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

FORM 10-Q

(Mark One)

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

For the quarterly period ended December 29, 2019

or

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

For the transition period from _____ to _____

Commission file number 0-12933

LAM RESEARCH CORPORATION
(Exact name of registrant as specified in its charter)

Delaware	**94-2634797**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
4650 Cushing Parkway, Fremont, California	**94538**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (510) 572-0200

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, Par Value $0.001 Per Share	LRCX	The Nasdaq Stock Market (Nasdaq Global Select Market)

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

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

As of January 31, 2020, the Registrant had 145,548,470 shares of Common Stock outstanding.

LAM RESEARCH CORPORATION

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PART I. FINANCIAL INFORMATION

ITEM 1. Financial Statements

LAM RESEARCH CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)
(unaudited)

	Three Months Ended		Six Months Ended	
	December 29, 2019	December 23, 2018	December 29, 2019	December 23, 2018
Revenue	$ 2,583,501	$ 2,522,673	$ 4,749,247	$ 4,853,364
Cost of goods sold	1,403,857	1,377,640	2,587,893	2,650,133
Gross margin	1,179,644	1,145,033	2,161,354	2,203,231
Research and development	318,861	285,556	605,688	577,228
Selling, general, and administrative	174,272	169,098	331,700	343,873
Total operating expenses	493,133	454,654	937,388	921,101
Operating income	686,511	690,379	1,223,966	1,282,130
Other expense, net	(13,924)	(30,649)	(26,652)	(31,026)
Income before income taxes	672,587	659,730	1,197,314	1,251,104
Income tax expense	(158,077)	(90,875)	(217,015)	(148,889)
Net income	$ 514,510	$ 568,855	$ 980,299	$ 1,102,215
Net income per share:				
Basic	$ 3.57	$ 3.67	$ 6.79	$ 7.10
Diluted	$ 3.43	$ 3.51	$ 6.52	$ 6.73
Number of shares used in per share calculations:				
Basic	143,987	155,022	144,330	155,340
Diluted	150,097	162,170	150,389	163,749

See Notes to Condensed Consolidated Financial Statements

LAM RESEARCH CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands)
(unaudited)

	Three Months Ended		Six Months Ended	
	December 29, 2019	December 23, 2018	December 29, 2019	December 23, 2018
Net income	$ 514,510	$ 568,855	$ 980,299	$ 1,102,215
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustment	7,511	(7,268)	(1,187)	(13,529)
Cash flow hedges:				
Net unrealized gains during the period	4,079	5,122	3,388	11,988
Net losses (gains) reclassified into earnings	1,384	(5,726)	2,734	(4,578)
	5,463	(604)	6,122	7,410
Available-for-sale investments:				
Net unrealized (losses) gains during the period	(1,713)	585	(2,713)	298
Net losses (gains) reclassified into earnings	593	(51)	983	(54)
	(1,120)	534	(1,730)	244
Defined benefit plans, net change in unrealized component	459	375	578	(1,368)
Other comprehensive income (loss), net of tax	12,313	(6,963)	3,783	(7,243)
Comprehensive income	$ 526,823	$ 561,892	$ 984,082	$ 1,094,972

See Notes to Condensed Consolidated Financial Statements

LAM RESEARCH CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except per share data)

	December 29, 2019	June 30, 2019
	(unaudited)	(1)
ASSETS		
Cash and cash equivalents	$ 3,035,887	$ 3,658,219
Investments	1,647,867	1,772,984
Accounts receivable, less allowance for doubtful accounts of $5,357 as of December 29, 2019, and $5,021 as of June 30, 2019	2,030,490	1,455,522
Inventories	1,528,620	1,540,140
Prepaid expenses and other current assets	212,101	133,544
Total current assets	8,454,965	8,560,409
Property and equipment, net	1,047,254	1,059,077
Restricted cash and investments	253,907	255,177
Goodwill	1,484,824	1,484,597
Intangible assets, net	193,116	216,950
Other assets	480,056	425,123
Total assets	$ 11,914,122	$ 12,001,333
LIABILITIES AND STOCKHOLDERS' EQUITY		
Trade accounts payable	$ 452,779	$ 376,561
Accrued expenses and other current liabilities	1,114,013	946,641
Deferred profit	366,417	381,317
Current portion of long-term debt and finance lease obligations	632,292	667,131
Total current liabilities	2,565,501	2,371,650
Long-term debt and finance lease obligations, less current portion	3,786,067	3,822,768
Income taxes payable	872,778	892,790
Other long-term liabilities	272,043	190,821
Total liabilities	7,496,389	7,278,029
Commitments and contingencies		
Temporary equity, convertible notes	38,304	49,439
Stockholders' equity:		
Preferred stock, at par value of $0.001 per share; authorized, 5,000 shares, none outstanding	—	—
Common stock, at par value of $0.001 per share; authorized, 400,000 shares; issued and outstanding, 142,462 shares at December 29, 2019, and 144,433 shares at June 30, 2019	142	144
Additional paid-in capital	6,528,821	6,409,405
Treasury stock, at cost; 143,917 shares at December 29, 2019, and 140,573 shares at June 30, 2019	(12,673,292)	(11,602,573)
Accumulated other comprehensive loss	(60,247)	(64,030)
Retained earnings	10,584,005	9,930,919
Total stockholders' equity	4,379,429	4,673,865
Total liabilities and stockholders' equity	$ 11,914,122	$ 12,001,333

(1) Derived from audited financial statements

See Notes to Condensed Consolidated Financial Statements

LAM RESEARCH CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands) (unaudited)

	Six Months Ended	
	December 29, 2019	December 23, 2018
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income	$ 980,299	$ 1,102,215
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	130,194	161,599
Deferred income taxes	74,516	(62,704)
Equity-based compensation expense	88,630	89,149
Amortization of note discounts and issuance costs	3,250	2,276
Other, net	3,699	848
Changes in operating assets and liabilities	(508,613)	69,322
Net cash provided by operating activities	771,975	1,362,705
CASH FLOWS FROM INVESTING ACTIVITIES:		
Capital expenditures and intangible assets	(101,310)	(162,021)
Purchases of available-for-sale securities	(1,619,695)	(785,188)
Maturities of available-for-sales securities	952,327	364,720
Sales of available-for-sale securities	795,559	581,108
Other, net	(10,528)	(4,019)
Net cash provided by (used for) investing activities	16,353	(5,400)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Principal payments on debt	(46,952)	(86,271)
Net repayments of commercial paper	—	(359,604)
Treasury stock purchases	(1,083,199)	(1,737,414)
Dividends paid	(325,589)	(342,279)
Reissuance of treasury stock related to employee stock purchase plan	38,447	32,920
Proceeds from issuance of common stock	4,501	109
Other, net	—	(13,207)
Net cash used for financing activities	(1,412,792)	(2,505,746)
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	862	(5,032)
Net decrease in cash, cash equivalents, and restricted cash	(623,602)	(1,153,473)
Cash, cash equivalents, and restricted cash at beginning of period	3,913,396	4,768,558
Cash, cash equivalents, and restricted cash at end of period	$ 3,289,794	$ 3,615,085
Schedule of non-cash transactions:		
Accrued payables for stock repurchases	289	4
Accrued payables for capital expenditures	27,966	36,582
Dividends payable	163,510	171,196
Transfers of inventory to property and equipment, net	27,472	33,723

Reconciliation of cash, cash equivalents, and restricted cash	December 29, 2019	December 23, 2018
Cash and cash equivalents	$ 3,035,887	$ 3,359,793
Restricted cash and investments	253,907	255,292
Total cash, cash equivalents, and restricted cash	$ 3,289,794	$ 3,615,085

See Notes to Condensed Consolidated Financial Statements

LAM RESEARCH CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands)
(unaudited)

	Three Months Ended December 29, 2019						
	Common Stock Shares	Common Stock	Additional Paid-in Capital	Treasury Stock	Accumulated Other Comprehensive Loss	Retained Earnings	Total
Balance at September 29, 2019	144,871	$ 145	$ 6,456,492	$ (11,680,689)	$ (72,560)	$ 10,233,005	$ 4,936,393
Sale of common stock	72	—	632	—	—	—	632
Purchase of treasury stock	(3,242)	(3)	—	(1,005,340)	—	—	(1,005,343)
Reissuance of treasury stock	296	—	25,710	12,737	—	—	38,447
Equity-based compensation expense	—	—	45,725	—	—	—	45,725
Effect of conversion of convertible notes	465	—	(3,987)	—	—	—	(3,987)
Reclassification from temporary to permanent equity	—	—	4,249	—	—	—	4,249
Net income	—	—	—	—	—	514,510	514,510
Other comprehensive income	—	—	—	—	12,313	—	12,313
Cash dividends declared ($1.15 per common share)	—	—	—	—	—	(163,510)	(163,510)
Balance at December 29, 2019	142,462	$ 142	$ 6,528,821	$ (12,673,292)	$ (60,247)	$ 10,584,005	$ 4,379,429

	Six Months Ended December 29, 2019						
	Common Stock Shares	Common Stock	Additional Paid-in Capital	Treasury Stock	Accumulated Other Comprehensive Loss	Retained Earnings	Total
Balance at June 30, 2019	144,433	$ 144	$ 6,409,405	$ (11,602,573)	$ (64,030)	$ 9,930,919	$ 4,673,865
Sale of common stock	183	—	4,501	—	—	—	4,501
Purchase of treasury stock	(3,639)	(3)	—	(1,083,456)	—	—	(1,083,459)
Reissuance of treasury stock	296	—	25,710	12,737	—	—	38,447
Equity-based compensation expense	—	—	88,630	—	—	—	88,630
Effect of conversion of convertible notes	1,189	1	(10,560)	—	—	—	(10,559)
Reclassification from temporary to permanent equity	—	—	11,135	—	—	—	11,135
Adoption of ASU 2016-02	—	—	—	—	—	3,018	3,018
Net income	—	—	—	—	—	980,299	980,299
Other comprehensive income	—	—	—	—	3,783	—	3,783
Cash dividends declared ($2.30 per common share)	—	—	—	—	—	(330,231)	(330,231)
Balance at December 29, 2019	142,462	$ 142	$ 6,528,821	$ (12,673,292)	$ (60,247)	$ 10,584,005	$ 4,379,429

See Notes to Condensed Consolidated Financial Statements

	Three Months Ended December 23, 2018						
	Common Stock Shares	Common Stock	Additional Paid-in Capital	Treasury Stock	Accumulated Other Comprehensive Loss	Retained Earnings	Total
Balance at September 23, 2018	153,384	$ 153	$ 6,195,024	$ (9,582,409)	$ (57,729)	$ 8,767,786	$ 5,322,825
Sale of common stock	47	—	109	—	—	—	109
Purchase of treasury stock	(1,683)	(1)	—	(1,360)	—	—	(1,361)
Reissuance of treasury stock	273	—	22,637	10,283	—	—	32,920
Equity-based compensation expense	—	—	38,806	—	—	—	38,806
Effect of conversion of convertible notes	141	—	(1,435)	—	—	—	(1,435)
Exercise of warrants	1,799	2	(2)	—	—	—	—
Reclassification from temporary to permanent equity	—	—	1,803	—	—	—	1,803
Net income	—	—	—	—	—	568,855	568,855
Other comprehensive loss	—	—	—	—	(6,963)	—	(6,963)
Cash dividends declared ($1.10 per common share)	—	—	—	—	—	(171,196)	(171,196)
Balance at December 23, 2018	153,961	$ 154	$ 6,256,942	$ (9,573,486)	$ (64,692)	$ 9,165,445	$ 5,784,363

	Six Months Ended December 23, 2018						
	Common Stock Shares	Common Stock	Additional Paid-in Capital	Treasury Stock	Accumulated Other Comprehensive Loss	Retained Earnings	Total
Balance at June 24, 2018	156,892	$ 157	$ 6,144,425	$ (7,846,476)	$ (57,449)	$ 8,261,194	$ 6,501,851
Sale of common stock	79	—	109	—	—	—	109
Purchase of treasury stock	(9,491)	(9)	—	(1,737,293)	—	—	(1,737,302)
Reissuance of treasury stock	273	—	22,637	10,283	—	—	32,920
Equity-based compensation expense	—	—	89,149	—	—	—	89,149
Effect of conversion of convertible notes	2,103	2	(20,549)	—	—	—	(20,547)
Exercise of warrants	4,105	4	(12)	—	—	—	(8)
Reclassification from temporary to permanent equity	—	—	21,183	—	—	—	21,183
Adoption of ASU 2014-09	—	—	—	—	—	139,355	139,355
Adoption of ASU 2016-16	—	—	—	—	—	(443)	(443)
Adoption of ASU 2018-02	—	—	—	—	(2,227)	2,227	—
Net income	—	—	—	—	—	1,102,215	1,102,215
Other comprehensive loss	—	—	—	—	(5,016)	—	(5,016)
Cash dividends declared ($2.20 per common share)	—	—	—	—	—	(339,103)	(339,103)
Balance at December 23, 2018	153,961	$ 154	$ 6,256,942	$ (9,573,486)	$ (64,692)	$ 9,165,445	$ 5,784,363

See Notes to Condensed Consolidated Financial Statements

LAM RESEARCH CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
December 29, 2019
(Unaudited)

NOTE 1 — BASIS OF PRESENTATION

The accompanying unaudited Condensed Consolidated Financial Statements have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") for interim financial information and the instructions to Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. In the opinion of management, all adjustments (consisting only of normal recurring adjustments) considered necessary for a fair presentation have been included. The accompanying unaudited Condensed Consolidated Financial Statements should be read in conjunction with the audited Consolidated Financial Statements of Lam Research Corporation ("Lam Research" or the "Company") for the fiscal year ended June 30, 2019, which are included in the Company's Annual Report on Form 10-K as of and for the year ended June 30, 2019 (the "2019 Form 10-K"). The Company's reports on Form 10-K, Form 10-Q and Form 8-K are available online at the Securities and Exchange Commission website on the Internet. The address of that site is *www.sec.gov*. The Company also posts its reports on Form 10-K, Form 10-Q and Form 8-K on its corporate website at *http://investor.lamresearch.com*. The content on any website referred to in this Form 10-Q is not a part of or incorporated by reference in this Form 10-Q unless expressly noted.

The condensed consolidated financial statements include the accounts of Lam Research and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation. The Company's reporting period is a 52/53-week fiscal year. The Company's current fiscal year will end June 28, 2020 and includes 52 weeks. The quarters ended December 29, 2019 (the "December 2019 quarter") and December 23, 2018 (the "December 2018 quarter") included 13 weeks.

Reclassifications: Certain prior fiscal year balances have been reclassified to conform to the current fiscal year presentation.

NOTE 2 — RECENT ACCOUNTING PRONOUNCEMENTS

Recently Adopted

In February 2016, the FASB issued ASU 2016-02, "Leases." The amendment establishes the principles that lessees and lessors shall apply to report useful information to users of financial statements about the amount, timing, and uncertainty of cash flows arising from a lease. In January 2018 and July 2018 the FASB issued ASU 2018-01 and ASU 2018-11 amending the effects of ASU 2016-02, which in combination with ASU 2016-02 were codified as Accounting Standard Codification topic 842 ("ASC 842"). The Company adopted ASC 842 on the first day of the current fiscal year, July 1, 2019, under the modified-retrospective approach, applying the amendments to prospective reporting periods. Results for reporting periods beginning on or after July 1, 2019 are presented under ASC 842, while prior period amounts are not adjusted and continue to be reported in accordance with the historic accounting under ASC 840.

The Company elected the package of practical expedients that allowed the Company not to reassess (i) whether any expired or existing contracts contain leases; (ii) the lease classification for any expired or existing leases; and (iii) initial direct lease costs for existing leases. The Company did not elect to use hindsight in connection with the adoption of ASC 842.

The Company adopted ASC 842 by recording operating right-of-use assets of $110.8 million, net of deferred rent liabilities of $3.0 million that were reclassified to operating right-of-use assets, and operating lease liabilities of $113.8 million. The Company also recognized an adjustment of $3.0 million to retained earnings, net of tax; a reduction of $40.4 million to property and equipment, net; and a reduction of $43.8 million to finance leases ($42.3 million of which was previously recognized in long-term debt and finance lease obligations, less current portion and the remaining was previously recognized in current portion of long-term debt and finance lease obligations) related to its de-recognition of its previously recorded build-to-suit arrangements. The adoption of the standard did not materially impact the Company's Condensed Consolidated Statement of Operations and had no impact on cash flows.

Updates Not Yet Effective

In June 2016, the FASB released ASU 2016-13, "Financial Instruments – Credit Losses." The amendment revises the impairment model to utilize an expected loss methodology in place of the currently used incurred loss methodology, which will result in more timely recognition of losses on financial instruments, including but not limited to, available for sale debt securities and accounts receivable. The FASB issued a subsequent amendment to the initial guidance in November 2019 within ASU 2019-11. The Company is required to adopt these amendments starting in the first quarter of fiscal year 2021 using a

modified-retrospective approach. Early adoption is permitted. The Company is still evaluating the impact of this standard, but does not expect the adoption to have a material impact on its Condensed Consolidated Financial Statements.

In November 2018, the FASB issued ASU 2018-18, "Collaborative Arrangements (Topic 808).” The amendment clarifies that certain transactions between participants in a collaborative arrangement should be accounted for under Topic 606 when the counterparty is a customer for a good or service that is a distinct unit of account. The amendment also precludes entities from presenting consideration from transactions with a collaborator that is not a customer together with revenue recognized from contracts with customers. The Company is required to adopt this standard starting in the first quarter of fiscal year 2021. The standard should be applied retrospectively to the period when the Company initially adopted ASC 606. The Company is currently evaluating the impact of adoptions on its Condensed Consolidated Financial Statements.

In April 2019, the FASB issued ASU 2019-04,”Codification Improvements to Topic 326, Financial Instruments-Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments”, that clarifies and improves areas of guidance related to the recently issued standards on credit losses (ASU 2016-13), hedging (ASU 2017-12), and recognition and measurement of financial instruments (ASU 2016-01). The amendments generally have the same effective dates as their related standards. If already adopted, the amendments of ASU 2016-01 and ASU 2016-13 are effective starting in the first quarter of fiscal year 2021. The amendments of ASU 2017-12 were effective in the first quarter of fiscal year 2020, and did not have a material impact on the Company’s Condensed Consolidated Financial Statements. The Company continues to evaluate the impact of ASU 2016-13 and will consider the amendments of ASU 2019-04 as part of that process.

NOTE 3 — REVENUE

Deferred Revenue

Revenue of $125.9 million and $323.9 million included in deferred revenue at June 30, 2019 was recognized during the three and six months ended December 29, 2019.

The following table summarizes the transaction price for contracts that have not yet been recognized as revenue as of December 29, 2019 and when the Company expects to recognize the amounts as revenue:

	Less than 1 Year	1-3 Years	More than 3 Years	Total
		(In thousands)		
Deferred revenue	$ 372,927	$ 37,834 (1)	$ —	$ 410,761

(1) This amount is reported in Deferred profit on the Company's Condensed Consolidated Balance Sheets as the customers can demand the liability to be performed at any time.

Disaggregation of Revenue

The Company operates in one reportable business segment: manufacturing and servicing of wafer processing semiconductor manufacturing equipment. The Company’s material operating segments qualify for aggregation due to their customer base and similarities in economic characteristics, nature of products and services, and processes for procurement, manufacturing, and distribution.

The Company operates in seven geographic regions: United States, China, Europe, Japan, Korea, Southeast Asia, and Taiwan. For geographical reporting, revenue is attributed to the geographic location in which the customers’ facilities are located. The Company serves three primary markets: memory, foundry, and logic/integrated device manufacturing.

The following table presents the Company's revenues disaggregated by geographic region:

	Three Months Ended		Six Months Ended	
	December 29, 2019	December 23, 2018	December 29, 2019	December 23, 2018
	(In thousands)			
China	$ 758,286	$ 361,782	$ 1,349,954	$ 955,613
Taiwan	680,871	425,533	1,072,363	705,583
Korea	463,178	631,502	914,661	1,011,272
United States	223,725	135,696	407,384	255,801
Japan	208,240	691,817	481,913	1,361,857
Southeast Asia	184,168	165,204	397,923	363,340
Europe	65,033	111,139	125,049	199,898
	$ 2,583,501	$ 2,522,673	$ 4,749,247	$ 4,853,364

The following table presents the percentages of system revenues to each of the primary markets we serve:

	Three Months Ended		Six Months Ended	
	December 29, 2019	December 23, 2018	December 29, 2019	December 23, 2018
Memory	52%	79%	58%	78%
Foundry	36%	13%	31%	15%
Logic/integrated device manufacturing	12%	8%	11%	7%

NOTE 4 — EQUITY-BASED COMPENSATION PLANS

The Lam Research Corporation 2015 Stock Incentive Plan, as amended (the "2015 Plan"), provides for the grant of non-qualified equity-based awards of the Company's Common Stock to eligible employees and non-employee directors, including stock options, restricted stock units ("RSUs"), and market-based performance RSUs ("market-based PRSUs"). An option is a right to purchase Common Stock at a set price. An RSU award is an agreement to issue a set number of shares of Common Stock at the time of vesting. The Company's market-based PRSUs contain both a market condition and a service condition. The Company's options, RSU, and market-based PRSU awards typically vest over a period of three years. The Company also has an employee stock purchase plan that allows employees to purchase its Common Stock at a discount through payroll deductions.

The Company recognized the following equity-based compensation expense (including expense related to the employee stock purchase plan) and related income tax benefit in the Condensed Consolidated Statements of Operations:

	Three Months Ended		Six Months Ended	
	December 29, 2019	December 23, 2018	December 29, 2019	December 23, 2018
	(in thousands)			
Equity-based compensation expense	$ 45,725	$ 38,806	$ 88,630	$ 89,149
Income tax benefit recognized related to equity-based compensation expense	$ 4,461	$ 5,763	$ 14,279	$ 13,867

NOTE 5 — OTHER EXPENSE, NET

The significant components of other expense, net, are as follows:

	Three Months Ended		Six Months Ended	
	December 29, 2019	December 23, 2018	December 29, 2019	December 23, 2018
	(in thousands)			
Interest income	$ 25,454	$ 17,809	$ 57,238	$ 36,742
Interest expense	(42,615)	(19,784)	(86,610)	(41,572)
Gains (losses) on deferred compensation plan-related assets, net	14,129	(22,374)	13,693	(17,160)
Foreign exchange (losses) gains, net	(2,287)	2,581	(2,816)	2,632
Other, net	(8,605)	(8,881)	(8,157)	(11,668)
	$ (13,924)	$ (30,649)	$ (26,652)	$ (31,026)

NOTE 6 — INCOME TAX EXPENSE

The Company recorded an income tax expense of $158.1 million and $217.0 million for the three and six months ended December 29, 2019, which yielded an effective tax rate of approximately 23.5% and 18.1%, respectively.

The difference between the U.S. federal statutory tax rate of 21% and the Company's effective tax rate for the three months ended December 29, 2019 was primarily due to income in lower tax jurisdictions, U.S. taxation on low-taxed foreign income, and a cumulative income tax benefit reversal due to a court ruling, as outlined below.

In November 2019, the U.S. Court of Appeals for the Ninth Circuit ("Ninth Circuit") rejected the en banc appeal petitioned by Altera Corporation ("Altera") in July 2019. The Company has evaluated the impact of this decision and views the denial as an indication that Altera's position of excluding stock-based compensation expense in an inter-company cost-sharing arrangement is unlikely to be sustained upon further litigation. As a result, the Company has reversed $74.5 million of net tax assets associated with stock-based compensation benefits related to previous years in the Condensed Consolidated Financial Statements in the three months ended December 29, 2019. In conclusion, the Company is no longer reflecting a net tax benefit within its financial statements related to excluding stock-based compensation from its inter-company cost-sharing arrangement. If, at a future date, Altera secured a favorable ruling from the Supreme Court, the Company would re-evaluate the decision to record an income tax benefit at that time. Please refer to Note 7, "Income Taxes," to the Company's Consolidated Financial Statements in Part II, Item 8 of its 2019 Form 10-K for additional information.

The Internal Revenue Service ("IRS") is examining the Company's U.S. federal income tax return for the fiscal year ended June 24, 2018. As of December 29, 2019, no significant adjustments have been proposed by the IRS. The Company is unable to make a reasonable estimate as to when cash settlements, if any, with the IRS will occur.

The Company is in various stages of examinations in connection with all of its tax audits worldwide, and it is difficult to determine when these examinations will be settled. It is reasonably possible that over the next 12-month period the Company may experience an increase or decrease in its unrecognized tax benefits as a result of tax examinations or lapses of statute of limitations. The change in unrecognized tax benefits may range up to $10.0 million.

NOTE 7 — NET INCOME PER SHARE

Basic net income per share is computed by dividing net income by the weighted-average number of common shares outstanding during the period. Diluted net income per share is computed using the treasury stock method, for dilutive stock options, restricted stock units, convertible notes, and warrants. Dilutive shares outstanding include the effect of the convertible notes. Refer to Note 12 - Long-term Debt and Other Borrowings for additional information regarding the Company's convertible notes. The following table reconciles the numerators and denominators of the basic and diluted computations for net income per share.

	Three Months Ended		Six Months Ended	
	December 29, 2019	December 23, 2018	December 29, 2019	December 23, 2018
	(in thousands, except per share data)			
Numerator:				
Net income	$ 514,510	$ 568,855	$ 980,299	$ 1,102,215
Denominator:				
Basic average shares outstanding	143,987	155,022	144,330	155,340
Effect of potential dilutive securities:				
Employee stock plans	1,528	1,435	1,359	1,487
Convertible notes	4,582	5,713	4,700	5,894
Warrants	—	—	—	1,028
Diluted average shares outstanding	150,097	162,170	150,389	163,749
Net income per share - basic	$ 3.57	$ 3.67	$ 6.79	$ 7.10
Net income per share - diluted	$ 3.43	$ 3.51	$ 6.52	$ 6.73

For purposes of computing diluted net income per share, weighted-average common shares do not include potentially dilutive securities that are anti-dilutive under the treasury stock method. The following potentially dilutive securities were excluded:

	Three Months Ended		Six Months Ended	
	December 29, 2019	December 23, 2018	December 29, 2019	December 23, 2018
	(in thousands)			
Options and RSUs	3	227	4	890

NOTE 8 — FINANCIAL INSTRUMENTS

The Company maintains an investment portfolio of various holdings, types, and maturities. The Company's mutual funds, which are related to the Company's obligations under the deferred compensation plan, are classified as trading securities. Investments classified as trading securities are recorded at fair value based upon quoted market prices. Differences between the cost and fair value of trading securities are recognized as other income (expense) in the Condensed Consolidated Statements of Operations. All of the Company's other investments are classified as available-for-sale and consequently are recorded in the Condensed Consolidated Balance Sheets at fair value with unrealized gains or losses reported as a separate component of accumulated other comprehensive income (loss), net of tax.

Fair Value

The Company defines fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities required or permitted to be recorded at fair value, the Company considers the principal or most advantageous market in which it would transact, and it considers assumptions that market participants would use when pricing the asset or liability.

A fair value hierarchy has been established that prioritizes the inputs to valuation techniques used to measure fair value. The level of an asset or liability in the hierarchy is based on the lowest level of input that is significant to the fair value measurement. Assets and liabilities carried at fair value are classified and disclosed in one of the following three categories:

Level 1: Valuations based on quoted prices in active markets for identical assets or liabilities with sufficient volume and frequency of transactions.

Level 2: Valuations based on observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or model-derived valuations techniques for which all significant inputs are observable in the market or can be corroborated by observable market data, for substantially the full term of the assets or liabilities.

Level 3: Valuations based on unobservable inputs to the valuation methodology that are significant to the measurement of fair value of assets or liabilities and based on non-binding, broker-provided price quotes and may not have been corroborated by observable market data.

The Company's primary financial instruments include its cash, cash equivalents, investments, restricted cash and investments, long-term investments, accounts receivable, accounts payable, long-term debt and leases, and foreign currency related derivative instruments. The estimated fair value of cash, accounts receivable, and accounts payable approximates their carrying value due to the short period of time to their maturities. The estimated fair values of lease obligations approximate their carrying value as the substantial majority of these obligations have interest rates that adjust to market rates on a periodic basis. Refer to Note 12 - Long-Term Debt and Other Borrowings for additional information regarding the fair value of the Company's senior notes and convertible senior notes.

The following table sets forth the Company's cash, cash equivalents, investments, restricted cash and investments, and other assets measured at fair value on a recurring basis as of December 29, 2019, and June 30, 2019:

	December 29, 2019							
					(Reported Within)			
	Cost	Unrealized Gain	Unrealized (Loss)	Fair Value	Cash and Cash Equivalents	Investments	Restricted Cash & Investments	Other Assets
	(in thousands)							
Cash	$ 580,318	$ —	$ —	$ 580,318	$ 576,439	$ —	$ 3,879	$ —
Time deposit	1,606,528	—	—	1,606,528	1,356,500	—	250,028	—
Level 1:								
Money market funds	977,274	—	—	977,274	977,274	—	—	—
U.S. Treasury and agencies	476,406	116	(54)	476,468	—	476,468	—	—
Mutual funds	75,244	5,792	(452)	80,584	—	—	—	80,584
Level 1 Total	1,528,924	5,908	(506)	1,534,326	977,274	476,468	—	80,584
Level 2:								
Government-sponsored enterprises	9,819	—	(3)	9,816	2,799	7,017	—	—
Foreign government bonds	30,507	2	(6)	30,503	—	30,503	—	—
Corporate notes and bonds	1,225,526	742	(444)	1,225,824	122,875	1,102,949	—	—
Mortgage backed securities — residential	4,172	8	—	4,180	—	4,180	—	—
Mortgage backed securities — commercial	26,751	34	(35)	26,750	—	26,750	—	—
Level 2 Total	1,296,775	786	(488)	1,297,073	125,674	1,171,399	—	—
Total	$ 5,012,545	$ 6,694	$ (994)	$ 5,018,245	$ 3,035,887	$ 1,647,867	$ 253,907	$ 80,584

	June 30, 2019							
					(Reported Within)			
	Cost	Unrealized Gain	Unrealized (Loss)	Fair Value	Cash and Cash Equivalents	Investments	Restricted Cash & Investments	Other Assets
	(in thousands)							
Cash	$ 467,460	$ —	$ —	$ 467,460	$ 462,310	$ —	$ 5,150	$ —
Time deposit	1,563,686	—	—	1,563,686	1,313,659	—	250,027	—
Level 1:								
Money market funds	1,644,659	—	—	1,644,659	1,644,659	—	—	—
U.S. Treasury and agencies	465,655	283	(24)	465,914	86,981	378,933	—	—
Mutual funds	76,961	1,063	(283)	77,741	—	—	—	77,741
Level 1 Total	2,187,275	1,346	(307)	2,188,314	1,731,640	378,933	—	77,741
Level 2:								
Government-sponsored enterprises	16,005	5	(41)	15,969	—	15,969	—	—
Foreign government bonds	24,408	35	—	24,443	—	24,443	—	—
Corporate notes and bonds	1,466,167	2,310	(99)	1,468,378	150,610	1,317,768	—	—
Mortgage backed securities — residential	6,148	—	(4)	6,144	—	6,144	—	—
Mortgage backed securities — commercial	29,587	140	—	29,727	—	29,727	—	—
Level 2 Total	1,542,315	2,490	(144)	1,544,661	150,610	1,394,051	—	—
Total	$ 5,760,736	$ 3,836	$ (451)	$ 5,764,121	$ 3,658,219	$ 1,772,984	$ 255,177	$ 77,741

The Company accounts for its investment portfolio at fair value. Realized gains (losses) for investment sales are specifically identified. Management assesses the fair value of investments in debt securities that are not actively traded through consideration of interest rates and their impact on the present value of the cash flows to be received from the investments. The Company also considers whether changes in the credit ratings of the issuer could impact the assessment of fair value. Additionally, the Company also considers factors such as the Company's intent to sell the security and whether it is more likely than not that the Company will be required to sell the security before recovery of its amortized cost basis.

The Company did not recognize any losses on investments due to other-than-temporary impairments during the three and six months ended December 29, 2019 or December 23, 2018. Additionally, gross realized gains/(losses) from sales of investments were insignificant in the three and six months ended December 29, 2019 and December 23, 2018.

The following is an analysis of the Company's cash, cash equivalents, investments, and restricted cash and investments in unrealized loss positions:

	December 29, 2019					
	Unrealized Losses Less than 12 Months		Unrealized Losses 12 Months or Greater		Total	
	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss
	(in thousands)					
U.S. Treasury and agencies	$ 325,502	$ (54)	$ —	$ —	$ 325,502	$ (54)
Mutual funds	2,925	(195)	7,955	(257)	10,880	(452)
Government-sponsored enterprises	—	—	6,995	(3)	6,995	(3)
Foreign government bonds	29,420	(6)	—	—	29,420	(6)
Corporate notes and bonds	703,002	(441)	6,780	(3)	709,782	(444)
Mortgage backed securities — commercial	16,805	(35)	—	—	16,805	(35)
	$ 1,077,654	$ (731)	$ 21,730	$ (263)	$ 1,099,384	$ (994)

The amortized cost and fair value of cash equivalents, investments, and restricted investments with contractual maturities are as follows as of December 29, 2019:

	Cost	Estimated Fair Value
	(in thousands)	
Due in one year or less	$ 3,889,431	$ 3,889,377
Due after one year through five years	444,558	444,950
Due in more than five years	22,994	23,016
	$ 4,356,983	$ 4,357,343

The Company has the ability, if necessary, to liquidate its investments in order to meet the Company's liquidity needs in the next 12 months. Accordingly, those investments with contractual maturities greater than 12 months from the date of purchase nonetheless are classified as short-term on the accompanying Condensed Consolidated Balance Sheets.

Derivative Instruments and Hedging

The Company carries derivative financial instruments ("derivatives") on its Condensed Consolidated Balance Sheets at their fair values. The Company enters into foreign currency forward contracts and foreign currency options with financial institutions with the primary objective of reducing volatility of earnings and cash flows related to foreign currency exchange rate fluctuations. In addition, the Company enters into interest rate swap arrangements to manage interest rate risk. The counterparties to these derivatives are large global financial institutions that the Company believes are creditworthy, and therefore, it does not consider the risk of counterparty nonperformance to be material.

Cash Flow Hedges

The Company's financial position is routinely subjected to market risk associated with foreign currency exchange rate fluctuations on non-U.S. dollar transactions or cash flows, primarily from Japanese yen-denominated revenues and euro- denominated and Korean won-denominated expenses. The Company's policy is to mitigate the foreign exchange risk arising from the fluctuations in the value of these non-U.S. dollar denominated transactions or cash flows through a foreign currency cash flow hedging program, using forward contracts and foreign currency options that generally expire within 12 months and no later than 24 months. These hedge contracts are designated as cash flow hedges and are carried on the Company's balance sheet at fair value with the effective portion of the contracts' gains or losses included in accumulated other comprehensive income (loss) and subsequently recognized in revenue/expense in the same period the hedged items are recognized.

In addition, the Company has entered into interest rate swap agreements to hedge against the variability of cash flows due to changes in certain benchmark interest rates on fixed rate debt. These instruments are designated as cash flow hedges at inception and are settled in conjunction with the issuance of debt. The effective portion of the contracts' gains or losses is included in accumulated other comprehensive income (loss) and is amortized into income as the hedged item impacts earnings. During the three and six months ended December 29, 2019, the Company entered into a series of these interest rate swap agreements with a total notional value of $200 million. As of December 29, 2019, the Company had a net gain of $1.9 million accumulated in other comprehensive income, net of tax, related to these interest rate swap agreements. Additionally, in January 2020, the Company entered into an additional series of interest rate swap agreements with a total notional value of $200 million.

At inception and at each quarter-end, hedges are tested prospectively and retrospectively for effectiveness using regression analysis. Changes in the fair value of foreign exchange contracts due to changes in time value are included in the assessment of effectiveness. To qualify for hedge accounting, the hedge relationship must meet criteria relating to both the derivative instrument and the hedged item. These criteria include identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how the hedging instrument's effectiveness in offsetting the exposure to changes in the hedged item's fair value or cash flows will be measured. There were no material gains or losses during the three and six months ended December 29, 2019 and December 23, 2018 associated with forecasted transactions that failed to occur.

To receive hedge accounting treatment, all hedging relationships are formally documented at the inception of the hedge, and the hedges must be tested to demonstrate an expectation of providing highly effective offsetting changes to future cash flows on hedged transactions. When derivative instruments are designated and qualify as effective cash flow hedges, the Company recognizes effective changes in the fair value of the hedging instrument within accumulated other comprehensive income (loss) until the hedged exposure is realized. Consequently, the Company's results of operations are not subject to fluctuation as a result of changes in the fair value of the derivative instruments. If hedges are not highly effective or if the Company does not believe that the underlying hedged forecasted transactions will occur, the Company may not be able to account for its derivative

instruments as cash flow hedges. If this were to occur, future changes in the fair values of the Company's derivative instruments would be recognized in earnings. Additionally, related amounts previously recorded in other comprehensive income would be reclassified to income immediately. As of December 29, 2019, the Company had a net gain of $2.0 million accumulated in other comprehensive income, net of tax, related to foreign exchange cash flow hedges which it expects to reclassify from other comprehensive income into earnings over the next 12 months. Additionally, as of December 29, 2019, the Company had a net loss of $2.1 million accumulated in other comprehensive income, net of tax, related to interest rate contracts which it expects to reclassify from other comprehensive income into earnings over the next 5.2 years.

Fair Value Hedges

The Company has interest rate contracts whereby the Company receives fixed rates and pays variable rates based on certain benchmark interest rates, resulting in a net increase or decrease to interest expense, a component of other expense, net in our Condensed Consolidated Statement of Operations. These interest rate contracts are designated as fair value hedges and hedge against changes in the fair value of our debt portfolio. The Company concluded that these interest rate contracts meet the criteria necessary to qualify for the short-cut method of hedge accounting, and as such an assumption is made that the change in the fair value of the hedged debt, due to changes in the benchmark rate, exactly offsets the change in the fair value of the interest rate swap. Therefore, the derivative is considered to be effective at achieving offsetting changes in the fair value of the hedged liability, and no ineffectiveness is recognized. During the quarter ended September 29, 2019, the Company terminated and consequently discontinued the hedging relationship of selected interest rate contracts; refer to Note 12 - Long-Term Debt and Other Borrowings for additional information regarding the accumulated fair value adjustment and the related amortization.

Balance Sheet Hedges

The Company also enters into foreign currency forward contracts to hedge fluctuations associated with foreign currency denominated monetary assets and liabilities, primarily cash, third-party accounts receivable, accounts payable, and intercompany receivables and payables. These forward contracts are not designated for hedge accounting treatment. Therefore, the change in fair value of these derivatives is recorded as a component of other income (expense) and offsets the change in fair value of the foreign currency denominated assets and liabilities, which are also recorded in other income (expense).

As of December 29, 2019, the Company had the following outstanding foreign currency contracts that were entered into under its cash flow and balance sheet hedge programs:

	Notional Value			
	Derivatives Designated as Hedging Instruments:		Derivatives Not Designated as Hedging Instruments:	
	(in thousands)			
Foreign currency forward contracts				
	Buy Contracts	**Sell Contracts**	**Buy Contracts**	**Sell Contracts**
Japanese yen	$ —	$ 100,830	$ 61,301	$ —
Euro	61,007	—	42,371	—
Korean won	15,401	—	—	4,294
British pound sterling	—	—	48,439	—
Taiwan dollar	—	—	33,328	—
Chinese renminbi	—	—	31,683	—
Swiss franc	—	—	22,493	—
Singapore dollar	—	—	21,409	—
Indian rupee	—	—	7,855	—
	$ 76,408	$ 100,830	$ 268,879	$ 4,294

The fair value of derivative instruments in the Company's Condensed Consolidated Balance Sheet as of December 29, 2019, and June 30, 2019 were as follows:

	December 29, 2019				June 30, 2019			
	Fair Value of Derivative Instruments (Level 2)				Fair Value of Derivative Instruments (Level 2)			
	Derivative Assets		Derivative Liabilities		Derivative Assets		Derivative Liabilities	
	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
				(in thousands)				
Derivatives designated as hedging instruments:								
Foreign exchange contracts	Prepaid expense and other assets	$ 2,437	Accrued expenses and other current liabilities	$ 16	Prepaid expense and other assets	$ 119	Accrued expenses and other current liabilities	$ 2,756
Interest rate contracts, short-term		—	Accrued expenses and other current liabilities	2,746		—	Accrued expenses and other current liabilities	5,149
Interest rate contracts, long-term	Other assets	3,605		—	Other assets	1,537		—
Derivatives not designated as hedging instruments:								
Foreign exchange contracts	Prepaid expense and other assets	21	Accrued expenses and other current liabilities	200	Prepaid expense and other assets	1,249	Accrued expenses and other current liabilities	748
Total Derivatives		$ 6,063		$ 2,962		$ 2,905		$ 8,653

Under the master netting agreements with the respective counterparties to the Company's derivative contracts, subject to applicable requirements, the Company is allowed to net settle transactions of the same currency with a single net amount payable by one party to the other. However, the Company has elected to present the derivative assets and derivative liabilities on a gross basis on its balance sheet. As of December 29, 2019, the potential effect of rights of offset associated with the above foreign exchange and interest rate contracts would be an offset to assets and liabilities by $2.3 million, resulting in a net derivative asset of $3.8 million and net derivative liability of $0.7 million. As of June 30, 2019, the potential effect of rights of offset associated with the above foreign exchange and interest rate contracts would be an offset to both assets and liabilities by $2.4 million, resulting in a net derivative asset of $0.5 million and a net derivative liability of $6.2 million. The Company is not required to pledge, nor is the Company entitled to receive, cash collateral for these derivative transactions.

The effect of derivative instruments designated as cash flow hedges on the Company's Condensed Consolidated Statements of Operations, including accumulated other comprehensive income ("AOCI") was as follows:

		Three Months Ended		Six Months Ended	
		December 29, 2019		December 29, 2019	
	Location of Gain or (Loss) Recognized in or Reclassified into Income	Gain Recognized in AOCI	Loss Reclassified from AOCI into Income	Gain (Loss) Recognized in AOCI	Loss Reclassified from AOCI into Income
Derivatives in Cash Flow Hedging Relationships			(in thousands)		
Foreign Exchange Contracts	Revenue	$ 2,264	$ (172)	$ 3,198	$ (506)
Foreign Exchange Contracts	Cost of goods sold	196	(1,090)	(1,067)	(1,900)
Foreign Exchange Contracts	Selling, general, and administrative	130	(417)	(465)	(893)
Interest Rate Contracts	Other expense, net	2,394	(35)	2,394	(70)
		$ 4,984	$ (1,714)	$ 4,060	$ (3,369)

		Three Months Ended		Six Months Ended	
		December 23, 2018		December 23, 2018	
	Location of Gain or (Loss) Recognized in or Reclassified into Income	Gain (Loss) Recognized in AOCI	Gain (Loss) Reclassified from AOCI into Income	Gain (Loss) Recognized in AOCI	Gain (Loss) Reclassified from AOCI into Income
Derivatives in Cash Flow Hedging Relationships		(in thousands)			
Foreign Exchange Contracts	Revenue	$ 8,229	$ 7,813	$ 16,670	$ 8,487
Foreign Exchange Contracts	Cost of goods sold	(1,965)	(851)	(2,089)	(2,408)
Foreign Exchange Contracts	Selling, general, and administrative	(674)	(651)	(878)	(1,178)
Interest Rate Contracts	Other expense, net	—	(33)	—	(66)
		$ 5,590	$ 6,278	$ 13,703	$ 4,835

The effect of derivative instruments not designated as cash flow hedges on the Company's Condensed Consolidated Statements of Operations was as follows:

		Three Months Ended		Six Months Ended	
		December 29, 2019	December 23, 2018	December 29, 2019	December 23, 2018
Derivatives Not Designated as Hedging Instruments:	**Location of Gain (Loss) Recognized in Income**	**Gain Recognized in Income**	**Gain Recognized in Income**	**Loss Recognized in Income**	**Gain Recognized in Income**
		(in thousands)			
Foreign Exchange Contracts	Other income	$ 3,571	$ 301	$ (1,930)	$ 10,889

The following table presents the effect of the fair value cash flow hedge accounting on the Statement of Financial Performance as well as presents the location and amount of gain/(loss) recognized in Income on fair value and cash flow hedging relationships:

	Three Months Ended December 29, 2019				Six Months Ended December 29, 2019			
	Revenue	Cost of Goods Sold	Selling, General and Administrative	Other Income (Expense)	Revenue	Cost of Goods Sold	Selling, General and Administrative	Other Income (Expense)
	(in thousands)							
Total amounts of income and expense line items presented in the statement of financial performance in which the effects of fair value or cash flow hedges are recorded:								
	$ 2,583,501	$1,403,857	$ 174,272	$ (13,924)	$ 4,749,247	$ 2,587,893	$ 331,700	$ (26,652)
The effects of fair value and cash flow hedging:								
Gain or (loss) on fair value hedging relationships in Subtopic 815-20:								
Interest contracts:								
Hedged items	$ —	$ —	$ —	$ 2,342	$ —	$ —	$ —	$ (5,092)
Derivatives designated as hedging instruments	$ —	$ —	$ —	$ (2,342)	$ —	$ —	$ —	$ 5,092
Gain or (loss) on cash flow hedging relationships in Subtopic 815-20:								
Foreign exchange contracts:								
Amount of loss reclassified from accumulated other comprehensive income into income	$ (172)	$ (1,090)	$ (417)	$ —	$ (506)	$ (1,900)	$ (893)	$ —
Interest rate contracts:								
Amount of loss reclassified from accumulated other comprehensive income into income	$ —	$ —	$ —	$ (35)	$ —	$ —	$ —	$ (70)

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents, investments, restricted cash and investments, trade accounts receivable, and derivative financial instruments used in hedging activities. Cash is placed on deposit at large global financial institutions. Such deposits may be in excess of insured limits. Management believes that the financial institutions that hold the Company's cash are creditworthy and, accordingly, minimal credit risk exists with respect to these balances.

The Company's overall portfolio of available-for-sale securities must maintain an average minimum rating of "AA-" or "Aa3" as rated by Standard and Poor's, Fitch Ratings, or Moody's Investor Services. To ensure diversification and minimize concentration, the Company's policy limits the amount of credit exposure with any one financial institution or commercial issuer.

The Company is exposed to credit losses in the event of nonperformance by counterparties on foreign currency and interest rate hedge contracts that are used to mitigate the effect of exchange rate and interest rate fluctuations, and on contracts related to structured share repurchase arrangements. These counterparties are large global financial institutions and, to date, no such counterparty has failed to meet its financial obligations to the Company.

Credit risk evaluations, including trade references, bank references, and Dun & Bradstreet ratings, are performed on all new customers and the Company monitors its customers' financial condition and payment performance. In general, the Company does not require collateral on sales.

NOTE 9 — INVENTORIES

Inventories are stated at the lower of cost (first-in, first-out method) or net realizable value. System shipments to customers in Japan, for which title does not transfer until customer acceptance, are classified as finished goods inventory and carried at cost until title transfers. Inventories consist of the following:

	December 29, 2019	June 30, 2019
	(in thousands)	
Raw materials	$ 980,751	$ 994,738
Work-in-process	200,626	174,219
Finished goods	347,243	371,183
	$ 1,528,620	$ 1,540,140

NOTE 10 — GOODWILL AND INTANGIBLE ASSETS

Goodwill

The balance of goodwill is approximately $1.5 billion as of December 29, 2019 and June 30, 2019, respectively. As of December 29, 2019, $61.1 million of the goodwill balance is tax deductible and the remaining balance is not tax deductible due to purchase accounting and applicable foreign law.

Intangible Assets

The following table provides the Company's intangible assets:

	December 29, 2019			June 30, 2019		
	Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net
	(in thousands)					
Customer relationships	$ 630,206	$ (508,199)	$ 122,007	$ 630,165	$ (483,204)	$ 146,961
Existing technology	669,488	(651,379)	18,109	669,399	(647,837)	21,562
Patents and other intangible assets	135,048	(82,048)	53,000	126,235	(77,808)	48,427
Total intangible assets	$ 1,434,742	$ (1,241,626)	$ 193,116	$ 1,425,799	$ (1,208,849)	$ 216,950

The Company recognized $16.5 million and $36.3 million in intangible asset amortization expense during the three months ended December 29, 2019 and December 23, 2018, respectively. The Company recognized $32.7 million and $72.7 million in intangible asset amortization expense during the six months ended December 29, 2019 and December 23, 2018, respectively.

The estimated future amortization expense of intangible assets as of December 29, 2019, is reflected in the table below. The table excludes $13.5 million of capitalized costs for intangible assets that have not been placed into service.

Fiscal Year	Amount
	(in thousands)
2020 (remaining 6 months)	$ 32,742
2021	63,431
2022	59,093
2023	14,025
2024	7,324
Thereafter	2,962
	$ 179,577

NOTE 11 — ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

Accrued expenses and other current liabilities consist of the following:

	December 29, 2019	June 30, 2019
	(in thousands)	
Accrued compensation	$ 390,033	$ 336,090
Warranty reserves	118,193	127,932
Income and other taxes payable	134,615	49,926
Dividend payable	163,510	158,868
Other	307,662	273,825
	$ 1,114,013	$ 946,641

NOTE 12 — LONG-TERM DEBT AND OTHER BORROWINGS

As of December 29, 2019, and June 30, 2019, the Company's outstanding debt consisted of the following:

	December 29, 2019		June 30, 2019	
	Amount (in thousands)	Effective Interest Rate	Amount (in thousands)	Effective Interest Rate
Fixed-rate 2.75% Senior Notes Due March 15, 2020 ("2020 Notes")	$ 500,000	2.88%	$ 500,000	2.88%
Fixed-rate 2.80% Senior Notes Due June 15, 2021 ("2021 Notes")	800,000	2.95%	800,000	2.95%
Fixed-rate 3.80% Senior Notes Due March 15, 2025 ("2025 Notes")	500,000	3.87%	500,000	3.87%
Fixed-rate 3.75% Senior Notes Due March 15, 2026 ("2026 Notes")	750,000	3.86%	750,000	3.86%
Fixed-rate 4.00% Senior Notes Due March 15, 2029 ("2029 Notes")	1,000,000	4.09%	1,000,000	4.09%
Fixed-rate 2.625% Convertible Notes Due May 15, 2041 ("2041 Notes")	167,091 [1]	4.28%	212,349 [1]	4.28%
Fixed-rate 4.875% Senior Notes Due March 15, 2049 ("2049 Notes")	750,000	4.93%	750,000	4.93%
Total debt outstanding, at par	4,467,091		4,512,349	
Unamortized discount	(60,332)		(73,191)	
Fair value adjustment - interest rate contracts	1,300 [2]		(3,612)	
Unamortized bond issuance costs	(5,096)		(5,535)	
Total debt outstanding, at carrying value	$ 4,402,963		$ 4,430,011	
Reported as:				
Current portion of long-term debt, and commercial paper	$ 628,614		$ 662,308	
Long-term debt	3,774,349		3,767,703	
Total debt outstanding, at carrying value	$ 4,402,963		$ 4,430,011	

[1] As of the report date, these notes were convertible at the option of the bondholder. This is a result of the following condition being met: the market value of the Company's Common Stock was greater than 130% of the convertible notes conversion price for 20 or more of the 30 consecutive trading days preceding the quarter-end. As a result, the 2041 Notes were classified in current liabilities and a portion of the equity component, associated with the convertible notes representing the unamortized discount, was classified in temporary equity on the Company's Consolidated Balance Sheets. Upon closure of the conversion period, the notes not converted will be reclassified back into noncurrent liabilities and the temporary equity will be reclassified into permanent equity.

[2] This amount includes a cumulative fair market gain of $2.8 million for discontinued hedging relationships, net of an immaterial amount of amortization for the three and six months ended December 29, 2019.

Convertible Senior Notes

In June 2012, with the acquisition of Novellus Systems, Inc., the Company assumed $700 million in aggregate principal amount of 2.625% Convertible Senior Notes due May 15, 2041 (the "2041 Notes"). The Company pays cash interest at an annual rate of 2.625%, on a semi-annual basis on May 15 and November 15 of each year. The 2041 Notes also have a contingent interest payment provision that may require the Company to pay additional interest, up to 0.60% per year, based on certain thresholds, beginning with the semi-annual interest payment on May 15, 2021, and upon the occurrence of certain events, as outlined in the indenture governing the 2041 Notes.

The Company separately accounts for the liability and equity components of the 2041 Notes. The initial debt components of the 2041 Notes were valued based on the present value of the future cash flows using the Company's borrowing rate at the date of the issuance or assumption for similar debt instruments without the conversion feature, which equals the effective interest rate on the liability component disclosed in the table below, respectively. The equity component was initially valued equal to the principal value of the notes, less the present value of the future cash flows using the Company's borrowing rate at the date of the issuance or assumption for similar debt instruments without a conversion feature, which equated to the initial debt discount.

The 2041 Notes may be redeemed on or after May 21, 2021 at a price equal to outstanding principal plus accrued and unpaid interest if the last reported sales price of common shares has been equal to or more than 150% of the then applicable conversion price for at least 20 trading days during the 30 consecutive trading days prior to the redemption notice date.

Under certain circumstances, the 2041 Notes may be converted into shares of the Company's Common Stock. The number of shares each debenture is convertible into is based on conversion rates, disclosed in the table below. The principal value of the 2041 Note conversions in the three and six months ended December 29, 2019, was approximately $17.2 million and $45.3 million, respectively. During the quarter ended December 29, 2019 and in the subsequent period through February 3, 2020, the Company received notice of conversion for an additional $116.6 million principal value of 2041 Notes, which will settle in the quarter ending March 29, 2020.

Selected additional information regarding the 2041 Notes outstanding as of December 29, 2019, and June 30, 2019, is as follows:

	December 29, 2019	June 30, 2019
	2041 Notes	2041 Notes
	(in thousands, except years, percentages, conversion rate, and conversion price)	
Carrying amount of permanent equity component, net of tax	$ 161,271	$ 160,604
Carrying amount of temporary equity component, net of tax	$ 38,304	$ 49,439
Remaining amortization period (years)	21.4	21.9
Fair Value of Notes (Level 2)	$ 1,532,188	
Conversion rate (shares of common stock per $1,000 principal amount of notes)	31.2089	
Conversion price (per share of common stock)	$ 32.04	
If-converted value in excess of par value	$ 1,364,475	
Estimated share dilution using average quarterly stock price $264.15 per share	4,582	

Senior Notes

On March 4, 2019, the company completed a public offering of $750 million aggregate principal amount of the Company's Senior Notes due March 15, 2026 (the "2026 Notes"), $1.0 billion aggregate principal amount of the Company's Senior Notes due March 15, 2029 (the "2029 Notes"), and $750 million aggregate principal amount of the Company's Senior Notes due March 15, 2049 (the "2049 Notes"). The Company pays interest at an annual rate of 3.75%, 4.00%, and 4.875%, on the 2026, 2029, and 2049 Notes, respectively, on a semi-annual basis on March 15 and September 15 of each year.

On March 12, 2015, the Company completed a public offering of $500 million aggregate principal amount of the Company's Senior Notes due March 15, 2020 (the "2020 Notes") and $500 million aggregate principal amount of the Company's Senior Notes due March 15, 2025 (the "2025 Notes"). The Company pays interest at an annual rate of 2.75% and 3.80% on the 2020 Notes and 2025 Notes, respectively, on a semi-annual basis on March 15 and September 15 of each year. During the year ended June 26, 2016, the Company entered into a series of interest rate contracts hedging the fair value of a portion of the 2025 Notes par value, whereby the Company receives a fixed rate and pays a variable rate based on a certain benchmark interest rate. Refer to Note 8 - Financial Instruments for additional information regarding these interest rate contracts.

On June 7, 2016, the Company completed a public offering of $800 million aggregate principal amount of Senior Notes due June 2021 (the "2021 Notes"). The Company pays interest at an annual rate of 2.80% on the 2021 Notes on a semi-annual basis on June 15 and December 15 of each year.

The Company may redeem the 2020, 2021, 2025, 2026, 2029 and 2049 Notes (collectively the "Senior Notes") at a redemption price equal to 100% of the principal amount of such series ("par"), plus a "make whole" premium as described in the indenture in respect to the Senior Notes and accrued and unpaid interest before February 15, 2020, for the 2020 Notes, before May 15, 2021 for the 2021 Notes, before December 15, 2024 for the 2025 Notes, before January 15, 2026 for the 2026 Notes, before

December 15, 2028 for the 2029 Notes, and before September 15, 2048 for the 2049 Notes. In addition, upon the occurrence of certain events, as described in the indenture, the Company will be required to make an offer to repurchase the Senior Notes at a price equal to 101% of the principal amount of the respective note, plus accrued and unpaid interest.

Selected additional information regarding the Senior Notes outstanding as of December 29, 2019, is as follows:

	Remaining Amortization period (years)	Fair Value of Notes (Level 2) (in thousands)
2020 Notes	0.2	$ 500,410
2021 Notes	1.5	$ 809,552
2025 Notes	5.2	$ 536,190
2026 Notes	6.2	$ 805,748
2029 Notes	9.2	$ 1,104,060
2049 Notes	29.2	$ 947,325

Commercial Paper Program

On November 13, 2017, the Company established a commercial paper program (“the CP Program”) under which the Company may issue unsecured commercial paper notes on a private placement basis up to a maximum aggregate principal amount of $1.25 billion. The net proceeds from the commercial paper program will be used for general corporate purposes, including repurchases of the Company’s Common Stock from time to time under the Company’s stock repurchase program. Amounts available under the CP Program may be re-borrowed. The CP Program is backstopped by the Company’s Revolving Credit Arrangement. As of December 29, 2019 and June 30, 2019, the Company had no outstanding borrowings under the CP Program.

Revolving Credit Facility

On March 12, 2014, the Company established an unsecured Credit Agreement. This agreement was amended on November 10, 2015 (the “Amended and Restated Credit Agreement”), October 13, 2017 (the “2nd Amendment”), and February 25, 2019 (the “3rd Amendment”). Under the Amended and Restated Credit Agreement (as amended by the 2nd and 3rd Amendment), the Company has a revolving credit facility of $1.25 billion with a syndicate of lenders with an expansion option that will allow the Company, subject to certain requirements, to request an increase in the facility of up to an additional $600.0 million, for a potential total commitment of $1.85 billion. The facility matures on October 13, 2022.

Interest on amounts borrowed under the credit facility is, at the Company’s option, based on (1) a base rate, defined as the greatest of (a) prime rate, (b) Federal Funds rate plus 0.5%, or (c) one-month LIBOR plus 1.0%, plus a spread of 0.0% to 0.5%, or (2) LIBOR multiplied by the statutory rate, plus a spread of 0.9% to 1.50%, in each case as the applicable spread is determined based on the rating of the Company’s non-credit enhanced, senior unsecured long-term debt. Principal and any accrued and unpaid interest is due and payable upon maturity. Additionally, the Company will pay the lenders a quarterly commitment fee that varies based on the Company’s credit rating. The Amended and Restated Credit Agreement contains affirmative covenants, negative covenants, financial covenants and events of default. As of December 29, 2019, the Company had no borrowings outstanding under the credit facility and was in compliance with all financial covenants.

Interest Cost

The following table presents the amount of interest cost recognized relating to both the contractual interest coupon and amortization of the debt discount, issuance costs, and effective portion of interest rate contracts with respect to the Senior Notes, convertible notes, the term loan agreement, commercial paper, and the revolving credit facility during the three and six months ended December 29, 2019 and December 23, 2018.

	Three Months Ended		Six Months Ended	
	December 29, 2019	December 23, 2018	December 29, 2019	December 23, 2018
	(in thousands)			
Contractual interest coupon	$ 40,665	$ 16,550	$ 81,787	$ 33,977
Amortization of interest discount	1,158	887	2,393	1,787
Amortization of issuance costs	416	329	830	658
Effect of interest rate contracts, net	155	777	830	1,530
Total interest cost recognized	$ 42,394	$ 18,543	$ 85,840	$ 37,952

NOTE 13 — LEASES

The Company leases certain office spaces, manufacturing and warehouse spaces, equipment, and vehicles. On July 1, 2019 the Company adopted ASC 842. Refer to Note 2 - Recent Accounting Pronouncements for additional information regarding the adoption. While the majority of the Company's lease arrangements are operating leases, the Company has certain leases that qualify as finance leases.

Lease accounting policy

Lease expense for operating leases is recognized on a straight-line basis over the lease term. The Company includes renewals and terminations in the calculation of the right-of-use asset and liability when the provision is reasonably certain to be exercised. The Company uses its incremental borrowing rate based on the information available at commencement date in determining the present value of future lease payments when the rate implicit in the lease is unknown.

The Company has elected the following practical expedients and accounting policy elections for accounting under ASC 842: (i) leases with an initial lease term of 12 months or less are not recorded on the balance sheet; and (ii) lease and non-lease components of a contract are accounted for as a single lease component.

Lease details

The components of lease expense were as follows:

	Three Months Ended	Six Months Ended
	December 29, 2019	December 29, 2019
	(in thousands)	
Financing lease cost:		
Amortization of right-of-use assets	$ 891	$ 1,819
Interest on lease liabilities	115	265
Total finance lease cost	$ 1,006	$ 2,084
Operating lease cost	$ 10,421	$ 21,185
Variable lease cost	22,071	41,018

Variable lease payments are expensed as incurred and are not included within the right of use asset and lease liability calculation. Variable lease payments primarily include costs associated with the Company's third party logistics arrangements that contain one or more embedded leases. Variable lease costs will fluctuate based on factory output and material receipt volumes. Short-term rental expense, for agreements less than one year in duration, were immaterial for the three and six months ended December 29, 2019.

Supplemental cash flow information related to leases was as follows:

	Six Months Ended December 29, 2019
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows paid for operating leases	$ 19,384
Financing cash flows paid for principal portion of finance leases	1,647
Right-of-use assets obtained in exchange for lease obligations:	
Operating leases	$ 11,968
Finance leases	1,357

Supplemental balance sheet information related to leases were as follows:

	December 29, 2019 (in thousands)
Operating leases	
Other assets	$ 101,605
Accrued expenses and other current liabilities	$ 36,480
Other long-term liabilities	70,442
Total operating lease liabilities	$ 106,922
Finance Leases	
Property and Equipment, net	$ 18,684
Current portion of long-term debt and lease liabilities	$ 3,677
Long-term debt and lease liabilities	11,719
Total finance lease liabilities	$ 15,396

	December 29, 2019	
	Weighted-Average Remaining Lease Term (in years)	Weighted-Average Discount Rate
Operating leases	4.4	2.57%
Finance leases	4.3	2.82%

As of December 29, 2019, the maturities of lease liabilities are as follows:

Fiscal Year	Operating Leases	Finance Leases
	(in thousands)	
2020 (remaining 6 months)	$ 19,237	$ 2,022
2021	34,265	3,548
2022	18,256	6,208
2023	11,659	1,200
2024	8,591	841
Thereafter	20,809	2,920
Total lease payments	$ 112,817	$ 16,739
Less imputed interest	(5,895)	(1,343)
Total	$ 106,922	$ 15,396

Selected Operating Leases and Related Guarantees

The Company leases the majority of its administrative, research and development and manufacturing facilities, regional sales/service offices, and certain equipment under non-cancelable operating leases. Certain of the Company's facility leases for buildings located at its Fremont, California headquarters, Tualatin, Oregon campus, and certain other facility leases provide the Company with options to extend the leases for additional periods or to purchase the facilities. Certain of the Company's facility leases provide for periodic rent increases based on the general rate of inflation.

The Company has operating leases regarding certain improved properties in Fremont and Livermore, California (the "California Operating Leases"). The Company is required to maintain cash collateral in an aggregate of approximately $250.0 million in separate interest-bearing accounts as security for the Company's obligations. These amounts are recorded with other restricted cash and investments in the Company's Condensed Consolidated Balance Sheet as of December 29, 2019.

During the term of the California Operating Leases and when the terms of the California Operating Leases expire, the property subject to the California Operating Leases may be re-marketed. The Company has guaranteed to the lessor that each property will have a certain minimum residual value. The aggregate guarantee made by the Company under the California Operating Leases is generally no more than $220.4 million; however, under certain default circumstances, the guarantee with regard to the California Operating Lease may be 100% of the lessor's aggregate investment in the applicable property, which in no case will exceed $250.0 million, in the aggregate.

NOTE 14 — COMMITMENTS AND CONTINGENCIES

Refer to Note 13 - Leases for details regarding guarantees surrounding selected operating leases.

Other Guarantees

The Company has issued certain indemnifications to its lessors for taxes and general liability under some of its agreements. The Company has entered into insurance contracts that are intended to limit its exposure to such indemnifications. As of December 29, 2019, the Company had not recorded any liability on its Condensed Consolidated Financial Statements in connection with these indemnifications, as it does not believe that it is probable that any material amounts will be paid under these guarantees.

Generally, the Company indemnifies, under pre-determined conditions and limitations, its customers for infringement of third-party intellectual property rights by the Company's products or services. The Company seeks to limit its liability for such indemnity to an amount not to exceed the sales price of the products or services subject to its indemnification obligations. The Company does not believe that it is probable that any material amounts will be paid under these guarantees.

The Company provides guarantees and standby letters of credit to certain parties as required for certain transactions initiated during the ordinary course of business. As of December 29, 2019, the maximum potential amount of future payments that the Company could be required to make under these arrangements and letters of credit was $58.4 million. The Company does not believe, based on historical experience and information currently available, that it is probable that any material amounts will be required to be paid.

In addition, the Company has entered into indemnification agreements with its officers and directors, consistent with its Bylaws and Certificate of Incorporation; and under local law, the Company may be required to provide indemnification to its employees for actions within the scope of their employment. Although the Company maintains insurance contracts that cover some of the potential liability associated with these indemnification agreements, there is no guarantee that all such liabilities will be covered. The Company does not believe, based on historical experience and information currently available, that it is probable that any material amounts will be required to be paid under such indemnification agreements or statutory obligations.

Warranties

The Company provides standard warranties on its systems. The liability amount is based on actual historical warranty spending activity by type of system, customer, and geographic region, modified for any known differences such as the impact of system reliability improvements.

Changes in the Company's product warranty reserves were as follows:

	Three Months Ended		Six Months Ended	
	December 29, 2019	December 23, 2018	December 29, 2019	December 23, 2018
	(in thousands)			
Balance at beginning of period	$ 114,470	$ 157,363	$ 127,932	$ 169,407
Warranties issued during the period	40,419	36,853	70,899	72,793
Settlements made during the period	(31,848)	(44,199)	(66,916)	(89,506)
Changes in liability for pre-existing warranties	(4,848)	(2,262)	(13,722)	(4,939)
Balance at end of period	$ 118,193	$ 147,755	$ 118,193	$ 147,755

Legal Proceedings

While the Company is not currently a party to any legal proceedings that it believes material, the Company is either a defendant or plaintiff in various actions that have arisen from time to time in the normal course of business, including intellectual property claims. The Company accrues for a liability when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Significant judgment is required in both the determination of probability and the determination as to whether a loss is reasonably estimable. Based on current information, the Company does not believe that a material loss from known matters is probable and therefore has not recorded an accrual of any material amount for litigation or other contingencies related to existing legal proceedings.

NOTE 15 — STOCK REPURCHASE PROGRAM

In November 2018, the Board of Directors authorized the Company to repurchase up to an additional $5.0 billion of Common Stock. These repurchases can be conducted on the open market or as private purchases and may include the use of derivative contracts with large financial institutions, in all cases subject to compliance with applicable law. This repurchase program has no termination date and may be suspended or discontinued at any time. Funding for this repurchase program may be through a combination of cash on hand, cash generation, and borrowings. As of December 29, 2019, the Company has purchased approximately $3.0 billion of shares under this authorization, comprised of $0.5 billion of open market purchases and execution of $2.5 billion of accelerated share repurchase arrangements.

Repurchases under the repurchase program were as follows during the periods indicated:

Period	Total Number of Shares Repurchased	Total Cost of Repurchase	Average Price Paid Per Share [1]	Amount Available Under Repurchase Program
	(in thousands, except per share data)			
Available balance as of June 30, 2019				$ 3,033,500
Quarter ended September 29, 2019	383	$ 75,196	$ 196.34	$ 2,958,304
Quarter ended December 29, 2019	3,224	$ 1,000,475	$ —	$ 1,957,829

(1) Average price paid per share excludes the effect of accelerated share repurchases. See additional disclosure below regarding the Company's accelerated share repurchase activity during the six months ended December 29, 2019.

In addition to the shares repurchased under the Board-authorized repurchase program shown above, during the three and six months ended December 29, 2019, the Company acquired 18 thousand shares at a total cost of $4.9 million and 32 thousand shares at a total cost of $7.8 million, respectively, which the Company withheld through net settlements to cover minimum tax

withholding obligations upon the vesting of restricted stock unit awards granted under the Company's equity compensation plans. The shares retained by the Company through these net share settlements are not a part of the Board-authorized repurchase program but instead are authorized under the Company's equity compensation plan.

Accelerated Share Repurchase Agreements

On November 22, 2019, the Company entered into two separate accelerated share repurchase agreements (collectively, the "November 2019 ASR") with two financial institutions to repurchase a total of $1.0 billion of Common Stock. The Company took an initial delivery of approximately 2.9 million shares, which represented 75% of the prepayment amount divided by the Company's closing stock price on November 22, 2019. The total number of shares received under the November 2019 ASR will be based upon the average daily volume weighted average price of the Company's Common Stock during the repurchase period, less an agreed upon discount. Final settlement of the November 2019 ASR will occur no later than May 27, 2020.

On June 4, 2019, the Company entered into four separate accelerated share repurchase agreements (collectively, the "June 2019 ASR") with two financial institutions to repurchase a total of $750 million of Common Stock. The Company took an initial delivery of approximately 3.1 million shares, which represented 75% of the prepayment amount divided by the Company's closing stock price on June 4, 2019. The total number of shares received under the June 2019 ASR was based upon the average daily volume weighted average price of the Company's Common Stock during the repurchase period, less an agreed upon discount. Final settlement of the agreements occurred during November 2019, resulting in the receipt of approximately 361 thousand additional shares, which yielded a weighted-average share price of approximately $215.60 for the transaction period.

NOTE 16 — ACCUMULATED OTHER COMPREHENSIVE LOSS

The components of accumulated other comprehensive income (loss), net of tax at December 29, 2019, as well as the activity for the six months ending December 29, 2019, were as follows:

	Accumulated Foreign Currency Translation Adjustment	Accumulated Unrealized Gain or Loss on Cash flow hedges	Accumulated Unrealized Holding Gain or Loss on Available-For-Sale Investments	Accumulated Unrealized Components of Defined Benefit Plans	Total
			(in thousands)		
Balance at June 30, 2019	$ (39,370)	$ (4,330)	$ 2,146	$ (22,476)	$ (64,030)
Other comprehensive (loss) income before reclassifications	(1,174)	3,388	(2,713)	578	79
(Gains) losses reclassified from accumulated other comprehensive income (loss) to net income	(13)	2,734 (1)	983 (2)	—	3,704
Net current-period other comprehensive (loss) income	(1,187)	6,122	(1,730)	578	3,783
Balance at December 29, 2019	$ (40,557)	$ 1,792	$ 416	$ (21,898)	$ (60,247)

(1) Amount of after tax loss reclassified from AOCI into net income located in revenue: $0.4 million loss; cost of goods sold: $1.6 million loss; and selling, general, and administrative expenses: $0.7 million loss.
(2) Amount of after tax loss reclassified from accumulated other comprehensive income into net income located in other expense, net.

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

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

With the exception of historical facts, the statements contained in this discussion are forward-looking statements, which are subject to the safe harbor provisions created by the Private Securities Litigation Reform Act of 1995. Certain, but not all, of the forward-looking statements in this report are specifically identified as forward-looking, by use of phrases and words such as "believe," "estimated," "anticipate," "expect," "probable," "intend," "plan," "aim," "may," "should," "could," "would," "will," "continue," and other future-oriented terms. The identification of certain statements as "forward-looking" does not mean that other statements not specifically identified are not forward-looking. Forward-looking statements include but are not limited to statements that relate to: trends and opportunities in the global economic environment and the semiconductor industry; the anticipated levels of, and rates of change in, margins, market share, served addressable market, capital expenditures, research and development expenditures, international sales, revenue (actual and/or deferred), operating expenses and earnings generally; management's plans and objectives for our current and future operations and business focus; volatility in our quarterly results; customer and end user requirements and our ability to satisfy those requirements; customer capital spending and their demand for our products and services, and the reliability of indicators of change in customer spending and demand; the effect of variability in our customers' business plans or demand for our equipment and services; changes in demand for our products and in our market share resulting from, among other things, any changes in our customers' proportion of capital expenditure (with respect to certain technology inflections); hedging transactions; debt or financing arrangements; our competition, and our ability to defend our market share, and to gain new market share; our ability to obtain and qualify alternative sources of supply; changes in state, federal and international tax laws, our estimated annual tax rate and the factors that affect our tax rates; anticipated growth or decline in the industry and the total market for wafer fabrication equipment, our growth relative thereto and the resulting impact on us from such growth or decline; the success of joint development and collaboration relationships with customers, suppliers, or others; outsourced activities; the role of component suppliers in our business; our leadership and competency, and our ability to facilitate innovation; our ability to continue to, including the underlying factors that, create sustainable differentiation; the resources invested to comply with evolving standards and the impact of such efforts; legal and regulatory compliance; the estimates we make, and the accruals we record, in order to implement our critical accounting policies (including but not limited to the adequacy of prior tax payments, future tax benefits or liabilities, and the adequacy of our accruals relating to them); our investment portfolio; our access to capital markets; uses of, payments of, and impact of interest rate fluctuations on, our debt; our intention to pay quarterly dividends and the amounts thereof, if any; our ability and intention to repurchase our shares; credit risks; controls and procedures; recognition or amortization of expenses; our ability to manage and grow our cash position; our strategic relevance with our customers; our ability to scale our operations to respond to changes in our business; the value of our patents; the materiality of potential losses arising from legal proceedings; the probability of making payments under our guarantees; and the sufficiency of our financial resources or liquidity to support future business activities (including but not limited to operations, investments, debt service requirements, dividends, and capital expenditures). Such statements are based on current expectations and are subject to risks, uncertainties, and changes in condition, significance, value, and effect, including without limitation those discussed below under the heading "Risk Factors" within Part II Item 1A and elsewhere in this report and other documents we file from time to time with the Securities and Exchange Commission ("SEC"), such as our annual report on Form 10-K for the year ended June 30, 2019 (our "2019 Form 10-K"), our quarterly report on form 10-Q for the fiscal quarter ended September 29, 2019, and our current reports on Form 8-K. Such risks, uncertainties, and changes in condition, significance, value, and effect could cause our actual results to differ materially from those expressed in this report and in ways not readily foreseeable. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof and are based on information currently and reasonably known to us. We do not undertake any obligation to release the results of any revisions to these forward-looking statements, which may be made to reflect events or circumstances that occur after the date of this report or to reflect the occurrence or effect of anticipated or unanticipated events.

Documents To Review In Connection With Management's Discussion and Analysis Of Financial Condition and Results Of Operations

For a full understanding of our financial position and results of operations for the three and six months ended December 29, 2019, and the related Management's Discussion and Analysis of Financial Condition and Results of Operations below, you should also read the Condensed Consolidated Financial Statements and notes presented in this Form 10-Q and the financial statements and notes in our 2019 Form 10-K.

EXECUTIVE SUMMARY

Lam Research Corporation is a global supplier of innovative wafer fabrication equipment and services to the semiconductor industry. We have built a strong global presence with core competencies in areas like nanoscale applications enablement, chemistry, plasma and fluidics, advanced systems engineering and a broad range of operational disciplines. Our products and services are designed to help our customers build smaller, faster, and better performing devices that are used in a variety of electronic products, including mobile phones, personal computers, servers, wearables, automotive vehicles, and data storage devices.

Our customer base includes leading semiconductor memory, foundry, and integrated device manufacturers that make products such as non-volatile memory, DRAM, and logic devices. We aim to increase our strategic relevance with our customers by contributing more to their continued success. Our core technical competency is integrating hardware, process, materials, software, and process control enabling results on the wafer.

Semiconductor manufacturing, our customers' business, involves the complete fabrication of multiple dies or integrated circuits on a wafer. This involves the repetition of a set of core processes and can require hundreds of individual steps. Fabricating these devices requires highly sophisticated process technologies to integrate an increasing array of new materials with precise control at the atomic scale. Along with meeting technical requirements, wafer processing equipment must deliver high productivity and be cost-effective.

Demand from the Cloud, Internet of Things, and other markets is driving the need for increasingly powerful and cost-efficient semiconductors. At the same time, there are growing technical challenges with traditional scaling. These trends are driving significant inflections in semiconductor manufacturing, such as the increasing importance of vertical 3D scaling strategies as well as multiple patterning to enable shrinks.

We believe we are in a strong position with our leadership and competency in deposition, etch, and clean to facilitate some of the most significant innovations in semiconductor device manufacturing. Several factors create opportunity for sustainable differentiation for us: (i) our focus on research and development, with several on-going programs relating to sustaining engineering, product and process development, and concept and feasibility; (ii) our ability to effectively leverage cycles of learning from our broad installed base; (iii) our collaborative focus with ecosystem partners; and (iv) our focus on delivering our multi-product solutions with a goal to enhance the value of Lam's solutions to our customers.

Despite recent semiconductor capital investment volatility, over the longer term, we believe that technology inflections in our industry, including 3D device scaling, multiple patterning, process flow, and advanced packaging chip integration will lead to an increase in our served addressable market for our products and services in deposition, etch, and clean. While there could be continued variability in the near-term, we believe that demand for our products and services will increase faster than overall spending on wafer fabrication equipment, as the proportion of customers' capital expenditures rises in these technology inflection areas, and as we gain market share.

The following table summarizes certain key financial information for the periods indicated below:

	Three Months Ended		
	December 29, 2019	September 29, 2019	December 23, 2018
	(in thousands, except per share data and percentages)		
Revenue	$ 2,583,501	$ 2,165,746	$ 2,522,673
Gross margin	$ 1,179,644	$ 981,710	$ 1,145,033
Gross margin as a percent of total revenue	45.7%	45.3%	45.4%
Total operating expenses	$ 493,133	$ 444,255	$ 454,654
Net income	$ 514,510	$ 465,789	$ 568,855
Diluted net income per share	$ 3.43	$ 3.09	$ 3.51

In the December 2019 quarter, revenue increased 19% compared to the September 2019 quarter primarily as a result of increased investments from our foundry customers. The increase in gross margin as a percentage of revenue in the December 2019 quarter compared to the September 2019 quarter was primarily driven by higher factory utilization. The increase in operating expenses in the December 2019 quarter compared to the September 2019 quarter was mainly driven by increases in spending for supplies, employee-related costs and outside services.

Our cash and cash equivalents, investments, and restricted cash and investments balances decreased to $4.9 billion at the end of the December 2019 quarter compared to $5.8 billion at the end of the September 2019 quarter. This decrease was primarily

driven by $1.0 billion of share repurchases, including net share settlement on employee stock-based compensation, $166.7 million of dividends paid to stockholders, and $62.1 million of capital expenditures, partially offset by $307.9 million of cash generated from operating activities. Employee headcount as of December 29, 2019, was approximately 10,700.

RESULTS OF OPERATIONS

Revenue

	Three Months Ended			Six Months Ended	
	December 29, 2019	September 29, 2019	December 23, 2018	December 29, 2019	December 23, 2018
Revenue (in millions)	$ 2,584	$ 2,166	$ 2,523	$ 4,749	$ 4,853
China	29%	27%	14%	28%	20%
Taiwan	26%	18%	17%	23%	15%
Korea	18%	21%	25%	19%	21%
United States	9%	8%	5%	9%	5%
Japan	8%	13%	27%	10%	28%
Southeast Asia	7%	10%	7%	8%	7%
Europe	3%	3%	5%	3%	4%

Revenue for the December 2019 quarter increased 19% from the September 2019 quarter, increased 2% compared to the December 2018 quarter, and decreased 2% in the six months ended December 2019 compared to the same period in 2018, reflecting changes in customer demand for semiconductor equipment.

Our deferred revenue balance at December 29, 2019 decreased to $411 million, as compared to $481 million as of September 29, 2019. Our deferred revenue balance does not include system shipments to customers in Japan, for which title does not transfer until customer acceptance. Shipments to customers in Japan are classified as inventory at cost until the time of acceptance. The estimated future revenue value from shipments to customers in Japan was approximately $91 million as of December 29, 2019, and $47 million as of September 29, 2019.

The percentages of system revenues to each of the markets we serve were as follows for the periods presented:

	Three Months Ended			Six Months Ended	
	December 29, 2019	September 29, 2019	December 23, 2018	December 29, 2019	December 23, 2018
Memory	52%	64%	79%	58%	78%
Foundry	36%	25%	13%	31%	15%
Logic/integrated device manufacturing	12%	11%	8%	11%	7%

Gross Margin

	Three Months Ended			Six Months Ended	
	December 29, 2019	September 29, 2019	December 23, 2018	December 29, 2019	December 23, 2018
	(in thousands, except percentages)				
Gross margin	$ 1,179,644	$ 981,710	$ 1,145,033	$ 2,161,354	$ 2,203,231
Percent of revenue	45.7%	45.3%	45.4%	45.5%	45.4%

Gross margin as a percentage of revenue was higher in the December 2019 quarter compared to the September 2019 quarter primarily due to higher factory utilization resulting from increased production volume. The increase in gross margin as a percentage of revenue in the December 2019 quarter compared to the December 2018 quarter is primarily due to lower amortization expense related to intangibles acquired through business combinations. In the six months ended December 29, 2019, gross margin as a percentage of revenue slightly increased compared to the same period in the prior year primarily due to lower amortization expense related to intangibles acquired through business combinations, partially offset by lower factory utilization.

Research and Development

	Three Months Ended			Six Months Ended	
	December 29, 2019	September 29, 2019	December 23, 2018	December 29, 2019	December 23, 2018
	(in thousands, except percentages)				
Research & development (“R&D”)	$ 318,861	$ 286,827	$ 285,556	$ 605,688	$ 577,228
Percent of revenue	12.3%	13.2%	11.3%	12.8%	11.9%

We continued to make significant R&D investments focused on leading-edge deposition, etch, clean and other semiconductor manufacturing processes. The increase in R&D expense in the December 2019 quarter compared to the September 2019 quarter was primarily driven by an increase of $16 million in employee-related expenses resulting from higher deferred compensation plan-related costs and higher employee variable compensation, and an increase of $12 million in spending for supplies.

The increase in R&D expense in the December 2019 quarter compared to the same period in the prior year was primarily driven by an increase of $31 million in employee-related expenses resulting from higher deferred compensation plan-related costs and higher employee variable compensation.

The increase in R&D expense in the six months ended December 29, 2019 compared to the same period in 2018 was primarily due to an increase of $28 million in employee-related expenses resulting from higher deferred compensation plan-related costs and higher employee variable compensation.

Selling, General, and Administrative

	Three Months Ended			Six Months Ended	
	December 29, 2019	September 29, 2019	December 23, 2018	December 29, 2019	December 23, 2018
	(in thousands, except percentages)				
Selling, general, and administrative (“SG&A”)	$ 174,272	$ 157,428	$ 169,098	$ 331,700	$ 343,873
Percent of revenue	6.7%	7.3%	6.7%	7.0%	7.1%

SG&A expense during the December 2019 quarter increased in comparison to the September 2019 quarter in significant part due to an increase of $9 million in employee-related expenses resulting from higher deferred compensation plan-related costs and higher employee variable compensation.

SG&A expense during the December 2019 quarter compared to the same period in the prior year slightly increased primarily due to an increase of $20 million in employee-related expenses resulting from higher deferred compensation plan-related costs and higher employee variable compensation, offset by a decrease of $6 million in spending for supplies.

The decrease in SG&A expense for the six months ended December 29, 2019 compared to the same period in 2018 was primarily due to decreases of $5 million in outside services, $8 million in spending for supplies, and $5 million in costs associated with a reduction in force that occurred in 2018, partially offset by a $13 million increase in employee-related expenses resulting from higher deferred compensation plan-related costs and higher employee variable compensation.

Other Expense, Net

Other expense, net consisted of the following:

	Three Months Ended			Six Months Ended	
	December 29, 2019	September 29, 2019	December 23, 2018	December 29, 2019	December 23, 2018
	(in thousands)				
Interest income	$ 25,454	$ 31,784	$ 17,809	$ 57,238	$ 36,742
Interest expense	(42,615)	(43,995)	(19,784)	(86,610)	(41,572)
Gains (losses) on deferred compensation plan-related assets, net	14,129	(436)	(22,374)	13,693	(17,160)
Foreign exchange (losses) gains, net	(2,287)	(529)	2,581	(2,816)	2,632
Other, net	(8,605)	448	(8,881)	(8,157)	(11,668)
	$ (13,924)	$ (12,728)	$ (30,649)	$ (26,652)	$ (31,026)

Interest income decreased in the December 2019 quarter compared to the September 2019 quarter as a result of lower cash balances and lower yield. Interest income increased compared to the December 2018 quarter as a result of higher cash balances. Interest income increased in the six months ended December 29, 2019 compared to the same period in 2018 as a result of higher cash balances and higher yield.

Interest expense decreased in the December 2019 quarter compared to the September 2019 quarter primarily due to conversions of the 2041 Convertible Note. Interest expense increased in the three and six months ended December 2019 compared to the same period in 2018 due to the March 2019 issuance of $2.5 billion of senior notes.

Significant changes in the market value of securities drove the higher gains on assets related to obligations under our deferred compensation plan in the December 2019 quarter compared to the September 2019 and December 2018 quarters.

Foreign exchange fluctuations are primarily due to currency movements against portions of our unhedged balance sheet exposures.

Other, net was higher in the December 2019 quarter compared to the September 2019 primarily due to an increase in charitable contributions during the December 2019 quarter. Other, net was lower in the six months ended December 2019 compared to the same period in 2018 primarily due to higher charitable contributions during the six months ended December 2018.

Income Tax Expense

Our provision for income taxes and effective tax rate for the periods indicated were as follows:

	Three Months Ended			Six Months Ended	
	December 29, 2019	September 29, 2019	December 23, 2018	December 29, 2019	December 23, 2018
	(in thousands, except percentages)				
Income tax expense	$ 158,077	$ 58,938	$ 90,875	$ 217,015	$ 148,889
Effective tax rate	23.5%	11.2%	13.8%	18.1%	11.9%

The increase in the effective tax rate for the three and six months ended December 2019 compared to the three months ended September 2019 and the three and six months ended December 2018 was primarily due to a cumulative income tax benefit reversal due to a court ruling, as outlined below.

As discussed in Note 6, “Income Tax Expense”, of our Condensed Consolidated Financial Statements of this Form 10-Q, in November 2019, the Ninth Circuit rejected the en banc appeal petitioned by Altera in July 2019. We have evaluated the impact of this decision and view the denial as an indication that Altera’s position of excluding stock-based compensation expense in an inter-company cost-sharing arrangement is unlikely to be sustained upon further litigation. As a result, we have reversed $74.5 million of net tax assets associated with stock-based compensation benefits related to previous years in the Condensed Consolidated Financial Statements in the three months ended December 29, 2019. In conclusion, we are no longer reflecting a net tax benefit within our financial statements related to excluding stock-based compensation from our inter-company cost-sharing arrangement. If, at a future date, Altera secured a favorable ruling from the Supreme Court, we would re-evaluate the decision to record an income tax benefit at that time. Please refer to Note 7, “Income Taxes,” to our Consolidated Financial Statements in Part II, Item 8 of our 2019 Form 10-K for additional information.

International revenues account for a significant portion of our total revenues, such that a material portion of our pre-tax income is earned and taxed outside the United States. International pre-tax income is taxable in the United States at a lower effective tax rate than the federal statutory tax rate. Please refer to Note 7, “Income Taxes,” to our Consolidated Financial Statements in Part II, Item 8 of our 2019 Form 10-K for additional information.

Uncertain Tax Positions

We re-evaluate uncertain tax positions on a quarterly basis. This evaluation is based on factors including, but not limited to, changes in facts or circumstances, changes in tax law, effectively settled issues under audit, and new audit activity. Any change in recognition or measurement would result in the recognition of a tax benefit or an additional charge to the tax provision.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

A critical accounting policy is defined as one that has both a material impact on our financial condition and results of operations and requires us to make difficult, complex and/or subjective judgments, often as a result of the need to make estimates about matters that are inherently uncertain. The preparation of financial statements in conformity with U.S. generally accepted accounting principles (“GAAP”) requires management to make certain judgments, estimates and assumptions that could affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. We base our estimates and assumptions on historical experience and on various other assumptions we believe to be applicable and evaluate them on an ongoing basis to ensure they remain reasonable under current conditions. Actual results could differ significantly from those estimates, which could have a material impact on our business, results of operations, and financial condition. Our critical accounting estimates include:

- the recognition and valuation of revenue from arrangements with multiple performance obligations which impacts revenue;
- the valuation of inventory, which impacts gross margin;
- the valuation of warranty reserves, which impacts gross margin;
- the recognition and measurement of current and deferred income taxes, including the measurement of uncertain tax positions, which impact our provision for income tax expenses; and
- the valuation and recoverability of long-lived assets, which impacts gross margin and operating expenses when we record asset impairments or accelerate their depreciation or amortization.

We believe that the following critical accounting policies reflect the more significant judgments and estimates used in the preparation of our condensed consolidated financial statements regarding the critical accounting estimates indicated above.

Revenue Recognition*:* We recognize revenue when promised goods or services are transferred to customers in an amount that reflects the consideration to which we expect to be entitled in exchange for those goods or services by following a five-step process, (1) identify the contract with a customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price, and (5) recognize revenue when or as we satisfy a performance obligation, as further described below.

Identify the contract with a customer. We generally consider documentation of terms with an approved purchase order as a customer contract, provided that collection is considered probable, which is assessed based on the creditworthiness of the customer as determined by credit checks, payment histories, and/or other circumstances.

Identify the performance obligations in the contract. Performance obligations include sales of systems, spare parts, and services. In addition, our customer contracts contain provisions for installation and training services which have been deemed immaterial in the context of the contract.

Determine the transaction price. The transaction price for our contracts with customers consists of both fixed and variable consideration provided it is probable that a significant reversal of revenue will not occur when the uncertainty related to variable consideration is resolved. Fixed consideration includes amounts to be contractually billed to the customer while variable consideration includes estimates for discounts and credits for future usage which are based on contractual terms outlined in volume purchase agreements and other factors known at the time. We generally invoice customers at shipment and for professional services either as provided or upon meeting certain milestones. Customer invoices are generally due within 30 to 90 days after issuance. Our contracts with customers typically do not include significant financing components as the period between the transfer of performance obligations and timing of payment are generally within one year.

Allocate the transaction price to the performance obligations in the contract. For contracts that contain multiple performance obligations, we allocate the transaction price to the performance obligations on a relative standalone selling price basis. Standalone selling prices are based on multiple factors including, but not limited to historical discounting trends for products and services and pricing practices in different geographies.

Recognize revenue when or as we satisfy a performance obligation. Revenue for systems and spares are recognized at a point in time, which is generally upon shipment or delivery. Revenue from services is recognized over time as services are completed or ratably over the contractual period of generally one year or less.

Inventory Valuation*:* Our policy is to assess the valuation of all inventories including manufacturing raw materials, work-in-process, finished goods, and spare parts in each reporting period. Obsolete inventory or inventory in excess of management's estimated usage requirement is written down to its estimated net realizable value if less than cost. Estimates of market value include but are not limited to management's forecasts related to our future manufacturing schedules, customer demand, technological and/or market obsolescence, general semiconductor market conditions, and possible alternative uses. If future customer demand or market conditions are less favorable than our projections, additional inventory write-downs may be required and would be reflected in cost of goods sold in the period in which we make the revision.

Warranty*:* We record a provision for estimated warranty expenses to cost of sales for each system when we recognize revenue. We periodically monitor the performance and cost of warranty activities, if actual costs incurred are different than our estimates, we may recognize adjustments to provisions in the period in which those differences arise or are identified. We do not maintain general or unspecified reserves; all warranty reserves are related to specific systems.

Income Taxes*:* Deferred income taxes reflect the net tax effect of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, as well as the tax effect of carryforwards. We record a valuation allowance to reduce our deferred tax assets to the amount that is more likely than not to be realized. Realization of our net deferred tax assets is dependent on future taxable income. We believe it is more likely than not that such assets will be realized; however, ultimate realization could be negatively impacted by market conditions and other variables not known or anticipated at this time. In the event that we determine that we will not be able to realize all or part of our net deferred tax assets, an adjustment will be charged to earnings in the period such determination is made. Likewise, if we later determine that it is more likely than not that the deferred tax assets will be realized, then the previously provided valuation allowance will be reversed.

We recognize the benefit from a tax position only if it is more likely than not that the position will be sustained upon audit based solely on the technical merits of the tax position. Our policy is to include interest and penalties related to unrecognized tax benefits as a component of income tax expense.

Long-lived Assets*:* We review goodwill at least annually for impairment. If certain events or indicators of impairment occur between annual impairment tests, we will perform an impairment test at that date. In testing for a potential impairment of goodwill, we: (1) allocate goodwill to the reporting units to which the acquired goodwill relates; (2) estimate the fair value of our reporting units; and (3) determine the carrying value (book value) of those reporting units. Prior to this allocation of the assets to the reporting units, we assess long-lived assets for impairment. Furthermore, if the estimated fair value of a reporting unit is less than the carrying value, we must estimate the fair value of all identifiable assets and liabilities of that reporting unit, in a manner similar to a purchase price allocation for an acquired business. This can require independent valuations of certain internally generated and unrecognized intangible assets such as in-process R&D and developed technology. Only after this process is completed can the amount of goodwill impairment, if any, be determined. In our goodwill impairment process we first assess qualitative factors to determine whether it is necessary to perform a quantitative analysis. We do not calculate the fair value of a reporting unit unless we determine, based on a qualitative assessment, that it is more likely than not that the reporting unit's fair value is less than its carrying amount.

The process of evaluating the potential impairment of goodwill is subjective and requires significant judgment at many points during the analysis. We determine the fair value of our reporting units by using an income approach. Under the income approach, we determine fair value based on estimated future cash flows of each reporting unit, discounted by an estimated weighted-average cost of capital, which reflects the overall level of inherent risk of a reporting unit and the rate of return an outside investor would expect to earn.

In estimating the fair value of a reporting unit, we make estimates and judgments about the future cash flows of our reporting units, including estimated growth rates and assumptions about the economic environment. Although our cash flow forecasts are based on assumptions that are consistent with the plans and estimates we are using to manage the underlying businesses, there is significant judgment involved in determining the cash flows attributable to a reporting unit. In addition, we make certain

judgments about allocating shared assets to the estimated balance sheets of our reporting units. Changes in judgment on these assumptions and estimates could result in a goodwill impairment charge.

As a result, several factors could result in an impairment of a material amount of our goodwill balance in future periods, including but not limited to: (1) weakening of the global economy, weakness in the semiconductor equipment industry, or our failure to reach internal forecasts, which could impact our ability to achieve our forecasted levels of cash flows and reduce the estimated discounted cash flow value of our reporting units; and (2) a decline in our Common Stock price and resulting market capitalization, to the extent we determine that the decline is sustained and indicates a reduction in the fair value of our reporting units below their carrying value. Further, the value assigned to intangible assets, other than goodwill, is based on estimates and judgments regarding expectations such as the success and lifecycle of products and technology acquired. If actual product acceptance differs significantly from the estimates, we may be required to record an impairment charge to write down the asset to its realizable value.

For other long-lived assets, we routinely consider whether indicators of impairment are present. If such indicators are present, we determine whether the sum of the estimated undiscounted cash flows attributable to the assets is less than their carrying value. If the sum is less, we recognize an impairment loss based on the excess of the carrying amount of the assets over their respective fair values. Fair value is determined by discounted future cash flows, appraisals or other methods. We recognize an impairment charge to the extent the present value of anticipated net cash flows attributable to the asset are less than the asset's carrying value. The fair value of the asset then becomes the asset's new carrying value, which we depreciate over the remaining estimated useful life of the asset. Assets to be disposed of are reported at the lower of the carrying amount or fair value.

Recent Accounting Pronouncements

For a description of recent accounting pronouncements, including the expected dates of adoption and estimated effects, if any, on our condensed consolidated financial statements, see Note 2 - Recent Accounting Pronouncements, of our Condensed Consolidated Financial Statements, included in Part 1 of this Form 10-Q.

LIQUIDITY AND CAPITAL RESOURCES

Total gross cash, cash equivalents, investments, and restricted cash and investments balances were $4.9 billion at December 29, 2019 compared to $5.7 billion as of June 30, 2019. This decrease was primarily driven by $1.1 billion of share repurchases, including net share settlement on employee stock-based compensation, along with $325.6 million of dividends paid to stockholders, partially offset by $772.0 million of cash generated from operating activities.

Cash Flow from Operating Activities

Net cash provided by operating activities of $772.0 million during the six months ended December 29, 2019, consisted of (in millions):

Net income	$	980.3
Non-cash charges:		
Depreciation and amortization		130.2
Equity-based compensation expense		88.6
Deferred income taxes		74.5
Amortization of note discounts and issuance costs		3.3
Changes in operating asset and liability accounts		(508.6)
Other		3.7
	$	772.0

Significant changes in operating asset and liability accounts, net of foreign exchange impact, included the following uses of cash: increases in accounts receivable of $575.2 million, prepaid expense and other assets of $81.4 million, and inventory of $15.9 million, combined with decreases in deferred profit of $14.9 million. The uses of cash are offset by sources of cash from the following: increases in accrued expense and other liabilities of $104.1 million and trade accounts payable of $74.7 million.

Cash Flow from Investing Activities

Net cash provided by investing activities during the six months ended December 29, 2019, was $16.4 million, primarily consisting of net sales and maturities of available-for-sale securities of $128.2 million, partially offset by capital expenditures of $101.3 million.

Cash Flow from Financing Activities

Net cash used for financing activities during the six months ended December 29, 2019, was $1.4 billion, primarily consisting of $1.1 billion in treasury stock repurchases, including net share settlement on employee stock-based compensation, $325.6 million in dividends paid, and $47.0 million of cash paid for debt repayment, particularly offset by $38.4 million in treasury stock reissuance.

Liquidity

Given that the semiconductor industry is highly competitive and has historically experienced rapid changes in demand, we believe that maintaining sufficient liquidity reserves is important to support sustaining levels of investment in R&D and capital infrastructure. Anticipated cash flows from operations based on our current business outlook, combined with our current levels of cash, cash equivalents, and short-term investments as of December 29, 2019, are expected to be sufficient to support our anticipated levels of operations, investments, debt service requirements, capital expenditures, capital redistributions, and dividends through at least the next 12 months. However, uncertainty in the global economy and the semiconductor industry, as well as disruptions in credit markets, have in the past, and could in the future, impact customer demand for our products, as well as our ability to manage normal commercial relationships with our customers, suppliers, and creditors.

Under certain circumstances, our 2041 Notes may be converted and settled in cash and shares of our Common Stock. During the six months ended December 29, 2019, approximately $45.3 million principal value of convertible 2041 Notes were converted and in the subsequent period through January 31, 2020, we received notice of conversion of an additional $116.6 million principal value of 2041 Notes, which will settle in the quarter ending March 29, 2020. We expect to have sufficient levels of cash, cash equivalents, and short term investments to fund the near-term settlement of these Convertible Notes.

In the longer term, liquidity will depend to a great extent on our future revenues and our ability to appropriately manage our costs based on demand for our products and services. While we have substantial cash balances, we may require additional funding and need or choose to raise the required funds through borrowings or public or private sales of debt or equity securities. We believe that, if necessary, we will be able to access the capital markets on terms and in amounts adequate to meet our objectives. However, given the possibility of changes in market conditions or other occurrences, there can be no assurance that such funding will be available in needed quantities or on terms favorable to us.

ITEM 3. Quantitative and Qualitative Disclosures about Market Risk

For financial market risks related to changes in interest rates, marketable equity security prices, and foreign currency exchange rates, refer to Part II, Item 7A, “Quantitative and Qualitative Disclosures About Market Risk”, in our 2019 Form 10-K. Other than as noted below, our exposure related to market risk has not changed materially since June 30, 2019. All of the potential changes noted below are based on sensitivity analysis performed on our financial position as of December 29, 2019. Actual results may differ materially.

Fixed Income Securities

Our investments in various interest earning securities carry a degree of market risk for changes in interest rates. At any time, a sharp rise in interest rates could have a material adverse impact on the fair value of our fixed income investment portfolio. Conversely, declines in interest rates could have a material adverse impact on interest income for our investment portfolio. We target to maintain a conservative investment policy, which focuses on the safety and preservation of our capital by limiting default risk, market risk, reinvestment risk, and concentration risk.

The following table presents the hypothetical fair values of fixed income securities that would result from selected potential decreases and increases in interest rates. Market changes reflect immediate hypothetical parallel shifts in the yield curve of plus or minus 50 basis points ("BPS"), 100 BPS, and 150 BPS. The hypothetical fair values as of December 29, 2019, were as follows:

	Valuation of Securities Given an Interest Rate Decrease of X Basis Points			Fair Value as of December 29, 2019	Valuation of Securities Given an Interest Rate Increase of X Basis Points		
	(150 BPS)	(100 BPS)	(50 BPS)	0.00%	50 BPS	100 BPS	150 BPS
				(in thousands)			
U.S. Treasury and agencies	$ 478,961	$ 478,130	$ 477,299	$ 476,468	$ 475,636	$ 474,805	$ 473,974
Government-sponsored enterprises	9,847	9,837	9,826	9,816	9,805	9,795	9,784
Foreign government bonds	30,689	30,627	30,565	30,503	30,442	30,380	30,318
Corporate notes and bonds	1,236,608	1,233,015	1,229,420	1,225,824	1,222,229	1,218,634	1,215,039
Mortgage backed securities - residential	4,265	4,237	4,209	4,180	4,152	4,123	4,095
Mortgage backed securities - commercial	27,161	27,024	26,887	26,750	26,612	26,475	26,338
Total	$ 1,787,531	$ 1,782,870	$ 1,778,206	$ 1,773,541	$ 1,768,876	$ 1,764,212	$ 1,759,548

We mitigate default risk by investing in high credit quality securities and by positioning our portfolio to respond appropriately to a significant reduction in a credit rating of any investment issuer or guarantor. The portfolio includes only marketable securities with active secondary or resale markets to achieve portfolio liquidity and maintain a prudent amount of diversification.

ITEM 4. Controls and Procedures

Design of Disclosure Controls and Procedures and Internal Control over Financial Reporting

We maintain disclosure controls and procedures and internal control over final reporting that are designed to comply with Rule 13a-15 of the Exchange Act. In designing and evaluating the controls and procedures associated with each, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and that the effectiveness of controls cannot be absolute because the cost to design and implement a control to identify errors or mitigate the risk of errors occurring should not outweigh the potential loss caused by the errors that would likely be detected by the control. Moreover, we believe that a control system cannot be guaranteed to be 100% effective all of the time. Accordingly, a control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met.

Disclosure Controls and Procedures

As required by Exchange Act Rule 13a-15(b), as of December 29, 2019, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rule 13a-15(e). Based upon that evaluation, our Chief Executive Officer, along with our Chief Financial Officer, concluded that our disclosure controls and procedures are effective at the reasonable assurance level.

We intend to review and evaluate the design and effectiveness of our disclosure controls and procedures on an ongoing basis and to correct any material deficiencies that we may discover. Our goal is to ensure that our senior management has timely access to material information that could affect our business.

Changes in Internal Control over Financial Reporting

There has been no change in our internal control over financial reporting during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Effectiveness of Controls

While we believe the present design of our disclosure controls and procedures and internal control over financial reporting is effective, future events affecting our business may cause us to modify our disclosure controls and procedures or internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. Legal Proceedings

While we are not currently a party to any legal proceedings that we believe are material, we are either a defendant or plaintiff in various actions that have arisen from time to time in the normal course of business, including intellectual property claims. We accrue for a liability when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Significant judgment is required in both the determination of probability and the determination as to whether a loss is reasonably estimable. Based on current information, we do not believe that a material loss from known matters is probable and therefore have not recorded an accrual of any material amount for litigation or other contingencies related to existing legal proceedings.

ITEM 1A. Risk Factors

In addition to the other information in this Form 10-Q, the following risk factors should be carefully considered in evaluating us and our business because such factors may significantly impact our business, operating results, and financial condition. As a result of these risk factors, as well as other risks discussed in our other SEC filings, our actual results could differ materially from those projected in any forward-looking statements. No priority or significance is intended by, nor should be attached, to the order in which the risk factors appear.

The Semiconductor Capital Equipment Industry Is Subject to Variability and Periods of Rapid Growth or Decline; We Therefore Face Risks Related to Our Strategic Resource Allocation Decisions

The semiconductor capital equipment industry has historically been characterized by rapid changes in demand. The industry environment has moved toward being more characterized by variability across segments and customers, accentuated by consolidation within the industry. Variability in our customers' business plans may lead to changes in demand for our equipment and services, which could negatively impact our results. The variability in our customers' investments during any particular period is dependent on several factors, including but not limited to electronics demand, economic conditions (both general and in the semiconductor and electronics industries), industry supply and demand, prices for semiconductors, and our customers' ability to develop and manufacture increasingly complex and costly semiconductor devices. The changes in demand may require our management to adjust spending and other resources allocated to operating activities.

During periods of rapid growth or decline in demand for our products and services, we face significant challenges in maintaining adequate financial and business controls, management processes, information systems, and procedures for training, assimilating, and managing our workforce, and in appropriately sizing our supply chain infrastructure and facilities, work force, and other components of our business on a timely basis. If we do not adequately meet these challenges during periods of increasing or declining demand, our gross margins and earnings may be negatively impacted.

We continuously reassess our strategic resource allocation choices in response to the changing business environment. If we do not adequately adapt to the changing business environment, we may lack the infrastructure and resources to scale up our business to meet customer expectations and compete successfully during a period of growth, or we may expand our capacity too rapidly and/or beyond what is appropriate for the actual demand environment, resulting in excess fixed costs.

Especially during transitional periods, resource allocation decisions can have a significant impact on our future performance, particularly if we have not accurately anticipated industry changes. Our success will depend, to a significant extent, on the ability of our executive officers and other members of our senior management to identify and respond to these challenges effectively.

Future Declines in the Semiconductor Industry, and the Overall World Economic Conditions on Which It Is Significantly Dependent, Could Have a Material Adverse Impact on Our Results of Operations and Financial Condition

Our business depends on the capital equipment expenditures of semiconductor manufacturers, which in turn depend on the current and anticipated market demand for integrated circuits. With the consolidation of customers within the industry, the semiconductor capital equipment market may experience rapid changes in demand driven both by changes in the market generally and the plans and requirements of particular customers. The economic, political, and business conditions occurring nationally, globally, or in any of our key sales regions, which are often unpredictable, have historically impacted customer demand for our products and normal commercial relationships with our customers, suppliers, and creditors. Additionally, in times of economic uncertainty, our customers' budgets for our products, or their ability to access credit to purchase them, could be adversely affected. This would limit their ability to purchase our products and services. As a result, changing economic, political or business conditions can cause material adverse changes to our results of operations and financial condition, including but not limited to:

- a decline in demand for our products or services;
- an increase in reserves on accounts receivable due to our customers' inability to pay us;
- an increase in reserves on inventory balances due to excess or obsolete inventory as a result of our inability to sell such inventory;
- valuation allowances on deferred tax assets;
- restructuring charges;
- asset impairments including the potential impairment of goodwill and other intangible assets;
- a decline in the value of our investments;
- exposure to claims from our suppliers for payment on inventory that is ordered in anticipation of customer purchases that do not come to fruition;
- a decline in the value of certain facilities we lease to less than our residual value guarantee with the lessor; and
- challenges maintaining reliable and uninterrupted sources of supply.

Fluctuating levels of investment by semiconductor manufacturers may materially affect our aggregate shipments, revenues, operating results, and earnings. Where appropriate, we will attempt to respond to these fluctuations with cost management programs aimed at aligning our expenditures with anticipated revenue streams, which sometimes result in restructuring charges. Even during periods of reduced revenues, we must continue to invest in R&D and maintain extensive ongoing worldwide customer service and support capabilities to remain competitive, which may temporarily harm our profitability and other financial results.

Our Revenues and Operating Results Are Variable

Our revenues and operating results may fluctuate significantly from quarter to quarter or year to year due to a number of factors, not all of which are in our control. We manage our expense levels based in part on our expectations of future revenues. Because our operating expenses are based in part on anticipated future revenues, and a certain amount of those expenses are relatively fixed, a change in the timing of recognition of revenue and/or the level of gross profit from a small number of transactions can unfavorably affect operating results in a particular quarter or year. Factors that may cause our financial results to fluctuate unpredictably include but are not limited to:

- economic conditions in the electronics and semiconductor industries in general and specifically the semiconductor equipment industry;
- the size and timing of orders from customers;
- consolidation of the customer base, which may result in the investment decisions of one customer or market having a significant effect on demand for our products or services;
- procurement shortages;
- the failure of our suppliers or outsource providers to perform their obligations in a manner consistent with our expectations;
- manufacturing difficulties;
- customer cancellations or delays in shipments, installations, and/or customer acceptances;
- the extent that customers continue to purchase and use our products and services in their business;
- our customers' reuse of existing and installed products, to the extent that such reuse decreases their need to purchase new products or services;
- changes in average selling prices, customer mix, and product mix;
- our ability to develop, introduce, and market new, enhanced, and competitive products in a timely manner;
- our competitors' introduction of new products;
- legal or technical challenges to our products and technologies;

- transportation, communication, demand, information technology, or supply disruptions based on factors outside our control, such as strikes, acts of God, wars, terrorist activities, widespread outbreak of illness, and natural or man-made disasters;
- legal, tax, accounting, or regulatory changes (including but not limited to change in import/export regulations and tariffs) or changes in the interpretation or enforcement of existing requirements;
- changes in our estimated effective tax rate;
- foreign currency exchange rate fluctuations; and
- the dilutive impact of our Convertible Notes (as defined below) on our earnings per share.

We May Incur Impairments to Goodwill or Long-lived Assets

We review our long-lived assets, including goodwill and intangible assets identified in business combinations and other intangible assets, for impairment annually or whenever events or changes in circumstances indicate that the carrying amount of these assets may not be recoverable. Negative industry or economic trends, including reduced market prices of our Common Stock, reduced estimates of future cash flows, disruptions to our business, slower growth rates, or lack of growth in our relevant business units, could lead to impairment charges against our long-lived assets, including goodwill and other intangible assets. If, in any period, our stock price decreases to the point where our fair value, as determined by our market capitalization, is less than the book value of our assets, this could also indicate a potential impairment, and we may be required to record an impairment charge in that period, which could adversely affect our result of operations.

Our valuation methodology for assessing impairment requires management to make judgments and assumptions based on historical experience and to rely heavily on projections of future operating performance. We operate in a highly competitive environment and projections of future operating results and cash flows may vary significantly from actual results. Additionally, if our analysis indicates potential impairment to goodwill in one or more of our business units, we may be required to record additional charges to earnings in our financial statements, which could negatively affect our results of operations.

Our Leverage and Debt Service Obligations and Potential Note Conversion or Related Hedging Activities May Adversely Affect Our Financial Condition, Results of Operations, and Earnings per Share

We have $4.5 billion in aggregate principal amount of senior unsecured notes and convertible notes outstanding. Additionally, we have funding available to us under our $1.25 billion commercial paper program and our $1.25 billion revolving credit facility, which serves as a backstop to our commercial paper program. Our revolving credit facility also includes an option to increase the amount up to an additional $600.0 million, for a potential total commitment of $1.85 billion. We may, in the future, decide to enter into additional debt arrangements.

In addition, we have entered, and in the future may enter, into derivative instrument arrangements to hedge against the variability of cash flows due to changes in the benchmark interest rate of fixed rate debt. We could be exposed to losses in the event of nonperformance by the counterparties to our derivative instruments.

Our indebtedness could have adverse consequences, including:

- risk associated with any inability to satisfy our obligations;
- a portion of our cash flows that may have to be dedicated to interest and principal payments and may not be available for operations, working capital, capital expenditures, expansion, acquisitions, or general corporate or other purposes; and
- impairing our ability to obtain additional financing in the future.

Our ability to meet our expenses and debt obligations will depend on our future performance, which will be affected by financial, business, economic, regulatory, and other factors. Furthermore, our operations may not generate sufficient cash flows, to enable us to meet our expenses and service our debt. As a result, we may need to enter into new financing arrangements to obtain the necessary funds. If we determine it is necessary to seek additional funding for any reason, we may not be able to obtain such funding or, if funding is available, obtain it on acceptable terms. If we fail to make a payment on our debt, we could be in default on such debt, and this default could cause us to be in default on our other outstanding indebtedness.

Conversion of our Convertible Notes may cause dilution to our stockholders and to our earnings per share. The number of shares of our Common Stock into which the Convertible Notes are convertible may be adjusted from time to time, including increases in such rates as a result of dividends that we pay to our stockholders. Upon conversion of any Convertible Notes, we will deliver cash in the amount of the principal amount of the Convertible Notes and, with respect to any excess conversion value greater than the principal amount of the Convertible Notes, shares of our Common Stock, which would result in dilution to our stockholders. Prior to the maturity of the Convertible Notes, if the price of our Common Stock exceeds the conversion price, U.S. generally accepted accounting principles require that we report an increase in diluted share count, which would

result in lower reported earnings per share. The price of our Common Stock could also be affected by sales of our Common Stock by investors who view the Convertible Notes as a more attractive means of equity participation in our company and also by hedging activity that may develop involving our Common Stock by holders of the Convertible Notes.

Our Credit Agreements Contain Covenant Restrictions That May Limit Our Ability to Operate Our Business

We may be unable to respond to changes in business and economic conditions, engage in transactions that might otherwise be beneficial to us, or obtain additional financing because our debt agreements contain, and any of our other future similar agreements may contain, covenant restrictions that limit our ability to, among other things:

- incur additional debt, assume obligations in connection with letters of credit, or issue guarantees;
- create liens;
- enter into transactions with our affiliates;
- sell certain assets; and
- merge or consolidate with any person.

Our ability to comply with these covenants is dependent on our future performance, which will be subject to many factors, some of which are beyond our control, including prevailing economic conditions. In addition, our failure to comply with these covenants could result in a default under the Senior Notes, the Convertible Notes, or our other debt, which could permit the holders to accelerate such debt. If any of our debt is accelerated, we may not have sufficient funds available to repay such debt, which could materially and negatively affect our financial condition and results of operation.

We Have a Limited Number of Key Customers

Sales to a limited number of large customers constitute a significant portion of our overall revenue, shipments, cash flows, collections, and profitability. As a result, the actions of even one customer may subject us to variability in those areas that is difficult to predict. In addition, large customers may be able to negotiate requirements that result in decreased pricing, increased costs, and/or lower margins for us; compliance with specific environmental, social, and corporate governance standards; and limitations on our ability to share technology with others. Similarly, significant portions of our credit risk may, at any given time, be concentrated among a limited number of customers so that the failure of even one of these key customers to pay its obligations to us could significantly impact our financial results.

We Depend on Creating New Products and Processes and Enhancing Existing Products and Processes for Our Success; Consequently, We Are Subject to Risks Associated with Rapid Technological Change

Rapid technological changes in semiconductor manufacturing processes subject us to increased pressure to develop technological advances that enable those processes. We believe that our future success depends in part upon our ability to develop and offer new products with improved capabilities and to continue to enhance our existing products. If new products or existing products have reliability, quality, design, or safety problems, our performance may be impacted by reduced orders, higher manufacturing costs, delays in acceptance of and payment for new products, and additional service and warranty expenses. We may be unable to develop and manufacture products successfully, or products that we introduce may fail in the marketplace. For more than 25 years, the primary driver of technology advancement in the semiconductor industry has been to shrink the lithography that prints the circuit design on semiconductor chips. That driver could be approaching its technological limit, leading semiconductor manufacturers to investigate more complex changes in multiple technologies in an effort to continue technology development. In addition, the emergence of “big data” and new tools such as machine learning and artificial intelligence that capitalize on the availability of large data sets is leading semiconductor manufacturers and equipment manufacturers to pursue new products and approaches that exploit those tools to advance technology development. In the face of uncertainty on which technology solutions will become successful, we will need to focus our efforts on developing the technology changes that are ultimately successful in supporting our customer requirements. Our failure to develop and offer the correct technology solutions in a timely manner with productive and cost-effective products could adversely affect our business in a material way. Our failure to commercialize new products in a timely manner could result in loss of market share, unanticipated costs, and inventory obsolescence, which would adversely affect our financial results.

In order to develop new products and processes and enhance existing products and processes, we expect to continue to make significant investments in R&D, to investigate the acquisition of new products and technologies, to invest in or acquire such business or technologies, and to pursue joint development relationships with customers, suppliers, or other members of the industry. Our investments and acquisitions may not be as successful as we may expect, particularly as we seek to invest or acquire product lines and technologies that are new to us. We may find that acquisitions are not available to us, for regulatory or other reasons, and that we must therefore limit ourselves to collaboration and joint venture development activities, which do not have the same benefits as acquisitions. Pursuing development through collaboration and/or joint development activities rather than through an acquisition poses substantial challenges for management, including those related to aligning business

objectives; sharing confidential information, intellectual property and data; sharing value with third parties; and realizing synergies that might have been available in an acquisition but are not available through a joint development project. We must manage product transitions and joint development relationships successfully, as the introduction of new products could adversely affect our sales of existing products and certain jointly developed technologies may be subject to restrictions on our ability to share that technology with other customers, which could limit our market for products incorporating those technologies. Future technologies, processes, or product developments may render our current product offerings obsolete, leaving us with non-competitive products, obsolete inventory, or both. Moreover, customers may adopt new technologies or processes to address the complex challenges associated with next-generation devices. This shift may result in a reduction in the size of our addressable markets or could increase the relative size of markets in which we either do not compete or have relatively low market share.

We Are Subject to Risks Relating to Product Concentration and Lack of Product Revenue Diversification

We derive a substantial percentage of our revenues from a limited number of products. Our products are priced up to approximately $15 million per system. As a result, the inability to recognize revenue on even a few systems can cause a significantly adverse impact on our revenues for a given quarter, and, in the longer term, the continued market acceptance of these products is critical to our future success. Our business, operating results, financial condition, and cash flows could therefore be adversely affected by:

- a decline in demand for even a limited number of our products,
- a failure to achieve continued market acceptance of our key products,
- export restrictions or other regulatory or legislative actions that could limit our ability to sell those products to key customers or customers within certain markets,
- an improved version of products being offered by a competitor in the markets in which we participate,
- increased pressure from competitors that offer broader product lines,
- increased pressure from regional competitors,
- technological changes that we are unable to address with our products, or
- a failure to release new or enhanced versions of our products on a timely basis.

In addition, the fact that we offer limited product lines creates the risk that our customers may view us as less important to their business than our competitors that offer additional products and/or product capabilities, including new products that take advantage of “big data” or other new technologies such as machine learning and artificial intelligence. This may impact our ability to maintain or expand our business with certain customers. Such product concentration may also subject us to additional risks associated with technology changes. Our business is affected by our customers’ use of our products in certain steps in their wafer fabrication processes. Should technologies change so that the manufacture of semiconductors requires fewer steps using our products, this could have a larger impact on our business than it would on the business of our less concentrated competitors.

Strategic Alliances and Customer Consolidation May Have Negative Effects on Our Business

Increasingly, semiconductor manufacturing companies are entering into strategic alliances or consolidating with one another to expedite the development of processes and other manufacturing technologies and/or achieve economies of scale. The outcomes of such an alliance can be the definition of a particular tool set for a certain function and/or the standardization of a series of process steps that use a specific set of manufacturing equipment, while the outcomes of consolidation can lead to an overall reduction in the market for semiconductor manufacturing equipment as customers’ operations achieve economies of scale and/or increased purchasing power based on their higher volumes. In certain instances, this could work to our disadvantage if a competitor’s tools or equipment become the standard equipment for such functions or processes. Additional outcomes of such consolidation may include our customers re-evaluating their future supplier relationships to consider our competitors’ products and/or gaining additional influence over the pricing of products and the control of intellectual property or data.

Similarly, our customers may partner with, or follow the lead of, educational or research institutions that establish processes for accomplishing various tasks or manufacturing steps. If those institutions utilize a competitor’s equipment when they establish those processes, it is likely that customers will tend to use the same equipment in setting up their own manufacturing lines. Even if they select our equipment, the institutions and the customers that follow their lead could impose conditions on acceptance of that equipment, such as adherence to standards and requirements or limitations on how we license our proprietary rights, that increase our costs or require us to take on greater risk. These actions could adversely impact our market share and financial results.

We Depend on a Limited Number of Key Suppliers and Outsource Providers, and We Run the Risk That They Might Not Perform as We Expect

Outsource providers and component suppliers have played and will continue to play a key role in our product development, manufacturing operations, field installation and support, and many of our transactional and administrative functions, such as information technology, facilities management, and certain elements of our finance organization. These providers and suppliers might suffer financial setbacks, be acquired by third parties, become subject to exclusivity arrangements that preclude further business with us, or be unable to meet our requirements or expectation due to their independent business decisions or *force majeure* events that could interrupt or impair their continued ability to perform as we expect.

Although we attempt to select reputable providers and suppliers and we attempt to secure their performance on terms documented in written contracts, it is possible that one or more of these providers or suppliers could fail to perform as we expect, or fail to secure or protect intellectual property rights, and such failure could have an adverse impact on our business. In some cases, the requirements of our business mandate that we obtain certain components and sub-assemblies included in our products from a single supplier or a limited group of suppliers. Where practical, we endeavor to establish alternative sources to mitigate the risk that the failure of any single provider or supplier will adversely affect our business, but this is not feasible in all circumstances. There is therefore a risk that a prolonged inability to obtain certain components or secure key services could impair our ability to manage operations, ship products, and generate revenues, which could adversely affect our operating results and damage our customer relationships.

We Face Risks Related to the Disruption of Our Primary Manufacturing Facilities

While we maintain business continuity plans, our manufacturing facilities are concentrated in a limited number of locations. These locations are subject to disruption for a variety of reasons, such as natural or man-made disasters, widespread outbreaks of illness, terrorist activities, disruptions of our information technology resources, utility interruptions, or other events beyond our control. Such disruptions may cause delays in shipping our products, which could result in the loss of business or customer trust, adversely affecting our business and operating results.

Once a Semiconductor Manufacturer Commits to Purchase a Competitor's Semiconductor Manufacturing Equipment, the Manufacturer Typically Continues to Purchase That Competitor's Equipment, Making It More Difficult for Us to Sell Our Equipment to That Customer

Semiconductor manufacturers must make a substantial investment to qualify and integrate wafer processing equipment into a semiconductor production line. We believe that once a semiconductor manufacturer selects a particular supplier's processing equipment, the manufacturer generally relies upon that equipment for that specific production line application for an extended period of time, especially for customers that are more focused on tool reuse. Accordingly, we expect it to be more difficult to sell our products to a given customer for a product line application if that customer initially selects a competitor's equipment for the same product line application.

We Face a Challenging and Complex Competitive Environment

We face significant competition from multiple competitors, and with increased consolidation efforts in our industry, as well as the emergence and strengthening of new, regional competitors, we may face increasing competitive pressures. Other companies continue to develop systems and/or acquire businesses and products that are competitive to ours and may introduce new products and product capabilities that may affect our ability to sell and support our existing products. We face a greater risk if our competitors enter into strategic relationships with leading semiconductor manufacturers covering products similar to those we sell or may develop, as this could adversely affect our ability to sell products to those manufacturers.

We believe that to remain competitive we must devote significant financial resources to offer products that meet our customers' needs, to maintain customer service and support centers worldwide, and to invest in product and process R&D. Technological changes and developing technologies, have required, and are expected to continue to require, new and costly investments. Certain of our competitors, including those that are created and financially backed by foreign governments, have substantially greater financial resources and more extensive engineering, manufacturing, marketing, and customer service and support resources than we do and therefore have the potential to offer customers a more comprehensive array of products and/or product capabilities and to therefore achieve additional relative success in the semiconductor equipment industry. These competitors may deeply discount or give away products similar to those that we sell, challenging or even exceeding our ability to make similar accommodations and threatening our ability to sell those products. We also face competition from our own customers, who in some instances have established affiliated entities that manufacture equipment similar to ours. In addition, we face competition from companies that exist in a more favorable legal or regulatory environment than we do, allowing the freedom of action in ways that we may be unable to match. In many cases speed to solution is necessary for customer satisfaction and our competitors may be better positioned to achieve these objectives. For these reasons, we may fail to continue to compete successfully worldwide.

In addition, our competitors may be able to develop products comparable or superior to those we offer or may adapt more quickly to new technologies or evolving customer requirements. In particular, while we continue to develop product enhancements that we believe will address future customer requirements, we may fail in a timely manner to complete the development or introduction of these additional product enhancements successfully, or these product enhancements may not achieve market acceptance or be competitive. Accordingly, competition may intensify, and we may be unable to continue to compete successfully in our markets, which could have a material adverse effect on our revenues, operating results, financial condition, and/or cash flows.

Our Future Success Depends Heavily on International Sales and the Management of Global Operations

Non-U.S. sales, as reflected in Part 1 Item 1. Business, accounted for approximately 91%, 92%, and 93% of total revenue in the six months ended December 29, 2019 and fiscal years 2019, and 2018, respectively. We expect that international sales will continue to account for a substantial majority of our total revenue in future years.

We are subject to various challenges related to international sales and the management of global operations including, but not limited to:

- domestic and international trade policies, practices, relations, disputes and issues;
- domestic and international tariffs, export controls and other barriers;
- developing customers and/or suppliers, who may have limited access to capital resources;
- global or national economic and political conditions;
- changes in currency controls;
- differences in the enforcement of intellectual property and contract rights in varying jurisdictions;
- our ability to respond to customer and foreign government demands for locally sourced systems, spare parts, and services and develop the necessary relationships with local suppliers;
- compliance with U.S. and international laws and regulations affecting foreign operations, including U.S. and international trade restrictions and sanctions, anti-bribery, anti-corruption, environmental, tax, and labor laws;
- fluctuations in interest and foreign currency exchange rates;
- the need for technical support resources in different locations; and
- our ability to secure and retain qualified people, and effectively manage people, in all necessary locations for the successful operation of our business.

There is inherent risk, based on the complex relationships among China, Japan, Korea, Taiwan, and the United States, that political, diplomatic and national security influences might lead to trade disputes, impacts and/or disruptions, in particular those affecting the semiconductor industry. This would adversely affect our business with China, Japan, Korea, and/or Taiwan and perhaps the entire Asia Pacific region or global economy. A significant trade dispute, impact and/or disruption in any area where we do business could have a materially adverse impact on our future revenue and profits. Tariffs, export controls, additional taxes, trade barriers or sanctions may increase our manufacturing costs, decrease margins, reduce the competitiveness of our products, or inhibit our ability to sell products or purchase necessary equipment and supplies, which could have a material adverse effect on our business, results of operations, or financial conditions. In addition, there are risks that foreign governments may, among other things, insist on the use of local suppliers; compel companies to partner with local companies to design and supply equipment on a local basis, requiring the transfer of intellectual property rights and/or local manufacturing; utilize their influence over their judicial systems to respond to intellectual property disputes or issues; and provide special incentives to government-backed local customers to buy from local competitors, even if their products are inferior to ours; all of which could adversely impact our revenues and margins. Certain international sales depend on our ability to obtain export licenses from the U.S. or foreign governments. Our failure or inability to obtain such licenses, or an expansion of the number or kinds of sales for which export licenses are required, could potentially limit our markets and impact our revenues. Many of the challenges noted above are applicable in China, which is a fast-developing market for the semiconductor equipment industry and therefore an area of anticipated growth for our business.

We are exposed to potentially adverse movements in foreign currency exchange rates. The majority of our sales and expenses are denominated in U.S. dollars. However, we are exposed to foreign currency exchange rate fluctuations primarily related to revenues denominated in Japanese yen and expenses denominated in euro and Korean won. Currently, we hedge certain anticipated foreign currency cash flows, primarily anticipated revenues denominated in Japanese yen and expenses dominated in euro and Korean won. In addition, we enter into foreign currency hedge contracts to minimize the short-term impact of the foreign currency exchange rate fluctuations on certain foreign currency denominated monetary assets and liabilities, primarily third-party accounts receivables, accounts payables, and intercompany receivables and payables. We believe these are our primary exposures to currency rate fluctuation. We expect to continue to enter into hedging transactions, for the purposes outlined, for the foreseeable future. However, these hedging transactions may not achieve their desired effect because differences between the actual timing of the underlying exposures and our forecasts of those exposures may leave us either over

or under hedged on any given transaction. Moreover, by hedging these foreign currency denominated revenues, expenses, monetary assets, and liabilities, we may miss favorable currency trends that would have been advantageous to us but for the hedges. Additionally, we are exposed to short-term foreign currency exchange rate fluctuations on non-U.S. dollar-denominated monetary assets and liabilities (other than those currency exposures previously discussed), and currently we do not enter into foreign currency hedge contracts against these exposures. Therefore, we are subject to potential unfavorable foreign currency exchange rate fluctuations to the extent that we transact business (including intercompany transactions) in these currencies.

The magnitude of our overseas business also affects where our cash is generated. Certain uses of cash, such as share repurchases, payment of dividends, or the repayment of our notes, can usually only be made with onshore cash balances. Since the majority of our cash is generated outside of the United States, this may impact certain business decisions and outcomes.

Our Ability to Attract, Retain, and Motivate Key Employees Is Critical to Our Success

Our ability to compete successfully depends in large part on our ability to attract, retain, and motivate key employees with the appropriate skills, experiences and competencies. This is an ongoing challenge due to intense competition for top talent, fluctuations in industry or business economic conditions, as well as increasing geographic expansion, and these factors in combination may result in cycles of hiring activity and workforce reductions. Our success in hiring depends on a variety of factors, including the attractiveness of our compensation and benefit programs, global economic or political and industry conditions, our organizational structure, global competition for talent and the availability of qualified employees, the availability of career development opportunities, the ability to obtain necessary authorizations for workers to provide services outside their home countries, and our ability to offer a challenging and rewarding work environment. We periodically evaluate our overall compensation and benefit programs and make adjustments, as appropriate, to maintain or enhance their competitiveness. If we are not able to successfully attract, retain, and motivate key employees, we may be unable to capitalize on market opportunities and our operating results may be materially and adversely affected.

Certain Critical Information Systems, That We Rely on for the Operation of Our Business and Products That We Sell, Are Susceptible to Cybersecurity and Other Threats or Incidents

We maintain and rely upon certain critical information systems for the effective operation of our business. These information systems include but are not limited to, telecommunications, the Internet, our corporate intranet, various computer hardware and software applications, (some of which may be integrated into the products that we sell or be required in order to provide the services that we offer), network communications, and email. These information systems may be owned and maintained by us, our outsourced providers, or third parties such as vendors, contractors, customers and Cloud providers. In addition, we make use of Software-As-A-Service (SAAS) products for certain important business functions that are provided by third parties and hosted on their own networks and servers, or third-party networks and servers, all of which rely on networks, email and/or the Internet for their function. All of these information systems are subject to disruption, breach or failure from various sources, including those using techniques that change frequently or may be disguised or difficult to detect, or designed to remain dormant until a triggering event, or that may continue undetected for an extended period of time. Those sources may include mistakes or unauthorized actions by our employees or contractors, phishing schemes and other third-party attacks, and degradation or loss of service or access to data due to viruses, malware, denial of service attacks, destructive or inadequate code, power failures, or physical damage to computers, hard drives, communication lines, or networking equipment.

We have experienced cybersecurity and other threats and incidents in the past. Although past threats and incidents have not resulted in a material adverse effect, we may incur material losses related to cybersecurity and other threats or incidents in the future. If we were subject to a cybersecurity and other incident, it could have a material adverse effect on our business. Such adverse effects might include:

- Loss of (or inability to access, e.g. through ransomware) confidential and/or sensitive information stored on these critical information systems or transmitted to or from those systems;
- The disruption of the proper function of our products, services and/or operations;
- The failure of our or our customers' manufacturing processes;
- Errors in the output of our work or our customers' work;
- The loss or public exposure of the personal information of our employees, customers or other parties;
- The public release of customer orders, financial and business plans, and operational results;
- Exposure to claims from third parties who are adversely impacted by such incidents;
- Misappropriation or theft of our or a customer's, supplier's or other party's assets or resources, including technology data, intellectual property or other sensitive information and costs associated therewith;
- Reputational damage;
- Diminution in the value of our investment in research, development and engineering; or

- Our failure to meet, or violation of, regulatory or other legal obligations, such as the timely publication or filing of financial statements, tax information and other required communications.

While we have implemented ISO 27001 compliant security procedures and virus protection software, intrusion prevention systems, identity and access control, and emergency recovery processes, and we carefully select our third-party providers of information systems, to mitigate risks to the information systems that we rely on, and to our technology, data, intellectual property and other sensitive information, those security procedures and mitigation and protection systems cannot be guaranteed to be fail-safe and we may still suffer cybersecurity and other incidents. It may be difficult to hire and retain employees with substantial cybersecurity acumen. In addition, our policies and procedures may not be effective in enabling us to identify risks, threats and incidents in a timely manner, or at all, or to respond expediently, appropriately and effectively when incidents occur and repair any damage caused by such incidents, which could have a material adverse effect on our business.

Our Financial Results May Be Adversely Impacted by Higher than Expected Tax Rates or Exposure to Additional Tax Liabilities

We are subject to income, transaction, and other taxes in the United States and various foreign jurisdictions, and significant judgment is required to determine worldwide tax liabilities. The amount of taxes we pay is subject to ongoing audits in various jurisdictions, and a material assessment by a governing tax authority could affect our profitability. As a global company, our effective tax rate is highly dependent upon the geographic composition of worldwide earnings and tax regulations governing each region. Our effective tax rate could be adversely affected by changes in the split of earnings between countries with differing statutory tax rates, in the valuation allowance of deferred tax assets, in tax laws, by material audit assessments, or by changes in or expirations of agreements with tax authorities. These factors could affect our profitability. In particular, the carrying value of deferred tax assets, which are predominantly in the United States, is dependent on our ability to generate future taxable income in the United States.

A Failure to Comply with Environmental Regulations May Adversely Affect Our Operating Results

We are subject to a variety of domestic and international governmental regulations related to the handling, discharge, and disposal of toxic, volatile, or otherwise hazardous chemicals. Failure to comply with present or future environmental regulations could result in fines being imposed on us, require us to undertake remediation activities, suspend production, and/or cease operations, or cause our customers to not accept our products. These regulations could require us to alter our current operations, acquire significant additional equipment, incur substantial other expenses to comply with environmental regulations, or take other actions. Any failure to comply with regulations governing the use, handling, sale, transport, or disposal of hazardous substances could subject us to future liabilities that may adversely affect our operating results, financial condition, and ability to operate our business.

If We Choose to Acquire or Dispose of Businesses, Product Lines, and Technologies, We May Encounter Unforeseen Costs and Difficulties That Could Impair Our Financial Performance

An important element of our management strategy is to review acquisition prospects that would complement our existing products, augment our market coverage and distribution ability, enhance our technological capabilities, or accomplish other strategic objectives. As a result, we may seek to make acquisitions of complementary companies, products, or technologies, or we may reduce or dispose of certain product lines or technologies that no longer fit our long-term strategies. For regulatory or other reasons, we may not be successful in our attempts to acquire or dispose of businesses, products, or technologies, resulting in significant financial costs, reduced or lost opportunities, and diversion of management’s attention. Managing an acquired business, disposing of product technologies, or reducing personnel entails numerous operational and financial risks, including difficulties in assimilating acquired operations and new personnel or separating existing business or product groups, diversion of management’s attention away from other business concerns, amortization of acquired intangible assets, adverse customer reaction to our decision to cease support for a product, and potential loss of key employees or customers of acquired or disposed operations. There can be no assurance that we will be able to achieve and manage successfully any such integration of potential acquisitions, disposition of product lines or technologies, or reduction in personnel, or that our management, personnel, or systems will be adequate to support continued operations. Any such inabilities or inadequacies could have a material adverse effect on our business, operating results, financial condition, and/or cash flows.

In addition, any acquisition could result in changes such as potentially dilutive issuances of equity securities, the incurrence of debt and contingent liabilities, the amortization of related intangible assets, and goodwill impairment charges, any of which could materially adversely affect our business, financial condition, results of operations, cash flows, and/or the price of our Common Stock.

The Market for Our Common Stock Is Volatile, Which May Affect Our Ability to Raise Capital or Make Acquisitions or May Subject Our Business to Additional Costs

The market price for our Common Stock is volatile and has fluctuated significantly over the past years. The trading price of our Common Stock could continue to be highly volatile and fluctuate widely in response to a variety of factors, many of which are not within our control or influence. These factors include but are not limited to the following:

- general market, semiconductor, or semiconductor equipment industry conditions;
- economic or political events, trends, and unexpected developments occurring nationally, globally, or in any of our key sales regions;
- variations in our quarterly operating results and financial condition, including our liquidity;
- variations in our revenues, earnings, or other business and financial metrics from forecasts by us or securities analysts or from those experienced by other companies in our industry;
- announcements of restructurings, reductions in force, departure of key employees, and/or consolidations of operations;
- government regulations;
- developments in, or claims relating to, patent or other proprietary rights;
- technological innovations and the introduction of new products by us or our competitors;
- commercial success or failure of our new and existing products;
- disruptions of relationships with key customers or suppliers; or
- dilutive impacts of our Convertible Notes.

In addition, the stock market experiences significant price and volume fluctuations. Historically, we have witnessed significant volatility in the price of our Common Stock due in part to the price of and markets for semiconductors. These and other factors have adversely affected and may again adversely affect the price of our Common Stock, regardless of our actual operating performance. In the past, following volatile periods in the price of their stock, many companies became the object of securities class action litigation. If we are sued in a securities class action, we could incur substantial costs, and it could divert management’s attention and resources and have an unfavorable impact on our financial performance and the price for our Common Stock.

Intellectual Property, Indemnity, and Other Claims Against Us Can Be Costly and We Could Lose Significant Rights That Are Necessary to Our Continued Business and Profitability

Third parties may assert infringement, misappropriation, unfair competition, product liability, breach of contract, or other claims against us. From time to time, other persons send us notices alleging that our products infringe or misappropriate their patent or other intellectual property rights. In addition, law enforcement authorities may seek criminal charges relating to intellectual property or other issues. We also face risks of claims arising from commercial and other relationships. In addition, our bylaws and other indemnity obligations provide that we will indemnify officers and members of our Board of Directors against losses that they may incur in legal proceedings resulting from their service to us. From time to time, in the normal course of business, we indemnify third parties with whom we enter into contractual relationships, including customers and suppliers, with respect to certain matters. We have agreed, under certain conditions, to hold these third parties harmless against specified losses, such as those arising from a breach of representations or covenants, other third-party claims that our products when used for their intended purposes infringe the intellectual property rights of such other third parties, or other claims made against certain parties. In such cases, it is our policy either to defend the claims or to negotiate licenses or other settlements on commercially reasonable terms. However, we may be unable in the future to negotiate necessary licenses or reach agreement on other settlements on commercially reasonable terms, or at all, and any litigation resulting from these claims by other parties may materially and adversely affect our business and financial results, and we may be subject to substantial damage awards and penalties. Moreover, although we have insurance to protect us from certain claims and cover certain losses to our property, such insurance may not cover us for the full amount of any losses, or at all, and may be subject to substantial exclusions and deductibles.

We May Fail to Protect Our Critical Proprietary Technology Rights, Which Could Affect Our Business

Our success depends in part on our proprietary technology and our ability to protect key components of that technology through patents, copyrights, trade secrets and other forms of protection. Protecting our key proprietary technology helps us achieve our goals of developing technological expertise and new products and systems that give us a competitive advantage; increasing market penetration and growth of our installed base; and providing comprehensive support and service to our customers. As part of our strategy to protect our technology, we currently hold a number of U.S. and foreign patents and pending patent applications, and we keep certain information, processes, and techniques confidential and/or as trade secrets. However, other parties may challenge or attempt to invalidate or circumvent any patents the U.S. or foreign governments issue to us; these governments may fail to issue patents for pending applications; or we may lose trade secret protection over valuable

information due to our or third parties' intentional or unintentional actions or omissions or even those of our own employees. Additionally, intellectual property litigation can be expensive and time-consuming and even when patents are issued, or trade secret processes are followed, the legal systems in certain of the countries in which we do business might not enforce patents and other intellectual property rights as rigorously or effectively as the United States or may favor local entities in their intellectual property enforcement. The rights granted or anticipated under any of our patents, pending patent applications, or trade secrets may be narrower than we expect or, in fact, provide no competitive advantages. Moreover, because we selectively file for patent protection in different jurisdictions, we may not have adequate protection in all jurisdictions based on such filing decisions. Any of these circumstances could have a material adverse impact on our business.

We Are Exposed to Various Risks from Our Regulatory Environment

We are subject to various risks related to (1) new, different, inconsistent, or even conflicting laws, rules, and regulations that may be enacted by legislative or executive bodies and/or regulatory agencies in the countries that we operate; (2) disagreements or disputes related to international trade; and (3) the interpretation and application of laws, rules, and regulations. As a public company with global operations, we are subject to the laws of multiple jurisdictions and the rules and regulations of various governing bodies, including those related to export controls, financial and other disclosures, corporate governance, privacy, anti-corruption, such as the Foreign Corrupt Practices Act and other local laws prohibiting corrupt payments to governmental officials, conflict minerals or other social responsibility legislation, immigration or travel regulations, and antitrust regulations, among others. Each of these laws, rules, and regulations imposes costs on our business, including financial costs and potential diversion of our management's attention associated with compliance, and may present risks to our business, including potential fines, restrictions on our actions, and reputational damage if we are unable to fully comply.

To maintain high standards of corporate governance and public disclosure, we intend to invest appropriate resources to comply with evolving standards. Changes in or ambiguous interpretations of laws, regulations, and standards may create uncertainty regarding compliance matters. Efforts to comply with new and changing regulations have resulted in, and are likely to continue to result in, increased selling, general, and administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If we are found by a court or regulatory agency not to be in compliance with the laws and regulations, our business, financial condition, and/or results of operations could be adversely affected.

There Can Be No Assurance That We Will Continue to Declare Cash Dividends or Repurchase Our Shares at All or in Any Particular Amounts

Our Board of Directors has declared quarterly dividends since April 2014. Our intent to continue to pay quarterly dividends and to repurchase our shares is subject to capital availability and periodic determinations by our Board of Directors that cash dividends and share repurchases are in the best interest of our stockholders and are in compliance with all laws and agreements applicable to the declaration and payment of cash dividends or the repurchasing of shares by us. Future dividends and share repurchases may also be affected by, among other factors, our views on potential future capital requirements for investments in acquisitions and the funding of our research and development; legal risks; changes in federal, state, and international tax laws or corporate laws; contractual restrictions, such as financial or operating covenants in our debt arrangements; availability of onshore cash flow; and changes to our business model. Our dividend payments and share repurchases may change from time to time, and we cannot provide assurance that we will continue to declare dividends or repurchase shares at all or in any particular amounts. A reduction or suspension in our dividend payments or share repurchases could have a negative effect on the price of our Common Stock.

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

Repurchases of Company Shares

In November 2018, the Board of Directors authorized management to repurchase up to an additional $5.0 billion of Common Stock on such terms and conditions as it deems appropriate. These repurchases can be conducted on the open market or as private purchases and may include the use of derivative contracts with large financial institutions, in all cases subject to compliance with applicable law. This repurchase program has no termination date and may be suspended or discontinued at any time. Funding for this share repurchase program may be through a combination of cash on hand, cash generation, and borrowings. As of December 29, 2019, we have purchased approximately $3.0 billion of shares under this authorization, comprised of $0.5 billion of open market purchases and execution of $2.5 billion of accelerated share repurchase arrangements.

Share repurchases, including those under the repurchase program, were as follows:

	Total Number of Shares Repurchased [1]	Average Price Paid Per Share [2]	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Amount Available Under Repurchase Program
	(in thousands, except per share data)			
Available balance as of June 30, 2019				$ 3,033,500
Quarter ended September 29, 2019	397	$ 196.83	383	2,958,304
September 30, 2019 - November 3, 2019	3	$ 235.81	—	2,958,304
November 4, 2019 - November 24, 2019	3,227	$ 277.65	3,224	1,957,829
November 25, 2019 - December 29, 2019	12	$ 271.04	—	1,957,829
Quarter ended December 29, 2019	3,242	$ 265.88	3,224	$ 1,957,829

(1) During the three and six months ended December 29, 2019, we acquired 18 thousand shares at a total cost of $4.9 million and 32 thousand shares at a total cost of $7.8 million, respectively, which we withheld through net share settlements to cover minimum tax withholding obligations upon the vesting of restricted stock unit awards granted under our equity compensation plans. The shares retained by us through these net share settlements are not a part of the Board-authorized repurchase program but instead are authorized under our equity compensation plan.

(2) Average price paid per share excludes the effect of accelerated share repurchases. See additional disclosure below regarding our accelerated share repurchase activity during the six months ended December 29, 2019.

Accelerated Share Repurchase Agreements

On November 22, 2019, the Company entered into two separate accelerated share repurchase agreements (collectively, the "November 2019 ASR") with two financial institutions to repurchase a total of $1.0 billion of Common Stock. The Company took an initial delivery of approximately 2.9 million shares, which represented 75% of the prepayment amount divided by the Company's closing stock price on November 22, 2019. The total number of shares received under the November 2019 ASR will be based upon the average daily volume weighted average price of the Company's Common Stock during the repurchase period, less an agreed upon discount. Final settlement of the November 2019 ASR will occur no later than May 27, 2020.

On June 4, 2019, we entered into four separate accelerated share repurchase agreements (collectively, the "June 2019 ASR") with two financial institutions to repurchase a total of $750 million of Common Stock. We took an initial delivery of approximately 3.1 million shares, which represented 75% of the prepayment amount divided by our closing stock price on June 4, 2019. The total number of shares received under the June 2019 ASR was based upon the average daily volume weighted average price of our Common Stock during the repurchase period, less an agreed upon discount. Final settlement of the agreements occurred during November 2019, resulting in the receipt of approximately 361 thousand additional shares, which yielded a weighted-average share price of approximately $215.60 for the transaction period.

ITEM 3. Defaults Upon Senior Securities

None.

ITEM 4. Mine Safety Disclosures

Not applicable.

ITEM 5. Other Information

None.

ITEM 6. Exhibits

Exhibit Number	Description
31.1	Rule 13a-14(a)/15d-14(a) Certification (Principal Executive Officer)
31.2	Rule 13a-14(a)/15d-14(a) Certification (Principal Financial Officer)
32.1	Section 1350 Certification (Principal Executive Officer)
32.2	Section 1350 Certification (Principal Financial Officer)
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

LAM RESEARCH CORPORATION

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.

Date: February 4, 2020

LAM RESEARCH CORPORATION
(Registrant)

/s/ Douglas R. Bettinger

Douglas R. Bettinger

Executive Vice President, Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

Exhibit 31.1

RULE 13a-14(a)/15d-14(a) CERTIFICATION (PRINCIPAL EXECUTIVE OFFICER)

I, Timothy M. Archer, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Lam Research Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 4, 2020

/s/ Timothy M. Archer

Timothy M. Archer

President and Chief Executive Officer

Exhibit 31.2

RULE 13a-14(a)/15d-14(a) CERTIFICATION (PRINCIPAL FINANCIAL OFFICER)

I, Douglas R. Bettinger, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Lam Research Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 4, 2020

/s/ Douglas R. Bettinger

Douglas R. Bettinger

Executive Vice President, Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)

Exhibit 32.1

SECTION 1350 CERTIFICATION (PRINCIPAL EXECUTIVE OFFICER)

In connection with the Quarterly Report of Lam Research Corporation (the "Company") on Form 10-Q for the fiscal period ending December 29, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Timothy M. Archer, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to my knowledge, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

February 4, 2020

/s/ Timothy M. Archer

Timothy M. Archer

President and Chief Executive Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") or otherwise subject to the liability of that section. Such certification will not be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.

Exhibit 32.2

SECTION 1350 CERTIFICATION (PRINCIPAL FINANCIAL OFFICER)

In connection with the Quarterly Report of Lam Research Corporation (the "Company") on Form 10-Q for the fiscal period ending December 29, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Douglas R. Bettinger, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to my knowledge, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

February 4, 2020

/s/ Douglas R. Bettinger

Douglas R. Bettinger

Executive Vice President, Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") or otherwise subject to the liability of that section. Such certification will not be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.