CADENCE DESIGN SYSTEMS INC
Form 10-Q
July 25, 2016

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

FORM 10-Q

(Mark One)
x QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended July 2, 2016
OR
¨ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission file number 000-15867

CADENCE DESIGN SYSTEMS, INC.
(Exact Name of Registrant as Specified in Its Charter)

Delaware	00-0000000
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
2655 Seely Avenue, Building 5, San Jose, California	95134
(Address of Principal Executive Offices)	(Zip Code)

(408) 943-1234
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 x 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 during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x 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,” and “smaller reporting company” in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer x	Accelerated filer o
Non-accelerated filer ¨ (Do not check if a smaller reporting company)	Smaller reporting company o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ¨ No x
On July 2, 2016, approximately 292,339,000 shares of the registrant’s common stock, $0.01 par value, were outstanding.

CADENCE DESIGN SYSTEMS, INC.
INDEX

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements
CADENCE DESIGN SYSTEMS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands)
(Unaudited)

	As of July 2, 2016	January 2, 2016 As Adjusted (Note 1)
ASSETS		
Current assets:		
Cash and cash equivalents	$669,573	$616,686
Short-term investments	34,745	94,498
Receivables, net	156,444	164,848
Inventories	61,932	56,762
Prepaid expenses and other	39,485	31,441
Total current assets	962,179	964,235
Property, plant and equipment, net of accumulated depreciation of $604,532 and $581,345, respectively	235,911	228,599
Goodwill	573,714	551,772
Acquired intangibles, net of accumulated amortization of $239,170 and $216,589, respectively	287,888	296,482
Long-term receivables	17,368	4,498
Other assets	300,813	299,929
Total assets	$2,377,873	$2,345,515
LIABILITIES AND STOCKHOLDERS’ EQUITY		
Current liabilities:		
Revolving credit facility	$50,000	$—
Accounts payable and accrued liabilities	224,685	238,022
Current portion of deferred revenue	289,786	298,285
Total current liabilities	564,471	536,307
Long-term liabilities:		
Long-term portion of deferred revenue	38,094	30,209
Long-term debt	643,073	343,288
Other long-term liabilities	56,842	59,596
Total long-term liabilities	738,009	433,093
Commitments and contingencies (Note 12)		
Stockholders’ equity:		
Common stock and capital in excess of par value	1,851,724	1,863,086
Treasury stock, at cost	(800,059)	(400,555)
Retained earnings (accumulated deficit)	33,713	(73,991)
Accumulated other comprehensive loss	(9,985)	(12,425)
Total stockholders’ equity	1,075,393	1,376,115
Total liabilities and stockholders’ equity	$2,377,873	$2,345,515

See notes to condensed consolidated financial statements.

CADENCE DESIGN SYSTEMS, INC.
CONDENSED CONSOLIDATED INCOME STATEMENTS
(In thousands, except per share amounts)
(Unaudited)

	Three Months Ended		Six Months Ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
Revenue:				
Product and maintenance	$419,963	$384,951	$831,707	$768,588
Services	33,058	30,932	69,176	58,661
Total revenue	453,021	415,883	900,883	827,249
Costs and expenses:				
Cost of product and maintenance	42,960	31,715	87,141	73,774
Cost of services	18,823	20,040	36,696	38,566
Marketing and sales	101,110	96,662	200,310	196,930
Research and development	182,371	157,974	362,277	320,970
General and administrative	36,388	27,467	64,688	55,109
Amortization of acquired intangibles	4,537	6,119	10,317	12,350
Restructuring and other charges (credits)	(74)	(498)	14,512	3,861
Total costs and expenses	386,115	339,479	775,941	701,560
Income from operations	66,906	76,404	124,942	125,689
Interest expense	(5,896)	(8,180)	(11,253)	(19,934)
Other income, net	2,842	1,347	7,605	6,128
Income before provision for income taxes	63,852	69,571	121,294	111,883
Provision for income taxes	14,517	11,411	21,397	17,464
Net income	$49,335	$58,160	$99,897	$94,419
Net income per share - basic	$0.17	$0.20	0.34	0.33
Net income per share - diluted	$0.17	$0.19	0.33	0.30
Weighted average common shares outstanding – basic	288,191	285,297	292,403	284,910
Weighted average common shares outstanding – diluted	295,201	313,665	299,318	312,756

See notes to condensed consolidated financial statements.

CADENCE DESIGN SYSTEMS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(In thousands)
(Unaudited)

	Three Months Ended		Six Months Ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
Net income	$49,335	$58,160	$99,897	$94,419
Other comprehensive income (loss), net of tax effects:				
Foreign currency translation adjustments	(2,307)	(4,528)	1,907	(13,418)
Changes in unrealized holding gains or losses on available-for-sale securities, net of reclassification adjustment for realized gains and losses	(304)	(52)	560	13
Changes in defined benefit plan liabilities	(109)	26	(27)	317
Total other comprehensive income (loss), net of tax effects	(2,720)	(4,554)	2,440	(13,088)
Comprehensive income	$46,615	$53,606	$102,337	$81,331

See notes to condensed consolidated financial statements.

CADENCE DESIGN SYSTEMS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(Unaudited)

	Six Months Ended	
	July 2, 2016	July 4, 2015
Cash and cash equivalents at beginning of period	$616,686	$932,161
Cash flows from operating activities:		
Net income	99,897	94,419
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	62,759	58,963
Amortization of debt discount and fees	527	8,971
Stock-based compensation	49,988	43,564
Gain on investments, net	(3,265)	(1,590)
Deferred income taxes	10,252	7,097
Other non-cash items	750	1,142
Changes in operating assets and liabilities, net of effect of acquired businesses:		
Receivables	(3,532)	(8,078)
Inventories	(10,296)	(6,243)
Prepaid expenses and other	(8,690)	(8,036)
Other assets	(8,709)	1,117
Accounts payable and accrued liabilities	(14,012)	(20,653)
Deferred revenue	(7,412)	5,827
Other long-term liabilities	(4,700)	(8,058)
Net cash provided by operating activities	163,557	168,442
Cash flows from investing activities:		
Purchases of available-for-sale securities	(20,525)	(59,516)
Proceeds from the sale of available-for-sale securities	55,168	37,586
Proceeds from the maturity of available-for-sale securities	26,115	15,600
Proceeds from the sale of long-term investments	2,583	2,293
Purchases of property, plant and equipment	(28,287)	(24,067)
Cash paid in business combinations and asset acquisitions, net of cash acquired	(41,627)	—
Net cash used for investing activities	(6,573)	(28,104)
Cash flows from financing activities:		
Proceeds from term loans	300,000	—
Proceeds from revolving credit facility	50,000	—
Payment of convertible notes	—	(349,999)
Payment of convertible notes embedded conversion derivative liability	—	(530,643)
Proceeds from convertible notes hedges	—	530,643
Payment of debt issuance costs	(622)	—
Excess tax benefits from stock-based compensation	—	10,097
Proceeds from issuance of common stock	36,296	38,167
Stock received for payment of employee taxes on vesting of restricted stock	(17,490)	(15,814)
Payments for repurchases of common stock	(480,100)	(93,076)
Net cash used for financing activities	(111,916)	(410,625)
Effect of exchange rate changes on cash and cash equivalents	7,819	(14,023)
Increase (decrease) in cash and cash equivalents	52,887	(284,310)
Cash and cash equivalents at end of period	$669,573	$647,851

Supplemental cash flow information:		
Cash paid for interest	$9,423	$12,006
Cash paid for taxes, net	$13,730	$16,373

See notes to condensed consolidated financial statements.

CADENCE DESIGN SYSTEMS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

NOTE 1. BASIS OF PRESENTATION

The condensed consolidated financial statements included in this Quarterly Report on Form 10-Q have been prepared by Cadence Design Systems, Inc., or Cadence, without audit, pursuant to the rules and regulations of the United States Securities and Exchange Commission, or the SEC. Certain information and footnote disclosures normally included in consolidated financial statements prepared in accordance with United States generally accepted accounting principles, or U.S. GAAP, have been condensed or omitted pursuant to such rules and regulations. However, Cadence believes that the disclosures contained in this Quarterly Report on Form 10-Q comply with the requirements of Section 13(a) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, for a Quarterly Report on Form 10-Q and are adequate to make the information presented not misleading. These condensed consolidated financial statements are meant to be, and should be, read in conjunction with the consolidated financial statements and the Notes thereto included in Cadence's Annual Report on Form 10-K for the fiscal year ended January 2, 2016. Certain prior period balances have been reclassified to conform to current period presentation.

The unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q reflect all adjustments (which include only normal, recurring adjustments and those items discussed in these Notes) that are, in the opinion of management, necessary to state fairly the results of operations, cash flows and financial position for the periods and dates presented. The results for such periods are not necessarily indicative of the results to be expected for the full fiscal year. Management has evaluated subsequent events through the issuance date of the unaudited condensed consolidated financial statements.

Use of Estimates

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

New Accounting Standards

In March 2016, the Financial Accounting Standards Board, or FASB, issued a new accounting standard intended to simplify various aspects related to how stock-based awards are accounted for and presented in the financial statements. The new standard: (a) requires all income tax effects of awards to be recognized in the income statement when the awards vest or are settled, (b) requires classification of excess tax benefits as an operating activity in the statement of cash flows rather than a financing activity, (c) eliminates the requirement to defer recognition of an excess tax benefit until the benefit is realized through a reduction to taxes payable, (d) modifies statutory withholding tax requirements, and (e) provides for a policy election to account for forfeitures as they occur. The guidance is effective in the first quarter of fiscal 2017 and early adoption is permitted if all amendments are adopted in the same period. Cadence elected to early adopt the new standard during the first quarter of fiscal 2016. As a result of early adoption, Cadence recorded all income tax effects of share-based awards in its provision for income taxes in the condensed consolidated income statements. Cadence also recorded a cumulative effect adjustment of approximately $7.8 million as a reduction of opening accumulated deficit on Cadence's condensed consolidated balance sheets. The cumulative effect adjustment was comprised of approximately $8.1 million related to the recognition of income tax benefits in excess of compensation expense, offset by $0.3 million related to the policy election to recognize the impact of forfeitures on stock-based compensation expense as they occur. Additionally, Cadence adopted the change in presentation in the condensed consolidated statement of cash flows related to excess tax benefits on a prospective basis. Accordingly, prior periods have not been adjusted. There was no impact for the change in presentation in the statement of cash flows related to statutory tax withholding requirements as Cadence has historically classified the statutory tax withholding as a financing activity in its consolidated statement of cash flows.

In April 2015, the FASB issued a new accounting standard requiring that debt issuance costs be presented in the balance sheet as a direct deduction from the associated debt liability. The new standard became effective for Cadence in the first quarter of fiscal 2016 and required retrospective application. As a result, prior period balances have been reclassified to conform to the current period presentation. Adoption of this standard did not have a material impact on

Cadence's consolidated balance sheets.

In May 2014, the FASB issued a comprehensive revenue recognition standard for revenue associated with the delivery of goods or services to customers. The updated standard will replace most existing revenue recognition guidance in U.S. GAAP when it becomes effective and permits the use of either the retrospective or cumulative effect transition method. In August 2015, the FASB deferred the effective date of the new revenue standard for periods beginning after December 15, 2016 to December 15, 2017, with early adoption permitted but not earlier than the original effective date of December 15, 2016. Accordingly, the updated standard is effective for Cadence in the first quarter of fiscal 2018. In March 2016, the FASB finalized its amendments to the guidance in the new standard on assessing whether an entity is a principal or an agent in a revenue transaction. This conclusion impacts whether an entity reports revenue on a gross or net basis. In April 2016, the FASB finalized additional amendments to the guidance in the new revenue standard on identifying performance obligations and accounting for licenses of intellectual property. Cadence has not yet selected a transition method and is currently evaluating the effect that the updated standard, and the recently issued amendments, will have on its consolidated financial statements and related disclosures.

In January 2016, the FASB issued a new accounting standard that will impact certain aspects of recognition, measurement, presentation and disclosure of financial instruments. The updated standard is effective for Cadence in the first quarter of fiscal 2018, and early adoption is permitted. Cadence is currently evaluating the effect the updated standard will have on its consolidated financial statements and related disclosures.

In February 2016, the FASB issued a new accounting standard requiring, among other things, the recognition of lease assets and lease liabilities on the balance sheet by lessees for certain lease arrangements that are classified as operating leases under the previous standard. The updated standard is effective for Cadence in the first quarter of fiscal 2019, and early adoption is permitted. Cadence is currently evaluating the effect the updated standard will have on its consolidated financial statements and related disclosures.

In March 2016, the FASB issued a new accounting standard intended to simplify the accounting for equity method investments when there is an increase in the level of ownership interest or degree of influence. The new standard is effective for Cadence in the first quarter of fiscal 2017 and requires prospective application. Adoption of this standard is not expected to have a material impact on Cadence’s consolidated financial statements.

NOTE 2. DEBT

Cadence’s outstanding debt as of July 2, 2016 and January 2, 2016 was as follows:

	July 2, 2016 (In thousands)			January 2, 2016		
	Principal	Unamortized Discount and Debt Issuance Costs	Carrying Value	Principal	Unamortized Discount and Debt Issuance Costs	Carrying Value
Revolving Credit Facility	$50,000	—	$50,000	—	$ —	$—
2019 Term Loan	300,000	(531)	299,469	—	$ —	—
2024 Notes	350,000	(6,396)	343,604	350,000	(6,712)	343,288
Total outstanding debt	$700,000	$ (6,927)	$693,073	$350,000	$ (6,712)	$343,288

Revolving Credit Facility

Cadence maintains a senior unsecured revolving credit facility with a group of lenders led by Bank of America, N.A., as administrative agent. The credit facility provides for borrowings up to $250.0 million, with the right to request increased capacity up to an additional $150.0 million upon the receipt of lender commitments, for total maximum borrowings of $400.0 million. The credit facility, as amended, expires on September 19, 2019 and has no subsidiary guarantors. Any outstanding loans drawn under the credit facility are due at maturity on September 19, 2019. Outstanding borrowings may be paid at any time prior to maturity.

Interest accrues on borrowings under the credit facility at either LIBOR plus a margin between 1.25% and 2.0% per annum or at the base rate plus a margin between 0.25% and 1.0% per annum. The interest rate applied to borrowings is determined by Cadence’s consolidated leverage ratio as specified by the credit facility agreement. As of July 2, 2016, the interest rate on Cadence’s revolving credit facility was 2.16%. Interest is payable quarterly. A commitment fee ranging from 0.20% to 0.35% is assessed on the daily average undrawn portion of revolving commitments.

The credit facility contains customary negative covenants that, among other things, restrict Cadence's ability to incur additional indebtedness, grant liens, make certain investments (including acquisitions), dispose of certain assets and make certain payments, including share repurchases and dividends. In addition, the credit facility contains financial covenants that require Cadence to maintain a leverage ratio not to exceed 2.75 to 1, and a minimum interest coverage ratio of 3.00 to 1. As of July 2, 2016 and January 2, 2016, Cadence was in compliance with all financial covenants associated with the revolving credit facility.

2019 Term Loan

On January 28, 2016, Cadence entered into a $300.0 million three-year senior unsecured non-amortizing term loan facility due on January 28, 2019, or the 2019 Term Loan, with a group of lenders led by JPMorgan Chase Bank, N.A., as administrative agent. The 2019 Term Loan is unsecured, and the proceeds will be used for general corporate purposes, including the repurchase of common stock.

Amounts outstanding under the 2019 Term Loan initially accrue interest at a rate equal to LIBOR plus a margin of 1.125% per annum, which may increase to a rate equal to LIBOR plus a margin of up to 1.875% per annum, depending on Cadence's leverage ratio. As of July 2, 2016, the interest rate on Cadence's 2019 Term Loan was 1.90%. The covenants of the 2019 Term Loan are generally consistent with Cadence's existing five-year senior unsecured revolving credit facility. In addition, the term loan agreement contains certain financial covenants that require Cadence to maintain a funded debt to EBITDA ratio not greater than 2.75 to 1, with a step-up to 3.25 to 1 for one year following an acquisition by Cadence of at least $250.0 million that results in a pro forma leverage ratio between 2.50 to 1 and 3.00 to 1. As of July 2, 2016, Cadence was in compliance with all financial covenants associated with the 2019 Term Loan.

2024 Notes

In October 2014, Cadence issued $350.0 million aggregate principal amount of 4.375% Senior Notes due October 15, 2024, or the 2024 Notes. Cadence received net proceeds of $342.4 million from the issuance of the 2024 Notes, net of a discount of $1.4 million and issuance costs of $6.2 million. Both the discount and issuance costs are being amortized to interest expense over the term of the 2024 Notes using the effective interest method. Interest is payable in cash semi-annually in April and October. The 2024 Notes are unsecured and rank equal in right of payment to all of Cadence's existing and future senior indebtedness.

Cadence may redeem the 2024 Notes, in whole or in part, at a redemption price equal to the greater of (a) 100% of the principal amount of the notes to be redeemed and (b) the sum of the present values of the remaining scheduled payments of principal and interest, plus any accrued and unpaid interest, as more particularly described in the indenture governing the 2024 Notes.

The indenture governing the 2024 Notes includes customary representations, warranties and restrictive covenants, including, but not limited to, restrictions on Cadence's ability to grant liens on assets, enter into sale and lease-back transactions, or merge, consolidate or sell assets, and also includes customary events of default.

For information regarding the impact of new accounting standards on the presentation of debt issuance costs, see Note 1 under the heading "New Accounting Standards."

NOTE 3. CASH, CASH EQUIVALENTS AND INVESTMENTS

Cadence's cash, cash equivalents and short-term investments at fair value as of July 2, 2016 and January 2, 2016 were as follows:

	As of	
	July 2, 2016	January 2, 2016
	(In thousands)	
Cash and cash equivalents	$669,573	$616,686
Short-term investments	34,745	94,498
Cash, cash equivalents and short-term investments	$704,318	$711,184

7

Cash and Cash Equivalents

Cadence considers all highly liquid investments with original maturities of three months or less on the date of purchase to be cash equivalents. The amortized cost of Cadence's cash equivalents approximates fair value. The following table summarizes Cadence's cash and cash equivalents at fair value as of July 2, 2016 and January 2, 2016:

	As of July 2, 2016	January 2, 2016
	(In thousands)	
Cash and interest bearing deposits	$274,631	$255,995
Money market funds	387,641	360,691
Commercial paper	1,999	—
Bank certificates of deposit	5,302	—
Total cash and cash equivalents	$669,573	$616,686

Short-Term Investments

The following tables summarize Cadence's short-term investments as of July 2, 2016 and January 2, 2016:

	As of July 2, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(In thousands)			
Corporate debt securities	$1,998	$ —	$ —	$1,998
Bank certificates of deposit	6,750	3	—	6,753
United States Treasury securities	21,411	7	—	21,418
Commercial paper	1,497	1	—	1,498
Marketable debt securities	31,656	11	—	31,667
Marketable equity securities	2,319	759	—	3,078
Total short-term investments	$33,975	$ 770	$ —	$34,745

The marketable debt securities included in short-term investments as of July 2, 2016 have contractual maturities of less than one year. Actual maturities may differ from contractual maturities because issuers may have the right to call or prepay obligations without penalties.

	As of January 2, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(In thousands)			
Corporate debt securities	$34,905	$ 1	$ (77)	$34,829
Bank certificates of deposit	15,049	1	(4)	15,046
United States Treasury securities	36,372	2	(88)	36,286
United States government agency securities	4,151	1	—	4,152
Commercial paper	1,993	—	—	1,993
Marketable debt securities	92,470	5	(169)	92,306
Marketable equity securities	1,817	375	—	2,192
Total short-term investments	$94,287	$ 380	$ (169)	$94,498

Realized gains and losses from the sale of marketable debt and equity securities are recorded in other income, net in the condensed consolidated income statements.

NOTE 4. RECEIVABLES, NET

Cadence's current and long-term receivables balances as of July 2, 2016 and January 2, 2016 were as follows:

	As of	
	July 2, 2016	January 2, 2016
	(In thousands)	
Accounts receivable	$77,760	$107,041
Unbilled accounts receivable	78,684	57,807
Long-term receivables	17,368	4,498
Total receivables	173,812	169,346
Less allowance for doubtful accounts	—	—
Total receivables, net	$173,812	$169,346

Cadence's customers are primarily concentrated within the semiconductor and electronics systems industries. As of July 2, 2016, no one customer accounted for 10% or more of Cadence's total receivables. As of January 2, 2016, one customer accounted for 12% of Cadence's total receivables, and no other customer accounted for 10% or more of Cadence's total receivables. As of July 2, 2016 and January 2, 2016, approximately 45% of Cadence's total receivables were attributable to the ten customers with the largest balances of total receivables.

NOTE 5. STOCK REPURCHASE PROGRAMS

In July 2015, Cadence's Board of Directors approved an 18-month plan to repurchase shares of Cadence common stock of up to an aggregate of $1.2 billion, beginning in the third quarter of fiscal 2015. The actual timing and amount of repurchases are subject to business and market conditions, corporate and regulatory requirements, acquisition opportunities and other factors. The stock repurchase program may be suspended, modified or discontinued at any time. As of July 2, 2016, the remaining amount authorized for the repurchase of shares was $480 million.

The shares repurchased under Cadence's repurchase authorizations and the total cost of repurchased shares, including commissions, during the three and six months ended July 2, 2016 and July 4, 2015 were as follows:

	Three Months Ended		Six Months Ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
	(In thousands)			
Shares repurchased	10,026	2,887	21,581	4,889
Total cost of repurchased shares	$240,100	$56,279	$480,100	$93,076

For additional information regarding share repurchases, see the discussion under Part II, Item 2, "Unregistered Sales of Equity Securities and Use of Proceeds."

NOTE 6. STOCK-BASED COMPENSATION

Stock-based compensation expense is reflected in Cadence's condensed consolidated income statements for the three and six months ended July 2, 2016 and July 4, 2015 as follows:

	Three Months Ended		Six Months Ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
	(In thousands)			
Cost of product and maintenance	$447	$558	$911	$1,127
Cost of services	653	815	1,334	1,647
Marketing and sales	5,305	5,236	10,841	10,683
Research and development	14,477	11,401	28,374	22,778
General and administrative	4,474	3,693	8,528	7,329
Total stock-based compensation expense	$25,356	$21,703	$49,988	$43,564

Cadence had total unrecognized compensation expense related to stock option and restricted stock grants of $148.6 million as of July 2, 2016, which will be recognized over the remaining vesting period. The remaining weighted-average vesting period of unvested awards is 2.2 years.

For information regarding the impact of new accounting standards impacting stock-based compensation, see Note 1 under the heading "New Accounting Standards."

NOTE 7. ACQUISITIONS

During the six months ended July 2, 2016, Cadence completed two business combinations for total cash consideration of $42.4 million, after taking into account cash acquired of $1.8 million. The total purchase consideration was preliminarily allocated to the assets acquired and liabilities assumed based on their respective estimated fair values on the acquisition dates. Cadence will also make payments to certain employees over a period of up to four years subject to continued employment and other conditions. Cadence recorded a total of $23.6 million of goodwill, $23.2 million of acquired intangible assets and $2.6 million of net liabilities consisting primarily of deferred revenue.

The recorded goodwill is primarily related to expected synergies from combining operations of the acquired companies. The weighted-average amortization period for definite-lived intangible assets acquired is approximately 8.0 years.

Results of operations and the estimated fair value of acquired assets and assumed liabilities are recorded in the consolidated financial statements from the date of acquisition. Pro forma results of operations for the business combinations completed during the six months ended July 2, 2016 have not been presented because the effects of these acquisitions, individually and in the aggregate, would not have been material to Cadence's financial results. The fair values of acquired intangible assets and assumed liabilities were determined using significant inputs that are not observable in the market. For an additional description of these fair value calculations, see Note 11 in the notes to condensed consolidated financial statements.

A trust for the benefit of the children of Lip-Bu Tan, Cadence's President, Chief Executive Officer, or CEO, and director, owned less than 2% of Rocketick Technologies Ltd., one of the acquired companies, and Mr. Tan and his wife serve as co-trustees of the trust and disclaim pecuniary and economic interest in the trust. The Board of Directors of Cadence reviewed the transaction and concluded that it was in the best interests of Cadence to proceed with the transaction. Mr. Tan recused himself from the Board of Directors' discussion of the valuation of Rocketick Technologies Ltd. and on whether to proceed with the transaction. A financial advisor provided a fairness opinion to Cadence in connection with the transaction.

NOTE 8. GOODWILL AND ACQUIRED INTANGIBLES

Goodwill

The changes in the carrying amount of goodwill during the six months ended July 2, 2016 were as follows:

	Gross Carrying Amount
	(In thousands)
Balance as of January 2, 2016	$ 551,772
Goodwill resulting from acquisitions	23,579
Effect of foreign currency translation	(1,637)
Balance as of July 2, 2016	$ 573,714

Acquired Intangibles, Net

Acquired intangibles as of July 2, 2016 were as follows, excluding intangibles that were fully amortized as of January 2, 2016:

	Gross Carrying Amount	Accumulated Amortization	Acquired Intangibles, Net
	(In thousands)		
Existing technology	$342,575	$(139,895)	$ 202,680
Agreements and relationships	174,677	(93,156)	81,521
Tradenames, trademarks and patents	9,806	(6,119)	3,687
Total acquired intangibles	$527,058	$(239,170)	$ 287,888

Acquired intangibles as of January 2, 2016 were as follows, excluding intangibles that were fully amortized as of January 3, 2015:

	Gross Carrying Amount	Accumulated Amortization	Acquired Intangibles, Net
	(In thousands)		
Existing technology	$329,627	$(124,097)	$ 205,530
Agreements and relationships	173,325	(86,808)	86,517
Tradenames, trademarks and patents	10,119	(5,684)	4,435
Total acquired intangibles	$513,071	$(216,589)	$ 296,482

Amortization expense from existing technology and maintenance agreements is included in cost of product and maintenance. Amortization of acquired intangibles for the three and six months ended July 2, 2016 and July 4, 2015 was as follows:

	Three Months Ended		Six Months Ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
	(In thousands)			
Cost of product and maintenance	$10,546	$10,105	$21,209	$20,278
Amortization of acquired intangibles	4,537	6,119	10,317	12,350
Total amortization of acquired intangibles	$15,083	$16,224	$31,526	$32,628

Estimated amortization expense for intangible assets with definite lives for the following five fiscal years and thereafter is as follows:

	(In thousands)
2016 – remaining period	$ 28,966
2017	56,093
2018	52,280
2019	45,241
2020	40,035
Thereafter	65,273
Total estimated amortization expense	$ 287,888

NOTE 9. RESTRUCTURING AND OTHER CHARGES

Cadence has initiated various restructuring plans in an effort to better align its resources with its business strategy. These restructuring plans have primarily been comprised of severance payments and termination benefits related to headcount reductions, estimated lease losses related to facilities vacated under the restructuring plans and charges related to assets abandoned as part of the restructuring plans. During the six months ended July 2, 2016, Cadence initiated a restructuring plan, or the 2016 Restructuring Plan, and recorded restructuring and other charges of approximately $14.2 million related to severance payments and termination benefits. As of July 2, 2016, total liabilities related to the 2016 Restructuring Plan were $3.0 million. Cadence expects to make cash payments for severance and related benefits for the 2016 Restructuring Plan through fiscal 2016.

The following table presents activity relating to Cadence's restructuring plans during the six months ended July 2, 2016:

	Severance and Benefits	Excess Facilities	Total
	(In thousands)		
Balance, January 2, 2016	$751	$ 386	$1,137
Restructuring and other charges (credits):			
2016 Restructuring Plan	14,216	—	14,216
Prior restructuring plans	21	275	296
Non-cash charges	—	(91)	(91)
Cash payments	(12,025)	(348)	(12,373)
Effect of foreign currency translation	281	(25)	256
Balance, July 2, 2016	$3,244	$ 197	$3,441

The remaining accrual for Cadence's restructuring plans is recorded in accounts payable and accrued liabilities in the condensed consolidated balance sheet.

NOTE 10. NET INCOME PER SHARE

Basic net income per share is computed by dividing net income during the period by the weighted average number of shares of common stock outstanding during that period, less unvested restricted stock awards. Diluted net income per share is impacted by equity instruments considered to be potential common shares, if dilutive, computed using the treasury stock method of accounting.

The calculations for basic and diluted net income per share for the three and six months ended July 2, 2016 and July 4, 2015 are as follows:

	Three Months Ended		Six Months Ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
	(In thousands, except per share amounts)			
Net income	$49,335	$58,160	$99,897	$94,419
Weighted average common shares used to calculate basic net income per share	288,191	285,297	292,403	284,910
2015 Warrants	—	20,635	—	19,773
Stock-based awards	7,010	7,733	6,915	8,073
Weighted average common shares used to calculate diluted net income per share	295,201	313,665	299,318	312,756
Net income per share - basic	$0.17	$0.20	$0.34	$0.33
Net income per share - diluted	$0.17	$0.19	$0.33	$0.30

The 2015 Warrants expired in December 2015. For an additional description of the 2015 Warrants, see Note 3 in the notes to consolidated financial statements in Cadence's Annual Report on Form 10-K for the fiscal year ended January 2, 2016.

The following table presents shares of Cadence's common stock outstanding for the three and six months ended July 2, 2016 and July 4, 2015 that were excluded from the computation of diluted net income per share because the effect of including these shares in the computation of diluted net income per share would have been anti-dilutive:

	Three Months Ended		Six Months Ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
	(In thousands)			
Options to purchase shares of common stock	1,279	1,503	1,014	1,308
Non-vested shares of restricted stock	19	23	51	18
Total potential common shares excluded	1,298	1,526	1,065	1,326

NOTE 11. FAIR VALUE

Inputs to valuation techniques are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect Cadence's market assumptions. These two types of inputs have created the following fair value hierarchy:

- Level 1 – Quoted prices for identical instruments in active markets;
- Level 2 – Quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets; and
- Level 3 – Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

This hierarchy requires Cadence to minimize the use of unobservable inputs and to use observable market data, if available, when determining fair value. Cadence recognizes transfers between levels of the hierarchy based on the fair values of the respective financial instruments at the end of the reporting period in which the transfer occurred. There were no transfers between levels of the fair value hierarchy during the six months ended July 2, 2016.

On a quarterly basis, Cadence measures at fair value certain financial assets and liabilities. The fair value of financial assets and liabilities was determined using the following levels of inputs as of July 2, 2016 and January 2, 2016:

	Fair Value Measurements as of July 2, 2016			
	Total	Level 1	Level 2	Level 3
	(In thousands)			
Assets				
Cash equivalents:				
Money market funds	$387,641	$387,641	$—	$ —
Bank certificates of deposit	5,302	—	5,302	—
Commercial paper	1,999	—	1,999	—
Short-term investments:				
Corporate debt securities	1,998	—	1,998	—
Bank certificates of deposit	6,753	—	6,753	—
United States Treasury securities	21,418	21,418	—	—
Commercial paper	1,498	—	1,498	—
Marketable equity securities	3,078	3,078	—	—
Trading securities held in Non-Qualified Deferred Compensation, or NQDC, trust	23,786	23,786	—	—
Total Assets	$453,473	$435,923	$17,550	$ —

As of July 2, 2016, Cadence did not have any financial liabilities requiring a recurring fair value measurement.

	Fair Value Measurements as of January 2, 2016			
	Total	Level 1	Level 2	Level 3
	(In thousands)			
Assets				
Cash equivalents:				
Money market funds	$360,691	$360,691	$—	$ —
Short-term investments:				
Corporate debt securities	34,829	—	34,829	—
Bank certificates of deposit	15,046	—	15,046	—
United States Treasury securities	36,286	36,286	—	—
United States government agency securities	4,152	4,152	—	—
Commercial paper	1,993	—	1,993	—
Marketable equity securities	2,192	2,192	—	—
Trading securities held in NQDC trust	24,905	24,905	—	—
Total Assets	$480,094	$428,226	$51,868	$ —

	Total	Level 1	Level 2	Level 3
	(In thousands)			
Liabilities				
Foreign currency exchange contracts	362	—	362	—

Total Liabilities	$362	$—	$362	$ —

14

Level 3 Measurements

During the six months ended July 2, 2016, Cadence acquired intangible assets of $23.2 million. The fair value of the intangible assets acquired was determined using the income and cost approaches and level 3 inputs. Key assumptions include the amount and timing of expected future cash flows, market conditions, projected costs, assumed profit margins, discount rates and the economy in general. The fair value of these intangible assets was affected most significantly by the projected income associated with the intangible assets and the anticipated timing of the projected income, but was also impacted by the discount rate used to adjust the outcomes to their present values. Cadence used discount rates ranging from 14.0% to 17.5% to value the intangible assets acquired.

As part of its acquisitions during the six months ended July 2, 2016, Cadence also assumed obligations related to deferred revenue, which were estimated using the cost build-up approach. The cost build-up approach determines fair value using estimates of the costs required to fulfill the contracted obligations plus an assumed profit. Cadence assumed a profit margin of 14.5% when valuing these liabilities, which were then adjusted to present value using a discount rate of 3.5%. The resulting fair value using this approach approximates the amount that Cadence would be required to pay a third party to assume the obligation. The fair value of the deferred revenue obligations assumed was affected most significantly by the estimated costs required to fulfill the obligation, but was also affected by the assumed profit margin and the discount rate.

Cadence believes that its estimates and assumptions related to the fair value of its acquired intangible assets and deferred revenue obligations are reasonable, but significant judgment is involved.

NOTE 12. CONTINGENCIES

Legal Proceedings

From time to time, Cadence is involved in various disputes and litigation that arise in the ordinary course of business. These include disputes and lawsuits related to intellectual property, indemnification obligations, mergers and acquisitions, licensing, contracts, distribution arrangements and employee relations matters. At least quarterly, Cadence reviews the status of each significant matter and assesses its potential financial exposure. If the potential loss from any claim or legal proceeding is considered probable and the amount or the range of loss can be estimated, Cadence accrues 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 on Cadence’s judgments using the best information available at the time. As additional information becomes available, Cadence reassesses the potential liability related to pending claims and litigation matters and may revise estimates.

Other Contingencies

Cadence provides its customers with a warranty on sales of hardware products, generally for a 90-day period. Cadence did not incur any significant costs related to warranty obligations during the three and six months ended July 2, 2016 and July 4, 2015.

Cadence’s product license and services agreements typically include a limited indemnification provision for claims from third parties relating to Cadence’s intellectual property. If the potential loss from any indemnification claim is considered probable and the amount or the range of loss can be estimated, Cadence accrues a liability for the estimated loss. The indemnification is generally limited to the amount paid by the customer. Cadence did not incur any significant losses from indemnification claims during the three and six months ended July 2, 2016 and July 4, 2015.

NOTE 13. OTHER COMPREHENSIVE LOSS

Cadence's other comprehensive loss is comprised of foreign currency translation losses, changes in defined benefit plan liabilities, and changes in unrealized holding gains and losses on available-for-sale securities net of reclassifications for realized gains and losses, as presented in Cadence's condensed consolidated statements of comprehensive income.

Accumulated other comprehensive loss was comprised of the following as of July 2, 2016 and January 2, 2016:

	As of July 2, 2016	January 2, 2016
	(In thousands)	
Foreign currency translation loss	$(7,662)	$(9,569)
Changes in defined benefit plan liabilities	(3,093)	(3,066)
Unrealized holding gains on available-for-sale securities	770	210
Total accumulated other comprehensive loss	$(9,985)	$(12,425)

For the three and six months ended July 2, 2016 and July 4, 2015 there were no significant amounts reclassified from accumulated other comprehensive loss to net income.

NOTE 14. SEGMENT REPORTING

Segment reporting is based on the "management approach," following the method that management organizes the company's reportable segments for which separate financial information is made available to, and evaluated regularly by, the chief operating decision maker in allocating resources and in assessing performance. Cadence's chief operating decision maker is its President and CEO, who reviews Cadence's consolidated results as one operating segment. In making operating decisions, the CEO primarily considers consolidated financial information, accompanied by disaggregated information about revenues by geographic region.

Outside the United States, Cadence markets and supports its products and services primarily through its subsidiaries. Revenue is attributed to geography based upon the country in which the product is used or services are delivered. Long-lived assets are attributed to geography based on the country where the assets are located.

The following table presents a summary of revenue by geography for the three and six months ended July 2, 2016 and July 4, 2015:

	Three Months Ended		Six Months Ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
	(In thousands)			
Americas:				
United States	$206,416	$192,176	$416,438	$379,383
Other Americas	7,196	7,425	16,437	12,839
Total Americas	213,612	199,601	432,875	392,222
Asia	111,032	96,426	210,211	195,208
Europe, Middle East and Africa	88,720	82,014	174,184	160,584
Japan	39,657	37,842	83,613	79,235
Total	$453,021	$415,883	$900,883	$827,249

The following table presents a summary of long-lived assets by geography as of July 2, 2016 and January 2, 2016:

	As of	
	July 2, 2016	January 2, 2016
	(In thousands)	
Americas:		
United States	$191,920	$189,665
Other Americas	618	387
Total Americas	192,538	190,052
Asia	29,571	24,767
Europe, Middle East and Africa	12,898	12,832
Japan	904	948
Total	$235,911	$228,599

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

The following discussion should be read in conjunction with the condensed consolidated financial statements and notes thereto included in this Quarterly Report on Form 10-Q, or this Quarterly Report, and in conjunction with our Annual Report on Form 10-K for the fiscal year ended January 2, 2016. This Quarterly Report contains statements that are not historical in nature, are predictive, or that depend upon or refer to future events or conditions or contain forward-looking statements. Statements including, but not limited to, statements regarding the extent and timing of future revenues and expenses and customer demand, statements regarding the deployment of our products, statements regarding our reliance on third parties and other statements using words such as “anticipates,” “believes,” “could,” “estimates,” “expects,” “forecasts,” “intends,” “may,” “plans,” “projects,” “should,” “will” and “would,” and words of similar import and th thereof, constitute forward-looking statements. These statements are predictions based upon our current expectations about future events. Actual results could vary materially as a result of certain factors, including, but not limited to, those expressed in these statements. We refer you to the “Risk Factors,” “Results of Operations,” “Disclosures About Market Risk,” and “Liquidity and Capital Resources” sections contained in this Quarterly Report, and the risks discussed in our other Securities Exchange Commission, or SEC, filings, which identify important risks and uncertainties that could cause actual results to differ materially from those contained in the forward-looking statements.

We urge you to consider these factors carefully in evaluating the forward-looking statements contained in this Quarterly Report. All subsequent written or oral forward-looking statements attributable to our company or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements. The forward-looking statements included in this Quarterly Report are made only as of the date of this Quarterly Report. We do not intend, and undertake no obligation, to update these forward-looking statements.

Overview

We develop system design enablement, or SDE, solutions that our customers use to design whole electronics systems, increasingly small and complex integrated circuits, or ICs, and electronic devices. Our solutions are designed to help our customers reduce the time to bring an electronics system, IC or electronic device to market and to reduce their design, development and manufacturing costs. Our SDE product offerings include electronic design automation, or EDA, software, emulation and prototyping hardware, system interconnect and analysis and two categories of intellectual property, or IP, commonly referred to as verification IP, or VIP, and design IP. We provide maintenance for our software, hardware, and IP product offerings. We also provide engineering services related to methodology, education, hosted design solutions and design services for advanced ICs and development of custom IP. These services help our customers manage and accelerate their electronics product development processes.

Our customers include electronics systems and semiconductor companies, internet infrastructure and service companies and other technology companies that develop a wide range of electronics products and services in a number of market segments, such as mobile and consumer devices, communications, cloud and data center infrastructure, personal computers, automotive systems, medical systems, and other devices. The renewal of many of our customer contracts and our customers’ decisions to make new purchases from us are dependent upon our customers’ commencement of new design projects. As a result, our business is significantly influenced by our customers’ business outlook and investment in new designs and products.

Our future performance depends on our ability to innovate, commercialize newly developed solutions and enhance and maintain our current products. We must keep pace with our customers’ technical developments, satisfy industry standards and meet our customers’ increasingly demanding performance, productivity, quality and predictability requirements.

We combine our products and technologies into categories related to major design activities:

- Functional Verification, including Emulation and Prototyping Hardware;
- Digital IC Design and Signoff;
- Custom IC Design;
- System Interconnect and Analysis; and
- IP.

The products and technologies included in these categories are combined with ready-to-use packages of technologies assembled from our broad portfolio of IP and other associated components that provide comprehensive solutions for low power, mixed signal and designs at smaller geometries referred to as advanced process nodes, as well as popular designs based on design IP owned and licensed by other companies. These solutions are marketed to users who specialize in areas such as system design and verification, functional verification, logic design, digital implementation, custom IC design and verification, printed circuit board, or PCB, IC package and SiP design and analysis.

For additional information about our products, see the discussion in Item 1, "Business," under the heading "Products and Product Strategy," in our Annual Report on Form 10-K for the fiscal year ended January 2, 2016.

We have identified certain items that management uses as performance indicators to manage our business, including revenue, certain elements of operating expenses and cash flow from operations, and we describe these items further below under the headings "Results of Operations" and "Liquidity and Capital Resources."

Critical Accounting Estimates

In preparing our condensed consolidated financial statements, we make assumptions, judgments and estimates that can have a significant impact on our revenue, operating income and net income, as well as on the value of certain assets and liabilities on our condensed consolidated balance sheets. We base our assumptions, judgments and estimates on historical experience and various other factors that we believe to be reasonable under the circumstances. Actual results could differ materially from these estimates under different assumptions or conditions. At least quarterly, we evaluate our assumptions, judgments and estimates, and make changes as deemed necessary. Historically, our assumptions, judgments and estimates relative to our critical accounting estimates have not differed materially from actual results. For further information about our critical accounting estimates, see the discussion in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," under the heading "Critical Accounting Estimates" in our Annual Report on Form 10-K for the fiscal year ended January 2, 2016.

New Accounting Standards

For information regarding new accounting standards applicable to us, see Note 1 in the notes to condensed consolidated financial statements under the heading "New Accounting Standards."

Results of Operations

Financial results for the three and six months ended July 2, 2016, as compared to the three and six months ended July 4, 2015, reflect the following:

- increased product and maintenance and services revenue, primarily because of increased demand for our software, emulation and prototyping hardware and services;
- increased cost of product and maintenance, primarily due to increased emulation and prototyping hardware costs;
- continued investment in research and development activities;
- restructuring activities; and
- decreased interest expense.

Revenue

We primarily generate revenue from licensing our software and IP, selling or leasing our emulation and prototyping hardware technology, providing maintenance for our software, hardware and IP, providing engineering services and earning royalties generated from the use of our IP. The timing of our revenue is significantly affected by the mix of software, hardware and IP products generating revenue in any given period and whether the revenue is recognized in a recurring manner over multiple periods or up front, upon completion of delivery.

We seek to achieve a consistent revenue mix such that approximately 90% of our revenue is recurring in nature, and the remainder of the resulting revenue is recognized up front, upon completion of delivery. Recurring revenue includes revenue from our software and IP license arrangements where revenue is recognized over multiple periods, services, royalties from certain IP arrangements, maintenance on perpetual software licenses and hardware, and our operating leases of hardware. Upfront revenue is primarily generated by our sales of emulation and prototyping hardware and perpetual software and IP licenses. Our ability to achieve this mix in any single fiscal period may be impacted primarily by delivery of hardware and IP products to our customers.

For an additional description of the impact of emulation hardware sales on the timing of revenue recognition, see the discussion in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," under the heading "Critical Accounting Estimates – Revenue Recognition" in our Annual Report on Form 10-K for the fiscal year ended January 2, 2016.

Revenue by Period

The following table shows our revenue for the three months ended July 2, 2016 and July 4, 2015 and the change in revenue between periods:

	Three Months Ended		Change	
	July 2, 2016	July 4, 2015	Amount	Percentage
	(In millions, except percentages)			
Product and maintenance	$420.0	$385.0	$35.0	9 %
Services	33.0	30.9	2.1	7 %
Total revenue	$453.0	$415.9	$37.1	9 %

The following table shows our revenue for the six months ended July 2, 2016 and July 4, 2015 and the change in revenue between periods:

	Six Months Ended		Change	
	July 2, 2016	July 4, 2015	Amount	Percentage
	(In millions, except percentages)			
Product and maintenance	$831.7	$768.6	$63.1	8 %
Services	69.2	58.6	10.6	18 %
Total revenue	$900.9	$827.2	$73.7	9 %

Product and maintenance revenue increased during the three and six months ended July 2, 2016, as compared to the three and six months ended July 4, 2015, primarily because of increased revenue for our emulation and prototyping hardware and generally increased business levels. The increase in services revenue during the six months ended July 2, 2016 was primarily due to incremental revenue from a customer agreement that was recognized at the completion of the contract when all specified deliverables were made available. Revenue may fluctuate from period to period based on demand for, and our resources to fulfill, our services, emulation hardware and IP offerings.

No one customer accounted for 10% or more of total revenue during the three and six months ended July 2, 2016 or July 4, 2015.

Revenue by Product Group

The following table shows the percentage of revenue contributed by each of our five product groups for the past five consecutive quarters:

	Three Months Ended				
	July 4, 2015	October 3, 2015	January 2, 2016	April 2, 2016	July 2, 2016
Functional Verification, including Emulation and Prototyping Hardware	21 %	23 %	25 %	26 %	27 %
Digital IC Design and Signoff	29 %	28 %	28 %	30 %	27 %
Custom IC Design	27 %	26 %	25 %	25 %	26 %
System Interconnect and Analysis	11 %	10 %	10 %	9 %	10 %
IP	12 %	13 %	12 %	10 %	10 %
Total	100 %	100 %	100 %	100 %	100 %

As described in Note 2 in the notes to consolidated financial statements in our Annual Report on Form 10-K for the fiscal year ended January 2, 2016, certain of our licensing arrangements allow customers the ability to remix among software products. Additionally, we have arrangements with customers that include a combination of our products, with the actual product selection and number of licensed users to be determined at a later date. For these arrangements, we estimate the allocation of the revenue to product groups based upon the expected usage of our products. The actual usage of our products by these customers may differ and, if that proves to be the case, the revenue allocation in the table above would differ.

Revenue by Geography

	Three Months Ended		Change	
	July 2, 2016	July 4, 2015	Amount	Percentage
	(In millions, except percentages)			
United States	$206.4	$192.2	$14.2	7 %
Other Americas	7.2	7.4	(0.2)	(3)%
Asia	111.0	96.4	14.6	15 %
Europe, Middle East and Africa	88.7	82.0	6.7	8 %
Japan	39.7	37.9	1.8	5 %
Total revenue	$453.0	$415.9	$37.1	9 %

	Six Months Ended		Change	
	July 2, 2016	July 4, 2015	Amount	Percentage
	(In millions, except percentages)			
United States	$416.5	$379.4	$37.1	10 %
Other Americas	16.4	12.8	3.6	28 %
Asia	210.2	195.2	15.0	8 %
Europe, Middle East and Africa	174.2	160.6	13.6	8 %
Japan	83.6	79.2	4.4	6 %
Total revenue	$900.9	$827.2	$73.7	9 %

Most of our revenue is transacted in the United States dollar. However, certain revenue transactions are denominated in foreign currencies, primarily the Japanese yen. We recognize reduced revenue from those contracts in periods when the Japanese yen weakens in value against the United States dollar and additional revenue from those contracts in periods when the Japanese yen strengthens against the United States dollar. For an additional description of how changes in foreign exchange rates affect our condensed consolidated financial statements, see the discussion under Item 3, “Quantitative and Qualitative Disclosures About Market Risk – Foreign Currency Risk.”

Revenue by Geography as a Percent of Total Revenue

	Three Months Ended		Six Months Ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
United States	45 %	46 %	46 %	46 %
Other Americas	2 %	2 %	2 %	1 %
Asia	24 %	23 %	24 %	24 %
Europe, Middle East and Africa	20 %	20 %	19 %	19 %
Japan	9 %	9 %	9 %	10 %
Total	100 %	100 %	100 %	100 %

Cost of Revenue

	Three Months Ended		Change	
	July 2, 2016	July 4, 2015	Amount	Percentage
	(In millions, except percentages)			
Cost of product and maintenance	$43.0	$31.7	$11.3	36 %
Cost of services	18.8	20.0	(1.2)	(6)%

	Six Months Ended		Change	
	July 2, 2016	July 4, 2015	Amount	Percentage
	(In millions, except percentages)			
Cost of product and maintenance	$87.1	$73.8	$13.3	18 %
Cost of services	36.7	38.6	(1.9)	(5)%

Cost of Product and Maintenance

Cost of product and maintenance includes costs associated with the sale and lease of our emulation and prototyping hardware and licensing of our software and IP products, certain employee salary and benefits and other employee-related costs, cost of our customer support services, amortization of technology-related and maintenance-related acquired intangibles, as well as the costs of technical documentation and royalties payable to third-party vendors. Costs associated with our emulation and prototyping hardware products include materials, assembly, applicable reserves and overhead. These hardware manufacturing costs make our cost of emulation and prototyping hardware product higher, as a percentage of revenue, than our cost of software and IP products.

A summary of cost of product and maintenance is as follows:

	Three Months Ended		Change	
	July 2, 2016	July 4, 2015	Amount	Percentage
	(In millions, except percentages)			
Product and maintenance-related costs	$32.5	$21.6	$10.9	50 %
Amortization of acquired intangibles	10.5	10.1	0.4	4 %
Total cost of product and maintenance	$43.0	$31.7	$11.3	36 %

	Six Months Ended		Change	
	July 2, 2016	July 4, 2015	Amount	Percentage
	(In millions, except percentages)			
Product and maintenance-related costs	$65.9	$53.5	$12.4	23 %
Amortization of acquired intangibles	21.2	20.3	0.9	4 %
Total cost of product and maintenance	$87.1	$73.8	$13.3	18 %

Cost of product and maintenance depends primarily on our hardware product sales in any given period. Cost of product and maintenance is also affected by employee salary and benefits and other employee-related costs, as well as the timing and extent to which we acquire intangible assets, acquire or license third-parties' intellectual property or technology and sell our products that include such acquired or licensed intellectual property or technology.

The changes in product and maintenance-related costs for the three and six months ended July 2, 2016, as compared to the three and six months ended July 4, 2015, were due to the following:

	Change	
	Three Months Ended	Six Months Ended
	(In millions)	
Emulation and prototyping hardware costs	$10.5	$12.5
Other items	0.4	(0.1)
Total change in product and maintenance-related costs	$10.9	$12.4

Emulation and prototyping hardware costs increased during the three and six months ended July 2, 2016, as compared to the three and six months ended July 4, 2015, primarily due to higher emulation and prototyping hardware revenue. Gross margins on our hardware products will fluctuate based on customer pricing strategies, product mix, product competition and product life cycle.

Cost of Services

Cost of services primarily includes employee salary, benefits and other employee-related costs to perform work on revenue-generating projects, costs to maintain the infrastructure necessary to manage a services organization, and provisions for contract losses, if any. Cost of services will fluctuate from period to period based on our utilization of design services engineers on revenue-generating projects or on internal development projects.

Operating Expenses

Our operating expenses include marketing and sales, research and development and general and administrative expenses. Factors that cause our operating expenses to fluctuate include changes in the number of employees due to hiring and acquisitions, restructuring activities, foreign exchange rates, stock-based compensation and the impact of our variable compensation programs that are driven by overall operating results.

Many of our operating expenses are transacted in various foreign currencies. We recognize lower expenses in periods when the United States dollar strengthens in value against other currencies and we recognize higher expenses when the United States dollar weakens against other currencies. For an additional description of how changes in foreign exchange rates affect our condensed consolidated financial statements, see the discussion in Item 3, “Quantitative and Qualitative Disclosures About Market Risk – Foreign Currency Risk.”

Our operating expenses for the three and six months ended July 2, 2016 and July 4, 2015 were as follows:

	Three Months Ended		Change	
	July 2, 2016	July 4, 2015	Amount	Percentage
	(In millions, except percentages)			
Marketing and sales	$101.1	$96.7	$4.4	5 %
Research and development	182.4	158.0	24.4	15 %
General and administrative	36.4	27.5	8.9	32 %
Total operating expenses	$319.9	$282.2	$37.7	13 %

	Six Months Ended		Change	
	July 2, 2016	July 4, 2015	Amount	Percentage
	(In millions, except percentages)			
Marketing and sales	$200.3	$196.9	$3.4	2 %
Research and development	362.3	321.0	41.3	13 %
General and administrative	64.7	55.1	9.6	17 %
Total operating expenses	$627.3	$573.0	$54.3	9 %

Our operating expenses, as a percentage of total revenue, for the three and six months ended July 2, 2016 and July 4, 2015 were as follows:

	Three Months Ended		Six Months Ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
Marketing and sales	22 %	23 %	22 %	24 %
Research and development	40 %	38 %	40 %	39 %
General and administrative	8 %	7 %	7 %	7 %
Total operating expenses	70 %	68 %	69 %	70 %

Marketing and sales

The changes in marketing and sales expense for the three and six months ended July 2, 2016, as compared to the three and six months ended July 4, 2015, were due to the following:

	Change	
	Three Months Ended	Six Months Ended
	(In millions)	
Salary, benefits and other employee-related costs	$3.0	1.6
Other items	1.4	1.8
Total change in marketing and sales expense	$4.4	$ 3.4

Research and Development

Costs included in research and development increased during the three and six months ended July 2, 2016, as compared to the three and six months ended July 4, 2015, primarily due to incremental investments in research and development. We expect employee salary and other compensation-related costs included in research and development to increase during fiscal 2016 due to continued investments in research and development activities.

Stock-based compensation included in research and development increased during the three months ended July 2, 2016, as compared to the three months ended July 4, 2015, and during the six months ended July 2, 2016, as compared to the six months ended July 4, 2015, primarily because of higher grant-date fair values of stock awards vesting during the three and six months ended July 2, 2016. We expect stock-based compensation included in research and development to increase during fiscal 2016, as compared to fiscal 2015, due to higher grant-date fair values of stock awards vesting during fiscal 2016.

The changes in research and development expense for the three and six months ended July 2, 2016, as compared to the three and six months ended July 4, 2015, were due to the following:

	Change	
	Three Months Ended	Six Months Ended
	(In millions)	
Salary, benefits and other employee-related costs	$20.0	34.5
Stock-based compensation	3.1	5.6
Facilities and other infrastructure costs	1.8	4.1
Materials and other pre-production costs	(1.9)	(5.8)
Other items	1.4	2.9
Total change in research and development expense	$24.4	$ 41.3

General and administrative

The changes in general and administrative expense for the three and six months ended July 2, 2016, as compared to the three and six months ended July 4, 2015, were due to the following:

	Change	
	Three Months Ended	Six Months Ended
	(In millions)	
Acquisition-related costs	$6.2	$ 6.1
Salary, benefits and other employee-related costs	1.5	1.7
Other items	1.2	1.8
Total change in general and administrative expense	$8.9	$ 9.6

Restructuring and other charges

During the six months ended July 2, 2016, we initiated a restructuring plan to better align our resources with our business strategy, or the 2016 Restructuring Plan. In connection with the 2016 Restructuring plan, we recorded restructuring and other charges of $14.2 million, which consisted of severance and related benefits. For an additional description of the 2016 Restructuring Plan, see Note 9 in the notes to condensed consolidated financial statements.

Interest Expense

	Three Months Ended		Six Months Ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
	(In millions)			
Contractual interest expense:				
2015 Notes	$—	$ 1.2	$—	$ 3.0
2019 Term Loan	1.4	—	2.4	—
Revolving credit facility	0.4	0.1	0.6	0.3
2024 Notes	3.8	3.8	7.6	7.6
Amortization of debt discount:				
2015 Notes	—	2.5	—	7.5
2024 Notes	—	—	—	0.1
Amortization of deferred financing costs:				
2015 Notes	—	0.3	—	1.0
2019 Term Loan	0.1	—	0.1	—
2024 Notes	0.2	0.1	0.3	0.3
Other	—	0.2	0.3	0.1
Total interest expense	$5.9	$ 8.2	$11.3	$ 19.9

For an additional description of our outstanding indebtedness, see Note 2 in the notes to condensed consolidated financial statements. For an additional description of the 2015 Notes, see Note 3 in the notes to condensed consolidated financial statements in our Annual Report on Form 10-K for the fiscal year ended January 2, 2016.

Income Taxes

The following table presents the provision for income taxes and the effective tax rate for the three and six months ended July 2, 2016 and July 4, 2015:

	Three Months Ended		Six Months Ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
	(In millions, except percentages)			
Provision for income taxes	$14.5	$11.4	$21.4	$17.5
Effective tax rate	22.7 %	16.4 %	17.6 %	15.6 %

We adopted a new accounting standard related to the accounting for stock-based compensation during the three months ended April 2, 2016 that required all income tax effects of stock-based awards to be recognized in our condensed consolidated income statement as the awards vest or are settled. For further discussion regarding new accounting standards, see Note 1 in the notes to condensed consolidated financial statements under the heading “New Accounting Standards.”

Our provision for income taxes for the three and six months ended July 2, 2016 is primarily attributable to federal, state and foreign income taxes on our anticipated fiscal 2016 income and includes the tax benefit of the United States federal research tax credit resulting from its permanent reinstatement in December 2015. Our provision for income taxes for the three months ended July 2, 2016 includes $4.1 million of tax benefit related to stock-based compensation deductions and $4.2 million of tax provision related to foreign withholding taxes which were recorded as discrete items during the period.

Our foreign earnings are generally subject to lower statutory tax rates than our United States earnings.We estimate our annual effective tax rate for fiscal 2016 to be approximately 18%. Our estimate excludes tax effects of certain stock-based compensation, potential acquisitions, and other items that we cannot anticipate.

Our provision for income taxes for the three and six months ended July 4, 2015 primarily resulted from federal, state and foreign income taxes on our then anticipated fiscal 2015 income and did not include the potential tax benefit of the United States federal research tax credit, which had expired in December 2014.

Our future effective tax rates may be materially impacted by tax amounts associated with our foreign earnings at rates different from the United States federal statutory rate, the tax impact of stock-based compensation, accounting for uncertain tax positions, business combinations, closure of statute of limitations or settlement of tax audits, changes in valuation allowance and changes in tax law. A significant amount of our foreign earnings is generated by our subsidiaries organized in Ireland and Hungary. Our future effective tax rates may be adversely affected if our earnings were to be lower in countries where we have lower statutory tax rates or if we were to repatriate certain foreign earnings on which United States taxes have not been previously accrued.

For further discussion regarding our income taxes, see Note 6 in the notes to consolidated financial statements in our Annual Report on Form 10-K for the fiscal year ended January 2, 2016.

Liquidity and Capital Resources

	As of July 2, 2016	January 2, 2016	Change
	(In millions)		
Cash, cash equivalents and short-term investments	$704.3	$ 711.2	$(6.9)
Net working capital	$397.7	$ 427.9	$(30.2)

Cash, Cash Equivalents and Short-term Investments

As of July 2, 2016, our principal sources of liquidity consisted of $704.3 million of cash, cash equivalents and short-term investments, as compared to $711.2 million as of January 2, 2016.

Our primary sources of cash, cash equivalents and short-term investments during the six months ended July 2, 2016 were proceeds from borrowings, cash generated from operations, proceeds from the sale and maturity of available-for-sale securities, proceeds from the exercise of stock options and proceeds from stock purchases under our employee stock purchase plan.

Our primary uses of cash, cash equivalents and short-term investments during the six months ended July 2, 2016 were payments related to salaries and benefits, other employee-related costs and operating expenses, repurchases of our common stock, acquisitions, purchases of property, plant and equipment and tax payments.

Approximately 66% of our cash, cash equivalents and short-term investments were held by our foreign subsidiaries as of July 2, 2016. Our intent is to indefinitely reinvest our earnings from certain foreign operations. We do not anticipate we will need to repatriate dividends from foreign operations that are indefinitely reinvested in order to fund our domestic operations. In the event that dividends from foreign operations that are currently indefinitely reinvested are needed to fund United States liquidity, we could be required to accrue and pay additional taxes in order to repatriate these funds. For further discussion regarding our income taxes see Note 6 in the notes to consolidated financial statements in our Annual Report on Form 10-K for the fiscal year ended January 2, 2016.

Our investments in marketable debt securities are classified as available-for-sale and are classified as current assets on the condensed consolidated balance sheets. Our investments are made in accordance with our cash investment policy, which governs the amounts and types of investments we hold in our portfolio. Our investment portfolio could be affected by various risks and uncertainties including credit risk, interest rate risk and general market risk, as outlined in Part II, Item 1A, “Risk Factors.”

We expect that current cash, cash equivalents and short-term investment balances, cash flows that are generated from operations and cash borrowings available under our revolving credit facility will be sufficient to meet our domestic and international working capital needs, and other capital and liquidity requirements, including acquisitions and share repurchases for at least the next 12 months.

26

Net Working Capital

Net working capital is comprised of current assets less current liabilities, as shown on our condensed consolidated balance sheets. The decrease in our net working capital as of July 2, 2016, as compared to January 2, 2016, is primarily due to a net decrease in cash, cash equivalents and short-term investments resulting from investing and financing activities.

Cash Flows from Operating Activities

	Six Months Ended		
	July 2, 2016	July 4, 2015	Change
	(In millions)		
Cash provided by operating activities	$163.6	$168.4	$(4.8)

Cash flows from operating activities include net income, adjusted for certain non-cash items, as well as changes in the balances of certain assets and liabilities. Our cash flows from operating activities are significantly influenced by business levels and the payment terms set forth in our license agreements. The decrease in cash flows from operating activities for the six months ended July 2, 2016, as compared to the six months ended July 4, 2015, was primarily due to the timing of cash receipts from customers and disbursements made to vendors.

We expect that cash flows from operating activities will fluctuate in future periods due to a number of factors, including our operating results, tax payments and the timing of our billings, collections and disbursements.

Cash Flows from Investing Activities

	Six Months Ended		
	July 2, 2016	July 4, 2015	Change
	(In millions)		
Cash used for investing activities	$(6.6)	$(28.1)	$21.5

The decrease in cash used for investing activities during the six months ended July 2, 2016, as compared to the six months ended July 4, 2015, was primarily due to an increase in net proceeds from transactions associated with our available-for-sale securities, partially offset by cash paid in business combinations and asset acquisitions. We expect to continue our investing activities, including purchasing property, plant and equipment, purchasing intangible assets, business combinations, purchasing software licenses, and making long-term equity investments.

Cash Flows from Financing Activities

	Six Months Ended		
	July 2, 2016	July 4, 2015	Change
	(In millions)		
Cash used for financing activities	$(111.9)	$(410.6)	$298.7

Cash used for financing activities decreased during the six months ended July 2, 2016, as compared to the six months ended July 4, 2015, primarily due to proceeds from the 2019 Term Loan and our revolving credit facility and a decrease in payments made to settle the 2015 Notes, offset by an increase in payments made to repurchase shares of our common stock.

On January 28, 2016, we entered into a $300.0 million three-year senior unsecured non-amortizing term loan facility due on January 28, 2019, or the 2019 Term Loan, with a group of lenders led by JPMorgan Chase Bank, N.A., as administrative agent. The 2019 Term Loan is unsecured, and the proceeds will be used for general corporate purposes, including the repurchase of our common stock. For additional information relating the 2019 Term Loan, see Note 2 in the notes to condensed consolidated financial statements.

Our revolving credit facility provides for borrowings up to $250.0 million, with the right to request increased capacity up to an additional $150.0 million upon the receipt of lender commitments, for total maximum borrowings of $400.0 million. The credit facility, as amended, expires on September 19, 2019 and currently has no subsidiary guarantors. Any outstanding loans drawn under the credit facility are due at maturity on September 19, 2019. Outstanding borrowings may be paid at any time prior to maturity. As of July 2, 2016, outstanding borrowings under the revolving credit facility were $50.0 million.

Other Factors Affecting Liquidity and Capital Resources

Stock Repurchase Program

As of July 2, 2016, we had approximately $480 million remaining under our authorized stock repurchase program. We expect to execute this program through the end of fiscal 2016. The actual timing and amount of repurchases will be subject to business and market conditions, corporate and regulatory requirements, acquisition opportunities and other factors. The stock repurchase program may be suspended, modified or discontinued at any time, and will be funded by the United States, or U.S., cash on hand, future U.S. cash flow and borrowings under our revolving credit facility. For an additional description of our share repurchase programs and repurchase authorizations, see Part II, Item 2, “Unregistered Sales of Equity Securities and Use of Proceeds.”

2024 Notes

In October 2014, we issued $350.0 million aggregate principal amount of 4.375% Senior Notes due October 15, 2024. We received net proceeds of $342.4 million from the issuance of the 2024 Notes, net of a discount of $1.4 million and issuance costs of $6.2 million. Interest is payable in cash semi-annually. The 2024 Notes are unsecured and rank equal in right of payment to all of our existing and future senior indebtedness. The proceeds from the 2024 Notes are available for general corporate purposes, which may include the retirement of debt, working capital, capital expenditures, acquisitions and strategic transactions.

Item 3. Quantitative and Qualitative Disclosures About Market Risk
Foreign Currency Risk
A material portion of our revenue, expenses and business activities are transacted in the U.S. dollar. In certain foreign countries where we price our products and services in U.S. dollars, a decrease in value of the local currency relative to the U.S. dollar results in an increase in the prices for our products and services compared to those products of our competitors that are priced in local currency. This could result in our prices being uncompetitive in certain markets.
In certain countries where we may invoice customers in the local currency, Japan in particular, our revenues benefit from a weaker dollar and are adversely affected by a stronger dollar. The opposite impact occurs in countries where we record expenses in local currencies. In those cases, our costs and expenses benefit from a stronger dollar and are adversely affected by a weaker dollar. The fluctuations in our operating expenses outside the United States resulting from volatility in foreign exchange rates are not generally moderated by corresponding fluctuations in revenues from existing contracts, except for our operations in Japan because we receive some cash payments and make most expense payments in Japanese yen.
We enter into foreign currency forward exchange contracts to protect against currency exchange risks associated with existing assets and liabilities. A foreign currency forward exchange contract acts as a hedge by increasing in value when underlying assets decrease in value or underlying liabilities increase in value due to changes in foreign exchange rates. Conversely, a foreign currency forward exchange contract decreases in value when underlying assets increase in value or underlying liabilities decrease in value due to changes in foreign exchange rates. These forward contracts are not designated as accounting hedges, so the unrealized gains and losses are recognized in other income, net, in advance of the actual foreign currency cash flows with the fair value of these forward contracts being recorded as accrued liabilities or other current assets.
We do not use forward contracts for trading purposes. Our forward contracts generally have maturities of 90 days or less. We enter into foreign currency forward exchange contracts based on estimated future asset and liability exposures, and the effectiveness of our hedging program depends on our ability to estimate these future asset and liability exposures. Recognized gains and losses with respect to our current hedging activities will ultimately depend on how accurately we are able to match the amount of foreign currency forward exchange contracts with actual underlying asset and liability exposures.
The following table provides information about our foreign currency forward exchange contracts as of July 2, 2016. The information is provided in United States dollar equivalent amounts. The table presents the notional amounts, at contract exchange rates, and the weighted average contractual foreign currency exchange rates expressed as units of the foreign currency per United States dollar, which in some cases may not be the market convention for quoting a particular currency. All of these forward contracts mature before or during August 2016.

	Notional Principal	Weighted Average Contract Rate
	(In millions)	
Forward Contracts:		
European Union euro	$ 56.5	0.89
Japanese yen	29.2	104.78
Canadian dollar	10.1	1.28
Chinese renminbi	7.6	6.61
Israeli shekel	7.2	3.87
British pound	7.1	0.71
South Korean won	6.7	1,170.29
Taiwan dollar	6.6	32.34
Hong Kong dollar	6.4	7.76
Indian rupee	6.3	67.65
Other	3.2	N/A
Total	$ 146.9	

Estimated fair value	$	—

29

We actively monitor our foreign currency risks, but there is no guarantee that our foreign currency hedging activities will substantially offset the impact of fluctuations in currency exchange rates on our results of operations, cash flows and financial position.

Interest Rate Risk

Our exposure to market risk for changes in interest rates relates primarily to our portfolio of marketable debt securities, our portfolio of cash and cash equivalents and outstanding balances drawn on our revolving credit facility, if any.

We are exposed to interest rate fluctuations in many of the world's leading industrialized countries, but the fair value of our marketable debt securities and our interest income and expense is most sensitive to fluctuations in the general level of United States interest rates. In this regard, changes in United States interest rates affect the interest earned on our marketable debt securities and cash and cash equivalents, any unrealized and realized gains or losses on our marketable debt securities and the costs associated with foreign currency hedges. Pursuant to our investment policy, we limit the amount of our credit exposure to any one issuer, other than in securities issued by the United States Treasury and United States government agencies.

Our short-term investments as of July 2, 2016 include $31.7 million of marketable debt securities that may decline in value if market interest rates rise. Such variability in market interest rates may result in a negative impact on the results of our investment activities. As of July 2, 2016, an increase in the market rates of interest of 1% would result in a decrease in the fair values of our marketable debt securities by approximately $0.1 million.

All highly liquid securities with a maturity of three months or less at the date of purchase are considered to be cash equivalents. Securities with maturities greater than three months are classified as available-for-sale and are considered to be short-term investments. The carrying value of our interest-bearing instruments approximated fair value as of July 2, 2016.

Interest rates under our revolving credit facility and 2019 Term Loan are variable, so interest expense could be adversely affected by changes in interest rates, particularly for periods when the revolving credit facility is utilized. Interest rates for our revolving credit facility and 2019 Term Loan can fluctuate based on changes in market interest rates and in an interest rate margin that varies based on our consolidated leverage ratio. As of July 2, 2016, we had $50.0 million outstanding under our revolving credit facility. For an additional description of the revolving credit facility and 2019 Term Loan, see Note 2 in the notes to condensed consolidated financial statements.

Equity Price Risk

Equity Investments

We have a portfolio of equity investments that includes marketable equity securities and non-marketable investments. Our equity investments are made primarily in connection with our strategic investment program. Under our strategic investment program, from time to time, we make cash investments in companies with technologies that are potentially strategically important to us. See Note 4 in the notes to consolidated financial statements in our Annual Report on Form 10-K for the fiscal year ended January 2, 2016, for an additional description of these investments. Our non-marketable investments had a carrying value of $3.8 million as of July 2, 2016, and $3.9 million as of January 2, 2016.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, under the supervision and with the participation of our management, including our Chief Executive Officer, or CEO, and our Chief Financial Officer, or CFO, we evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of July 2, 2016.

The evaluation of our disclosure controls and procedures included a review of our processes and the effect on the information generated for use in this Quarterly Report on Form 10-Q. In the course of this evaluation, we sought to identify any material weaknesses in our disclosure controls and procedures, to determine whether we had identified any acts of fraud involving personnel who have a significant role in our disclosure controls and procedures, and to confirm that any necessary corrective action, including process improvements, was taken. This type of evaluation is done every fiscal quarter so that our conclusions concerning the effectiveness of these controls can be reported in our periodic reports filed with the SEC. The overall goals of these evaluation activities are to monitor our disclosure controls and procedures and to make modifications as necessary. We intend to maintain these disclosure controls and procedures, modifying them as circumstances warrant.

Based on their evaluation as of July 2, 2016, our CEO and CFO have concluded that our disclosure controls and procedures were effective to provide reasonable assurance that the information required to be disclosed by us in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms and is accumulated and communicated to our management, including the CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during the fiscal quarter ended July 2, 2016 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our CEO and CFO, does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all errors and all fraud. Internal control over financial reporting, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of internal control are met. Further, the design of internal control must reflect the fact that there are resource constraints, and the benefits of the control must be considered relative to their costs. While our disclosure controls and procedures and internal control over financial reporting are designed to provide reasonable assurance of their effectiveness, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within Cadence, have been detected.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings
From time to time, we are involved in various disputes and litigation that arise in the ordinary course of business. These include disputes and lawsuits related to intellectual property, indemnification obligations, mergers and acquisitions, licensing, contracts, distribution arrangements and employee relations matters. At least quarterly, 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 the amount or the range of loss can be estimated, we 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 on our judgments using the best information available at the time. As additional information becomes available, we reassess the potential liability related to pending claims and litigation matters and may revise estimates.

Item 1A. Risk Factors
Our operations and financial results are subject to various risks and uncertainties, including those described in the sections below, that could adversely affect our business, financial condition, results of operations, cash flows, and the trading price of our common stock.

Risks Related to Our Business
Uncertainty in the global economy in general, and any potential downturn in the semiconductor and electronics industries in particular, may negatively impact our business and reduce our bookings levels and revenue.

Purchases of our products and services are dependent upon the commencement of new design projects by IC manufacturers and electronics systems companies. The IC and electronics systems industries are cyclical and are characterized by constant and rapid technological change, rapid product obsolescence and price erosion, evolving standards, short product life cycles and wide fluctuations in product supply and demand.

The IC and electronics systems industries have also experienced significant downturns in connection with, or in anticipation of, maturing product cycles of both these industries’ and their customers’ products. While spending on EDA products and services has grown in recent years, the current outlook for the semiconductor industry is uncertain and may result in a decrease in spending on EDA products and services.

While we cannot predict global economic conditions, uncertainty about future political and economic conditions and future decline in consumer spending could negatively impact our customers’ businesses, reducing the number of new chip designs and their overall research and development spending, including their spending on EDA products and services, and as a result decrease demand for our products. Decreased bookings for our products and services, customer bankruptcies, consolidation among our customers, or problems or delays with our hardware suppliers or with the supply or delivery of our hardware products could also adversely affect our ability to grow our business or adversely affect our future revenues and financial results. Our future business and financial results are subject to considerable uncertainty that could impact our stock price. If economic conditions deteriorate in the future, or, in particular, if semiconductor or electronics systems industry revenues do not grow or our suppliers of our hardware components and products are subject to problems or delays, our future revenues and financial results could be adversely affected. However, if economic conditions improve for our customers, the positive impact on our revenues and financial results may be deferred due to cautious customer research and development spending and our mix of licenses that result in recurring revenue.

Customer consolidation could affect our operating results.

There has been a trend toward customer consolidation in our industry through business combinations, including mergers, asset acquisitions and strategic partnerships. To the extent this trend continues, it could make us dependent on fewer customers who may be able to exert increased pressure on our prices and other contract terms and could increase the portion of our total sales concentration for any single customer. Customer consolidation activity could also reduce the demand for our products and services if such customers streamline research and development or operations, reduce purchases or delay purchasing decisions. These outcomes could negatively impact our financial condition.

Our failure to respond quickly to technological developments or customers' increasing technological requirements could make our products uncompetitive and obsolete.

The industries in which we compete experience rapid technology developments, rapid changes in industry standards and customer requirements, and frequent introductions and improvements of new products. Currently, the industries we serve are experiencing the following trends:

- changes in the design and manufacturing of ICs, including migration to advanced process nodes and the introduction of three dimensional transistors, such as fin-based, multigate transistors, or FinFETs, present major challenges to the semiconductor industry, particularly in IC design, design automation, design of manufacturing equipment, and the manufacturing process itself. With migration to advanced process nodes, the industry must adapt to more complex physics and manufacturing challenges such as the need to draw features on silicon that are many times smaller than the wavelength of light used to draw the features via lithography. Models of each component's electrical properties and behavior also become more complex as do requisite analysis, design, verification and manufacturing capabilities. Novel design tools and methodologies must be invented and enhanced quickly to remain competitive in the design of electronics in the smallest nanometer ranges;
- the challenges of advanced node design are leading some customers to work with more mature, less risky manufacturing processes that may reduce their need to upgrade or enhance their EDA products and design flows;
- a potential slowdown in "Moore's Law," which may reduce or slow the need for customers to upgrade or enhance their EDA products and design flows;
- the ability to design SoCs increases the complexity of managing a design that, at the lowest level, is represented by billions of shapes on fabrication masks. In addition, SoCs typically incorporate microprocessors and digital signal processors that are programmed with software, requiring simultaneous design of the IC and the related software embedded on the IC;
- with the availability of seemingly endless gate capacity, there is an increase in design reuse, or the combining of off-the-shelf design IP with custom logic to create ICs or SoCs. The unavailability of a broad range of high-quality design IP (including our own) that can be reliably incorporated into a customer's design with our software products and services could lead to reduced demand for our products and services;
- increased technological capability of the FPGA, which is a programmable logic chip, creates an alternative to IC implementation for some electronics companies. This could reduce demand for our IC implementation products and services;
- a growing number of low-cost engineering services businesses could reduce the need for some IC companies to invest in EDA products; and
- adoption of cloud computing technologies with accompanying new business models for an increasing number of software categories, including EDA.

If we are unable to respond quickly and successfully to these trends, we may lose our competitive position, and our products or technologies may become obsolete. To compete successfully, we must develop, acquire or license new products and improve our existing products and processes on a schedule that keeps pace with technological developments and the requirements for products addressing a broad spectrum of designers and designer expertise in our industries. The market must also accept our new and improved products. Our hardware platforms must be enhanced periodically to reduce the likelihood that a competitor surpasses the capabilities we offer. Our introduction of new products could reduce the demand and revenue of our older products or affect their pricing. We must also be able to support a range of changing computer software, hardware platforms and customer preferences. A rapid transition to different business models associated with cloud computing technologies could result in reduced revenue. We cannot guarantee that we will be successful in keeping pace with all, or any, of the customer trends.

We have experienced varied operating results, and our operating results for any particular fiscal period are affected by the timing of revenue recognition, particularly for our emulation and prototyping hardware and IP products.

Various factors affect our operating results, and some of them are not within our control. Our operating results for any period are affected by the timing of revenue recognition, particularly for our emulation and prototyping hardware and IP products. In addition, we have recorded net losses in the past and may record net losses in the future.

A substantial portion of the product revenue related to our hardware business and some of our IP offerings is recognized upon delivery, and our forecasted revenue results are based, in part, on our expectations of hardware and

IP to be delivered in a particular quarter. Therefore, changes in hardware and IP bookings or deliveries relative to expectations will have a more immediate impact on our revenue than changes in software or services bookings, for which revenue is generally recognized over time.

In recent years, we made significant investments to expand our IP offerings through, among other things, research and development and acquisitions. As we continue to expand our IP offerings, a portion of the revenue related to our IP bookings will be deferred until we complete and deliver the licensed IP to our customers. As a result, costs related to the research and development of the IP may be incurred prior to the recognition of the related revenue.

Revenue related to our hardware and IP products is inherently difficult to predict because sales of our hardware and IP products depend on the commencement of new projects for the design and development of complex ICs and systems by our customers, our customers' willingness to expend capital to deploy our hardware or IP products in those projects and the availability of our hardware or IP products for delivery. Therefore, our hardware or IP sales may be delayed or may decrease if our customers delay or cancel projects because their spending is constrained or if there are problems or delays with the supply or delivery of our hardware or IP products or our hardware suppliers. Moreover, the hardware and IP markets are highly competitive, and our customers may choose to purchase a competitor's hardware or IP product based on cost, performance or other factors. These factors may result in lower revenue, which would have an adverse effect on our business, results of operations or cash flows.

Our software license mix is such that a substantial proportion of licenses require ratable revenue recognition, and we expect the license mix, combined with the modest growth in spending by our customers in the semiconductor sector, may make it difficult for us to rapidly increase our revenue in future fiscal periods. The timing of our revenue recognition may be deferred until payments become due and payable from customers with nonlinear payment terms or as cash is collected from customers with low credit ratings.

We plan our operating expenses based on forecasted revenue, expected business needs and other factors. These expenses and the effect of long-term commitments are relatively fixed in the short term. Bookings and the related revenue are harder to forecast in a difficult economic environment. If we experience a shortfall in bookings, our operating results could differ from our expectations because we may not be able to quickly reduce our expenses in response to short-term business changes.

The methods, estimates and judgments that we use in applying our accounting policies have a significant impact on our results of operations (see "Critical Accounting Estimates" under Part I, Item 2, "Management's Discussion and Analysis of Financial Condition and Results of Operations"). Such methods, estimates and judgments are, by their nature, subject to substantial risks, uncertainties and assumptions, and factors may arise over time that may lead us to change our methods, estimates and judgments. Changes in those methods, estimates and judgments could significantly affect our results of operations.

Historical results of operations should not be viewed as reliable indicators of our future performance. If our revenue, operating results or business outlook for future periods fall short of the levels expected by us, securities analysts or investors, the trading price of our common stock could decline.

Competitive pressures may require us to change our pricing, which could have an adverse effect on our results of operations.

The highly competitive markets in which we do business can put pressure on us to reduce the prices of our software, emulation and prototyping hardware and IP. If our competitors offer deep discounts on certain products in an effort to recapture or gain market share or to sell other software or hardware products, we may then need to lower our prices or offer other favorable terms to compete successfully. Any such changes would be likely to reduce our profit margins and could adversely affect our operating results. Any substantial changes to our prices and pricing policies could cause revenues to decline or be delayed as our sales force implements and our customers adjust to the new pricing policies. Some of our competitors bundle products for promotional purposes or as a long-term pricing strategy or provide guarantees of prices and product implementations. These practices could, over time, significantly constrain the prices that we can charge for our products. If we cannot offset price reductions with a corresponding increase in the number of sales or with lower spending, then the reduced revenues resulting from lower prices could have an adverse effect on our results of operations.

We depend on sole suppliers for certain hardware components and contract manufacturers for production of our emulation and prototyping hardware products, making us vulnerable to supply disruption and price fluctuation.

We depend on sole suppliers for certain hardware components and contract manufacturers for production of our emulation and prototyping hardware products. Our reliance on sole suppliers and contract manufacturers could result in product delivery problems and delays and reduced control over product pricing and quality. Though we prefer to have multiple sources to procure certain key components, in some cases it is not practical or feasible to do so. We may suffer a disruption in the supply of certain hardware components if we are unable to purchase sufficient components on a timely basis or at all for any reason. Any supply or manufacturing disruption, including delay in delivery of components by our suppliers or products by our manufacturers, or the bankruptcy or shutdown of our suppliers or manufacturers, could delay our production process and prevent us from delivering completed hardware products to customers or from supplying new evaluation units to customers, which could have a negative impact on our revenue and operating results.

We have acquired and expect to acquire other companies and businesses and may not realize the expected benefits of these acquisitions.

We have acquired and expect to acquire other companies and businesses in order to expand our IP business and other product offerings. Our future revenue growth and expansion of our business is dependent on our successful integration of our acquisitions. We may incur significant costs in connection with potential transactions, including acquisitions that are not consummated. Potential and completed acquisitions involve a number of risks. If any of the following acquisition-related risks occur, our business, operating results or financial condition could be adversely impacted:

- the failure to realize anticipated benefits such as cost savings and revenue enhancements;
- overlapping customers and product sets that impact our ability to maintain revenue at historical rates;
- the failure to integrate and manage acquired products and businesses effectively;
- the failure to retain key employees of the acquired company or business;
- difficulties in combining previously separate companies or businesses into a single unit;
- the substantial diversion of management’s attention from day-to-day business when evaluating and negotiating these transactions and integrating an acquired company or business;
- the discovery, after completion of the acquisition, of unanticipated liabilities assumed from the acquired company, business or assets, such that we cannot realize the anticipated value of the acquisition;
- difficulties related to integrating the products of an acquired company or business in, for example, distribution, engineering, licensing models or customer support areas;
- unanticipated costs;
- customer dissatisfaction with existing license agreements with us, possibly dissuading customers from licensing or buying products acquired by us after the expiration date of the existing license; or
- the failure to understand, compete and operate effectively in markets where we have limited experience.

In a number of our completed acquisitions, we have agreed to make future payments, either in the form of employee retention bonuses or contingent purchase price payments, based on the performance of the acquired companies, businesses or the employees who joined us with the acquired companies or businesses. The performance goals pursuant to which these future payments may be made generally relate to the achievement by the acquired company or business, or by the employees who joined us with the acquired company or business, of certain specified bookings, revenue, run rate, product proliferation, product development or employee retention goals during a specified period following completion of the applicable acquisition. The specific performance goal levels and amounts and timing of employee bonuses or contingent purchase price payments vary with each acquisition. We may continue to use contingent purchase price payments in connection with acquisitions in the future and while we expect to derive value from an acquisition in excess of such contingent payment obligations, we may be required to make certain contingent payments without deriving the anticipated value.

Future acquisitions may involve issuances of stock as full or partial payment of the purchase price for the acquired company or business, grants of restricted stock, restricted stock units or stock options to employees of the acquired companies or businesses (which may be dilutive to existing stockholders), expenditure of substantial cash resources or the incurrence of a material amount of debt. These arrangements may impact our liquidity, financial position and results of operations or increase dilution of our stockholders’ equity interests in the company.

We have invested and expect to continue to invest in research and development efforts for new and existing products and technologies and technical sales support. Such investments may affect our operating results, and, if the return on these investments is lower or develops more slowly than we expect, our revenue and operating results may suffer.

We have invested and expect to continue to invest in research and development for new and existing products, technologies and services in response to our customers’ increasing technological requirements, such as the migration to advanced process nodes and the introduction of FinFETs. Such investments may be in related areas, such as technical sales support. These investments may involve significant time, risks and uncertainties, including the risk that the expenses associated with these investments may affect our margins and operating results and that such investments may not generate sufficient revenues to offset liabilities assumed and expenses associated with these new investments. We believe that we must continue to invest a significant amount of time and resources in our research and development efforts and technical sales support to maintain and improve our competitive position. If we do not achieve the benefits anticipated from these investments, or if the achievement of these benefits is delayed, our revenue and operating results may be adversely affected.

The competition in our industries is substantial, and we may not be able to continue to successfully compete in our industries.

The EDA industry, the commercial electronics engineering services industry and the IP industry are highly competitive. If we fail to compete successfully in these industries, it could seriously harm our business, operating results or financial condition. To compete in these industries, we must identify and develop or acquire innovative and cost-competitive EDA products, integrate them into platforms and market them in a timely manner. We may not be able to compete successfully in these industries. Factors that could affect our ability to compete successfully include:

- the development by others of competitive EDA products or platforms and engineering services, possibly resulting in a shift of customer preferences away from our products and services and significantly decreased revenue;
- aggressive pricing competition by some of our competitors may cause us to lose our competitive position, which could result in lower revenues or profitability and could adversely impact our ability to realize the revenue and profitability forecasts for our software or emulation and prototyping hardware systems products;
- the challenges of developing (or acquiring externally developed) technology solutions, including hardware and IP offerings, that are adequate and competitive in meeting the rapidly evolving requirements of next-generation design challenges;
- the low cost of entry in EDA;
- intense competition to attract acquisition targets, possibly making it more difficult for us to acquire companies or technologies at an acceptable price, or at all;
- the combination of our EDA competitors or collaboration among many EDA companies to deliver more comprehensive offerings than they could individually; and
- decisions by electronics manufacturers to perform engineering services or IP development internally, rather than purchase these services from outside vendors due to budget constraints or excess engineering capacity.

We compete in EDA most frequently with Synopsys, Inc. and Mentor Graphics Corporation, but also with numerous other EDA providers (such as Ansys, Inc., ATopTech, Inc., Zuken Ltd. and many others offering “point solutions”), with manufacturers of electronic devices that have developed, acquired or have the capability to develop their own EDA products, and with numerous electronics design and consulting companies. In the area of design IP, we compete with Synopsys, Inc., CEVA, Inc. and numerous other IP companies.

The effect of foreign exchange rate fluctuations may adversely impact our revenue, expenses, cash flows and financial condition.

We have significant operations outside the United States. Our revenue from international operations as a percentage of total revenue was approximately 55% and 54% during the three months ended July 2, 2016 and July 4, 2015, respectively. We expect that revenue from our international operations will continue to account for a significant portion of our total revenue. We also transact business in various foreign currencies. Volatility, including as a result of unforeseen political activity, of foreign currencies in certain countries where we conduct business, most notably the Chinese renminbi, Japanese yen, European Union euro, British pound and Indian rupee have had and may in the future have an effect on our revenue or operating results.

Fluctuations in the rate of exchange between the U.S. dollar and the currencies of other countries where we conduct business could seriously affect our business, operating results or financial condition. For example, when a foreign currency declines in value relative to the U.S. dollar, it takes more of the foreign currency to purchase the same amount of U.S. dollars than before the change. If we price our products and services in the foreign currency, we receive fewer U.S. dollars than we did before the change. If we price our products and services in U.S. dollars, the decrease in value of the local currency results in an increase in the price for our products and services compared to those products of our competitors that are priced in local currency. This could result in our prices being uncompetitive in markets where business is transacted in the local currency. On the other hand, when a foreign currency increases in value relative to the U.S. dollar, it takes more U.S. dollars to purchase the same amount of the foreign currency. As we use the foreign currency to fund payroll costs and other operating expenses in our international operations, this results in an increase in operating expenses. Approximately 30% of our total costs and expenses are transacted in foreign currencies. Our attempts to reduce the effect of foreign currency fluctuations may be unsuccessful, and significant exchange rate movements may adversely impact our results of operations as expressed in U.S. dollars.

Our operating results could be adversely affected as a result of changes in our effective tax rates or by material differences between our forecasted annual effective tax rates and actual tax rates.

Any significant change in our future effective tax rates could adversely impact our results of operations for future periods. Our future effective tax rates could be adversely affected by the following:

- changes in tax laws or the interpretation of such tax laws in the United States, Ireland, Hungary, the United Kingdom, China, India or other international locations where we have operations;

- earnings being lower than anticipated in countries where we are taxed at lower rates as compared to the United States federal and state statutory tax rates;
- an increase in expenses not deductible for tax purposes, including certain stock-based compensation and impairment of goodwill;
- changes in the valuation allowance against our deferred tax assets;
- changes in judgment from the evaluation of new information that results in a recognition, derecognition or change in measurement of a tax position taken in a prior period;
- increases to interest or penalty expenses classified in the financial statements as income taxes;
- new accounting standards or interpretations of such standards;
- a change in our decision to indefinitely reinvest foreign earnings outside the United States; or
- results of tax examinations by the Internal Revenue Service, or IRS, state, and foreign tax authorities.

Our operations are subject to income and transaction taxes in the United States and in multiple foreign jurisdictions, with a significant amount of our foreign earnings generated by our subsidiaries organized in Ireland and Hungary. Future changes in domestic or international tax laws and regulations could adversely affect our future effective tax rates. President Obama and the United States Congress have called for comprehensive tax reform which, among other things, might change certain United States tax rules impacting the way United States-based multinationals are taxed on foreign income. Additionally, in October 2015, the Organisation for Economic Co-operation and Development, an international association of 34 countries, including the United States, released the final reports from its Base Erosion and Profit Shifting, or BEPS, Action Plans. The BEPS recommendations covered a number of issues, including country-by-country reporting, permanent establishment rules, transfer pricing rules and tax treaties. Although the BEPS recommendations are not themselves changes in tax law, this guidance has resulted in unilateral action by several member countries and is also prompting possible amendment of other countries' tax laws and regulations on a prospective and potentially retroactive basis. In October 2015, the European Commission concluded that certain member countries had granted unlawful rulings that artificially reduced tax burdens and has ordered the recovery of the unpaid taxes. Future tax law changes resulting from these developments may result in changes to long-standing tax principles, which could adversely affect our effective tax rate or result in higher cash tax liabilities.

Forecasts of our annual effective tax rate are complex and subject to uncertainty because our income tax position for each year combines the effects of estimating our annual income or loss, the mix of profits and losses earned by us and our subsidiaries in tax jurisdictions with a broad range of income tax rates, as well as benefits from available deferred tax assets, the impact of various accounting rules and results of tax audits. Forecasts of our annual effective tax rate do not include the anticipation of future tax law changes. If there were a material difference between forecasted and actual tax rates then it could have a material impact on our results of operations.

Our stock price has been subject to fluctuations and may continue to be subject to fluctuations.

The market price of our common stock has experienced fluctuations and may fluctuate or decline in the future, and as a result you could lose the value of your investment. The market price of our common stock may be affected by a number of factors, including:

- quarterly or annual operating or financial results or forecasts that fail to meet or are inconsistent with earlier projections or the expectations of our securities analysts or investors;
- changes in our forecasted bookings, revenue, earnings or operating cash flow estimates;
- an increase in our debt or other liabilities;
- market conditions in the IC, electronics systems and semiconductor industries;
- announcements of a restructuring plan;
- changes in management;
- repurchases of shares of our common stock or changes to plans to repurchase shares of our common stock;
- a gain or loss of a significant customer or market segment share;
- litigation; and
- announcements of new products or acquisitions of new technologies by us, our competitors or our customers.

In addition, equity markets in general, and the equities of technology companies in particular, have experienced and may experience in the future, extreme price and volume fluctuations due to, among other factors, the actions of market participants. Such price and volume fluctuations may adversely affect the market price of our common stock for reasons unrelated to our business or operating results.

Our future revenue is dependent in part upon our installed customer base continuing to license or buy products and purchase services.

Our installed customer base has traditionally generated additional new license, service and maintenance revenues. In future periods, customers may not necessarily license or buy additional products or contract for additional services or maintenance. Our customers, many of which are large semiconductor and systems companies, often have significant bargaining power in negotiations with us. Customer consolidation can reduce the total level of purchases of our software, hardware, IP and services, and in some cases, increase customers’ bargaining power in negotiations with their suppliers, including us.

We could suffer serious harm to our business because of the infringement of our intellectual property rights by third parties or because of our infringement of the intellectual property rights of third parties.

There are numerous patents relating to our business and ecosystem. New patents are being issued at a rapid rate and are owned by EDA companies as well as entities and individuals outside the EDA industry, including parties whose income is primarily derived from infringement-related licensing and litigation. It is not always practicable to determine in advance whether a product or any of its components infringes the patent rights of others. As a result, from time to time, we may be compelled to respond to or prosecute intellectual property infringement claims to protect our rights or defend a customer’s rights.

Intellectual property infringement claims, including contractual defense reimbursement obligations related to third-party claims against our customers, regardless of merit, could consume valuable management time, result in costly litigation or cause product shipment delays, all of which could seriously harm our business, operating results or financial condition. The risk of infringement and related indemnification claims associated with design IP products that are incorporated into a customer product broadly used by consumers may be higher than the risk associated with our software products. In settling these claims, we may be required to enter into royalty or licensing agreements with the third parties claiming infringement. These royalty or licensing agreements, if available, may not have terms favorable to us. Being compelled to enter into a license agreement with unfavorable terms could seriously harm our business, operating results or financial condition. Any potential intellectual property litigation could compel us to do one or more of the following:

- pay damages (including the potential for treble damages), license fees or royalties (including royalties for past periods) to the party claiming infringement;
- stop licensing products or providing services that use the challenged intellectual property;
- obtain a license from the owner of the infringed intellectual property to sell or use the relevant technology, which license may not be available on reasonable terms, or at all; or
- redesign the challenged technology, which could be time consuming and costly, or impossible.

If we were compelled to take any of these actions, our business or operating results may suffer.

If our security measures are breached, and an unauthorized party obtains access to customer data or our proprietary business information, our information systems may be perceived as being unsecure, which could harm our business and reputation.

Our products and services involve the storage and transmission of our proprietary information and that of our customers. We have offices throughout the world, including key research and development facilities outside of the United States. Our operations are dependent upon the connectivity of our operations throughout the world. Despite our security measures, our information technology and infrastructure may be vulnerable to cyber attacks or breached, which could result in unauthorized disclosure of sensitive information and could significantly interfere with our business operations. Breaches of our security measures could expose us to a risk of loss or misuse of this information, litigation and potential liability. Because techniques used to obtain unauthorized access or to sabotage information systems change frequently and generally are not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventive measures. In addition, if we select a vendor that uses cyber storage of information as part of their service or product offerings, despite our attempts to validate the security of such services, our proprietary information may be misappropriated by third parties. In the event of an actual or perceived breach of our security, or the security of one of our vendors, the market perception of the effectiveness of our security measures could be harmed and we could suffer damage to our reputation or our business, or lose existing customers and our ability to obtain new customers.

Risks associated with our international operations could adversely impact our financial condition.

A significant amount of our revenue is derived from our international operations, and we have offices throughout the world, including key research and development facilities outside of the United States. Our international operations may be subject to a number of risks, including:

- the adoption or expansion of government trade restrictions, including tariffs and other trade barriers;
- limitations on repatriation of earnings;
- limitations on the conversion of foreign currencies;

- reduced protection of intellectual property rights in some countries;
- performance of national economies;
- longer collection periods for receivables and greater difficulty in collecting accounts receivable;
- difficulties in managing foreign operations;
- political and economic instability; for example, any direct or follow-on effects from the United Kingdom's vote to leave the European Union;
- unexpected changes in regulatory requirements;
- inability to continue to offer competitive compensation in certain growing regions;
- differing employment practices and labor issues;
- United States' and other governments' licensing requirements for exports, which may lengthen the sales cycle or restrict or prohibit the sale or licensing of certain products; and
- variations in costs or expenses associated with our international operations, including as a result of changes in foreign tax laws or devaluation of the U.S. dollar relative to other foreign currencies.

Some of our international research and development and other facilities are in parts of the world where there may be a greater risk of business interruption as a result of political instability, terrorist acts or military conflicts than businesses located domestically. Furthermore, this potential harm is exacerbated because damage to or disruptions at our international research and development facilities could have a more significant adverse effect on our ability to develop new or improve existing products than other businesses that may only have sales offices or other less critical operations abroad. We are not insured for losses or interruptions caused by acts of war. Furthermore, our operations are dependent upon the connectivity of our operations throughout the world. Activities that interfere with our international connectivity or operations, such as cyber hacking, the introduction of a virus into our computer systems, natural disasters, civil unrest or terrorism, could significantly interfere with our business operations.

In addition, internal controls, policies and procedures and employee training and compliance programs that we have implemented to deter prohibited practices may not prevent our employees, contractors or agents from violating or circumventing our policies and the laws and regulations applicable to our worldwide operations.

We depend upon our management team and key employees, and our failure to attract, train, motivate and retain management and key employees may make us less competitive and therefore harm our results of operations.

Our business depends upon the continued services, efforts and abilities of our senior management and other key employees. Competition for highly skilled executive officers and employees can be intense, particularly in geographic areas recognized as high technology centers such as the Silicon Valley area, where our principal offices are located, and in other locations where we maintain facilities. In addition, competition for qualified personnel, including software engineers, in the EDA, commercial electronics engineering services and IP industries has intensified. We may also experience increased compensation costs that are not offset by either improved productivity or higher sales. We may not be successful in recruiting new personnel and in retaining and motivating existing personnel. From time to time, there may be changes in our management team resulting from the hiring and departure of executive officers, and as a result, we may experience disruption to our business that may harm our operating results and our relationships with our employees, customers and suppliers may be adversely affected.

To attract, retain and motivate individuals with the requisite expertise, we may be required to grant large numbers of stock options or other stock-based incentive awards, which may be dilutive to existing stockholders and increase compensation expense, and pay significant base salaries and cash bonuses, which could harm our operating results. The high cost of training new employees, not fully utilizing these employees, or losing trained employees to competing employers could also reduce our operating margins and harm our business or operating results.

In addition, applicable rules and regulations require stockholder approval for new equity compensation plans and significant amendments to existing equity compensation plans (including increases in shares available for issuance under such plans), and prohibit publicly-traded companies from giving a proxy to vote on equity compensation plans unless the beneficial owner of the shares has given voting instructions. These rules and regulations could make it more difficult for us to grant equity compensation to employees in the future. To the extent that these regulations make it more difficult or expensive to grant equity compensation to employees, we may incur increased compensation costs or find it difficult to attract, retain and motivate employees, which could materially and adversely affect our business.

39

We rely on our proprietary technology, as well as software and other intellectual property rights licensed to us by third parties, and we cannot assure you that the precautions taken to protect our rights will be adequate or that we will continue to be able to adequately secure such intellectual property rights from third parties.

Our success depends, in part, upon our proprietary technology. We generally rely on patents, copyrights, trademarks, trade secrets, licenses and restrictive agreements to establish and protect our proprietary rights in technology and products. Despite the precautions we may take to protect our intellectual property, third parties have tried in the past, and may try in the future, to challenge, invalidate or circumvent these safeguards. Our patents and other intellectual property rights may not provide us with sufficient competitive advantages. Patents may not be issued on any of our pending applications and our issued patents may not be sufficiently broad to protect our technology. Furthermore, the laws of foreign countries may not protect our proprietary rights in those countries to the same extent as applicable law protects these rights in the United States. The protection of our intellectual property may require the expenditure of significant financial and managerial resources. Moreover, the steps we take to protect our intellectual property may not adequately protect our rights, or deter or prevent third parties from infringing or misappropriating our proprietary rights.

Many of our products include software or other intellectual property licensed from third parties. We may have to seek new or renew existing licenses for such software and other intellectual property in the future. Our engineering services business holds licenses to certain software and other intellectual property owned by third parties, including that of our competitors. Our failure to obtain software, other intellectual property licenses or other intellectual property rights that are necessary or helpful for our business on favorable terms, or our need to engage in litigation over these licenses or rights, could seriously harm our business, operating results or financial condition.

Litigation could adversely affect our financial condition or operations.

We currently are, and in the future may be, involved in various disputes and litigation that arise in the ordinary course of business. These include disputes and lawsuits related to intellectual property, including customer indemnification, mergers and acquisitions, licensing, contracts, distribution arrangements and employee relations matters. For information regarding the litigation matters in which we are currently engaged, please refer to the discussion under Item 1, "Legal Proceedings" and Note 12 in the notes to condensed consolidated financial statements. We cannot provide any assurances that the final outcome of these lawsuits or any other proceedings that may arise in the future will not have a material adverse effect on our business, operating results, financial condition or cash flows. Litigation can be time consuming and expensive and could divert management's time and attention from our business, which could have a material adverse effect on our revenues and operating results.

Errors or defects in our products and services could expose us to liability and harm our business.

Our customers use our products and services in designing and developing products that involve a high degree of technological complexity, each of which has its own specifications. Because of the complexity of the systems and products with which we work, some of our products and designs can be adequately tested only when put to full use in the marketplace. As a result, our customers or their end users may discover errors or defects in our software or the systems we design, or the products or systems incorporating our design and intellectual property may not operate as expected. Errors or defects could result in:

- loss of customers;
- loss of market share;
- damage to our reputation;
- failure to attract new customers or achieve market acceptance;
- diversion of development resources to resolve the problem;
- loss of or delay in revenue;
- increased service costs; and
- liability for damages.

Our operating results and revenue could be adversely affected by customer payment delays, customer bankruptcies and defaults or modifications of licenses.

Occasionally, our customers file for bankruptcy or request to modify license terms. If our customers experience adversity in their business, they may delay or default on their payment obligations to us, file for bankruptcy or modify or cancel plans to license our products. For instance, if our customers are not successful in generating sufficient cash or are precluded from securing financing, they may not be able to pay, or may delay payment of, accounts receivable that are owed to us, although these obligations are generally not cancelable. Our customers’ inability to fulfill payment obligations, in turn, may adversely affect our revenue and cash flow. Additionally, our customers have, in the past, sought, and may, in the future, seek, to renegotiate pre-existing contractual commitments. Payment defaults by our customers or significant reductions in existing contractual commitments could have a material adverse effect on our financial condition and operating results.

The long sales cycle of our products and services may cause our operating results to fluctuate unexpectedly.
Generally, we have a long sales cycle that can extend up to six months or longer. The complexity and expense associated with our products and services generally require a lengthy customer education, evaluation and approval process. Consequently, we may incur substantial expenses and devote significant management effort and expense to develop potential relationships that do not result in agreements or revenue and may prevent us from pursuing other opportunities.
In addition, sales of our products and services have been and may in the future be delayed if customers delay approval or commencement of projects because of:
- the timing of customers' competitive evaluation processes; or
- customers' budgetary constraints and budget cycles.

Long sales cycles for hardware products subject us to a number of significant risks over which we have limited control, including insufficient, excess or obsolete inventory, variations in inventory valuation and fluctuations in quarterly operating results.
We have substantial cash requirements in the United States, but a significant portion of our cash is held and generated outside of the United States, and if our cash available in the United States and the cash available under our revolving credit facility is insufficient to meet our operating expenses and debt repayment obligations in the United States, then we may be required to raise cash in ways that could negatively affect our financial condition, results of operations and the market price of our common stock.
We have significant operations outside the United States. As of July 2, 2016, approximately 66% of our cash, cash equivalents and short-term investments balance was held by subsidiaries outside the United States, with the remainder of the balance held by us or our subsidiaries in the United States. We believe that the combination of our U.S. cash, cash equivalents, future U.S. operating cash flows, cash available under our revolving credit facility and other cash that may be accessible to us on attractive terms are sufficient to meet our ongoing U.S. operating expenses and debt repayment obligations. However, if these sources of cash were insufficient to meet our future funding obligations in the United States, we could be required to seek funding sources on less attractive terms, which could negatively impact our results of operations, financial position and the market price of our common stock.
Our reported financial results may be adversely affected by changes in United States generally accepted accounting principles, and we may incur significant costs to adjust our accounting systems and processes to comply with significant changes.
United States generally accepted accounting principles, or U.S. GAAP, are subject to interpretation by the Financial Accounting Standards Board, or FASB, the American Institute of Certified Public Accountants, the SEC and various bodies formed to promulgate and interpret appropriate accounting principles. The FASB is currently working together with the International Accounting Standards Board, or IASB, on several projects to further align accounting principles and facilitate more comparable financial reporting between companies that are required to follow U.S. GAAP under SEC regulations and those that are required to follow IFRS outside of the United States. These efforts by the FASB and IASB may result in different accounting principles under U.S. GAAP that could have a significant effect on our reported financial results for us in areas including, but not limited to, principles for recognizing revenue and accounting for leases. For information regarding new accounting standards, please refer to Note 1 in the notes to condensed consolidated financial statements under the heading "New Accounting Standards."
In addition, we may need to significantly change our customer contracts, accounting systems and processes when we adopt future or proposed changes in accounting principles noted above. The cost and effect of these changes may negatively impact our results of operations during the periods of transition.

The IRS and other tax authorities regularly examine our tax returns, and the outcome of current and future tax examinations may have a material adverse effect on our results of operations and cash flows.

The IRS and other tax authorities regularly examine our income tax returns and other non-income tax returns, such as payroll, sales, use, value-added, net worth or franchise, property, goods and services, consumption, import, stamp, and excise taxes, in both the United States and foreign jurisdictions. Governments are increasingly focused on ways to increase tax revenues, particularly from multinational corporations, which may lead to an increase in audit activity and harsher stances taken by tax authorities. The calculation of our provision for income taxes and our accruals for other taxes requires us to use significant judgment and involves dealing with uncertainties in the application of complex tax laws and regulations. In determining the adequacy of our provision for income taxes, we regularly assess the potential settlement outcomes resulting from income tax examinations. However, the final outcome of tax examinations, including the total amount payable or the timing of any such payments upon resolution of these issues, cannot be estimated with certainty. In addition, we cannot be certain that such amount will not be materially different from the amount that is reflected in our historical income tax provisions and accruals for other taxes. Should the IRS or other tax authorities assess additional taxes, penalties or interest as a result of a current or a future examination, we may be required to record charges to operations in future periods that could have a material impact on our results of operations, financial position or cash flows in the applicable period or periods.

The investment of our cash in money market funds and marketable debt securities is subject to risks that may cause losses and affect the liquidity of these investments.

Our investments include various money market funds and marketable debt securities, such as corporate debt securities, U.S. Treasury securities, U.S. government agency securities, bank certificates of deposit and commercial paper. Weakened financial markets have at times adversely impacted the general credit, liquidity, market prices and interest rates for these and other types of debt securities. Additionally, changes in monetary policy by the Federal Open Market Committee and concerns about the rising U.S. government debt level may cause a decrease in the purchasing power of the U.S. dollar and adversely affect our investment portfolio. Furthermore, if there is a default or downgrade of U.S. government or agency debt securities, our investment portfolio may be adversely impacted, requiring impairment charges that could adversely affect our liquidity, financial position, results of operations or cash flows. The financial market and monetary risks associated with our investment portfolio may have a material adverse effect on our financial condition, liquidity, results of operations or cash flows.

Our restructuring plans may not result in the benefits we have anticipated, possibly having a negative effect on our future operating results.

In recent fiscal years, we have initiated restructuring plans in an effort to reallocate or decrease costs by reducing our workforce and by consolidating facilities. We incur substantial costs to implement restructuring plans, and our restructuring activities may subject us to litigation risks and expenses. In addition, our restructuring plans may have other consequences, such as attrition beyond our planned reduction in workforce, a negative effect on employee morale and productivity or our ability to attract highly skilled employees. Our competitors may also use our restructuring plans to seek to gain a competitive advantage over us. As a result, our restructuring plans may affect our revenue and other operating results in the future.

Failure to obtain export licenses could harm our business by rendering us unable to ship products and transfer our technology outside of the United States.

We must comply with regulations of the United States and of certain other countries in shipping our products and transferring our technology outside the United States and to foreign nationals. Any significant future difficulty in complying with these regulations could harm our business, operating results or financial condition.

If we become subject to unfair hiring claims, we could be prevented from hiring needed employees, incur liability for damages and incur substantial costs in defending ourselves.

When companies in our industry lose employees to competitors, they frequently claim that these competitors have engaged in unfair hiring practices or that the employment of these persons would involve the disclosure or use of trade secrets. These claims could prevent us from hiring employees or cause us to incur liability for damages. We could also incur substantial costs in defending ourselves or our employees against these claims, regardless of their merits. Defending ourselves from these claims could also divert the attention of our management away from our operations.

42

Anti-takeover defenses in our certificate of incorporation and bylaws and certain provisions under Delaware law could prevent an acquisition of our company or limit the price that investors might be willing to pay for our common stock.

Our certificate of incorporation and bylaws and certain provisions of the Delaware General Corporation Law that apply to us could make it difficult for another company to acquire control of our company. For example:

- Our certificate of incorporation allows our Board of Directors to issue, at any time and without stockholder approval, preferred stock with such terms as it may determine. No shares of preferred stock are currently outstanding. However, the rights of holders of any of our preferred stock that may be issued in the future may be superior to the rights of holders of our common stock.
- Section 203 of the Delaware General Corporation Law generally prohibits a Delaware corporation from engaging in any business combination with a person owning 15% or more of its voting stock, or who is affiliated with the corporation and owned 15% or more of its voting stock at any time within three years prior to the proposed business combination, for a period of three years from the date the person became a 15% owner, unless specified conditions are met.

All or any one of these factors could limit the price that certain investors would be willing to pay for shares of our common stock and could allow our Board of Directors to resist, delay or prevent an acquisition of our company, even if a proposed transaction were favored by a majority of our independent stockholders.

Conflict minerals regulations may cause us to continue to incur additional expenses and may adversely impact our ability to conduct our business.

In August 2012, the SEC adopted new rules establishing disclosure and reporting requirements regarding the use of certain minerals referred to as “conflict minerals” in products. These rules require us to determine, disclose and report whether or not such minerals in our products originate from the Democratic Republic of the Congo or adjoining countries. We have incurred, and expect to continue to incur, costs to comply with these rules, including costs associated with conducting due diligence on our supply chain and fulfilling our reporting requirements, and we may incur costs related to changes to our products, processes or sources of supply. In addition, these rules could affect the availability of certain minerals used in the manufacture of our emulation and prototyping hardware products and IP boards, or the Covered Products, and thus impact our ability to source, at competitive prices, certain materials that are used in the Covered Products. Finally, our customers may prefer to purchase products from vendors who claim that all minerals in their products are conflict-free, and our revenues may be harmed or we may face reputational challenges if we are unable to verify that our Covered Products are conflict-free.

Our business is subject to the risk of earthquakes and other natural disasters.

Our corporate headquarters, including certain of our research and development operations and certain of our distribution facilities, is located in the Silicon Valley area of Northern California, a region known to experience seismic activity. If significant seismic activity were to occur, our operations may be interrupted, which could adversely impact our business and results of operations.

Our other offices in the United States and in other countries around the world may be adversely impacted by natural disasters. If a natural disaster occurs at or near any of our offices, our operations may be interrupted, which could adversely impact our business and results of operations. If a natural disaster impacts a significant number of our customers, our business and results of operations could be adversely impacted.

Risks Related to Our Securities and Indebtedness

Our debt obligations expose us to risks that could adversely affect our business, operating results or financial condition, and could prevent us from fulfilling our obligations under such indebtedness.

We have a substantial level of debt. As of July 2, 2016, we had total outstanding indebtedness of $693.1 million. We also had the ability to borrow an additional $200.0 million under our revolving credit facility, with the right to request increased capacity up to an additional $150.0 million upon the receipt of lender commitments, for total maximum borrowings of $400.0 million under our revolving credit facility. Subject to the limits contained in the credit agreement governing our revolving credit facility, the indenture that governs the 4.375% Senior Notes due 2024, or the 2024 Notes, and our other debt instruments, we may be able to incur substantial additional debt from time to time to finance working capital, capital expenditures, investments or acquisitions, share repurchases or for other purposes. If we do so, the risks related to our high level of debt could intensify. Specifically, our high level of debt could have important consequences, including the following:

- making it more difficult for us to satisfy our obligations to service our debt as described above;
- limiting our ability to obtain additional financing to fund future working capital, capital expenditures, acquisitions or other general corporate requirements;
- requiring a substantial portion of our cash flows to be dedicated to debt service payments instead of other

purposes, thereby reducing the amount of cash flows available for working capital, capital expenditures, acquisitions and other general corporate purposes;

- utilizing large portions of our U.S. cash to service our debt obligations because those payments are made in the United States, which may require us to repatriate cash from outside the United States and incur unanticipated or unfavorable tax expenses;
- increasing our vulnerability to general adverse economic and industry conditions;
- exposing us to the risk of increased interest rates as certain of our borrowings, including borrowings under our revolving credit facility, are at variable rates of interest;
- limiting our flexibility in planning for and reacting to changes in the industry in which we compete;
- placing us at a disadvantage compared to other, less leveraged competitors and competitors that have greater access to capital resources; and
- increasing our cost of borrowing.

At the option of the holders of our outstanding notes, we may, under certain circumstances, be required to repurchase such notes.

Under the terms of our 2024 Notes, we may be required to repurchase for cash such notes prior to their maturity in connection with the occurrence of certain significant corporate events. Specifically, we are required to offer to repurchase such notes upon a “change of control triggering event” (as defined in the indenture related to such notes), such as a change of control accompanied by certain downgrades in the credit ratings of such notes. The repayment obligations under such notes may have the effect of discouraging, delaying or preventing a takeover of our company. If we were required to pay the 2024 Notes prior to their scheduled maturity, it could have a significant negative impact on our cash and liquidity and could impact our ability to invest financial resources in other strategic initiatives.

The terms of the agreements governing our revolving credit facility and 2019 Term Loan and the indenture governing our 2024 Notes restrict our current and future operations, particularly our ability to respond to changes or to take certain actions.

The agreements governing our revolving credit facility and 2019 Term Loan contain a number of restrictive covenants that impose significant operating and financial restrictions on us and may limit our ability to engage in acts that may be in our long-term best interest, including restrictions on our ability to:

- pay dividends or make other distributions or repurchase or redeem capital stock;
- prepay, redeem or repurchase certain debt;
- issue certain preferred stock or similar equity securities;
- make certain investments;
- sell assets;
- incur liens;
- incur additional indebtedness and guarantee indebtedness;
- enter into sale and leaseback transactions;
- enter into transactions with affiliates;
- alter the businesses we conduct;
- enter into agreements restricting our subsidiaries’ ability to pay dividends; and
- consolidate, merge or sell all or substantially all of our assets.

In addition, the restrictive covenants in the agreements governing our revolving credit facility and 2019 Term Loan require us to maintain specified financial ratios and satisfy other financial condition tests. Our ability to meet those financial ratios and tests can be affected by events beyond our control, and we may be unable to meet them.

A breach of the covenants or restrictions under the agreements governing our revolving credit facility and 2019 Term Loan could result in an event of default under the applicable indebtedness. Such a default may allow the creditors to accelerate the related debt and may result in the acceleration of any other debt to which a cross-acceleration or cross-default provision applies. In addition, an event of default under the credit agreement governing our revolving credit facility would permit the lenders under our revolving credit facility to terminate all commitments to extend further credit under that facility. In the event our lenders or note holders accelerate the repayment of our borrowings, we and our subsidiaries may not have sufficient assets to repay that indebtedness. As a result of these restrictions, we may be:

- limited in how we conduct our business;
- unable to raise additional debt or equity financing to operate during general economic or business downturns; or
- unable to compete effectively or to take advantage of new business opportunities.

The indenture governing our 2024 Notes also contains certain restrictive covenants that impose operating and financial restrictions on us and may limit our ability to engage in acts that may be in our long-term best interest, including restrictions on our ability to incur liens and to enter into sale and leaseback transactions.
These restrictions may affect our ability to grow in accordance with our strategy. In addition, our financial results, our substantial indebtedness and our credit ratings could adversely affect the availability and terms of our financing.
We may not be able to generate sufficient cash to service all of our indebtedness and may be forced to take other actions to satisfy our obligations under our indebtedness, which may not be successful.
Our ability to make scheduled payments on or refinance our debt obligations depends on our financial condition and operating performance, which are subject to prevailing economic and competitive conditions and to certain financial, business, legislative, regulatory and other factors beyond our control. We may be unable to maintain a level of cash flows from operating activities sufficient to permit us to pay the principal, premium, if any, and interest on our indebtedness.
If our cash flows and capital resources are insufficient to fund our debt service obligations, we could face substantial liquidity problems and could be forced to reduce or delay investments and capital expenditures or to dispose of material assets or operations, seek additional debt or equity capital or restructure or refinance our indebtedness. We may not be able to effect any such alternative measures, if necessary, on commercially reasonable terms or at all and, even if successful, those alternative actions may not allow us to meet our scheduled debt service obligations. The agreements governing our revolving credit facility and 2019 Term Loan restrict our ability to dispose of assets and use the proceeds from those dispositions and may also restrict our ability to raise debt or equity capital to be used to repay other indebtedness when it becomes due. We may not be able to consummate those dispositions or to obtain proceeds in an amount sufficient to meet any debt service obligations then due.
In addition, we conduct a substantial portion of our operations through our subsidiaries, none of which are currently guarantors of our indebtedness. Accordingly, repayment of our indebtedness is dependent on the generation of cash flow by our subsidiaries and their ability to make such cash available to us, by dividend, debt repayment or otherwise. Unless they become guarantors of our indebtedness, our subsidiaries do not have any obligation to pay amounts due on our indebtedness or to make funds available for that purpose. Our subsidiaries may not be able to, or may not be permitted to, make distributions to enable us to make payments in respect of our indebtedness. Each subsidiary is a distinct legal entity, and, under certain circumstances, legal and contractual restrictions may limit our ability to obtain cash from our subsidiaries. While the agreements governing our revolving credit facility and 2019 Term Loan limit the ability of our subsidiaries to incur consensual restrictions on their ability to pay dividends or make other intercompany payments to us, these limitations are subject to qualifications and exceptions. In the event that we do not receive distributions from our subsidiaries, we may be unable to make required principal and interest payments on our indebtedness.
Our inability to generate sufficient cash flows to satisfy our debt obligations, or to refinance our indebtedness on commercially reasonable terms or at all, would materially and adversely affect our financial position and results of operations and our ability to satisfy our debt obligations.
If we cannot make scheduled payments on our debt, we will be in default and holders of our debt could declare all outstanding principal and interest to be due and payable, the lenders under our revolving credit facility could terminate their commitments to loan money and we could be forced into bankruptcy or liquidation. In addition, a material default on our indebtedness could suspend our eligibility to register securities using certain registration statement forms under SEC guidelines that permit incorporation by reference of substantial information regarding us, potentially hindering our ability to raise capital through the issuance of our securities and increasing our costs of registration.
Despite our current level of indebtedness, we and our subsidiaries may incur substantially more debt. This could further exacerbate the risks to our financial condition described above.
We and our subsidiaries may incur significant additional indebtedness in the future. Although the agreements governing our revolving credit facility and 2019 Term Loan contain restrictions on the incurrence of additional indebtedness, these restrictions are subject to a number of qualifications and exceptions, and the additional indebtedness incurred in compliance with these restrictions could be substantial. If we incur any additional indebtedness that ranks equally with the 2024 Notes, then subject to any collateral arrangements we may enter into, the holders of that debt will be entitled to share ratably in any proceeds distributed in connection with any insolvency,

liquidation, reorganization, dissolution or other winding up of our company.

Our variable rate indebtedness subjects us to interest rate risk, which could cause our debt service obligations to increase significantly.

Borrowings under our revolving credit facility and 2019 Term Loan are at variable rates of interest and expose us to interest rate risk. If interest rates were to increase, our debt service obligations on our variable rate indebtedness would increase even though the amount borrowed remained the same, and our net income and cash flows, including cash available for servicing our indebtedness, would correspondingly decrease. Assuming all loans were fully drawn, we were to fully exercise our right to increase borrowing capacity under our revolving credit facility and we made no prepayments on our 2019 Term Loan, each quarter point change in interest rates would result in an approximately $1.8 million change in annual interest expense on our indebtedness under our revolving credit facility and 2019 Term Loan. In the future, we may enter into interest rate swaps that involve the exchange of floating for fixed rate interest payments in order to reduce interest rate volatility. However, we may not maintain interest rate swaps with respect to all of our variable rate indebtedness, and any swaps we enter into may not fully mitigate our interest rate risk.

Various factors could increase our future borrowing costs or reduce our access to capital, including a lowering or withdrawal of the ratings assigned to our 2024 Notes by rating agencies.

We may in the future seek additional financing for a variety of reasons, and our future borrowing costs and access to capital could be affected by factors including the condition of the debt and equity markets, the condition of the economy generally, prevailing interest rates, our level of indebtedness and our business and financial condition. In addition, the 2024 Notes currently have an investment grade rating, and any rating assigned could be lowered or withdrawn entirely by a rating agency if, in that rating agency’s judgment, future circumstances relating to the basis of the rating, such as adverse changes, so warrant. Consequently, real or anticipated changes in our credit ratings will generally affect the market value of the 2024 Notes. Any future lowering of the ratings of the 2024 Notes likely would make it more difficult or more expensive for us to obtain additional debt financing.

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

In August 2008, our Board of Directors authorized us to repurchase shares of our common stock in the open market with a value of up to $500.0 million in the aggregate. In July 2015, our Board of Directors authorized the addition of $578.8 million in the aggregate to the amount remaining under the prior authorizations. As of July 2, 2016, approximately $480 million remained available under these authorizations.

In July 2015, our Board of Directors replaced the two-year, aggregate $450.0 million stock repurchase plan that commenced in the second quarter of fiscal 2015 with an 18-month plan to repurchase shares of our common stock of up to an aggregate of $1.2 billion under the authorizations, beginning in the third quarter of fiscal 2015. The actual timing and amount of repurchases will be subject to business and market conditions, corporate and regulatory requirements, acquisition opportunities and other factors. The stock repurchase program may be suspended, modified or discontinued at any time.

The following table presents repurchases made under our August 2008 and July 2015 authorizations and shares surrendered by employees to satisfy income tax withholding obligations during the three months ended July 2, 2016:

Period	Total Number of Shares Purchased [(1)]	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plan or Program	Maximum Dollar Value of Shares that May Yet Be Purchased Under Publicly Announced Plan or Program [(1)] (In millions)
April 3, 2016 – May 7, 2016	3,730,743	$ 23.45	3,693,320	$ 633.3
May 8, 2016 – June 4, 2016	3,133,822	$ 24.03	3,112,025	$ 558.5
June 5, 2016 – July 2, 2016	3,240,018	$ 24.44	3,220,413	$ 479.8
Total	10,104,583	$ 23.95	10,025,758	

(1) Shares purchased that were not part of our publicly announced repurchase programs represent employee surrender of shares of restricted stock to satisfy employee income tax withholding obligations due upon vesting, and do not reduce the dollar value that may yet be purchased under our publicly announced repurchase programs.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits
(a) The following exhibits are filed herewith:

		Incorporated by Reference				
Exhibit Number	Exhibit Title	Form	File No.	Exhibit No.	Filing Date	Provided Herewith
10.01	Form of Indemnity Agreement between the Registrant and its directors and executive officers, as amended and restated.					X
10.02	The Registrant's Executive Severance Plan.	8-K	001-15867	10.01	5/11/2016	
10.03	The Registrant's Omnibus Equity Incentive Plan, as amended and restated.	Def 14A	001-15867	Appendix A	3/25/2016	
10.04	The Senior Executive Bonus Plan.					X
31.01	Certification of the Registrant's Chief Executive Officer, Lip-Bu Tan, pursuant to Rule 13a-14 of the Securities Exchange Act of 1934.					X
31.02	Certification of the Registrant's Chief Financial Officer, Geoffrey G. Ribar, pursuant to Rule 13a-14 of the Securities Exchange Act of 1934.					X
32.01	Certification of the Registrant's Chief Executive Officer, Lip-Bu Tan, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
32.02	Certification of the Registrant's Chief Financial Officer, Geoffrey G. Ribar, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
101.INS	XBRL Instance Document.					X
101.SCH	XBRL Taxonomy Extension Schema Document.					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.					X
101.DEF	XBRL Definition Linkbase Document.					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.					X

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.

		CADENCE DESIGN SYSTEMS, INC. (Registrant)
DATE:	July 25, 2016	By: /s/ Lip-Bu Tan Lip-Bu Tan President, Chief Executive Officer and Director
DATE:	July 25, 2016	By: /s/ Geoffrey G. Ribar Geoffrey G. Ribar Senior Vice President and Chief Financial Officer

EXHIBIT INDEX

		Incorporated by Reference				
Exhibit Number	Exhibit Title	Form	File No.	Exhibit No.	Filing Date	Provided Herewith
10.01	Form of Indemnity Agreement between the Registrant and its directors and executive officers, as amended and restated.					X
10.02	The Registrant's Executive Severance Plan.	8-K	001-15867	10.01	5/11/2016	
10.03	The Registrant's Omnibus Equity Incentive Plan, as amended and restated.	Def 14A	001-15867	Appendix A	3/25/2016	
10.04	The Senior Executive Bonus Plan.					X
31.01	Certification of the Registrant's Chief Executive Officer, Lip-Bu Tan, pursuant to Rule 13a-14 of the Securities Exchange Act of 1934.					X
31.02	Certification of the Registrant's Chief Financial Officer, Geoffrey G. Ribar, pursuant to Rule 13a-14 of the Securities Exchange Act of 1934.					X
32.01	Certification of the Registrant's Chief Executive Officer, Lip-Bu Tan, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
32.02	Certification of the Registrant's Chief Financial Officer, Geoffrey G. Ribar, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
101.INS	XBRL Instance Document.					X
101.SCH	XBRL Taxonomy Extension Schema Document.					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.					X
101.DEF	XBRL Definition Linkbase Document.					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.					X