introducing new products that incorporate advanced features and other price/performance factors that enable us to increase revenues while maintaining acceptable margins. To the extent such cost reductions and new product introductions do not occur in a timely manner, or that our products do not achieve market acceptance or market acceptance at acceptable pricing, our forecasts of future revenue, financial condition, and operating results could be materially adversely affected.

General economic conditions and deterioration in the global business environment could have a material adverse effect on our business, operating results, and financial condition.

Adverse economic conditions or our customers' perceptions of the economic environment may negatively affect customer demand for our products and services and result in delayed or decreased spending. Weak global economic conditions in the past have resulted in weak demand for our products in certain geographies and had an adverse impact on our results of operations. If global economic conditions weaken, our business could be harmed due to customers or potential customers reducing or delaying orders. In addition, the inability of customers to obtain credit, the insolvency of one or more customers, or the insolvency of key suppliers could result in sales or production delays. Any of these effects could impact our ability to effectively manage inventory levels and collect receivables, require additional restructuring actions, and decrease our revenue and profitability. Uncertainty about future economic conditions makes it difficult for us to forecast operating results and to make

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decisions about future investments. Any or all of these factors could adversely affect our financial condition and results of operations in the future.

The intellectual property licensing component of our business strategy increases our business risk and fluctuation of our revenue.

Our business strategy includes licensing our intellectual property to companies that incorporate it into their respective technologies that address markets in which we do not directly participate or compete. We also license our intellectual property into markets where we do participate and compete. Our licensing and services revenue may be impacted by the introduction of new technologies by customers in place of the technologies based on our intellectual property, changes in the law that may weaken our ability to prevent the use of our patented technology by others, and changes of selling prices for products using licensed patents. We cannot assure that our licensing customers will continue to license our technology on commercially favorable terms or at all, or that these customers will introduce and sell products incorporating our technology, accurately report royalties owed to us, pay agreed upon royalties, honor agreed upon market restrictions, maintain the confidentiality of our proprietary information, or will not infringe upon or misappropriate our intellectual property. Our intellectual property licensing agreements are complex and depend upon many factors, including completion of milestones, allocation of values to delivered items and customer acceptances. Many of these require significant judgments. Additionally, this is a new end market for us, with which we do not yet have extensive experience.

We have also generated revenue from the sale of certain patents from our portfolio, generally for technology that we are no longer actively developing. While we plan to continue to monetize our patent portfolio through sales of non-core patents, we may not be able to realize adequate interest or prices for those patents. Accordingly, we cannot provide assurance that we will continue to generate revenue from these sales. In addition, although we seek to be strategic in our decisions to sell patents, we might incur reputational harm if a purchaser of our patents sues one of our customers for infringement of the purchased patent, and we might later decide to enter a space that requires the use of one or more of the patents we sold. In addition, as we sell groups of patents, we no longer have the opportunity to license those patents and receive a continuing royalty stream.

Our licensing and services revenue fluctuates, sometimes significantly, from period to period because it is heavily dependent on a few key transactions being completed in a given period, the timing of which is difficult to predict and may not match our expectations. Because of its high margin, the licensing and services revenue portion of our overall revenue can have a disproportionate impact on gross profit and profitability. Generating revenue from intellectual property licenses is a lengthy and complex process that may last beyond the period in which our efforts begin, and the accounting rules governing the recognition of revenue from intellectual property licensing transactions are increasingly complex and subject to interpretation. As a result, the amount of license revenue recognized in any period may differ significantly from our expectations.

A single large customer may be in a position to demand certain functionality, pricing or timing requirements that may detract from or interfere with our normal business activities. If this happens, delays in our normal development schedules could occur, causing our products to miss market windows, thereby reducing the total number of units sold of a particular product.

The products we develop are complex and require significant planning and resources. In the Mobile and Consumer end market, new products are typically introduced early in the year, often in association with key trade shows. In order to meet these deadlines, our customers must complete their product development by year-end, which usually means we must ship sample parts in early spring. If we cannot ship sample parts in early spring, customers may be forced to remove the feature provided by our product, use a competitor's product, or use an alternate technology in order to meet their timelines. We plan our product development with these market windows in mind, but if we receive requests from

a large customer to deploy resources to meet their requirements or work on a specific solution, our normal development path could be delayed, causing us to miss sample deadlines and therefore future revenues.

A number of factors, including our inventory strategy, can impact our gross margins.

A number of factors, including how products are manufactured to support the consumer market segment, yield, wafer pricing, cost of packaging raw materials, product mix, market acceptance of our new products, competitive pricing dynamics, geographic and/or end market mix, and pricing strategies, can cause our gross margins to fluctuate significantly either positively or negatively from period to period. In addition, forecasting our gross margins is difficult because a significant portion of our business is based on turns within the same quarter.

Our customers typically test and evaluate our products prior to deciding to design our product into their own products, and then require additional time to begin volume production of those products. This lengthy sales cycle may cause us to experience significant delays and to incur additional inventory costs until we generate revenue from our products. It is possible that we may never generate any revenue from products after incurring significant expenditures.

While our sales cycles are typically long, our average product life cycles tend to be short as a result of the rapidly changing technology environment in which we operate. In addition, our inventory levels may be higher than historical norms, from time to time, due to inventory build decisions aimed at meeting expected demand from a single large customer, reducing direct material

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cost or enabling responsiveness to expected demand. In the event the expected demand does not materialize, or if our short sales cycle does not generate sufficient revenue, we may be subject to incremental excess and obsolescence costs. In addition, future product cost reductions could impact our inventory valuation, which could adversely affect our operating results.

We and our connectivity customers depend on the availability of certain functions and capabilities within mobile and personal computing operating systems over which we may have no control. New releases of these operating systems may render certain of our products inoperable or may require significant engineering effort to create new device driver software.

Certain portions of our business operate within a market that is dominated by a few key OEMs. These OEMs could play a role in driving the growth of our business or could prevent our growth through deliberate or non-deliberate action. We do not have a presence in the Windows eco-system or in all iOS or Android devices. Our success and ability to grow depend upon our ability to continue to be successful within the iOS and Android eco-systems or gain significant traction within the Windows eco-system. Failure to maintain and grow our presence in these key eco-systems could adversely affect unit volumes.

Further, many of our products depend on the availability of certain functionality in the device operating system, typically Android, Linux, Windows, or iOS. Certain operating system primitives are needed to support video output. We have no control over these operating systems or the companies that produce them, and it is unlikely that we could influence any internal decision these companies make that may have a negative impact on our integrated circuits and their function. Updates to these operating systems that, for example, change the way video is output or remove the ability to output video could materially affect sales of MHL and HDMI integrated circuits.

Products targeted to personal computing or mobile, laptop, or notebook designs often require device driver software to operate. This software is difficult to produce and may require certifications before being released. Failure to produce this software could have a negative impact on our relation with operating system providers and may damage our reputation with end consumers as a quality supplier of products.

We may experience difficulties in transitioning to smaller geometry process technologies or in achieving higher levels of design integration, which may result in reduced manufacturing yields, delays in product deliveries, and increased expenses.

To remain competitive, we expect to continue to transition our semiconductor products to increasingly smaller geometries. This requires us to change the manufacturing processes for our products and to redesign some products as well as standard cells and other integrated circuit designs we may use in multiple products. We periodically evaluate the benefits, on a product-by-product basis, of migrating to smaller geometry process technologies to reduce our costs. The transition to lower nanometer geometry process technologies will result in significantly higher mask and prototyping costs, as well as additional expenditures for engineering design tools.

We depend on our relationships with our foundry partners to transition to smaller geometry processes successfully. We make no assurance that our foundry partners will be able to effectively manage the transition in a timely manner, or at all. If we or any of our foundry partners experience significant delays in this transition or fail to efficiently implement this transition, we could experience reduced manufacturing yields, delays in product deliveries, and increased expenses, all of which could adversely affect our relationships with our customers and our financial condition and operating results.

Shortages in, or increased costs of, wafers and materials could adversely impact our gross margins and lead to reduced revenues.

Worldwide manufacturing capacity for silicon wafers is relatively inelastic. If the demand for silicon wafers or assembly material materially exceeds market supply, our supply of silicon wafers or assembly material could quickly become limited. A shortage in manufacturing capacity could hinder our ability to meet product demand and therefore reduce our revenue. In addition, silicon wafers constitute a material portion of our product cost. If we are unable to purchase wafers at favorable prices, our gross margins will be adversely affected.

We depend on independent contractors for most of our assembly and test services, and disruption of their services, or an increased in cost of these services, could negatively impact our financial condition and results of operations.

We depend on subcontractors to assemble, test, and ship our products with acceptable quality and yield levels. Our operations and operating results may be adversely affected if we experience problems with our subcontractors that impact the delivery of product to our customers. Those problems may include: prolonged inability to obtain wafers or packaging materials with competitive performance and cost attributes; inability to achieve adequate yields or timely delivery; disruption or defects in assembly, test, or shipping services; or delays in stabilizing manufacturing processes or ramping up volume for new products. Economic conditions may adversely impact the financial health and viability of our subcontractors and result in their inability to meet their commitments to us resulting in product shortages, quality assurance problems, reduced revenue, and/or increased costs which could negatively impact our financial condition and results of operations.

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In the past, we have experienced delays in obtaining assembled and tested products and in securing assembly and test capacity commitments from our suppliers. We currently anticipate that our assembly and test capacity commitments are adequate; however, these existing commitments may not be sufficient for us to satisfy customer demand in future periods. We negotiate assembly and test prices and capacity commitments from our contractors on a periodic basis. If any of our assembly or test contractors reduce their capacity commitment or increase their prices, and we cannot find alternative sources, our operating results could be adversely affected.

The semiconductor industry routinely experiences cyclical market patterns and a significant industry downturn could adversely affect our operating results.

Our revenue and gross margin can fluctuate significantly due to downturns in the semiconductor industry. These downturns can be severe and prolonged and can result in price erosion and weak demand for our products. Weak demand for our products resulting from general economic conditions affecting the end markets we serve or the semiconductor industry specifically and reduced spending by our customers can result, and in the past has resulted, in excess and obsolete inventories and corresponding inventory write-downs. The dynamics of the markets in which we operate make prediction of and timely reaction to such events difficult. Due to these and other factors, our past results are not reliable predictors of our future results.

Our expense levels are based, in part, on our expectations of future sales. Many of our expenses, particularly those relating to facilities, capital equipment, and other overhead, are relatively fixed. We might be unable to reduce spending quickly enough to compensate for reductions in sales. Accordingly, shortfalls in sales could adversely affect our operating results.

Our participation in HDMI and MHL has included our acting as agent for these consortia for which we have been receiving adopter fees. We no longer act as agent for the HDMI standard and there is no guarantee that we will continue to act as agent for the MHL standard. Accordingly, we now receive a reduced share of HDMI adopter fees and we could in the future lose MHL adopter fees.

Through our wholly owned subsidiary, HDMI Licensing, LLC, we acted as agent of the HDMI consortium until December 31, 2016 and were responsible for promoting and administering the specification. We received all of the adopter fees paid by adopters of the HDMI specification in connection with our role as agent. In September 2016, the founders of the HDMI consortium ("Founders"), of which we are a member, amended the Founders Agreement resulting in changes to our role as agent for the HDMI consortium and to the model for sharing adopter fee revenues. Under the terms of the agreement, our role as the agent was terminated effective January 1, 2017 and a new independent entity was appointed to act as the new HDMI licensing agent with responsibility for licensing and the distribution of royalties among Founders. As a result of the amended model for sharing adopter fee revenue, we will be entitled to a reduced share of adopter fees paid by parties adopting the HDMI standard.

In addition, another member of the HDMI consortium asserts that we owe the other HDMI consortium founders their respective shares of any HDMI adopter fees not used by us in the marketing and other activities in furtherance of the HDMI standard from our time as agent. The consortium member has previously indicated its belief that the HDMI founders enjoy a right to these funds but has never pursued such claim. If a determination is made that there were excess adopter fees or if it is determined that we were obligated to share such fees with other consortium members, it could negatively impact our financial position. At this stage of the proceedings, we do not have an estimate of the likelihood or the amount of any financial consequences to us.

We share HDMI royalties with the other HDMI founders based on an allocation formula, which is reviewed every three years. The most recent royalty sharing formula covered the period from January 1, 2014 through December 31, 2016, and a new agreement is yet to be signed. Our portion of the royalty allocation has declined for the last several

years. In 2015, we received between 24% and 25% of the royalty allocation, while for 2016, we received 20% of the royalty allocation. The royalty allocation for 2017 and future years is not yet known but may decline. If the level continues to decline, our financial performance could be adversely affected. In addition, delays in the signing of new royalty sharing agreements may impact our timing of revenue recognition of the related royalties.

Through our wholly owned subsidiary, MHL, LLC, we act as agent of the MHL specification and are responsible for promoting and administering the specification. As agent, we are entitled to receive license fees paid by adopters of the MHL specification sufficient to reimburse us for the costs we incur to promote and administer the specification. Given the limited number of MHL adopters to date, we do not believe the license fees paid by such adopters will be sufficient to reimburse us for these costs and we make no assurance that the license fees paid by MHL adopters will ever be sufficient to reimburse us the costs we incur as agent of the specification.

We currently intend to promote and continue to be involved and actively participate in other standard setting initiatives. For example, through Silicon Image's acquisition of SiBEAM, Inc. in May 2011, it achieved SiBEAM's prior position as founder and chair of the WirelessHD Consortium. We may decide to license additional elements of our intellectual property to others for use in implementing, developing, promoting, or adopting standards in our target markets, in certain circumstances at little or no cost. This may make it easier for others to compete with us in such markets. In addition, even if we receive license fees or royalties in connection with the licensing of our intellectual property, we make no assurance that such license fees or royalties will compensate us adequately.



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We rely on independent software and hardware developers and disruption of their services could negatively affect our operations and financial results.

We rely on independent software and hardware developers for the design, development, supply, and support of intellectual property cores; design and development software; and certain elements of evaluation boards. As a result, failure or significant delay to complete software or deliver hardware in accordance with our plans, specifications, and agreements could disrupt the release of or introduction of new or existing products, which could be detrimental to the capability of our new or existing products to win designs. Any of these delays or inability to complete the design or development could have an adverse effect on our business, financial condition, or operating results.

Our failure to control unauthorized access to our IT systems may cause problems with key business partners or liability.

We may be subject to unauthorized access to our IT systems through a security breach or cyber-attack. In the ordinary course of our business, we maintain sensitive data on our networks, including our intellectual property and proprietary or confidential business information relating to our business and that of our customers and business partners. The secure maintenance of this information is critical to our business and reputation. We believe that companies have been increasingly subject to a wide variety of security incidents, cyber-attacks, and other attempts to gain unauthorized access. Cyber-attacks have become more prevalent and much harder to detect and defend against. Our network and storage applications may be subject to unauthorized access by hackers or breached due to operator error, malfeasance, or other system disruptions. It is often difficult to anticipate or immediately detect such incidents and to assess the damage caused by them. In the past, third parties have attempted to penetrate and/or infect our network and systems with malicious software in an effort to gain access to our network and systems.

These data breaches and any unauthorized access or disclosure of our information or intellectual property could compromise our intellectual property and expose sensitive business information. Cyber-attacks could also cause us to incur significant remediation costs, result in product development delays, disrupt key business operations, and divert attention of management and key information technology resources. Our reputation, brand, and business could be significantly harmed, and we could be subject to third party claims in the event of such a security breach.

Foreign sales, accounting for the majority of our revenue, are subject to various risks associated with selling in international markets, which could have a material adverse effect on our operations, financial condition, and results of operations.

We derive the majority of our revenue from sales outside of the United States. Accordingly, if we experience a decline in foreign sales, our operating results could be adversely affected. Our foreign sales are subject to numerous risks, including:

- changes in local economic conditions;
- currency exchange rate volatility;
- governmental stimulus packages, controls, and trade restrictions;
- governmental policies that promote development and consumption of domestic products;
- export license requirements, foreign trade compliance matters, and restrictions on the use of technology;
- political instability, war, terrorism, or pandemic disease;
- changes in tax rates, tariffs, or freight rates;
- reduced protection for intellectual property rights;
- longer receivable collection periods;
- natural or man-made disasters in the countries where we sell our products;

• interruptions in transportation;  
• interruptions in the global communication infrastructure; and  
• labor regulations.

Any of these factors could adversely affect our financial condition and results of operations in the future.

We have significant international operations exposing us to various economic, regulatory, political, and business risks, which could have a material adverse effect on our operations, financial condition, and results of operations.

We have significant international operations, including foreign sales offices to support our international customers and distributors, and operational and research and development sites in China, India, the Philippines, and other Asian locations. In addition, we purchase our wafers from foreign foundries; have our commercial products assembled, packaged, and tested by subcontractors located outside of the United States; and rely on an international service provider for inventory management, order fulfillment, and direct sales logistics.

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These and other integral business activities outside of the United States are subject to the risks and uncertainties associated with conducting business in foreign economic and regulatory environments including trade barriers; economic sanctions; environmental regulations; import and export regulations; duties and tariffs and other trade restrictions; changes in trade policies; anti-corruption laws; domestic and foreign governmental regulations; potential vulnerability of and reduced protection for intellectual property; disruptions or delays in production or shipments; and instability or fluctuations in currency exchange rates, any of which could have a material adverse effect on our business, financial condition, and operating results. In addition, with the acquisition of Silicon Image, we have increased the operational challenges of conducting our business in and across multiple geographic regions around the world, especially in the face of different business practices, social norms, and legal standards.

Moreover, our financial condition and results of operations could be affected in the event of political instability, including as a result of the United Kingdom referendum on June 23, 2016, in which voters approved an exit from the European Union (commonly referred to as "Brexit"), terrorist activity, U.S. or other military actions, or economic crises in countries where our main wafer suppliers, end customers, contract manufacturers, and logistics providers are located.

Our global organizational structure and operations expose us to unanticipated tax consequences.

Our legal organizational structure could result in unanticipated unfavorable tax or other consequences which could have an adverse effect on our financial condition and results of operations. We have a global tax structure to more effectively align our corporate structure with our business operations including responsibility for sales and purchasing activities. We created new and realigned existing legal entities; completed intercompany sales of rights to intellectual property, inventory, and fixed assets across different tax jurisdictions; and implemented cost-sharing and intellectual property licensing and royalty agreements between our legal entities. We currently operate legal entities in countries where we conduct supply-chain management, design, and sales operations around the world. In some countries, we maintain multiple entities for tax or other purposes. In addition, we are currently conducting further restructuring activities following our acquisition of Silicon Image as we integrate Silicon Image and its subsidiaries, which include numerous foreign entities, into our existing global tax and corporate structures. These integration activities, changes in tax laws, regulations, future jurisdictional profitability of the Company and its subsidiaries, and related regulatory interpretations in the countries in which we operate may impact the taxes we pay or tax provision we record, which could adversely affect our results of operations.

We are subject to taxation in the United States, Singapore, and other countries. Future effective tax rates could be affected by changes in the composition of earnings in countries with differing tax rates, changes in the valuation of deferred tax assets and liabilities, or changes in tax laws. We compute our effective tax rate using actual jurisdictional profits and losses. Changes in the jurisdictional mix of profits and losses may cause fluctuations in the effective tax rate. Adverse changes in tax rates, our tax assets, and tax liabilities could negatively affect our results in the future.

We make no assurance as to what taxes we pay or the ability to estimate our future effective tax rate because of, among other things, uncertainty regarding the tax policies of the jurisdictions where we operate. The U.S. government and the Organization for Economic Cooperation and Development have proposed tax policy changes with respect to the taxation of global operations of multinational companies. As a result, our actual effective tax rate or taxes paid may vary materially from our expectations. Changes in tax laws, regulations, and related interpretations in the countries in which we operate may have an adverse effect on our business, financial condition, or operating results.

Product quality problems could lead to reduced revenue, gross margins, and net income.

In general, we warrant our products for varying lengths of time against non-conformance to our specifications and certain other defects. Because our products, including hardware, software, and intellectual property cores, are highly

complex and increasingly incorporate advanced technology, our quality assurance programs may not detect all defects, whether manufacturing defects in individual products or systematic defects that could affect numerous shipments. Inability to detect a defect could result in a diversion of our engineering resources from product development efforts, increased engineering expenses to remediate the defect, and increased costs due to customer accommodation or inventory impairment charges. On occasion we have also repaired or replaced certain components, made software fixes, or refunded the purchase price or license fee paid by our customers due to product or software defects. If there are significant product defects, the costs to remediate such defects, net of reimbursed amounts from our vendors, if any, or to resolve warranty claims may adversely affect our revenue, gross margins, and net income.

The nature of our business makes our revenue and gross margin subject to fluctuation and difficult to predict with accuracy, which could have an adverse impact on our business and our ability to provide forward-looking revenue and gross margin guidance.

In addition to the challenging market conditions we may face, we have limited visibility into the demand for our products, particularly new products, because demand for our products depends upon our products being designed into our end customers' products and those products achieving market acceptance. Due to the complexity of our customers' designs, the design to volume production process for many of our customers requires a substantial amount of time, frequently longer than a year. In addition, we are dependent upon "turns," orders received and turned for shipment in the same quarter. These factors

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make it difficult for us to accurately forecast future sales and project quarterly revenues. The difficulty in forecasting future sales weakens our ability to project our inventory requirements, which could result, and in the past has resulted, in inventory write-downs or failure to meet customer product demands in a timely manner. While we may give guidance, the difficulty in forecasting revenues as well as the relative customer and product mix of those revenues limits our ability to provide accurate forward-looking revenue and gross margin guidance.

In addition, effective with the announcement of the proposed acquisition by Parent, the Company has discontinued the provision of forward-looking revenue and gross margin guidance.

Reductions in the average selling prices of our products could have a negative impact on our gross margins.

The average selling prices of our products generally decline as the products mature or may decline as we compete for market share or customer acceptance in competitive markets. We seek to offset the decrease in selling prices through yield improvement, manufacturing cost reductions, and increased unit sales. We also seek to continue to develop higher value products or product features that increase, or slow the decline of, the average selling price of our products. However, we cannot guarantee that our ongoing efforts will be successful or that they will keep pace with the decline in selling prices of our products, which could ultimately lead to a decline in revenues and have a negative effect on our gross margins.

If we are unable to adequately protect our intellectual property rights, our financial results and our ability to compete effectively may suffer.

Our success depends in part on our proprietary technology and we rely upon patent, copyright, trade secret, mask work, and trademark laws to protect our intellectual property. We intend to continue to protect our proprietary technology, however, we may be unsuccessful in asserting our intellectual property rights or such rights may be invalidated, violated, circumvented, or challenged. From time to time, third parties, including our competitors, have asserted against us patent, copyright, and other intellectual property rights to technologies that are important to us. Third parties may attempt to misappropriate our intellectual property through electronic or other means or assert infringement claims against us in the future. Such assertions by third parties may result in costly litigation, indemnity claims, or other legal actions, and we may not prevail in such matters or be able to license any valid and infringed patents from third parties on commercially reasonable terms. This could result in the loss of our ability to import and sell our products or require us to pay costly royalties to third parties in connection with sales of our products. Any infringement claim, indemnification claim, or impairment or loss of use of our intellectual property could materially adversely affect our financial condition and results of operations.

A material change in the agreements governing encryption keys we use could place additional restrictions on us, or our distributors or contract manufacturers, which could restrict product shipment or significantly increase the cost to track products throughout the distribution chain.

Many of the components in our products contain encryption keys used in connection with High Definition Content Protection (HDCP). The regulation and distribution of these encryption keys are controlled through license agreements with Digital Content Protection (DCP), a wholly owned subsidiary of Intel Corporation. These license agreements have been modified by DCP from time to time, and such changes could impact us, our distributors, and our customers. An important element of both HDMI and MHL is the ability to implement link protection for high definition (HD), and more recently, 4K UltraHD, content. We implement various aspects of the HDCP link protection within certain parts we sell. We also, for the benefit of our customers, include the necessary HDCP encryption keys in parts we ship to customers. These encryption keys are provided to us from DCP. We have a specific process for tracking and handling these encryption keys. If DCP changes any of the tracking or handling requirements associated with HDCP encryption keys, we may be required to change our manufacturing and distribution processes, which

could adversely affect our manufacturing and distribution costs associated with these products. If we cannot satisfy new requirements for the handling and tracking of encryption keys, we may have to cease shipping or manufacturing certain products.

Our participation in consortia for the development and promotion of industry standards in certain of our target markets, including the HDMI, MHL, and WirelessHD standards, requires us to license some of our intellectual property for free or under specified terms and conditions, which makes it easier for others to compete with us in such markets.

An element of our business strategy includes participating in consortia to establish industry standards in certain of our target markets; promoting and enhancing specifications; and developing and marketing products based on those specifications and future enhancements. We intend to continue participating in consortia that develop and promote the HDMI, MHL, and WirelessHD specifications. In connection with our participation in these consortia, we make certain commitments regarding our intellectual property, in each case with the effect of making certain of our intellectual property available to others, including our competitors, desiring to implement the specification in question. For example, we must license specific elements of our intellectual property to others for use in implementing the HDMI specification, including enhancements, as long as we remain part of the consortium. Also, we must agree not to assert certain necessary patent claims against other members of the MHL consortium, even if those members may have infringed upon those patents in implementing the MHL specification.

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Accordingly, certain companies that implement these specifications in their products may use specific elements of our intellectual property to compete with us. Although in the case of the HDMI and MHL consortia, there are annual fees and royalties associated with the adopters' use of the technology, we make no assurance that our shares of such annual fees and royalties will adequately compensate us for having to license or refrain from asserting our intellectual property. In September 2016, the Founders of the HDMI consortium, of which we are a member, amended the Founders Agreement resulting in changes to our role as agent for the HDMI consortium and to the model for sharing adopter fee revenues. Under the terms of the agreement, our role as the agent was terminated effective January 1, 2017 and a new independent entity was appointed to act as the new HDMI licensing agent with responsibility for licensing and the distribution of royalties among Founders. As a result of the amended model for sharing revenue, we will be entitled to a reduced share of adopter fees paid by parties adopting the HDMI standard.

Our revenue depends, in part, on the continued adoption and widespread implementation of the HDMI and MHL specifications and the new implementation and adoption of the WirelessHD specifications.

Silicon Image depended on its participation in standard setting organizations, such as the HDMI and MHL consortiums, and the widespread adoption and success of those standards. From time to time, competing standards have been established which negatively affect the success of existing standards or jeopardize the creation of new standards.

Our future revenue depends, in part, upon the continued adoption and widespread implementation of the HDMI, MHL, and WirelessHD specifications. A significant portion of Silicon Image's total revenue was derived from the sale of HDMI and MHL-enabled products and the licensing of our HDMI and MHL technology. Silicon Image's leadership in the market for HDMI and MHL-enabled products and intellectual property has been based on the ability to introduce first-to-market semiconductor and intellectual property solutions to customers and to continue to innovate within the standard. Our failure to continue to drive innovation in the HDMI and MHL specifications could have an adverse effect on our business going forward.

MHL has not been widely adopted and Silicon Image had a reduction in mobile design wins at one of our largest customers as a result of not including MHL. If other manufacturers who have included MHL in their designs decide that MHL is no longer necessary or cost-effective as a product feature, they too could choose to omit the MHL functionality (and our product) from their designs. Such decisions would adversely affect our revenues. Similarly, if our largest customer decides to remove MHL from other products, our revenue would be adversely affected.

We now have 60GHz wireless technology that we hope will be made widely available and adopted by the marketplace through the efforts of the WirelessHD consortium and incorporated into certain of our future products. As with our HDMI and MHL products and intellectual property, our success with this technology will depend on our ability to introduce first-to-market WirelessHD-enabled semiconductor and intellectual property solutions to our customers and to continue to innovate within the WirelessHD standard. WiGig is an example of a competing 60GHz standard that has been created as an alternative high-bandwidth wireless connectivity solution for the personal computing industry. While the WiGig standard has not been in the market as long as the WirelessHD standard, it does represent a viable alternative to WirelessHD for 60GHz connectivity. If WiGig should gain broader adoption before WirelessHD is adopted, it could negatively impact the adoption of WirelessHD.

As successor-in-interest to Silicon Image, we have granted Intel Corporation certain rights with respect to our intellectual property, which could allow Intel to develop products that compete with ours or otherwise reduce the value of our intellectual property.

Silicon Image entered into a patent cross-license agreement with Intel in which each of them granted the other a license to use the patents filed by the grantor prior to a specified date, except for use related to identified types of

products. We believe that the scope of this license to Intel excludes our current products and anticipated future products. Intel could, however, exercise its rights under this agreement to use certain of our patents received in the acquisition of Silicon Image to develop and market other products that compete with ours, without payment to us. Additionally, Intel's rights to these patents could reduce the value of the patents to any third-party who otherwise might be interested in acquiring rights to use these patents in such products. Finally, Intel could endorse competing products, including a competing digital interface, or develop its own proprietary digital interface. Any of these actions could substantially harm our business and results of operations.

Litigation and unfavorable results of legal proceedings could adversely affect our financial condition and operating results.

From time to time we are subject to various legal proceedings and claims that arise out of the ordinary conduct of our business. Certain claims are not yet resolved, including those that are discussed under Note 15 contained in the Notes to Consolidated Financial Statements, and additional claims may arise in the future. Results of legal proceedings cannot be predicted with certainty. Regardless of merit, litigation may be both time-consuming and disruptive to our operations and cause significant expense and diversion of management attention and we may enter into material settlements to avoid these risks. Should we fail to prevail in certain matters, we may be faced with significant monetary damages or injunctive relief against us that could materially and adversely affect our financial condition and operating results and certain portions of our business.



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We depend upon a third party to provide inventory management, order fulfillment, and direct sales logistics and disruption of these services could adversely impact our business and results of operations.

We rely on a third party vendor to provide cost-effective and efficient supply chain services. Among other activities, these outsourced services relate to direct sales logistics, including order fulfillment, inventory management and warehousing, and distribution of inventory to third party distributors. If our third party supply chain provider were to discontinue services for us or its operations are disrupted as a result of a fire, earthquake, act of terrorism, political unrest, governmental uncertainty, war, disease, or other natural disaster or catastrophic event, or any other reason, our ability to fulfill direct sales orders and distribute inventory timely, cost effectively, or at all, would be hindered, which could adversely affect our business.

We may have failed to adequately insure against certain risks, and, as a result, our financial condition and results may be adversely affected.

We carry insurance customary for companies in our industry, including, but not limited to, liability, property, and casualty; workers' compensation; and business interruption insurance. We also insure our employees for basic medical expenses. In addition, we have insurance contracts that provide director and officer liability coverage for our directors and officers. Other than the specific areas mentioned above, we are self-insured with respect to most other risks and exposures, and the insurance we carry in many cases is subject to a significant policy deductible or other limitation before coverage applies. Based on management's assessment and judgment, we have determined that it is more cost effective to self-insure against certain risks than to incur the insurance premium costs. The risks and exposures for which we self-insure include, but are not limited to, certain natural disasters, certain product defects, political risk, certain theft, patent infringement, and employment practice matters. Should there be a catastrophic loss due to an uninsured event (such as an earthquake) or a loss due to adverse occurrences in any area in which we are self-insured, our financial condition or operating results could be adversely affected.

We compete with others to attract and retain key personnel, and any loss of, or inability to attract, such personnel could adversely affect our ability to compete effectively.

We depend on the efforts and abilities of certain key members of management and other technical personnel. Our future success depends, in part, upon our ability to retain such personnel and attract and retain other highly qualified personnel, particularly product engineers who can respond to market demands and required product innovation. Competition for such personnel is intense and we may not be successful in hiring or retaining new or existing qualified personnel. From time to time we have effected restructurings which have eliminated a number of positions. Even if such personnel are not directly affected by the restructuring effort, such terminations can have a negative impact on morale and our ability to attract and hire new qualified personnel in the future. Additionally, delays related to closing the Canyon Bridge acquisition may make it difficult to retain or attract personnel during this period of uncertainty. If we lose existing qualified personnel or are unable to hire new qualified personnel, as needed, we could have difficulty competing in our highly-competitive and innovative environment.

The conflict minerals provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act could result in additional costs and liabilities.

As part of the Dodd-Frank Wall Street Reform and Consumer Protection Act, the Securities and Exchange Commission established new disclosure and reporting requirements for those companies who use "conflict" minerals mined from the Democratic Republic of Congo and adjoining countries in their products, whether or not these products are manufactured by third parties. As these new requirements are fully implemented, they could affect the sourcing and availability of minerals used in the manufacture of our semiconductor products. Although enforcement of the disclosure requirements by the Securities and Exchange Commission remain uncertain, certain customers may

still require disclosure related to the sources of certain minerals used in our products. There are costs associated with complying with the disclosure requirements, including for due diligence in regard to the sources of any conflict minerals used in our products, in addition to the cost of any required remediation and other changes to products, processes, or sources of supply as a consequence of such verification activities. Although we filed the required conflict minerals reports in 2014, 2015, and 2016 it may be several years before we can fully assess the internal and external cost of compliance of the effect the rules will have on our business.

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

None.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibit Number	Description
2.1	<u>Amendment No. 1 to the Agreement and Plan of Merger, by and among Lattice Semiconductor Corporation, Canyon Bridge Acquisition Company, Inc. and Canyon Bridge Merger Sub, Inc. (incorporated by reference to Exhibit 2.1 filed with the Company's Current Report on Form 8-K filed June 9, 2017).</u>
31.1	<u>Certification of Chief Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended.</u>
31.2	<u>Certification of Chief Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended.</u>
32.1	<u>Certification of Chief Executive Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
32.2	<u>Certification of Chief Financial Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
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 Labels Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

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SIGNATURES

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

LATTICE SEMICONDUCTOR CORPORATION  
(Registrant)

/s/ Max Downing  
MAX DOWNING  
Chief Financial Officer  
(Duly Authorized Officer and Principal Financial and Accounting Officer)

Date: August 10, 2017