

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 September 30, 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 000-09992

KLA CORPORATION

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

04-2564110
(I.R.S. Employer
Identification No.)

One Technology Drive, Milpitas, California
(Address of Principal Executive Offices)

95035
(Zip Code)

(408) 875-3000

(Registrant's telephone number, including area code)

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

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock, \$0.001 par value per share	KLAC	The Nasdaq Stock Market, LLC The 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 and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit 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.

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

As of October 18, 2019, there were 157,794,495 shares of the registrant's Common Stock, \$0.001 par value, outstanding.

INDEX

	<u>Page Number</u>
<u>PART I</u>	<u>FINANCIAL INFORMATION</u>
Item 1	<u>Financial Statements (Unaudited)</u>
	<u>Condensed Consolidated Balance Sheets as of September 30, 2019 and June 30, 2019</u>
	<u>3</u>
	<u>Condensed Consolidated Statements of Operations for the Three Months Ended September 30, 2019 and 2018</u>
	<u>4</u>
	<u>Condensed Consolidated Statements of Comprehensive Income for the Three Months Ended September 30, 2019 and 2018</u>
	<u>5</u>
	<u>Condensed Consolidated Statements of Stockholders' Equity for the Three Months Ended September 30, 2019 and 2018</u>
	<u>6</u>
	<u>Condensed Consolidated Statements of Cash Flows for the Three Months Ended September 30, 2019 and 2018</u>
	<u>7</u>
	<u>Notes to Condensed Consolidated Financial Statements</u>
	<u>8</u>
Item 2	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>
	<u>39</u>
Item 3	<u>Quantitative and Qualitative Disclosures About Market Risk</u>
	<u>51</u>
Item 4	<u>Controls and Procedures</u>
	<u>52</u>
<u>PART II</u>	<u>OTHER INFORMATION</u>
Item 1	<u>Legal Proceedings</u>
	<u>53</u>
Item 1A	<u>Risk Factors</u>
	<u>53</u>
Item 2	<u>Unregistered Sales of Equity Securities and Use of Proceeds</u>
	<u>70</u>
Item 3	<u>Defaults Upon Senior Securities</u>
	<u>70</u>
Item 4	<u>Mine Safety Disclosures</u>
	<u>70</u>
Item 5	<u>Other Information</u>
	<u>70</u>
Item 6	<u>Exhibits</u>
	<u>71</u>
<u>SIGNATURES</u>	<u>72</u>

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

KLA CORPORATION
Condensed Consolidated Balance Sheets
(Unaudited)

<u>(In thousands)</u>	<u>September 30, 2019</u>	<u>June 30, 2019</u>
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 988,348	\$ 1,015,994
Marketable securities	763,174	723,391
Accounts receivable, net	1,066,188	990,113
Inventories	1,254,240	1,262,500
Other current assets	283,799	323,077
Total current assets	4,355,749	4,315,075
Land, property and equipment, net	475,210	448,799
Goodwill	2,263,689	2,211,858
Deferred income taxes	216,629	206,141
Purchased intangible assets, net	1,549,201	1,560,670
Other non-current assets	368,921	265,973
Total assets	<u>\$ 9,229,399</u>	<u>\$ 9,008,516</u>
LIABILITIES, NON-CONTROLLING INTEREST AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 221,388	\$ 202,416
Deferred system revenue	277,515	282,348
Deferred service revenue	201,245	206,669
Current portion of long-term debt	250,000	249,999
Other current liabilities	993,299	827,054
Total current liabilities	1,943,447	1,768,486
Non-current liabilities:		
Long-term debt	3,174,130	3,173,383
Deferred tax liabilities	688,170	702,285
Deferred service revenue	101,001	98,772
Other non-current liabilities	643,032	587,897
Total liabilities	6,549,780	6,330,823
Commitments and contingencies (Note 14 and Note 15)		
Stockholders' equity:		
Common stock and capital in excess of par value	1,999,845	2,017,312
Retained earnings	733,173	714,825
Accumulated other comprehensive income (loss)	(71,855)	(73,029)
Total KLA stockholders' equity	2,661,163	2,659,108
Non-controlling interest in consolidated subsidiaries	18,456	18,585
Total stockholders' equity	2,679,619	2,677,693
Total liabilities and stockholders' equity	<u>\$ 9,229,399</u>	<u>\$ 9,008,516</u>

See accompanying notes to Condensed Consolidated Financial Statements (unaudited).

KLA CORPORATION
Condensed Consolidated Statements of Operations
(Unaudited)

(In thousands, except per share amounts)	Three months ended	
	September 30,	
	2019	2018
Revenues:		
Product	\$ 1,057,975	\$ 829,227
Service	355,439	264,033
Total revenues	1,413,414	1,093,260
Costs and expenses:		
Costs of revenues	604,241	381,387
Research and development	210,580	153,530
Selling, general and administrative	188,345	114,438
Interest expense	40,350	26,362
Other expense (income), net	(1,618)	(10,025)
Income before income taxes	371,516	427,568
Provision for income taxes	25,120	31,624
Net income	346,396	395,944
Less: Net loss attributable to non-controlling interest	(129)	—
Net income attributable to KLA	\$ 346,525	\$ 395,944
Net income per share attributable to KLA		
Basic	\$ 2.18	\$ 2.55
Diluted	\$ 2.16	\$ 2.54
Weighted-average number of shares:		
Basic	158,697	155,221
Diluted	160,131	156,083

See accompanying notes to Condensed Consolidated Financial Statements (unaudited).

KLA CORPORATION
Condensed Consolidated Statements of Comprehensive Income
(Unaudited)

<u>(In thousands)</u>	Three months ended September 30,	
	2019	2018
Net income	\$ 346,396	\$ 395,944
Other comprehensive income (loss):		
Currency translation adjustments:		
Change in currency translation adjustments	(2,438)	(3,082)
Change in income tax benefit or expense	393	—
Net change related to currency translation adjustments	(2,045)	(3,082)
Cash flow hedges:		
Change in net unrealized gains or losses	(742)	13,794
Reclassification adjustments for net gains or losses included in net income	1,527	(1,037)
Change in income tax benefit or expense	(24)	(3,295)
Net change related to cash flow hedges	761	9,462
Net change related to unrecognized losses and transition obligations in connection with defined benefit plans	729	142
Available-for-sale securities:		
Change in net unrealized gains or losses	1,183	2,110
Reclassification adjustments for net gains or losses included in net income	4	481
Change in income tax benefit or expense	542	(502)
Net change related to available-for-sale securities	1,729	2,089
Other comprehensive income (loss)	1,174	8,611
Less: Comprehensive loss attributable to non-controlling interest	(129)	—
Total comprehensive income attributable to KLA	\$ 347,699	\$ 404,555

See accompanying notes to Condensed Consolidated Financial Statements (unaudited).

KLA CORPORATION
Condensed Consolidated Statements of Stockholders' Equity
(Unaudited)

<u>(In thousands, except per share amounts)</u>	Common Stock and Capital in Excess of Par Value		Retained Earnings (Accumulated Deficit)	Accumulated Other Comprehensive Income (Loss)	Total KLA Stockholders' Equity	Non-Controlling Interest	Total Stockholders' Equity
	Shares	Amount					
Balance as of June 30, 2019	159,475	2,017,312	714,825	(73,029)	2,659,108	18,585	2,677,693
Net income attributable to KLA	—	—	346,525	—	346,525	—	346,525
Other comprehensive income	—	—	—	1,174	1,174	—	1,174
Net loss attributable to non-controlling interest	—	—	—	—	—	(129)	(129)
Net issuance under employee stock plans	281	(23,423)	—	—	(23,423)	—	(23,423)
Repurchase of common stock	(1,659)	(20,988)	(207,508)	—	(228,496)	—	(228,496)
Cash dividends (\$0.75 per share) and dividend equivalents declared	—	—	(120,669)	—	(120,669)	—	(120,669)
Stock-based compensation expense	—	26,944	—	—	26,944	—	26,944
Balance as of September 30, 2019	158,097	\$ 1,999,845	\$ 733,173	\$ (71,855)	\$ 2,661,163	\$ 18,456	\$ 2,679,619

<u>(In thousands, except per share amounts)</u>	Common Stock and Capital in Excess of Par Value		Retained Earnings (Accumulated Deficit)	Accumulated Other Comprehensive Income (Loss)	Total KLA Stockholders' Equity	Non-Controlling Interest	Total Stockholders' Equity
	Shares	Amount					
Balance as of June 30, 2018	156,048	\$ 617,999	\$ 1,056,445	\$ (53,933)	\$ 1,620,511	\$ —	\$ 1,620,511
Adoption of ASC 606	—	—	(21,215)	75	(21,140)	—	(21,140)
Reclassification of stranded tax effects	—	—	10,920	(10,920)	—	—	—
Balance as of July 1, 2018	156,048	617,999	1,046,150	(64,778)	1,599,371	—	1,599,371
Net income	—	—	395,944	—	395,944	—	395,944
Other comprehensive income	—	—	—	8,611	8,611	—	8,611
Net issuance under employee stock plans	332	(26,961)	—	—	(26,961)	—	(26,961)
Repurchase of common stock	(2,781)	(11,010)	(296,777)	—	(307,787)	—	(307,787)
Cash dividends (\$0.75 per share) and dividend equivalents declared	—	—	(117,947)	—	(117,947)	—	(117,947)
Stock-based compensation expense	—	16,138	—	—	16,138	—	16,138
Balance as of September 30, 2018	153,599	\$ 596,166	\$ 1,027,370	\$ (56,167)	\$ 1,567,369	\$ —	\$ 1,567,369

See accompanying notes to Condensed Consolidated Financial Statements (unaudited).

KLA CORPORATION
Condensed Consolidated Statements of Cash Flows
(Unaudited)

(In thousands)	Three months ended September 30,	
	2019	2018
Cash flows from operating activities:		
Net income	\$ 346,396	\$ 395,944
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	98,588	16,087
Loss (gains) on unrealized foreign exchange and other	12,794	3,895
Stock-based compensation expense	26,944	16,138
Changes in assets and liabilities, net of assets acquired and liabilities assumed in business acquisitions:		
Accounts receivable	(75,214)	36,079
Inventories	(5,091)	(55,738)
Other assets	(8,930)	(16,853)
Accounts payable	18,885	(14,765)
Deferred system revenue	(4,833)	(79,810)
Deferred service revenue	(4,337)	(13,325)
Other liabilities	91,043	93,753
Net cash provided by operating activities	496,245	381,405
Cash flows from investing activities:		
Business acquisitions, net of cash acquired	(78,530)	(11,787)
Capital expenditures	(32,566)	(22,330)
Proceeds from disposition of non-marketable securities	1,086	—
Purchases of available-for-sale securities	(263,767)	—
Proceeds from sale of available-for-sale securities	25,449	91,238
Proceeds from maturity of available-for-sale securities	198,751	254,757
Purchases of trading securities	(9,021)	(4,619)
Proceeds from sale of trading securities	11,905	7,612
Net cash (used in) provided by investing activities	(146,693)	314,871
Cash flows from financing activities:		
Common stock repurchases	(228,496)	(299,974)
Payment of dividends to stockholders	(121,636)	(122,757)
Issuance of common stock	114	—
Tax withholding payments related to vested and released restricted stock units	(23,538)	(26,961)
Payment of contingent consideration payable	(57)	—
Net cash used in financing activities	(373,613)	(449,692)
Effect of exchange rate changes on cash and cash equivalents	(3,585)	(1,452)
Net (decrease) increase in cash and cash equivalents	(27,646)	245,132
Cash and cash equivalents at beginning of period	1,015,994	1,404,382
Cash and cash equivalents at end of period	\$ 988,348	\$ 1,649,514
Supplemental cash flow disclosures:		
Income taxes paid	\$ 19,862	\$ 24,962
Interest paid	\$ 26,347	\$ 537
Non-cash activities:		
Business acquisition holdback amounts - investing activities	\$ —	\$ 440
Contingent consideration payable - financing activities	\$ 9,366	\$ 3,102
Dividends payable - financing activities	\$ 1,552	\$ 4,783
Unsettled common stock repurchase - financing activities	\$ 8,000	\$ 7,812
Accrued purchases of land, property and equipment - investing activities	\$ 16,074	\$ 9,242

See accompanying notes to Condensed Consolidated Financial Statements (unaudited).

KLA CORPORATION
Notes to Condensed Consolidated Financial Statements
(Unaudited)

NOTE 1 – BASIS OF PRESENTATION

Basis of Presentation. On July 15, 2019 we changed our corporate name from “KLA-Tencor Corporation” to “KLA Corporation”. For purposes of this report, “KLA,” the “Company,” “we,” “our,” “us,” or similar references mean KLA Corporation, and its majority-owned subsidiaries unless the context requires otherwise. The Condensed Consolidated Financial Statements have been prepared by us pursuant to the rules and regulations of the U.S. Securities and Exchange Commission (“SEC”). Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America have been condensed or omitted pursuant to such rules and regulations.

In the opinion of management, the unaudited interim financial statements reflect all adjustments (consisting only of normal, recurring adjustments) necessary for a fair statement of the financial position, results of operations, comprehensive income, stockholders’ equity and cash flows for the periods indicated. These financial statements and notes, however, should be read in conjunction with Item 8, “Financial Statements and Supplementary Data” included in our Annual Report on Form 10-K for the fiscal year ended June 30, 2019, filed with the SEC on August 16, 2019.

The Condensed Consolidated Financial Statements include the accounts of KLA and its majority-owned subsidiaries. All significant intercompany balances and transactions have been eliminated.

The results of operations for the three months ended September 30, 2019 are not necessarily indicative of the results that may be expected for any other interim period or for the full fiscal year ending June 30, 2020.

Certain reclassifications have been made to the prior year’s Condensed Consolidated Financial Statements to conform to the current year presentation. The reclassifications did not have material effects on the prior year’s Condensed Consolidated Balance Sheets, Statements of Operations, Comprehensive Income and Cash Flows.

Acquisition of Orbotech, Ltd. On February 20, 2019 (the “Closing Date” or “Acquisition Date”), we completed the acquisition of Orbotech, Ltd. (“Orbotech”) for total consideration of \$3.26 billion. The acquisition of Orbotech is referred to as the “Orbotech Acquisition”. The Orbotech Acquisition was accounted for by applying the acquisition method of accounting for business combinations. The unaudited Condensed Consolidated Financial Statements in this report include the financial results of Orbotech prospectively from the Acquisition Date. For additional details, refer to Note 6 “Business Combinations” of the Condensed Consolidated Financial Statements.

Management Estimates. The preparation of the Condensed Consolidated Financial Statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions in applying our accounting policies that affect the reported amounts of assets and liabilities (and related disclosure of contingent assets and liabilities) at the date of the Condensed Consolidated Financial Statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

Comparability. Effective July 1, 2019, we adopted ASC 842, Leases (“ASC 842”). Prior periods were not retrospectively restated, and accordingly, the Consolidated Balance Sheet as of June 30, 2019, and the Condensed Consolidated Statements of Operations for the three months ended September 30, 2018 were prepared using accounting standards that were different than those in effect for the three months ended September 30, 2019.

Significant Accounting Policies. We updated our accounting policies for Leases. There have been no other material changes to our significant accounting policies in Note 1 “Description of Business and Summary of Significant Accounting Policies,” of the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended June 30, 2019.

Leases. Under ASC 842, a contract is or contains a lease when we have the right to control the use of an identified asset for a period of time. We determine if an arrangement is a lease at inception of the contract, which is the date on which the terms of the contract are agreed to, and the agreement creates enforceable rights and obligations. The commencement date of the lease is the date that the lessor makes an underlying asset available for our use. On the commencement date leases are evaluated for classification and assets and liabilities are recognized based on the present value of lease payments over the lease term.

The lease term used to calculate the lease liability includes options to extend or terminate the lease when it is reasonably certain that the option will be exercised. The right-of-use (“ROU”) asset is initially measured as the amount of lease liability, adjusted for any initial lease costs, prepaid lease payments and any lease incentives. Variable lease payments, consisting primarily of reimbursement of costs incurred by lessors for common area maintenance, real estate taxes, and insurance are not included in the lease liability and are recognized as they are incurred.

As most of our leases do not provide an implicit rate, we use our incremental borrowing rate at lease commencement to measure ROU assets and lease liabilities. The incremental borrowing rate used by us is based on baseline rates and adjusted by the credit spreads commensurate with our secured borrowing rate, over a similar term. We used the incremental borrowing rate on June 30, 2019 for all leases that commenced on or prior to that date. Operating lease expense is generally recognized on a straight-line basis over the lease term.

We have elected the practical expedient to account for the lease and non-lease components as a single lease component for the majority of our asset classes. For leases with a term of one year or less, we have elected not to record the ROU asset or liability.

Recent Accounting Pronouncements.

Recently Adopted

In February 2016, the Financial Accounting Standards Board (“FASB”) issued ASC 842 which supersedes the lease recognition requirements in ASC 840, Leases, (“ASC 840”). The most prominent of the changes in ASC 842 is the recognition of ROU assets and lease liabilities by lessees for those leases classified as operating leases.

Consistent with ASC 840, leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the statements of operations. In July 2018, the FASB issued an accounting standard update which amended ASC 842 and offered an additional (and optional) transition method by which entities could elect not to recast the comparative periods presented in financial statements in the period of adoption.

KLA adopted the new standard on July 1, 2019, the first day of fiscal 2020, using the optional adoption method whereby we did not adjust comparative period financial statements. Consequently, prior period balances and disclosures have not been restated. KLA elected certain practical expedients, which among other things, allowed us to carry forward prior conclusions about lease identification and classification. The adoption of ASC 842 resulted in the balance sheet recognition of additional lease assets and lease liabilities of \$110.7 million and \$108.7 million, respectively, related primarily to facilities, vehicles and other equipment. The adoption of ASC 842 did not have a material impact on beginning retained earnings, the Condensed Consolidated Statement of Operations, Cash Flows, or earnings per share. Additionally, the adoption of ASC 842 did not have a material impact on the Condensed Consolidated Financial Statements for arrangements in which KLA is the lessor. For additional information regarding KLA’s leases, see Note 9 “Leases” in the Condensed Consolidated Financial Statements.

Updates Not Yet Effective

In June 2016, the FASB issued an accounting standard update that changes the accounting for recognizing impairments of financial assets. Under the update, credit losses for certain types of financial instruments will be estimated based on expected losses. The update also modifies the impairment models for available-for-sale debt securities and for purchased financial assets with credit deterioration since their origination. The update is effective for us beginning in the first quarter of our fiscal year ending June 30, 2021, with early adoption permitted starting in the first quarter of fiscal year ending June 30, 2020. We are currently evaluating the impact of this accounting standard update on our Condensed Consolidated Financial Statements.

In August 2018, the FASB issued an accounting standard update which modifies the existing accounting standards for fair value measurement disclosure. This update eliminates the disclosure of the amount of and reasons for transfers between level 1 and level 2 of the fair value hierarchy, and the policy for timing of transfers between levels. This standard update is effective for us beginning in the first quarter of our fiscal year ending June 30, 2021, and early adoption is permitted. We are currently evaluating the impact of this accounting standard update on our Condensed Consolidated Financial Statements.

In August 2018, the FASB issued an accounting standard update to amend the disclosure requirements related to defined benefit pension and other post-retirement plans. Some of the changes include adding a disclosure requirement for significant gains and losses related to changes in the benefit obligation for the period and removing the amounts in accumulated other comprehensive income expected to be recognized as components of net periodic benefit cost over the next fiscal year. This standard update is effective for us for the fiscal year ending June 30, 2021, and early adoption is permitted. We are currently evaluating the impact of this accounting standard update on our Condensed Consolidated Financial Statements.

In August 2018, the FASB issued an accounting standard update to align the requirements for capitalizing implementation costs incurred in a cloud computing arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The guidance clarifies which costs should be capitalized including the cost to acquire the license and the related implementation costs. This standard update is effective for us beginning in the first quarter of our fiscal year ending June 30, 2021, with an option to be adopted either prospectively or retrospectively. Early adoption is permitted. We are currently evaluating the impact of this accounting standard update on our Condensed Consolidated Financial Statements.

NOTE 2 – REVENUE

Contract Balances

The following table represents the opening and closing balances of accounts receivables, contract assets and contract liabilities for the indicated periods.

(In thousands, except for percentage)	As of		As of		\$ Change	% Change
	September 30, 2019	July 1, 2019	September 30, 2019	July 1, 2019		
Accounts receivable, net	\$ 1,066,188	\$ 990,113	\$ 76,075		8 %	
Contract assets	\$ 99,068	\$ 94,015	\$ 5,053		5 %	
Contract liabilities	\$ 579,761	\$ 587,789	\$ (8,028)		(1)%	

Our payment terms and conditions vary by contract type, although terms generally include a requirement of payment of 70% to 90% of total contract consideration within 30 to 60 days of shipment, with the remainder payable within 30 days of acceptance.

The change in contract assets during the three months ended September 30, 2019 was mainly due to \$27.6 million of revenue recognized for which the payment is subject to conditions other than passage of time, partially offset by \$22.8 million of contract assets reclassified to net accounts receivable as our right to consideration for these contract assets became unconditional. Contract assets are included in Other current assets on our Condensed Consolidated Balance Sheet.

During the three months ended September 30, 2019, we recognized revenue of \$266.8 million that was included in contract liabilities as of July 1, 2019. This was partially offset by the value of products and services billed to customers for which control of the products and service has not transferred to the customers. Contract liabilities are included in current and non-current liabilities on our Condensed Consolidated Balance Sheets.

Remaining Performance Obligations

As of September 30, 2019, we had \$2.08 billion of remaining performance obligations, which represents our obligation to deliver products and services, and consists primarily of sales orders where written customer requests have been received. We expect to recognize approximately 5% to 15% of these performance obligations as revenue beyond the next twelve months, subject to risk of delays, pushouts, and cancellation by the customer, usually with limited or no penalties.

Refer to Note 18 “Segment Reporting and Geographic Information” of the Condensed Consolidated Financial Statements for information related to revenue by geographic region as well as significant product and service offerings.

NOTE 3 – FAIR VALUE MEASUREMENTS

Our financial assets and liabilities are measured and recorded at fair value, except for our debt and certain equity investments in privately-held companies. Equity investments without a readily available fair value are accounted for using the measurement alternative. The measurement alternative is calculated as cost minus impairment, if any, plus or minus changes resulting from observable price changes.

Our non-financial assets, such as goodwill, intangible assets, and land, property and equipment, are assessed for impairment when an event or circumstance indicates that an other-than-temporary decline in value may have occurred.

Fair Value of Financial Instruments. We have evaluated the estimated fair value of financial instruments using available market information and valuations as provided by third-party sources. The use of different market assumptions and/or estimation methodologies could have a significant effect on the estimated fair value amounts. The fair value of our cash equivalents, accounts receivable, accounts payable and other current assets and liabilities approximate their carrying amounts due to the relatively short maturity of these items.

Fair Value Hierarchy. The authoritative guidance for fair value measurements establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described below:

- | | |
|---------|--|
| Level 1 | Valuations based on quoted prices in active markets for identical assets or liabilities that the entity has the ability to access. |
| Level 2 | Valuations based on quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable data for substantially the full term of the assets or liabilities. |
| Level 3 | Valuations based on inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. |

A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

As of September 30, 2019, the types of instruments valued based on quoted market prices in active markets included money market funds, certain U.S. Treasury securities and U.S. Government agency securities. Such instruments are generally classified within Level 1 of the fair value hierarchy.

The types of instruments valued based on other observable inputs included corporate debt securities, sovereign securities, municipal securities, certain U.S. Treasury and U.S. Government agency securities. The market inputs used to value these instruments generally consist of market yields, reported trades and broker / dealer quotes. Such instruments are generally classified within Level 2 of the fair value hierarchy.

The principal market in which we execute our foreign currency contracts is the institutional market in an over-the-counter environment with a relatively high level of price transparency. The market participants generally are large financial institutions. Our foreign currency contracts' valuation inputs are based on quoted prices and quoted pricing intervals from public data sources and do not involve management judgment. These contracts are typically classified within Level 2 of the fair value hierarchy.

The fair value of deferred payments and contingent consideration payable, the majority of which were recorded in connection with recent business combinations, were classified as Level 3 and estimated using significant inputs that were not observable in the market. See Note 6 "Business Combinations" of the Condensed Consolidated Financial Statements for additional information.

[Table of Contents](#)

Financial assets (excluding cash held in operating accounts and time deposits) and liabilities measured at fair value on a recurring basis, as of the date indicated below, were presented on our Condensed Consolidated Balance Sheets as follows:

<u>As of September 30, 2019 (In thousands)</u>	<u>Total</u>	<u>Quoted Prices in Active Markets for Identical Assets (Level 1)</u>	<u>Significant Other Observable Inputs (Level 2)</u>	<u>Little or No Market Activity Inputs (Level 3)</u>
Assets				
Cash equivalents:				
Corporate debt securities	\$ 3,903	\$ —	\$ 3,903	\$ —
Money market funds and other	399,036	399,036	—	—
U.S. Government agency securities	1,500	—	1,500	—
U.S. Treasury securities	5,995	—	5,995	—
Marketable securities:				
Corporate debt securities	416,394	—	416,394	—
Municipal securities	1,906	—	1,906	—
Sovereign securities	6,014	—	6,014	—
U.S. Government agency securities	102,829	102,829	—	—
U.S. Treasury securities	224,519	212,705	11,814	—
Total cash equivalents and marketable securities ⁽¹⁾	<u>1,162,096</u>	<u>714,570</u>	<u>447,526</u>	<u>—</u>
Other current assets:				
Derivative assets	3,608	—	3,608	—
Other non-current assets:				
Executive Deferred Savings Plan	206,235	158,411	47,824	—
Total financial assets⁽¹⁾	<u>\$ 1,371,939</u>	<u>\$ 872,981</u>	<u>\$ 498,958</u>	<u>\$ —</u>
Liabilities				
Derivative liabilities	\$ (2,669)	\$ —	\$ (2,669)	\$ —
Deferred payments	(8,800)	—	—	(8,800)
Contingent consideration payable	(19,292)	—	—	(19,292)
Total financial liabilities	<u>\$ (30,761)</u>	<u>\$ —</u>	<u>\$ (2,669)</u>	<u>\$ (28,092)</u>

(1) Excludes cash of \$503.5 million held in operating accounts and time deposits of \$85.9 million as of September 30, 2019.

[Table of Contents](#)

Financial assets (excluding cash held in operating accounts and time deposits) and liabilities measured at fair value on a recurring basis, as of the date indicated below, were presented on our Condensed Consolidated Balance Sheets as follows:

<u>As of June 30, 2019 (In thousands)</u>	<u>Total</u>	<u>Quoted Prices in Active Markets for Identical Assets (Level 1)</u>	<u>Significant Other Observable Inputs (Level 2)</u>	<u>Little or No Market Activity Inputs (Level 3)</u>
Assets				
<i>Cash equivalents:</i>				
Corporate debt securities	\$ 10,988	\$ —	\$ 10,988	\$ —
Money market funds and other	352,708	352,708	—	—
U.S. Government agency securities	27,994	—	27,994	—
U.S. Treasury securities	55,858	—	55,858	—
<i>Marketable securities:</i>				
Corporate debt securities	422,089	—	422,089	—
Municipal securities	1,913	—	1,913	—
Sovereign securities	5,994	—	5,994	—
U.S. Government agency securities	131,224	131,224	—	—
U.S. Treasury securities	151,838	151,838	—	—
Total cash equivalents and marketable securities ⁽¹⁾	<u>1,160,606</u>	<u>635,770</u>	<u>524,836</u>	<u>—</u>
<i>Other current assets:</i>				
Derivative assets	2,557	—	2,557	—
<i>Other non-current assets:</i>				
Executive Deferred Savings Plan	207,581	158,021	49,560	—
Total financial assets⁽¹⁾	<u>\$ 1,370,744</u>	<u>\$ 793,791</u>	<u>\$ 576,953</u>	<u>\$ —</u>
Liabilities				
Derivative liabilities	\$ (3,334)	\$ —	\$ (3,334)	\$ —
Deferred payments	(8,800)	—	—	(8,800)
Contingent consideration payable	(14,005)	—	—	(14,005)
Total financial liabilities	<u>\$ (26,139)</u>	<u>\$ —</u>	<u>\$ (3,334)</u>	<u>\$ (22,805)</u>

(1) Excludes cash of \$479.8 million held in operating accounts and time deposits of \$99.0 million as of June 30, 2019.

There were no transfers between Level 1, Level 2 and Level 3 fair value measurements during the three months ended September 30, 2019. See Note 8 “Debt” of the Condensed Consolidated Financial Statements for disclosure of the fair value of our Senior Notes.

NOTE 4 – FINANCIAL STATEMENT COMPONENTS
Condensed Consolidated Balance Sheets

<u>(In thousands)</u>	As of September 30, 2019	As of June 30, 2019
Accounts receivable, net:		
Accounts receivable, gross	\$ 1,078,051	\$ 1,002,114
Allowance for doubtful accounts	(11,863)	(12,001)
	<u>\$ 1,066,188</u>	<u>\$ 990,113</u>
Inventories:		
Raw materials	\$ 449,075	\$ 444,627
Customer service parts	336,809	328,515
Work-in-process	287,951	285,191
Finished goods	180,405	204,167
	<u>\$ 1,254,240</u>	<u>\$ 1,262,500</u>
Other current assets:		
Contract assets	\$ 99,068	\$ 94,015
Prepaid expenses	80,691	88,387
Deferred costs of revenue	65,197	70,721
Prepaid income and other taxes	15,858	51,889
Other current assets	22,985	18,065
	<u>\$ 283,799</u>	<u>\$ 323,077</u>
Land, property and equipment, net:		
Land	\$ 67,876	\$ 67,883
Buildings and leasehold improvements	405,476	402,678
Machinery and equipment	680,970	669,316
Office furniture and fixtures	29,217	28,282
Construction-in-process	56,828	26,029
	1,240,367	1,194,188
Less: accumulated depreciation	(765,157)	(745,389)
	<u>\$ 475,210</u>	<u>\$ 448,799</u>
Other non-current assets:		
Executive Deferred Savings Plan ⁽¹⁾	\$ 206,235	\$ 207,581
Operating lease right of use assets	105,967	—
Other non-current assets	56,719	58,392
	<u>\$ 368,921</u>	<u>\$ 265,973</u>
Other current liabilities:		
Compensation and benefits	\$ 311,779	\$ 226,462
Executive Deferred Savings Plan	207,873	208,926
Other accrued expenses	163,345	202,647
Customer credits and advances	150,746	133,677
Income taxes payable	86,141	23,350
Interest payable	44,560	31,992
Operating lease liabilities, current	28,855	—
	<u>\$ 993,299</u>	<u>\$ 827,054</u>
Other non-current liabilities:		
Income taxes payable	\$ 358,235	\$ 392,266
Pension liabilities	80,046	79,622
Operating lease liabilities	75,552	—
Other non-current liabilities	129,199	116,009
	<u>\$ 643,032</u>	<u>\$ 587,897</u>

- (1) We have a non-qualified deferred compensation plan (known as “Executive Deferred Savings Plan” or “EDSP”) under which certain employees and non-employee directors may defer a portion of their compensation. The expense associated with changes in the EDSP liability included in selling, general and administrative expense was \$1.9 million and \$7.5 million during the three months ended September 30, 2019 and 2018, respectively. The amount of net gains associated with changes in the EDSP assets included in selling, general and administrative expense was \$2.3 million and \$7.4 million during the three months ended September 30, 2019 and 2018, respectively. For additional details, refer to Note 1, “Description of Business and Summary of Significant Accounting Policies,” of the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended June 30, 2019.

Accumulated Other Comprehensive Income (Loss)

The components of accumulated other comprehensive income (loss) (“OCI”) as of the dates indicated below were as follows:

(In thousands)	Currency Translation Adjustments	Unrealized Gains (Losses) on Available-for-Sale Securities	Unrealized Gains (Losses) on Cash Flow Hedges	Unrealized Gains (Losses) on Defined Benefit Plans	Total
Balance as of September 30, 2019	\$ (46,086)	\$ 113	\$ (7,964)	\$ (17,918)	\$ (71,855)
Balance as of June 30, 2019	\$ (44,041)	\$ (1,616)	\$ (8,725)	\$ (18,647)	\$ (73,029)

The effects on net income (loss) of amounts reclassified from accumulated OCI to the Condensed Consolidated Statement of Operations for the indicated period were as follows (in thousands):

Accumulated OCI Components	Location in the Condensed Consolidated Statements of Operations	Three Months Ended September 30,	
		2019	2018
Unrealized gains (losses) on cash flow hedges from foreign exchange and interest rate contracts ⁽¹⁾	Revenues	\$ 373	\$ 983
	Costs of revenues and operating expenses	(1,801)	(134)
	Interest expense	(99)	188
	Net gains (losses) reclassified from accumulated OCI	\$ (1,527)	\$ 1,037
Unrealized gains (losses) on available-for-sale securities	Other expense (income), net	\$ (4)	\$ (481)

- (1) The three months ended September 30, 2019 reflects the new accounting guidance for hedge accounting, which was adopted in the second quarter of fiscal year 2019. For additional details, refer to Note 16, “Derivative Instruments and Hedging Activities” of the Condensed Consolidated Financial Statements.

The amounts reclassified out of accumulated OCI related to our defined benefit pension plans, which were recognized as a component of net periodic cost for the three months ended September 30, 2019 and 2018 were \$0.2 million, respectively. For additional details, refer to Note 12, “Employee Benefit Plans” of the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended June 30, 2019.

NOTE 5 – MARKETABLE SECURITIES

The amortized cost and fair value of marketable securities as of the dates indicated below were as follows:

As of September 30, 2019 (In thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Corporate debt securities	\$ 419,980	\$ 430	\$ (113)	\$ 420,297
Money market funds and other	399,036	—	—	399,036
Municipal securities	1,899	7	—	1,906
Sovereign securities	6,014	3	(3)	6,014
U.S. Government agency securities	104,391	10	(72)	104,329
U.S. Treasury securities	230,632	120	(238)	230,514
Subtotal	1,161,952	570	(426)	1,162,096
Add: Time deposits ⁽¹⁾	85,902	—	—	85,902
Less: Cash equivalents	484,824	—	—	484,824
Marketable securities	\$ 763,030	\$ 570	\$ (426)	\$ 763,174

As of June 30, 2019 (In thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Corporate debt securities	\$ 433,518	\$ 141	\$ (582)	\$ 433,077
Money market funds and other	352,708	—	—	352,708
Municipal securities	1,910	3	—	1,913
Sovereign securities	6,001	1	(8)	5,994
U.S. Government agency securities	159,454	5	(241)	159,218
U.S. Treasury securities	208,058	39	(401)	207,696
Subtotal	1,161,649	189	(1,232)	1,160,606
Add: Time deposits ⁽¹⁾	99,006	—	—	99,006
Less: Cash equivalents	536,206	17	(2)	536,221
Marketable securities	\$ 724,449	\$ 172	\$ (1,230)	\$ 723,391

(1) Time deposits excluded from fair value measurements.

Our investment portfolio consists of both corporate and government securities that have a maximum maturity of three years. The longer the duration of these securities, the more susceptible they are to changes in market interest rates and bond yields. As yields increase, those securities with a lower yield-at-cost show a mark-to-market unrealized loss. Most of our unrealized losses are due to changes in market interest rates and bond yields. We believe that we have the ability to realize the full value of all of these investments upon maturity. As of September 30, 2019, we had 158 investments in an unrealized loss position. The following table summarizes the fair value and gross unrealized losses of our investments that were in an unrealized loss position as of the date indicated below, \$260.4 million of which were in a continuous loss position for 12 months or more:

As of September 30, 2019 (In thousands)	Fair Value	Gross Unrealized Losses
Corporate debt securities	\$ 182,963	\$ (112)
Sovereign securities	1,997	(3)
U.S. Government agency securities	79,082	(72)
U.S. Treasury securities	167,750	(239)
Total	\$ 431,792	\$ (426)

[Table of Contents](#)

The contractual maturities of securities classified as available-for-sale, regardless of their classification on our Condensed Consolidated Balance Sheets, as of the date indicated below were as follows:

<u>As of September 30, 2019 (In thousands)</u>	<u>Amortized Cost</u>	<u>Fair Value</u>
Due within one year	\$ 442,133	\$ 441,938
Due after one year through three years	320,897	321,236
	<u>\$ 763,030</u>	<u>\$ 763,174</u>

Actual maturities may differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties. Realized gains and losses on available-for-sale securities for the three months ended September 30, 2019 and 2018 were immaterial.

NOTE 6 - BUSINESS COMBINATIONS**Fiscal 2020 Acquisition**

On August 22, 2019, we acquired the outstanding shares of a privately-held company, primarily to expand our products and services offerings, for a total purchase consideration of \$93.9 million, including the fair value of the promise to pay an additional consideration up to \$60.0 million contingent on the achievement of certain revenue milestones. As of September 30, 2019, the estimated fair value of the additional consideration was \$9.2 million, which was classified as a non-current liability on the Condensed Consolidated Balance Sheets.

We have included the financial results of the acquisition completed during the first quarter of the fiscal year 2020 in our Condensed Consolidated Financial Statements from the date of acquisition. These results were not material to our Condensed Consolidated Financial Statements.

The purchase price of the fiscal 2020 acquisition was allocated on a preliminary basis as follows:

<u>(In thousands)</u>	<u>Fair Value</u>
Net tangible assets (including cash and cash equivalents of \$6.6 million)	\$ 7,196
Deferred tax liabilities	(15,265)
Intangible assets	47,931
Goodwill	54,001
Total	<u>\$ 93,863</u>

The purchase price allocation is preliminary and as additional information becomes available, we may further revise the preliminary purchase price allocation during the remainder of the measurement period, which will not exceed 12 months from the closing of the acquisition.

The \$54.0 million of goodwill was assigned to the Wafer Inspection and Patterning reporting units. None of the goodwill recognized is deductible for income tax purposes.

Fiscal 2019 Acquisitions*Orbotech Acquisition*

On February 20, 2019, we completed the acquisition of Orbotech for total purchase consideration of approximately \$3.26 billion which was paid in part by cash of \$1.90 billion, in part by KLA common stock with a fair value of \$1.32 billion and the balance by the assumption of stock options and RSUs. Orbotech is a global supplier of yield-enhancing and process-enabling solutions for the manufacture of electronics products. KLA acquired Orbotech to extend and enhance its portfolio of products to address market opportunities in the printed circuit board, flat panel display, advanced packaging and semiconductor manufacturing areas.

Preliminary Purchase Price Allocation

The total purchase consideration has been preliminarily allocated as follows (in thousands):

Purchase Price	
Cash for outstanding Orbotech shares ⁽¹⁾	\$ 1,901,948
Fair value of KLA common stock issued for outstanding Orbotech share ⁽²⁾	1,324,657
Cash for Orbotech equity awards ⁽³⁾	9,543
Fair value of KLA common stock issued to settle Orbotech equity awards ⁽⁴⁾	6,129
Stock options and RSUs assumed ⁽⁵⁾	13,281
Total purchase consideration	<u>3,255,558</u>
Less: cash acquired	<u>(215,640)</u>
Total purchase consideration, net of cash acquired	<u>\$ 3,039,918</u>
Allocation	
Accounts receivable, net	\$ 200,517
Inventories	330,325
Contract assets	63,181
Other current assets	73,561
Property, plant and equipment, net	102,197
Goodwill	1,809,625
Intangible assets	1,553,570
Other non-current assets	73,179
Accounts payable	(53,015)
Accrued liabilities	(178,849)
Other current liabilities ⁽⁶⁾	(69,449)
Deferred tax liabilities ⁽⁷⁾	(777,838)
Other non-current liabilities ⁽⁶⁾	(67,901)
Non-controlling interest	(19,185)
	<u>\$ 3,039,918</u>

(1) Represents the total cash paid to settle 48.9 million outstanding Orbotech shares as of February 20, 2019 at \$38.86 per Orbotech share.

(2) Represents the fair value of 12.2 million shares of our common stock issued to settle 48.9 million outstanding Orbotech shares. KLA issued 0.25 shares for each Orbotech share. The fair value of KLA's common stock was \$108.26 per share on the Acquisition Date.

(3) Represents primarily cash consideration for the settlement of the vested stock options and restricted stock units for which services were rendered by the employees of Orbotech prior to the closing, and a small portion for the settlement of fractional shares.

(4) Represents the fair value of share of 56,614 shares of KLA common stock issued to settle the vested Orbotech stock options. The fair value of KLA's common stock was \$108.26 per share on the Acquisition Date.

(5) Represents the fair value of the assumed stock options and RSUs to the extent those related to services provided by the employee of Orbotech prior to closing. Also refer to Note 10, "Equity, Long-Term Incentive Compensation Plans and Non-Controlling Interest" of the Condensed Consolidated Financial Statements for additional information about assumed stock options and RSUs.

- (6) On December 24, 2018, Orbotech, as part of its strategy to invest in the high growth area of the software business within the Printed Circuit Boards (“PCB”) industry, acquired the remaining 50% shares of Frontline, which was prior to that accounted as an equity investee, from Mentor Graphics Development Services (Israel) Ltd. Orbotech acquired all of the joint venture interests it did not previously own for \$85.0 million in cash on hand and agreed to pay an additional \$10.0 million in cash over four years plus a cash earn-out of not less than \$5.0 million and up to \$20.0 million. The earn out amounts are based on revenues from a Frontline product currently under development. As of February 20, 2019, the estimated fair market values of the four-year cash payment and the earn-out were \$8.8 million and \$7.1 million, respectively, and these amounts have been included in current and non-current liabilities at \$4.3 million and \$11.6 million respectively. As of September 30, 2019, the estimated fair market values of the four-year cash payment and the earn-out were \$8.8 million and \$3.2 million, respectively, and these amounts have been included in current and non-current liabilities at \$4.3 million and \$7.7 million respectively.
- (7) Primarily related to tax impact on the future amortization of intangible assets acquired and inventory fair value adjustments.

During the first quarter of the fiscal year ended June 30, 2020, we recorded measurement period adjustments to reflect facts and circumstances in existence as of the Acquisition Date. These adjustments primarily related to the valuation of individually immaterial net tangible assets of \$2.1 million with corresponding decrease to goodwill.

KLA allocated the purchase price to tangible and identified intangible assets acquired and liabilities assumed based on the preliminary estimates of their estimated fair values, which were determined using generally accepted valuation techniques based on estimates and assumptions made by management at the time of the Orbotech Acquisition and are subject to change during the measurement period which is not expected to exceed one year. The primary tasks that are required to be completed include discovery and the remeasurement of unknown uncertain tax positions that existed at the Acquisition Date, adjustments to the deferred tax liabilities for unremitted earnings, validation of synergies expected to be derived from the acquisition of Orbotech, recoverability of certain acquired assets and reallocation of certain acquired intangible assets between jurisdictions based on the outcome of ongoing tax audits, including any related tax impacts. Any adjustments to our preliminary purchase price allocation identified during the measurement period will be recognized in the period in which the adjustments are determined and recorded against goodwill.

The operating results of Orbotech have been included in our Condensed Consolidated Financial Statements for the three months ended September 30, 2019. The goodwill was primarily attributable to the assembled workforce of Orbotech, planned growth in new markets and synergies expected to be achieved from the combined operations of KLA and Orbotech. None of the goodwill is deductible for income tax purposes. Goodwill arising from the Orbotech Acquisition has been allocated to the Specialty Semiconductor Process; and the PCB and Display reporting units during the fiscal year ended June 30, 2019. For additional details, refer to Note 7 “Goodwill and Purchased Intangible Assets” of the Consolidated Financial Statements included in our Annual Report Form 10-K for the fiscal year ended June 30, 2019.

Intangible Assets

The estimated fair value and weighted average useful life of the Orbotech intangible assets are as follows:

<u>(In thousands)</u>	<u>Fair Value</u>	<u>Weighted Average Useful Lives (in years)</u>
Existing technology ⁽¹⁾	\$ 1,008,000	8
Customer-related assets ⁽²⁾	227,000	8
Backlog ⁽³⁾	37,500	1
Trade name ⁽⁴⁾	91,500	7
Off market leases ⁽⁵⁾	2,070	7
Total identified finite-lived intangible assets	1,366,070	
In-process research and development ⁽⁶⁾	187,500	N/A
Total identified intangible assets	<u>\$ 1,553,570</u>	

- (1) Existing technology was identified from the products of Orbotech and its fair value was determined using the Relief-from-Royalty Method under the income approach, which estimates the cost savings generated by a company related to the ownership of an asset for which it would otherwise have had to pay royalties or license fees on revenues earned through the use of the asset. The discount rate used was determined at the time of measurement based on an analysis of the implied internal rate of return of the transaction, weighted average cost of capital and weighted average return on assets. The economic useful life was determined based on the technology cycle related to each developed technology, as well as the cash flows over the forecast period.
- (2) Customer contracts and related relationships represent the fair value of the existing relationships with the Orbotech customers and its fair value was determined using the Multi-Period Excess Earning Method which involves isolating the net earnings attributable to the asset being measured based on present value of the incremental after-tax cash flows (excess earnings) attributable solely to the intangible asset over its remaining useful life. The economic useful life was determined based on historical customer attrition rates.
- (3) Backlog primarily relates to the dollar value of purchase arrangements with customers, effective, as of a given point in time, that are based on mutually agreed terms which, in some cases, may still be subject to completion of written documentation and may be changed or canceled by the customer, often without penalty. Orbotech's backlog consists of these arrangements with assigned shipment dates expected, in most cases, within three to twelve months. The fair value was determined using the Multi-Period Excess Earning Method. The economic useful life is based on the time to fulfill the outstanding order backlog obligation.
- (4) Trade name primarily relates to the "Orbotech" trade name. The fair value was determined by applying the Relief-from-Royalty Method under the income approach. The economic useful life was determined based on the expected life of the trade name.
- (5) The favorable / unfavorable components of the acquired leases were determined using the Income Approach which involves present valuing the difference in future cash flows between the contracted lease payments and the rent payable to a market participant over the lease terms. The economic useful life is based on the remaining lease term.
- (6) The fair value of in-process research and development ("IPR&D") was determined using the relief-from-royalty method under the income approach, which estimates the cost savings generated by a company related to the ownership of an asset for which it would otherwise have had to pay royalties or license fees on revenues earned through the use of the asset.

We believe the amounts of purchased intangible assets recorded above represent the fair values of and approximate the amounts a market participant would pay for, these intangible assets as of the Acquisition Date.

Other Fiscal 2019 Acquisitions

During the three months ended March 31, 2019 we acquired three privately-held companies primarily to expand our products and services offerings for an aggregate purchase price of \$118.3 million, including a post-closing working capital adjustment, and the fair value of the promise to pay additional consideration of up to \$13.0 million contingent on the achievement of certain milestones. As of September 30, 2019, the estimated fair value of the additional consideration was \$5.3 million, which was classified as a non-current liability on the Condensed Consolidated Balance Sheets.

During the three months ended September 30, 2018 we acquired two privately-held companies for an aggregate purchase price of \$15.4 million, including the fair value of the promise to pay total additional consideration of up to \$6.0 million contingent on the achievement of certain milestones. As of September 30, 2019, the estimated fair value of the

additional consideration was \$1.7 million, which is classified as a non-current liability on the Condensed Consolidated Balance Sheets.

None of these acquisitions were individually material to our Condensed Consolidated Financial Statements.

The aggregate purchase price of the other fiscal 2019 acquisitions was allocated on a preliminary basis as follows:

<u>(In thousands)</u>	<u>Fair Value</u>
Net tangible assets (including Cash and cash equivalents of \$2.6 million)	\$ 13,214
Identifiable intangible assets	75,130
Goodwill	45,380
Total	<u>\$ 133,724</u>

The goodwill was primarily assigned to the Wafer Inspection and Patterning, and GSS reporting units, and mainly attributable to the assembled workforce, and planned growth in new markets. A portion of the goodwill is deductible for income tax purposes.

Supplemental Unaudited Pro Forma Information:

The following unaudited pro forma financial information summarizes the combined results of operations for KLA, Orbotech, and the three acquisitions completed in the third quarter of fiscal 2019 as if the companies were combined as of the beginning of fiscal 2018. The unaudited pro forma information includes adjustments to amortization and depreciation for intangible assets and property, plant and equipment acquired, adjustments to stock-based compensation expense, the purchase accounting effect on inventory acquired, the purchase accounting effect on deferred revenue, interest expense and amortization of debt issuance costs associated with the Senior Notes financing, and transaction costs.

The table below reflects the impact of material and nonrecurring adjustments to the unaudited pro forma results for the three months ended, September 30, 2018 that are directly attributable to the acquisitions:

<u>Non-recurring Adjustments (In thousands)</u>	<u>Three Months Ended September 30, 2018</u>
Decrease / (increase) to revenue as a result of deferred revenue fair value adjustment	\$ —
(Decrease) / increase to expense as a result of inventory fair value adjustment	\$ 478
(Decrease) / increase to expense as a result of transaction costs	\$ (4,898)
(Decrease) / increase to expense as a result of compensation costs	\$ 2,811

The unaudited pro forma information presented below is for informational purposes only and is not necessarily indicative of our consolidated results of operations of the combined business had the acquisitions actually occurred at the beginning of fiscal year 2018 or of the results of our future operations of the combined businesses.

<u>(In thousands)</u>	<u>Pro Forma Three Months Ended September 30, 2018</u>
Revenues	\$ 1,348,197
Net income attributable to KLA	\$ 376,634

We have not included pro forma results of operations for the acquisition of privately-held companies completed in the first quarter of fiscal 2019 or the first quarter of fiscal 2020 herein as they were not material to us on either an individual or in aggregate. We included the results of operations of each acquisition in our Condensed Consolidated Statements of Operations from the date of each acquisition.

NOTE 7 – GOODWILL AND PURCHASED INTANGIBLE ASSETS

Goodwill
Goodwill represents the excess of the purchase price over the fair value of the net tangible and identifiable intangible assets acquired in the current and prior business combinations. We have four reportable segments and six reporting units. For additional details, refer to Note 18, “Segment Reporting and Geographic Information” of the Condensed Consolidated Financial

Statements. The following table presents goodwill carrying value and the movements during the three months ended September 30, 2019⁽¹⁾:

(In thousands)	Wafer Inspection and Patterning	Global Service and Support ("GSS")	Specialty Semiconductor Process	PCB and Display	Component Inspection	Total
Balance as of June 30, 2019	\$ 360,615	\$ 25,908	\$ 821,842	\$ 989,918	\$ 13,575	\$ 2,211,858
Acquired goodwill	54,001	—	—	—	—	54,001
Foreign currency and other adjustments	(35)	—	—	(2,135)	—	(2,170)
Balance as of September 30, 2019	<u>\$ 414,581</u>	<u>\$ 25,908</u>	<u>\$ 821,842</u>	<u>\$ 987,783</u>	<u>\$ 13,575</u>	<u>\$ 2,263,689</u>

(1) No goodwill was assigned to the Other reporting unit, and accordingly was excluded in the table above.

As of September 30, 2019, there have been no significant events or circumstances affecting the valuation of goodwill subsequent to the qualitative assessment performed in the third and fourth quarters of the fiscal year ended June 30, 2019. For additional details, refer to Note 7 "Goodwill and Purchased Intangible Assets," of the Notes to the Consolidated Financial Statements included in the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2019. The next annual assessment of goodwill by reporting unit is scheduled to be performed in the third quarter of the fiscal year ending June 30, 2020.

Purchased Intangible Assets

The components of purchased intangible assets as of the dates indicated below were as follows:

(In thousands)		As of September 30, 2019			As of June 30, 2019		
Category	Range of Useful Lives (in years)	Gross Carrying Amount	Accumulated Amortization, and Impairment	Net Amount	Gross Carrying Amount	Accumulated Amortization and Impairment	Net Amount
Existing technology	4-8	\$ 1,251,277	\$ 232,203	\$ 1,019,074	\$ 1,224,629	\$ 196,582	\$ 1,028,047
Trade name / Trademark	4-7	117,133	28,537	88,596	114,573	25,052	89,521
Customer relationships	4-9	305,028	74,511	230,517	297,250	66,471	230,779
Backlog and other	<1-9	50,393	30,014	20,379	43,969	19,146	24,823
Intangible assets subject to amortization		1,723,831	365,265	1,358,566	1,680,421	307,251	1,373,170
In-process research and development		190,635	—	190,635	187,500	—	187,500
Total		<u>\$ 1,914,466</u>	<u>\$ 365,265</u>	<u>\$ 1,549,201</u>	<u>\$ 1,867,921</u>	<u>\$ 307,251</u>	<u>\$ 1,560,670</u>

Purchased intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or asset group may not be recoverable. The change in the gross carrying amounts of intangible assets is due to acquisition of certain assets and liabilities of privately-held companies. For additional details, refer to Note 6 "Business Combinations" of the Condensed Consolidated Financial Statements.

Amortization expense for purchased intangible assets for the periods indicated below was as follows:

(In thousands)	Three Months Ended September 30,	
	2019	2018
Amortization expense - Cost of revenues	\$ 35,621	\$ 890
Amortization expense - Selling, general and administrative	22,256	544
Amortization expense - Research and development	31	—
Total	<u>\$ 57,908</u>	<u>\$ 1,434</u>

Based on the purchased intangible assets gross carrying amount recorded as of September 30, 2019, the underlying assets, the remaining estimated annual amortization expense is expected to be as follows:

Fiscal year ending June 30:	Amortization (In thousands)
2020 (remaining 9 months)	\$ 161,422
2021	194,901
2022	192,323
2023	191,271
2024	188,714
2025 and thereafter	429,935
Total	<u>\$ 1,358,566</u>

NOTE 8 – DEBT

The following table summarizes our debt as of September 30, 2019 and June 30, 2019:

	As of September 30, 2019		As of June 30, 2019	
	Amount (In thousands)	Effective Interest Rate	Amount (In thousands)	Effective Interest Rate
Fixed-rate 3.375% Senior Notes due on November 1, 2019	\$ 250,000	3.377%	\$ 250,000	3.377%
Fixed-rate 4.125% Senior Notes due on November 1, 2021	500,000	4.128%	500,000	4.128%
Fixed-rate 4.650% Senior Notes due on November 1, 2024	1,250,000	4.682%	1,250,000	4.682%
Fixed-rate 5.650% Senior Notes due on November 1, 2034	250,000	5.670%	250,000	5.670%
Fixed-rate 4.100% Senior Notes due on March 15, 2029	800,000	4.159%	800,000	4.159%
Fixed-rate 5.000% Senior Notes due on March 15, 2049	400,000	5.047%	400,000	5.047%
Total	<u>3,450,000</u>		<u>3,450,000</u>	
Unamortized discount	(8,528)		(8,738)	
Unamortized debt issuance costs	(17,342)		(17,880)	
Total	<u>\$ 3,424,130</u>		<u>\$ 3,423,382</u>	
Reported as:				
Current portion of long-term debt	\$ 250,000		\$ 249,999	
Long-term debt	3,174,130		3,173,383	
Total	<u>\$ 3,424,130</u>		<u>\$ 3,423,382</u>	

As of September 30, 2019, future principal payments for our debt are \$250.0 million for the remaining nine months in fiscal year 2020; \$500.0 million in fiscal year 2022; and \$2.70 billion after fiscal year 2023.

Senior Notes:

In March 2019 and November 2014, we issued \$1.20 billion and \$2.50 billion, respectively (each, a “2019 Senior Notes”, a “2014 Senior Notes”, and collectively the “Senior Notes”), aggregate principal amount of senior, unsecured long-term notes.

The interest rate specified for each series of the 2014 Senior Notes will be subject to adjustments from time to time if Moody’s Investor Service, Inc. (“Moody’s”) or Standard & Poor’s Ratings Services (“S&P”) or, under certain circumstances, a substitute rating agency selected by us as a replacement for Moody’s or S&P, as the case may be (a “Substitute Rating Agency”), downgrades (or subsequently upgrades) its rating assigned to the respective series of the 2014 Senior Notes such that the adjusted rating is below investment grade. For additional details, refer to Note 8 “Debt” of the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended June 30, 2019. Unlike the 2014 Senior Notes, the interest rate for each series of the 2019 Senior Notes will not be subject to such adjustments. During the fiscal year ended June 30, 2018, we entered into a series of forward contracts (the “2018 Rate Lock Agreements”) to lock the benchmark interest rate with notional amount of \$500.0 million in aggregate. In October 2014, we entered into a series of forward contracts to lock the 10-year treasury rate (“benchmark rate”) on a portion of the 2014 Senior Notes with a notional amount of \$1.00 billion in aggregate. For additional details on the forward contracts, refer to Note 16, “Derivative Instruments and Hedging Activities” of the Condensed Consolidated Financial Statements.

The original discounts on the 2019 Senior Notes and the 2014 Senior Notes amounted to \$6.7 million and \$4.0 million, respectively and are being amortized over the life of the debt. Interest is payable semi-annually on May 1 and November 1 of each year for the 2014 Senior Notes and semi-annually on March 15 and September 15 of each year for the 2019 Senior Notes. The indenture for the Senior Notes (the “Indenture”) includes covenants that limit our ability to grant liens on our facilities and enter into sale and leaseback transactions, subject to certain allowances under which certain sale and leaseback transactions are not restricted.

In certain circumstances involving a change of control followed by a downgrade of the rating of a series of Senior Notes by at least two of Moody’s, S&P and Fitch Inc., unless we have exercised our rights to redeem the Senior Notes of such series, we will be required to make an offer to repurchase all or, at the holder’s option, any part, of each holder’s Senior Notes of that series pursuant to the offer described below (the “Change of Control Offer”). In the Change of Control Offer, we will be required to offer payment in cash equal to 101% of the aggregate principal amount of Senior Notes repurchased plus accrued and unpaid interest, if any, on the Senior Notes repurchased, up to, but not including, the date of repurchase.

Based on the trading prices of the Senior Notes on the applicable dates, the fair value of the Senior Notes as of September 30, 2019 and June 30, 2019 was approximately \$3.82 billion and \$3.70 billion, respectively. While the Senior Notes are recorded at cost, the fair value of the long-term debt was determined based on quoted prices in markets that are not active; accordingly, the long-term debt is categorized as Level 2 for purposes of the fair value measurement hierarchy.

As of September 30, 2019, we were in compliance with all of our covenants under the Indenture associated with the Senior Notes.

Revolving Credit Facility:

In November 2017, we entered into a Credit Agreement (the “Credit Agreement”) providing for a \$750.0 million five-year unsecured Revolving Credit Facility (the “Revolving Credit Facility”), which replaced our prior Credit Facility. Subject to the terms of the Credit Agreement, the Revolving Credit Facility may be increased in an amount up to \$250.0 million in the aggregate. In November 2018, we entered into an Incremental Facility, Extension and Amendment Agreement (the “Amendment”), which amends the Credit Agreement to (a) extend the Maturity Date (the “Maturity Date”) from November 30, 2022 to November 30, 2023, (b) increase the total commitment by \$250.0 million and (c) effect certain other amendments to the Credit Agreement as set forth in the Amendment. After giving effect to the Amendment, the total commitments under the Credit Agreement are \$1.00 billion.

We may borrow, repay and reborrow funds under the Revolving Credit Facility until the Maturity Date, at which time such Revolving Credit Facility will terminate, and all outstanding loans under such facility, together with all accrued and unpaid interest, must be repaid. We may prepay outstanding borrowings under the Revolving Credit Facility at any time without a prepayment penalty.

Borrowings under the Revolving Credit Facility will bear interest, at our option, at either: (i) the Alternative Base Rate (“ABR”) plus a spread, which ranges from 75 bps to 100 bps, or (ii) the London Interbank Offered Rate (“LIBOR”) plus a spread, which ranges from 100 bps to 175 bps. The spreads under ABR and LIBOR are subject to adjustment in conjunction with credit rating downgrades or upgrades. We are also obligated to pay an annual commitment fee on the daily undrawn balance of the Revolving Credit Facility, which ranges from 10 bps to 25 bps, subject to an adjustment in conjunction with changes to our credit rating. As of September 30, 2019, we pay an annual commitment fee of 12.5 bps on the daily undrawn balance of the Revolving Credit Facility.

The Revolving Credit Facility requires us to maintain an interest expense coverage ratio as described in the Credit Agreement, on a quarterly basis, covering the trailing four consecutive fiscal quarters of no less than 3.50 to 1.00. In addition, we are required to maintain the maximum leverage ratio as described in the Credit Agreement, on a quarterly basis of 3.00 to 1.00, covering the trailing four consecutive fiscal quarters for each fiscal quarter, which can be increased to 4.00 to 1.00 for a period of time in connection with a material acquisition or a series of material acquisitions. As of September 30, 2019, our maximum allowed leverage ratio was 4.00 to 1.00 following the Orbotech Acquisition.

We were in compliance with all covenants under the Credit Agreement as of September 30, 2019 and had no outstanding borrowings under the unfunded Revolving Credit Facility.

NOTE 9—LEASES

We have operating leases for facilities, vehicles, and other equipment. Our facility leases are primarily used for administrative functions, research and development, manufacturing, and storage and distribution. Our finance leases are not material.

[Table of Contents](#)

Our existing leases do not contain significant restrictive provisions or residual value guarantees; however, certain leases contain provisions for payment of maintenance, real estate taxes, or insurance costs by us. Our leases have remaining lease terms ranging from less than one year to eleven years, including periods covered by options to extend the lease when it is reasonably certain that the option will be exercised.

Total lease expense for the three months ended September 30, 2019 was \$8.7 million and included \$0.2 million of costs related to short term leases which are not recorded on the Condensed Consolidated Balance Sheets. At September 30, 2019, the weighted average remaining lease term and weighted average discount rate for operating leases was 5.2 years and 1.7%, respectively.

Supplemental cash flow information related to leases was as follows:

Three months ended September 30, 2019	Amount (In thousands)
Operating cash outflows from operating leases	8,374
ROU assets obtained in exchange for new operating lease liabilities	2,805

Maturities of lease liabilities as of September 30, 2019 were as follows:

Fiscal year ending June 30,	Amount (In thousands)
2020 (remaining 9 months)	23,347
2021	24,802
2022	18,374
2023	12,827
2024	8,760
2025 and thereafter	20,856
Total lease payments	108,966
Less imputed interest	(4,559)
Total	104,407

As of September 30, 2019, we did not have material leases that had not yet commenced.

As of June 30, 2019, future minimum lease payments as defined under the previous lease accounting guidance of ASC 840 under noncancelable operating leases were as follows:

Fiscal year ending June 30,	Amount (In thousands)
2020	\$ 30,296
2021	22,250
2022	16,217
2023	11,878
2024	7,912
2025 and thereafter	15,018
Total minimum lease payments	\$ 103,571

NOTE 10 – EQUITY, LONG-TERM INCENTIVE COMPENSATION PLANS AND NON-CONTROLLING INTEREST

Equity Incentive Program

As of September 30, 2019, we had 10.8 million shares available for issuance under our 2004 Equity Incentive Plan (the “2004 Plan”).

For details of the 2004 Plan refer to Note 9 “Equity, Long-Term Incentive Compensation Plans and Non-Controlling Interest,” of the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended June 30, 2019.

Assumed Equity Plans

As of the Orbotech Acquisition Date, we assumed outstanding equity incentive awards under the following Orbotech equity incentive plans: (i) Equity Remuneration Plan for Key Employees of Orbotech Ltd. and its Affiliates and Subsidiaries (as Amended and Restated in 2005), (ii) 2010 Equity-Based Incentive Plan, and (iii) 2015 Equity-Based Incentive Plan (each, an “Assumed Equity Plan” and collectively the “Assumed Equity Plans”).

As of September 30, 2019, there were 10,651 and 432,372 shares of our common stock underlying the outstanding Assumed Options and RSUs, respectively, under the Assumed Equity Plans. The weighted-average remaining contractual terms, the aggregate intrinsic values, and the weighted average exercise price for the stock options outstanding under the Assumed Equity Plans as of September 30, 2019 were 4.75 years, \$0.6 million, and \$63.08 per share, respectively. During the three months ended September 30, 2019, there were 3,907 Assumed Options exercised with a weighted-average exercise price of \$29.26.

For details on the Assumed Equity Plans refer to Note 9 “Equity, Long-Term Incentive Compensation Plans and Non-Controlling Interest,” of the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended June 30, 2019.

Equity Incentive Plans - General Information

The following table summarizes the combined activity under our equity incentive plans:

<u>(In thousands)</u>	<u>Available For Grant^{(1) (2)}</u>
Balance as of June 30, 2019	11,613
Restricted stock units granted ⁽³⁾	(782)
Restricted stock units canceled	16
Balance as of September 30, 2019	<u>10,847</u>

- (1) The number of RSUs reflects the application of the award multiplier of 2.0x to calculate the impact of the award on the shares reserved under the 2004 Plan.
- (2) No additional stock options, RSUs or other awards will be granted under the Assumed Equity Plans.
- (3) Includes RSUs granted to senior management during the three months ended September 30, 2019 with performance-based vesting criteria (in addition to service-based vesting criteria for any of such RSUs that are deemed to have been earned) (“performance-based RSUs”). This line item includes all such performance-based RSUs granted during the three months ended September 30, 2019 reported at the maximum possible number of shares that may ultimately be issuable if all applicable performance-based criteria are achieved at their maximum levels and all applicable service-based criteria are fully satisfied (0.4 million shares for the three months ended September 30, 2019 reflects the application of the multiplier described above).

The fair value of stock-based awards is measured at the grant date and is recognized as an expense over the employee’s requisite service period. For RSUs granted without “dividend equivalent” rights, fair value is calculated using the closing price of our common stock on the grant date, adjusted to exclude the present value of dividends which are not accrued on those RSUs. The fair value for RSUs granted with “dividend equivalent” rights is determined using the closing price of our common stock on the grant date. The fair value for purchase rights under our Employee Stock Purchase Plan is determined using a Black-Scholes model.

The following table shows stock-based compensation expense for the indicated periods:

<u>(In thousands)</u>	Three Months Ended September 30,	
	2019	2018
Stock-based compensation expense by:		
Costs of revenues	\$ 2,864	\$ 1,831
Research and development	5,287	2,519
Selling, general and administrative	18,793	11,788
Total stock-based compensation expense	<u>\$ 26,944</u>	<u>\$ 16,138</u>

The following table shows stock-based compensation capitalized as inventory as of the dates indicated below:

<u>(In thousands)</u>	As of September 30, 2019	As of June 30, 2019
Inventory	\$ 4,909	\$ 4,819

Restricted Stock Units

The following table shows the activity and weighted-average grant date fair value for RSUs during the three months ended September 30, 2019:

	Shares ⁽¹⁾ (In thousands)	Weighted-Average Grant Date Fair Value
Outstanding restricted stock units as of June 30, 2019 ⁽²⁾	2,902	\$ 91.84
Granted ⁽³⁾	391	\$ 136.76
Vested and released	(276)	\$ 67.32
Withheld for taxes	(171)	\$ 67.32
Forfeited	(16)	\$ 104.14
Outstanding restricted stock units as of September 30, 2019 ⁽²⁾	<u>2,830</u>	<u>\$ 101.85</u>

(1) Share numbers reflect actual shares subject to awarded RSUs.

(2) Includes performance-based and market-based RSUs.

(3) This line item includes performance-based RSUs granted during the three months ended September 30, 2019 reported at the maximum possible number of shares that may ultimately be issuable if all applicable performance-based criteria are achieved at their maximum levels and all applicable service-based criteria are fully satisfied (0.2 million shares for the three months ended September 30, 2019.)

The RSUs granted by us generally vest (a) with respect to awards with only service-based vesting criteria, over periods ranging from two to four years and (b) with respect to awards with both performance-based and service-based vesting criteria, in two equal installments on the third and fourth anniversaries of the grant date and (c) with respect to awards with both market-based and service-based vesting criteria in three equal installments on the third, fourth and fifth anniversaries of the grant date, in each case subject to the recipient remaining employed by us as of the applicable vesting date. The RSUs granted to the independent members of the Board of Directors vest annually.

The following table shows the weighted-average grant date fair value per unit for the RSUs granted, vested, and tax benefits realized by us in connection with vested and released RSUs for the indicated periods:

<u>(In thousands, except for weighted-average grant date fair value)</u>	Three Months Ended September 30,	
	2019	2018
Weighted-average grant date fair value per unit	\$ 136.76	\$ 118.47
Grant date fair value of vested restricted stock units	\$ 30,092	\$ 36,072
Tax benefits realized by us in connection with vested and released restricted stock units	\$ 3,993	\$ 6,918

As of September 30, 2019, the unrecognized stock-based compensation expense balance related to RSUs was \$206.2 million, excluding the impact of estimated forfeitures, and will be recognized over a weighted-average remaining contractual term and an estimated weighted-average amortization period of 1.8 years. The intrinsic value of outstanding RSUs as of September 30, 2019 was \$451.2 million.

Cash-Based Long-Term Incentive Compensation

We have adopted a cash-based long-term incentive (“Cash LTI Plan”) program for many of our employees as part of our employee compensation program. Executives and non-employee members of the Board of Directors are not participating in this program. During the three months ended September 30, 2019 and 2018, we approved Cash LTI awards of \$1.8 million and \$2.8 million, respectively under our Cash LTI Plan. Cash LTI awards issued to employees under the Cash LTI Plan will vest in three or four equal installments, with one-third or one-fourth of the aggregate amount of the Cash LTI award vesting on each anniversary of the grant date over a three or four-year period. In order to receive payments under a Cash LTI award, participants must remain employed by us as of the applicable award vesting date. During the three months ended September 30, 2019 and 2018, we recognized \$16.6 million and \$15.2 million, respectively, in compensation expense under the Cash LTI Plan. As of September 30, 2019, the unrecognized compensation balance (excluding the impact of estimated forfeitures) related to the Cash LTI Plan was \$134.2 million. For details, refer to Note 9 “Equity, Long-Term Incentive Compensation Plans and Non-Controlling Interest,” of the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended June 30, 2019.

Employee Stock Purchase Plan

Our Employee Stock Purchase Plan (“ESPP”) provides that eligible employees may contribute up to 15% of their eligible earnings toward the semi-annual purchase of our common stock. The ESPP is qualified under Section 423 of the Internal Revenue Code. The employee’s purchase price is derived from a formula based on the closing price of the common stock on the first day of the offering period versus the closing price on the date of purchase (or, if not a trading day, on the immediately preceding trading day).

The offering period (or length of the look-back period) under the ESPP has a duration of six months, and the purchase price with respect to each offering period beginning on or after such date is, until otherwise amended, equal to 85% of the lesser of (i) the fair market value of our common stock at the commencement of the applicable six-month offering period or (ii) the fair market value of our common stock on the purchase date. We estimate the fair value of purchase rights under the ESPP using a Black-Scholes model.

The fair value of each purchase right under the ESPP was estimated on the date of grant using the Black-Scholes model and the straight-line attribution approach with the following weighted-average assumptions:

	Three Months Ended September 30,	
	2019	2018
Stock purchase plan:		
Expected stock price volatility	31.6 %	30.0 %
Risk-free interest rate	2.4 %	1.9 %
Dividend yield	2.5 %	2.9 %
Expected life (in years)	0.5	0.5

The following table shows total cash received from employees for the issuance of shares under the ESPP, the number of shares purchased by employees through the ESPP, the tax benefits realized by us in connection with the disqualifying dispositions of shares purchased under the ESPP and the weighted-average fair value per share for the indicated periods:

	Three Months Ended September 30,	
	2019	2018
(In thousands, except for weighted-average fair value per share)		
Total cash received from employees for the issuance of shares under the ESPP	\$ —	\$ —
Number of shares purchased by employees through the ESPP	—	—
Tax benefits realized by us in connection with the disqualifying dispositions of shares purchased under the ESPP	\$ 1,734	\$ 511
Weighted-average fair value per share based on Black-Scholes model	\$ 27.35	\$ 22.73

The ESPP shares are replenished annually on the first day of each fiscal year by virtue of an evergreen provision. The provision allows for share replenishment equal to the lesser of 2.0 million shares or the number of shares which we estimate will be required to be issued under the ESPP during the forthcoming fiscal year. As of September 30, 2019, a total of 2.6 million shares were reserved and available for issuance under the ESPP.

Quarterly cash dividends

On August 1, 2019, our Board of Directors declared a regular quarterly cash dividend of \$0.75 per share on the outstanding shares of our common stock, which was paid on September 3, 2019 to the stockholders of record as of the close of business on August 15, 2019. The total amount of regular quarterly cash dividends and dividend equivalents paid during the three months ended September 30, 2019 and 2018 was \$121.6 million and \$119.9 million, respectively. The amount of accrued dividends equivalents payable for regular quarterly cash dividends on unvested RSUs with dividend equivalent rights as of September 30, 2019 and June 30, 2019 was \$6.4 million and \$7.3 million, respectively. These amounts will be paid upon vesting of the underlying RSUs.

Non-controlling Interest

We have consolidated the results of Orbotech LT Solar, LLC (“OLTS”) and Orbograph Ltd. (“Orbograph”), in which we own approximately 84% and 94% of the outstanding equity interest, respectively. OLTS is engaged in the research, development and marketing of products for the deposition of thin film coating of various materials on crystalline silicon photovoltaic wafers for solar energy panels through plasma-enhanced chemical vapor deposition (“PECVD”). Orbograph is engaged in the development and marketing of character recognition solutions to banks, financial and other payment processing institutions and healthcare providers.

Additionally, we have consolidated the results of PixCell, an Israeli company developing diagnostic equipment for point-of-care hematology applications of which we own approximately 52% of the outstanding equity interest and are entitled to appoint the majority of this company’s directors.

NOTE 11 – STOCK REPURCHASE PROGRAM

Our Board of Directors has authorized a program which permits us to repurchase shares of our common stock. The intent of this program is to offset the dilution from our equity incentive plans, employee stock purchase plan, the issuance of shares in the Orbotech Acquisition, as well as to return excess cash to our stockholders. Subject to market conditions, applicable legal requirements and other factors, the repurchases were made in the open market in compliance with applicable securities laws, including the Securities Exchange Act of 1934 and the rules promulgated thereunder, such as Rule 10b-18 and Rule 10b5-1. This stock repurchase program has no expiration date and may be suspended at any time. On September 17, 2019, our Board of Directors authorized us to repurchase an additional \$1.00 billion of our common stock. As of September 30, 2019, an aggregate of approximately \$1.63 billion was available for repurchase under our stock repurchase program.

Share repurchases for the indicated periods (based on the trade date of the applicable repurchase) were as follows:

(In thousands)	Three Months Ended September 30,	
	2019	2018
Number of shares of common stock repurchased	1,659	2,781
Total cost of repurchases	\$ 228,496	\$ 307,787

As of September 30, 2019, we had repurchased 50 thousand shares for \$8.0 million, for which repurchases had not settled prior to September 30, 2019. The amount was recorded as a component of other current liabilities for the period presented.

NOTE 12 – NET INCOME PER SHARE

Basic net income per share is calculated by dividing net income available to common stockholders by the weighted-average number of common shares outstanding during the period. Diluted net income per share is calculated by using the weighted-average number of common shares outstanding during the period, increased to include the number of additional shares of common stock that would have been outstanding if the shares of common stock underlying our outstanding dilutive restricted stock units had been issued. The dilutive effect of outstanding restricted stock units is reflected in diluted net income per share by application of the treasury stock method.

The following table sets forth the computation of basic and diluted net income per share attributable to KLA:

(In thousands, except per share amounts)	Three Months Ended September 30,	
	2019	2018
Numerator:		
Net income attributable to KLA	\$ 346,525	\$ 395,944
Denominator:		
Weighted-average shares-basic, excluding unvested restricted stock units	158,697	155,221
Effect of dilutive restricted stock units and options	1,434	862
Weighted-average shares-diluted	160,131	156,083
Basic net income per share attributable to KLA	\$ 2.18	\$ 2.55
Diluted net income per share attributable to KLA	\$ 2.16	\$ 2.54
Anti-dilutive securities excluded from the computation of diluted net income per share	—	207

NOTE 13 – INCOME TAXES

The following table provides details of income taxes:

(Dollar amounts in thousands)	Three Months Ended September 30,	
	2019	2018
Income before income taxes	\$ 371,516	\$ 427,568
Provision for income taxes	\$ 25,120	\$ 31,624
Effective tax rate	6.8%	7.4%

Our effective tax rate is lower than the U.S. federal statutory rate primarily due to the proportion of earnings generated in jurisdictions with tax rates lower than the U.S. statutory rate.

In the normal course of business, we are subject to examination by tax authorities throughout the world. We completed the U.S. federal income tax examination for the fiscal year ended June 30, 2016 and are subject to U.S. federal income tax examinations for all years beginning from the fiscal year ended June 30, 2017. We are subject to state income tax examinations for all years beginning from the fiscal year ended June 30, 2015. We are also subject to examinations in other major foreign jurisdictions, including Singapore and Israel, for all years beginning from the calendar year ended December 31, 2012. We are under audit in Germany related to Orbotech for the years ended December 31, 2013 to December 31, 2015.

It is possible that certain examinations may be concluded in the next twelve months. The timing and resolution of income tax examinations is uncertain. The amounts paid, if any, upon resolution of issues raised by the taxing authorities may differ materially from the amounts accrued for each year. Although it is possible that our balance of gross unrecognized tax benefits could materially change in the next 12 months, we are unable to estimate the full range of possible adjustments to this balance given the uncertainty in the development of ongoing income tax examinations.

In May 2017, Orbotech received an assessment from the Israel Tax Authority (“ITA”) with respect to its fiscal years 2012 through 2014 (the “Assessment”, and the “Audit Period”, respectively), for an aggregate amount of tax, after offsetting all net operating losses (“NOLs”) available through the end of 2014, of approximately NIS 229.0 million (equivalent to approximately \$66.0 million which includes related interest and linkage differentials to the Israeli consumer price index as of date of the issuance of the Tax Decrees, as defined below).

On August 31, 2018, Orbotech filed an objection in respect of the tax assessment (the “Objection”). The ITA completed the second stage of the audit, in which the claims Orbotech raised in the Objection were examined by different personnel at the ITA. In addition, the ITA examined additional items during this second stage of the audit. As Orbotech and the ITA did not reach an agreement during the second stage, the ITA issued Tax Decrees to Orbotech on August 28, 2019 (“Tax Decrees”) for an aggregate amount of tax, after offsetting all NOLs available through the end of 2014, of approximately NIS 257 million (equivalent to approximately \$74 million which includes related interest and linkage differentials to the Israeli consumer price index as of the date of the issuance of the Tax Decrees). These Tax Decrees replaced the Assessment. We believe that our recorded unrecognized tax benefits are sufficient to cover the resolution of these Tax Decrees.

Orbotech filed a notice of appeal with respect to the above Tax Decrees with the District Court of Tel Aviv on September 26, 2019. The ITA and Orbotech have agreed to extend the filing of the ITA's arguments in support of the Tax Decrees to February 28, 2020. The ITA and Orbotech are continuing discussions in an effort to resolve this matter in a mutually agreeable manner.

In connection with the above, there is an ongoing criminal investigation in Israel against Orbotech, certain of its employees and its tax consultant. On April 11, 2018, Orbotech received a "suspect notification letter" (dated March 28, 2018) from the Tel Aviv District Attorney's Office (Fiscal and Financial). In the letter, it was noted that the investigation file was transferred from the Assessment Investigation Officer to the District Attorney's Office. The letter further states that the District Attorney's Office has not yet made a decision regarding submission of an indictment against Orbotech; and that if after studying the case, a decision is made to consider prosecuting Orbotech, Orbotech will receive an additional letter, and within 30 days, Orbotech may present its arguments to the District Attorney's Office as to why it should not be indicted. On October 27, 2019, we received a request for additional information from the District Attorney's Office. We will continue to monitor the progress of the District Attorney's Office investigation, however, we cannot anticipate when the review of the case will be completed and what will be the results thereof. We intend to cooperate with the District Attorney's Office to enable them to conclude their investigation.

NOTE 14 – LITIGATION AND OTHER LEGAL MATTERS

We are named from time to time as a party to lawsuits and other types of legal proceedings and claims in the normal course of our business. Actions filed against us include commercial, intellectual property, customer, and labor and employment related claims, including complaints of alleged wrongful termination and potential class action lawsuits regarding alleged violations of federal and state wage and hour and other laws. In general, legal proceedings and claims, regardless of their merit, and associated internal investigations (especially those relating to intellectual property or confidential information disputes) are often expensive to prosecute, defend or conduct and may divert management's attention and other company resources. Moreover, the results of legal proceedings are difficult to predict, and the costs incurred in litigation can be substantial, regardless of outcome. We believe the amounts provided in our Condensed Consolidated Financial Statements are adequate in light of the probable and estimated liabilities. However, because such matters are subject to many uncertainties, the ultimate outcomes are not predictable, and there can be no assurances that the actual amounts required to satisfy alleged liabilities from the matters described above will not exceed the amounts reflected in our Condensed Consolidated Financial Statements or will not have a material adverse effect on our results of operations, financial condition or cash flows.

NOTE 15 – COMMITMENTS AND CONTINGENCIES

Factoring. We have agreements (referred to as "factoring agreements") with financial institutions to sell certain of our trade receivables and promissory notes from customers without recourse. We do not believe we are at risk for any material losses as a result of these agreements. In addition, we periodically sell certain letters of credit ("LCs"), without recourse, received from customers in payment for goods and services.

The following table shows total receivables sold under factoring agreements and proceeds from sales of LCs for the indicated periods:

<u>(In thousands)</u>	Three Months Ended	
	September 30,	
	2019	2018
Receivables sold under factoring agreements	\$ 56,420	\$ 61,540
Proceeds from sales of LCs	\$ 9,929	\$ 10,892

Factoring and LC fees for the sale of certain trade receivables were recorded in other expense (income), net and were not material for the periods presented.

Purchase Commitments. We maintain commitments to purchase inventory from our suppliers as well as goods, services, and other assets in the ordinary course of business. Our liability under these purchase commitments is generally restricted to a forecasted time-horizon as mutually agreed upon between the parties. This forecasted time-horizon can vary among different suppliers. Our estimate of our significant purchase commitments for primarily material, services, supplies and asset purchases is approximately \$643.5 million as of September 30, 2019, which are primarily due within the next 12 months.

Actual expenditures will vary based upon the volume of the transactions and length of contractual service provided. In addition, the amounts paid under these arrangements may be less in the event that the arrangements are renegotiated or canceled. Certain agreements provide for potential cancellation penalties.

Cash Long-Term Incentive Plan. As of September 30, 2019, we have committed \$176.0 million for future payment obligations under our Cash LTI Plan. The calculation of compensation expense related to the Cash LTI Plan includes estimated forfeiture rate assumptions. Cash LTI awards issued to employees under the Cash LTI Plan vest in three or four equal installments, with one-third or one-fourth of the aggregate amount of the Cash LTI award vesting on each anniversary of the grant date over a three or four-year period. In order to receive payments under a Cash LTI award, participants must remain employed by us as of the applicable award vesting date.

Guarantees and Contingencies. We maintain guarantee arrangements available through various financial institutions for up to \$49.2 million, of which \$43.0 million had been issued as of September 30, 2019, primarily to fund guarantees to customs authorities for value-added tax (“VAT”) and other operating requirements of our subsidiaries in Europe, Israel and Asia.

Indemnification Obligations. Subject to certain limitations, we are obligated to indemnify our current and former directors, officers and employees with respect to certain litigation matters and investigations that arise in connection with their service to us. These obligations arise under the terms of our certificate of incorporation, our bylaws, applicable contracts, and Delaware and California law. The obligation to indemnify generally means that we are required to pay or reimburse the individuals’ reasonable legal expenses and possibly damages and other liabilities incurred in connection with these matters. For example, we have paid or reimbursed legal expenses incurred in connection with the investigation of our historical stock option practices and the related litigation and government inquiries by several of our current and former directors, officers and employees. Although the maximum potential amount of future payments we could be required to make under the indemnification obligations generally described in this paragraph is theoretically unlimited, we believe the fair value of this liability, to the extent estimable, is appropriately considered within the reserve we have established for currently pending legal proceedings.

We are a party to a variety of agreements pursuant to which we may be obligated to indemnify the other party with respect to certain matters. Typically, these obligations arise in connection with contracts and license agreements or the sale of assets, under which we customarily agree to hold the other party harmless against losses arising from, or provides customers with other remedies to protect against, bodily injury or damage to personal property caused by our products, non-compliance with our product performance specifications, infringement by our products of third-party intellectual property rights and a breach of warranties, representations and covenants related to matters such as title to assets sold, validity of certain intellectual property rights, non-infringement of third-party rights, and certain income tax-related matters. In each of these circumstances, payment by us is typically subject to the other party making a claim to and cooperating with us pursuant to the procedures specified in the particular contract. This usually allows us to challenge the other party’s claims or, in case of breach of intellectual property representations or covenants, to control the defense or settlement of any third-party claims brought against the other party. Further, our obligations under these agreements may be limited in terms of amounts, activity (typically at our option to replace or correct the products or terminate the agreement with a refund to the other party), and duration. In some instances, we may have recourse against third parties and/or insurance covering certain payments made by us.

In addition, we may in limited circumstances enter into agreements that contain customer-specific commitments on pricing, tool reliability, spare parts stocking levels, response time and other commitments. Furthermore, we may give these customers limited audit or inspection rights to enable them to confirm that we are complying with these commitments. If a customer elects to exercise its audit or inspection rights, we may be required to expend significant resources to support the audit or inspection, as well as to defend or settle any dispute with a customer that could potentially arise out of such audit or inspection. To date, we have made no significant accruals in our Condensed Consolidated Financial Statements for this contingency. While we have not in the past incurred significant expenses for resolving disputes regarding these types of commitments, we cannot make any assurance that it will not incur any such liabilities in the future.

It is not possible to predict the maximum potential amount of future payments under these or similar agreements due to the conditional nature of our obligations and the unique facts and circumstances involved in each particular agreement. Historically, payments made by us under these agreements have not had a material effect on our business, financial condition, results of operations or cash flows.

NOTE 16 – DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

The authoritative guidance requires companies to recognize all derivative instruments and hedging activities, including foreign currency exchange contracts and interest rate lock agreements, (collectively “derivatives”) as either assets or liabilities at fair value on the Condensed Consolidated Balance Sheets. In accordance with the accounting guidance, we designate foreign currency exchange contracts and interest rate lock agreements as cash flow hedges of certain forecasted foreign currency denominated sales, purchase and spending transactions, and the benchmark interest rate of the corresponding debt financing, respectively.

Our foreign subsidiaries operate and sell our products in various global markets. As a result, we are exposed to risks relating to changes in foreign currency exchange rates. We utilize foreign currency forward exchange contracts and option contracts to hedge against future movements in foreign exchange rates that affect certain existing and forecasted foreign currency denominated sales and purchase transactions, such as the Japanese yen, the euro, the pound sterling and the Israeli new shekel. We routinely hedge our exposures to certain foreign currencies with various financial institutions in an effort to minimize the impact of certain currency exchange rate fluctuations. These currency forward exchange contracts and options, designated as cash flow hedges, generally have maturities of less than 18 months. Cash flow hedges are evaluated for effectiveness monthly, based on changes in total fair value of the derivatives. If a financial counterparty to any of our hedging arrangements experiences financial difficulties or is otherwise unable to honor the terms of the foreign currency hedge, we may experience material losses.

In October 2014, we entered into a series of forward contracts (“Rate Lock Agreements”) to lock the benchmark rate on a portion of the Senior Notes. The Rate Lock Agreements had a notional amount of \$1.00 billion in aggregate which matured in the second quarter of the fiscal year ended June 30, 2015. The Rate Lock Agreements were terminated on the date of the pricing of the \$1.25 billion of 4.650% Senior Notes due in 2024 and we recorded the fair value of \$7.5 million as a gain within accumulated other comprehensive income (loss) (“OCI”) as of December 31, 2014. We recognized \$0.2 million for each of the three months ended September 30, 2019 and 2018, for the amortization of the gain recognized in accumulated other comprehensive income (loss), which amount reduced the interest expense. As of September 30, 2019, the unamortized portion of the fair value of the forward contracts for the Rate Lock Agreements was \$3.8 million. For more details, refer to Note 16, “Derivative Instruments and Hedging Activities” of the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended June 30, 2019.

During the fiscal year ended June 30, 2018, we entered into a series of forward contracts (the “2018 Rate Lock Agreements”) to lock the benchmark interest rate prior to expected debt issuances. The objective of the 2018 Rate Lock Agreements was to hedge the risk associated with the variability in interest rates due to the changes in the benchmark rate leading up to the closing of the intended financing on the notional amount being hedged. The 2018 Rate Lock Agreement had a notional amount of \$500.0 million in aggregate, which matured and terminated in the third quarter of fiscal year ending June 30, 2019 and we recorded the fair value of \$13.6 million as a loss within OCI. We recognized \$0.3 million amortization of the loss recognized in accumulated OCI, which increased the interest expense for the three months ended September 30, 2019. As of September 30, 2019, the unamortized portion of the fair value of the 2018 Rate Lock Agreements was \$13.0 million.

For derivatives that are designated and qualify as cash flow hedges, the effective portion of the gains or losses is reported in OCI and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. Prior to adopting the new accounting guidance for hedge accounting, time value was excluded from the assessment of effectiveness for derivatives designated as cash flow hedges. Time value was amortized on a mark-to-market basis and recognized in earnings over the life of the derivative contract. For derivative contracts executed after adopting the new accounting guidance, the election to include time value for the assessment of effectiveness is made on all forward contracts designated as cash flow hedges. The change in fair value of the derivative are recorded in OCI until the hedged item is recognized in earnings. The assessment of effectiveness of options contracts designated as cash flow hedges continue to exclude time value after adopting the new accounting guidance. The initial value of the component excluded from the assessment of effectiveness are recognized in earnings over the life of the derivative contract. Any difference between change in the fair value of the excluded components and the amounts recognized in earnings are recorded in OCI.

For derivatives that are not designated as cash flow hedges, gains and losses are recognized in other expense (income), net. We use foreign currency forward contracts to hedge certain foreign currency denominated assets or liabilities. The gains and losses on these derivative instruments are largely offset by the changes in the fair value of the assets or liabilities being hedged.

Derivatives in Cash Flow Hedging Relationships: Foreign Exchange and Interest Rate Contracts

The gains (losses) on derivatives in cash flow hedging relationships recognized in OCI for the indicated periods were as follows:

<u>(In thousands)</u>	Three Months Ended September 30,	
	2019	2018
Derivatives Designated as Hedging Instruments:		
Foreign exchange contracts:		
Amounts included in the assessment of effectiveness	\$ (740)	\$ 13,794
Amounts excluded from the assessment of effectiveness	\$ (2)	\$ —

The locations and amounts of designated and non-designated derivative's gains and losses reported in the Condensed Consolidated Statements of Operations for the indicated periods were as follows:

<u>(In thousands)</u>	Three Months Ended September 30, 2019				Three Months Ended September 30, 2018			
	Revenue	Cost of Revenues and Operating Expenses	Interest Expense	Other Expense (Income), Net	Revenue	Cost of Revenues	Interest Expense	Other Expense (Income), Net
Total amounts presented in the Condensed Consolidated Statement of Operations in which the effects of cash flow hedges are recorded	\$ 1,413,414	\$ 1,003,166	\$ 40,350	\$ (1,618)	\$ 1,093,260	\$ 381,387	\$ 26,362	\$ (10,025)
Gains (losses) on Derivatives Designated as Hedging Instruments:								
Rate lock agreements:								
Amount of gains (losses) reclassified from accumulated OCI to earnings	\$ —	\$ —	\$ (99)	\$ —	\$ —	\$ —	\$ —	\$ —
Foreign exchange contracts:								
Amount of gains (losses) reclassified from accumulated OCI to earnings	\$ 475	\$ (1,801)	\$ —	\$ —	\$ 983	\$ (134)	\$ 188	\$ —
Amount excluded from the assessment of effectiveness recognized in earnings based on an amortization approach	\$ (102)	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Amount excluded from the assessment of effectiveness	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 229
Gains (losses) on Derivatives Not Designated as Hedging Instruments:								
Amount of gains (losses) recognized in earnings	\$ —	\$ —	\$ —	\$ 2,325	\$ —	\$ —	\$ —	\$ 3,763

The U.S. dollar equivalent of all outstanding notional amounts of foreign currency hedge contracts, with maximum remaining maturities of approximately ten months as of the dates indicated below were as follows:

<u>(In thousands)</u>	As of September 30, 2019	As of June 30, 2019
	Cash flow hedge contracts - foreign currency	
Purchase	\$ 26,488	\$ 31,108
Sell	\$ 117,761	\$ 113,226
Other foreign currency hedge contracts		
Purchase	\$ 228,271	\$ 257,614
Sell	\$ 280,226	\$ 273,061

The locations and fair value of our derivatives reported in our Condensed Consolidated Balance Sheets as of the dates indicated below were as follows:

(In thousands)	Asset Derivatives				Liability Derivatives		
	Balance Sheet Location	As of September 30, 2019	As of June 30, 2019	Balance Sheet Location	As of September 30, 2019	As of June 30, 2019	
		Fair Value			Fair Value		
Derivatives designated as hedging instruments							
Foreign exchange contracts	Other current assets	608	397	Other current liabilities	824	2,097	
Total derivatives designated as hedging instruments		608	397		824	2,097	
Derivatives not designated as hedging instruments							
Foreign exchange contracts	Other current assets	3,000	2,160	Other current liabilities	1,845	1,237	
Total derivatives not designated as hedging instruments		3,000	2,160		1,845	1,237	
Total derivatives		<u>\$ 3,608</u>	<u>\$ 2,557</u>		<u>\$ 2,669</u>	<u>\$ 3,334</u>	

The changes in OCI, before taxes, related to derivatives for the indicated periods were as follows:

(In thousands)	Three Months Ended September 30,	
	2019	2018
	Beginning balance	\$ (10,791)
Amount reclassified to earnings	1,527	(1,037)
Net change in unrealized gains or losses	(742)	13,794
Ending balance	<u>\$ (10,006)</u>	<u>\$ 15,103</u>

Offsetting of Derivative Assets and Liabilities

We present derivatives at gross fair values in the Condensed Consolidated Balance Sheets. We have entered into arrangements with each of our counterparties, which reduce credit risk by permitting net settlement of transactions with the same counterparty under certain conditions. The information related to the offsetting arrangements for the periods indicated was as follows (in thousands):

Description	Gross Amounts of Derivatives	Gross Amounts of Derivatives Offset in the Condensed Consolidated Balance Sheets	Net Amount of Derivatives Presented in the Condensed Consolidated Balance Sheets	Gross Amounts of Derivatives Not Offset in the Condensed Consolidated Balance Sheets		
				Financial Instruments	Cash Collateral Received	Net Amount
				Derivatives - Assets	\$ 3,608	\$ —
Derivatives - Liabilities	\$ (2,669)	\$ —	\$ (2,669)	\$ 2,027	\$ —	\$ (642)

Description	Gross Amounts of Derivatives	Gross Amounts of Derivatives Offset in the Condensed Consolidated Balance Sheets	Net Amount of Derivatives Presented in the Condensed Consolidated Balance Sheets	Gross Amounts of Derivatives Not Offset in the Condensed Consolidated Balance Sheets		
				Financial Instruments	Cash Collateral Received	Net Amount
				Derivatives - Assets	\$ 2,557	\$ —
Derivatives - Liabilities	\$ (3,334)	\$ —	\$ (3,334)	\$ 1,397	\$ —	\$ (1,937)

NOTE 17– RELATED PARTY TRANSACTIONS

During the three months ended September 30, 2019 and 2018, we purchased from, or sold to, several entities, where one or more of our executive officers or members of our Board of Directors, or their immediate family members, were, during the periods presented, an executive officer or a board member of a subsidiary, including Anaplan, Inc. Citrix Systems, Inc., Keysight Technologies, Inc., and NetApp, Inc. The following table provides the transactions with these parties for the indicated periods (for the portion of such period that they were considered related):

(In thousands)	Three Months Ended	
	September 30,	
	2019	2018
Total revenues	\$ 1,041	\$ 2
Total purchases	\$ 465	\$ 603

Our receivable balances from these parties were \$1.8 million at September 30, 2019 and immaterial as of June 30, 2019. Our payable balances from these parties were immaterial at September 30, 2019 and June 30, 2019.

NOTE 18 – SEGMENT REPORTING AND GEOGRAPHIC INFORMATION

ASC 280, Segment Reporting, establishes standards for reporting information about operating segments. Operating segments are defined as components of an enterprise about which separate financial information is evaluated regularly by the chief operating decision maker (“CODM”) in deciding how to allocate resources and in assessing performance. Our CODM is our Chief Executive Officer.

We have four reportable segments: Semiconductor Process Control; Specialty Semiconductor Process; PCB, Display and Component Inspection; and Other. The reportable segments are determined based on several factors including, but not limited to, customer base, homogeneity of products, technology, delivery channels and similar economic characteristics.

Semiconductor Process Control

The Semiconductor Process Control (“SPC”) segment offers comprehensive portfolio of inspection, metrology and data analytics products, and related service, which helps integrated circuit manufacturers achieve target yield throughout the entire semiconductor fabrication process—from research and development (“R&D”) to final volume production. Our differentiated products and services are designed to provide comprehensive solutions that help our customers accelerate development and production ramp cycles, achieve higher and more stable semiconductor die yields and improve their overall profitability. This reportable segment is comprised of two operating segments.

Specialty Semiconductor Process

The Specialty Semiconductor Manufacturing segment develops and sells advanced vacuum deposition and etching process tools, which are used by a broad range of specialty semiconductor customers, including manufacturers of microelectromechanical systems (“MEMS”), radio frequency (“RF”) communication chips, and power semiconductors for automotive and industrial applications. This reportable segment is comprised of one operating segment.

PCB, Display and Component Inspection

The PCB, Display and Component Inspection segment enable electronic device manufacturers to inspect, test and measure printed circuit boards (“PCBs”), flat panel displays (“FPDs”) and ICs to verify their quality, pattern the desired electronic circuitry on the relevant substrate and perform three-dimensional shaping of metalized circuits on multiple surfaces. This segment also engages in the development and marketing of character recognition solutions to banks, financial and other payment processing institutions and healthcare providers. This reportable segment is comprised of two operating segments.

Other

We engage in the research, development and marketing of products for the deposition of thin film coating of various materials on crystalline silicon photovoltaic wafers for solar energy panels. This reportable segment is comprised of one operating segment.

The CODM assesses the performance of each operating segment and allocates resources to those segments based on total revenue and segment gross margin and does not evaluate the segments using discrete asset information. Segment gross margin excludes corporate allocations and effects of foreign exchange rates, amortization of intangible assets, amortization of inventory fair value adjustments, and transaction costs associated with our acquisitions related to costs of revenues.

The following is a summary of results for each of our four reportable segments for the indicated periods:

(In thousands)	Three Months Ended September 30,	
	2019	2018
Semiconductor Process Control:		
Revenue	\$ 1,163,632	\$ 1,069,959
Segment gross margin	\$ 742,342	\$ 702,231
Specialty Semiconductor Process:		
Revenue	\$ 69,139	\$ —
Segment gross margin	\$ 38,164	\$ —
PCB, Display and Component Inspection:		
Revenue	\$ 178,552	\$ 23,615
Segment gross margin	\$ 76,068	\$ 10,533
Other:		
Revenue	\$ 2,231	\$ —
Segment gross margin	\$ 653	\$ —
Totals:		
Revenue	\$ 1,413,554	\$ 1,093,574
Segment gross margin	\$ 857,227	\$ 712,764

The following table reconciles total reportable segment revenue to total revenue for the indicated periods:

(In thousands)	Three Months Ended September 30,	
	2019	2018
Total revenue for reportable segments	\$ 1,413,554	\$ 1,093,574
Corporate allocations and effects of foreign exchange rates	(140)	(314)
Total revenue	\$ 1,413,414	\$ 1,093,260

The following table reconciles total segment gross margin to total income before income taxes for the indicated periods:

(In thousands)	Three Months Ended September 30,	
	2019	2018
Total segment gross margin	\$ 857,227	\$ 712,764
Acquisition-related charges, corporate allocations, and effects of foreign exchange rates ⁽¹⁾	48,054	891
Research and development	210,580	153,530
Selling, general and administrative	188,345	114,438
Interest expense	40,350	26,362
Other expense (income), net	(1,618)	(10,025)
Income before income taxes	\$ 371,516	\$ 427,568

(1) Acquisition-related charges primarily include amortization of intangible assets, amortization of inventory fair value adjustments, and other acquisition-related costs classified or presented as part of costs of revenues.

Our significant operations outside the United States include manufacturing facilities in China, Germany, Israel and Singapore and sales, marketing and service offices in Japan, the rest of the Asia Pacific region and Europe. For geographical revenue reporting, revenues are attributed to the geographic location in which the customer is located. Long-lived assets consist of land, property and equipment, net and are attributed to the geographic region in which they are located.

The following is a summary of revenues by geographic region, based on ship-to location, for the indicated periods:

(Dollar amounts in thousands)	Three Months Ended September 30,			
	2019		2018	
Revenues:				
Taiwan	\$ 386,729	27%	\$ 254,437	23%
China	345,856	24%	340,134	31%
Japan	206,211	15%	135,578	12%
Korea	197,450	14%	153,501	14%
North America	181,983	13%	102,129	9%
Europe and Israel	59,383	4%	71,669	7%
Rest of Asia	35,802	3%	35,812	4%
Total	\$ 1,413,414	100%	\$ 1,093,260	100%

The following is a summary of revenues by major products for the indicated periods:

(Dollar amounts in thousands)	Three Months Ended September 30,			
	2019		2018	
Revenues:				
Wafer Inspection	\$ 448,274	32%	\$ 447,292	41%
Patterning	382,658	27%	304,001	28%
Specialty Semiconductor Process	56,870	4%	—	—%
PCB, Display and Component Inspection	120,360	9%	20,835	2%
Services	355,439	25%	264,033	24%
Other	49,813	3%	57,099	5%
Total	\$ 1,413,414	100%	\$ 1,093,260	100%

Wafer Inspection, and Patterning products are offered in Semiconductor Process Control segment. Services are offered in multiple segments. Other includes primarily refurbished systems, remanufactured legacy systems, and enhancements and upgrades for previous-generation products which are part of Semiconductor Process Control segment.

In the three months ended September 30, 2019, two customers accounted for approximately 17% and 12% of total revenues. In the three months ended September 30, 2018, two customers accounted for approximately 15% and 10% of total revenues. One customer on an individual basis accounted for greater than 10% of net accounts receivables at September 30, 2019 and June 30, 2019.

Land, property and equipment, net by geographic region as of the dates indicated below were as follows:

(In thousands)	As of September 30, 2019	As of June 30, 2019
Land, property and equipment, net:		
United States	\$ 279,293	\$ 253,255
Singapore	52,778	49,523
Israel	63,250	66,082
Europe	61,302	62,027
Rest of Asia	18,587	17,912
Total	\$ 475,210	\$ 448,799

NOTE 19 – RESTRUCTURING CHARGES

In September 2019, management approved a plan to streamline our organization and business processes that included the reduction of workforce, which is expected to be completed in the second half of our fiscal year 2021, primarily in our PCB, Display and Component Inspection segment, and a potential disposition of our solar energy business in our Other segment. Restructuring charges were immaterial for the three months ended September 30, 2019. Proceeds from disposition of our solar energy business are not expected to be material.

We expect to incur additional restructuring charges, including additional severance costs and other related costs in future periods in connection with the completion of our workforce reduction.

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

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This report contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. All statements other than statements of historical fact may be forward-looking statements. You can identify these and other forward-looking statements by the use of words such as “may,” “will,” “could,” “would,” “should,” “expects,” “plans,” “anticipates,” “relies,” “believes,” “estimates,” “predicts,” “intends,” “potential,” “continue,” “thinks,” “seeks,” or the negative of such terms, or other comparable terminology. Forward-looking statements also include the assumptions underlying or relating to any of the foregoing statements. Such forward-looking statements include, among others, forecasts of the future results of our operations, including profitability; orders for our products and capital equipment generally; sales of semiconductors; the investments by our customers in advanced technologies and new materials; the allocation of capital spending by our customers (and, in particular, the percentage of spending that our customers allocate to process control); growth of revenue in the semiconductor industry, the semiconductor capital equipment industry and our business; technological trends in the semiconductor industry; future developments or trends in the global capital and financial markets; our future product offerings and product features; the success and market acceptance of new products; timing of shipment of backlog; our future product shipments and product and service revenues; our future gross margins; our future research and development expenses and selling, general and administrative expenses; our ability to successfully maintain cost discipline; international sales and operations; our ability to maintain or improve our existing competitive position; success of our product offerings; creation and funding of programs for research and development; attraction and retention of employees; results of our investment in leading edge technologies; the effects of hedging transactions; the effect of the sale of trade receivables and promissory notes from customers; our future effective income tax rate; our recognition of tax benefits; the effects of any audits or litigation; future payments of dividends to our stockholders; the completion of any acquisitions of third parties, or the technology or assets thereof; benefits received from any acquisitions and development of acquired technologies; sufficiency of our existing cash balance, investments, cash generated from operations and the unfunded portion of our revolving line of credit under a Credit Agreement (the “Credit Agreement”) to meet our operating and working capital requirements, including debt service and payment thereof; future dividends, and stock repurchases; our compliance with the financial covenants under the Credit Agreement; the adoption of new accounting pronouncements including ASC 842 and ASC 606; the tax liabilities resulting from the enactment of the Tax Cuts and Jobs Act; and our repayment of our outstanding indebtedness.

Our actual results may differ significantly from those projected in the forward-looking statements in this report. Factors that might cause or contribute to such differences include, but are not limited to, those discussed in Part II, Item 1A, “Risk Factors” in this report as well as in Item 1, “Business” and Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report on Form 10-K for the year ended June 30, 2019, filed with the Securities and Exchange Commission on August 16, 2019. You should carefully review these risks and also review the risks described in other documents we file from time to time with the Securities and Exchange Commission. You are cautioned not to place undue reliance on these forward-looking statements, and we expressly assume no obligation and do not intend to update the forward-looking statements in this report after the date hereof.

EXECUTIVE SUMMARY

We are a leading supplier of process control and yield management solutions for the semiconductor and related nanoelectronics industries. Our broad portfolio of inspection and metrology products, and related service, software and other offerings primarily supports integrated circuit (“IC” or “chip”) manufacturers throughout the entire semiconductor fabrication process, from research and development to final volume production. We provide leading edge equipment, software and support that enable IC manufacturers to identify, resolve and manage significant advanced technology manufacturing process challenges and obtain higher finished product yields at lower overall cost. In addition to serving the semiconductor industry, we also provide a range of technology solutions to a number of other high technology industries, including advanced packaging, light emitting diode (“LED”), power devices, compound semiconductor, and data storage industries, as well as general materials research.

Our products and services are used by the vast majority of bare wafer, IC, lithography reticle (“reticle” or “mask”) and hard disk drive manufacturers around the world. Our products, services and expertise are used by our customers to measure, detect, analyze and resolve critical product defects that arise in that environment in order to control nanometric level manufacturing processes.

Our revenues are driven largely by our customers’ spending on capital equipment and related maintenance services necessary to support key transitions in their underlying product technologies, or to increase their production volumes in response to market demand or expansion plans. Our semiconductor customers generally operate in one or more of the three major semiconductor markets - memory, foundry and logic. All three of these markets are characterized by rapid technological changes and sudden shifts in end-user demand, which influence the level and pattern of our customers’ spending on our products and services. Although capital spending in all three semiconductor markets has historically been very cyclical, the demand for more advanced and lower cost chips used in a growing number of consumer electronics, communications, data processing, and industrial and automotive products has resulted over the long term in a favorable demand environment for our process control and yield management solutions, particularly in the foundry and logic markets, which have higher levels of process control adoption than the memory market.

Through the acquisition of Orbotech, Ltd. (“Orbotech”), we have expanded our reach in the electronics value chain to include technologically advanced, yield-enhancing and process-enabling solutions to address various manufacturing stages of Printed Circuit Boards (“PCB”), Flat Panel Displays (“FPD”), Specialty Semiconductor Devices (“SD”) and other electronic components. The products include Automated Optical Inspection (“AOI”), Automated Optical Shaping (“AOS”), Direct Imaging (“DI”), additive printing, laser drilling, laser plotters, Computer aided manufacturing (“CAM”) and engineering solutions for PCB and additional adjacent electronics component manufacturing, as well as AOI, test, repair and process monitoring systems for FPD manufacturing and vacuum process tools for etch, Physical Vapor Deposition (“PVD”), Molecular Vapor Deposition (“MVD”) and Chemical Vapor Deposition (“CVD”) solutions for SD manufacturing.

In our newly acquired Orbotech business, consumer end markets have been experiencing a fundamental shift in technology complexity, driven primarily by the proliferation of high-end mobile devices and automotive devices, as well as by the demand for large area FPDs such as large-size LCD televisions and OLED displays. The shift towards 5G connectivity and the fast-paced growth of the Internet of Things (“IoT”) services is expected to continue to further accelerate this shift as more devices become connected and dependent upon other electronic devices.

As a supplier to the global semiconductor, semiconductor-related and electronics industries, our customer base continues to become more highly concentrated over time, thereby increasing the potential impact of a sudden change in capital spending by a major customer on our revenues and profitability. As our customer base becomes increasingly more concentrated, large orders from a relatively limited number of customers account for a substantial portion of our sales, which potentially exposes us to more volatility for revenues and earnings. In the global semiconductor and electronics related industries, China is emerging as a major region for manufacturing of logic and memory chips, adding to its role as the world’s largest consumer of ICs. Additionally, a significant portion of global FPD and PCB manufacturing has migrated to China. Government initiatives are propelling China to expand its domestic manufacturing capacity and attracting semiconductor manufacturers from Taiwan, Korea, Japan and the US. China is currently seen as an important long-term growth region for the semiconductor and electronics capital equipment sector. We are also subject to the cyclical capital spending that has historically characterized the semiconductor, semiconductor-related and electronics industries. The timing, length, intensity and volatility of the capacity-oriented capital spending cycles of our customers are unpredictable.

The semiconductor and electronics industries have also been characterized by constant technological innovation. Currently, there are multiple drivers for growth in the industry with increased demand for chips providing computation power and connectivity for Artificial Intelligence (“AI”) applications and support for mobile devices at the leading edge of foundry and logic chip manufacturing. Qualification of early extreme ultraviolet (“EUV”) lithography processes and equipment is driving growth at leading logic/foundry and dynamic random-access memory (“DRAM”) manufacturers. Expansion of IoT together with increasing acceptance of advanced driver assistance systems (“ADAS”) in anticipation of the introduction of autonomous cars have begun to accelerate legacy-node technology conversions and capacity expansions. Intertwined in these areas, spurred by data storage and connectivity needs, is the growth in demand for memory chips. On the other hand, higher design costs for the most advanced ICs could economically constrain leading-edge manufacturing technology customers to focus their resources on only the large technologically advanced products and applications. We believe that, over the long term, our customers will continue to invest in advanced technologies and new materials to enable smaller design rules and higher density applications that fuel demand for process control equipment, although the growth for such equipment may be adversely impacted by higher design costs for advanced ICs, reuse of installed products, and delays in production ramps by our customers in response to higher costs and technical challenges at more advanced technology nodes.

Additionally, current trends in smart mobile devices, 5G connectivity, automotive electronics, smart vehicles, flexible displays, AR / VR and wearable devices, high-performance computing, large size televisions and the IoT are expected to drive the need for production, inspection, test and repair solutions that are able to address the cutting-edge technology embedded in these types of electronic products.

The demand for our products and our revenue levels are driven by our customers' needs to solve the process challenges that they face as they adopt new technologies required to fabricate advanced ICs that are incorporated into sophisticated mobile devices. Our customers continuously seek to increase yields and enhance the efficiency of their manufacturing processes, including by improving their manufacturing, inspection, testing and repair capabilities.

Subsequent to the Orbotech Acquisition, we changed our organizational structure resulting in four reportable segments: Semiconductor Process Control, Specialty Semiconductor Process, PCB, Display and Component Inspection, and Other. Prior period results have been recast to conform to the current presentation.

Our view of the current wafer fab equipment demand climate is aligned with consensus industry analyst expectations for the calendar year 2019, which reflects a decline in capital equipment spending by memory customers. In contrast to the memory business, capital equipment spending by foundry and logic customers at the leading edge are accelerating their ramp. We have already seen our mix of business begin to shift toward increased purchases by logic and foundry customers as a percentage of total sales, and we expect spending from these customers to continue to remain strong. Because of a more diversified semiconductor device-end demand, and disciplined capacity planning by wafer fab equipment customers, we believe the long-term growth dynamics for the industry remain strong. While manufacturers of PCBs, FPDs, SDs and other electronic components create different products for diverse end-markets, they share similar production challenges in an increasingly competitive environment.

The following table sets forth some of our key quarterly unaudited financial information⁽¹⁾⁽²⁾:

(In thousands, except net income per share)	Three Months Ended				
	September 30, 2019	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018
Total revenues	\$ 1,413,414	\$ 1,258,435	\$ 1,097,311	\$ 1,119,898	\$ 1,093,260
Gross margin	\$ 809,173	\$ 665,650	\$ 610,366	\$ 711,638	\$ 711,873
Net income attributable to KLA	\$ 346,525	\$ 217,845	\$ 192,728	\$ 369,100	\$ 395,944
Diluted net income per share attributable to KLA ⁽³⁾	\$ 2.16	\$ 1.35	\$ 1.23	\$ 2.42	\$ 2.54

- (1) On July 1, 2018, we adopted ASC 606 using the modified retrospective transition approach. Results for reporting periods beginning after June 30, 2018 are presented under ASC 606.
- (2) On February 20, 2019, we completed the acquisition of Orbotech for total consideration of approximately \$3.26 billion. The operating results of Orbotech have been included in our Condensed Consolidated Financial Statements from the Acquisition Date. For additional details, refer to Note 6 "Business Combinations" to our Condensed Consolidated Financial Statements.
- (3) Diluted net income per share are computed independently for each of the quarters presented based on the weighted-average fully diluted shares outstanding for each quarter. Therefore, the sum of quarterly diluted net income per share information may not equal annual (or other multiple-quarter calculations of) diluted net income per share.

Acquisition of Orbotech, Ltd.

On February 20, 2019, we completed the acquisition of Orbotech, Ltd. ("Orbotech") for total consideration of approximately \$3.26 billion. Orbotech's core business enables electronic device manufacturers to inspect, test and measure printed circuit boards and flat panel displays to verify their quality; pattern electronic circuitry on substrate and perform three-dimensional shaping of metalized circuits on multiple surfaces; and utilize advanced vacuum deposition and etching process in semiconductor device and semiconductor manufacturing and to perform laser drilling of electronic substrates. For additional details on the financial statement impacts of the Orbotech acquisition, refer to Note 6 "Business Combinations" to the Condensed Consolidated Financial Statements.

CRITICAL ACCOUNTING ESTIMATES AND POLICIES

The preparation of our Condensed Consolidated Financial Statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions in applying our accounting policies that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We base these estimates and assumptions on historical experience and evaluate them on an ongoing basis to ensure

that they remain reasonable under current conditions. Actual results could differ from those estimates. We discuss the development and selection of the critical accounting estimates with the Audit Committee of our Board of Directors on a quarterly basis, and the Audit Committee has reviewed our related disclosure in this Quarterly Report on Form 10-Q.

We updated our accounting policies for Leases. There have been no other material changes in our critical accounting estimates and policies since our Annual Report on Form 10-K for the fiscal year ended June 30, 2019. Refer to Note 1 “Basis of Presentation” to the Condensed Consolidated Financial Statements for additional details. In addition, please refer to Management’s Discussion and Analysis of Financial Condition and Results of Operations contained in Part II, Item 7 of our Annual Report on Form 10-K for our fiscal year ended June 30, 2019 for a more complete discussion of our critical accounting policies and estimates.

Recent Accounting Pronouncements

For a description of recent accounting pronouncements, including those recently adopted and the expected dates of adoption as well as estimated effects, if any, on our Condensed Consolidated Financial Statements of those not yet adopted, see Note 1, “Basis of Presentation” to the Condensed Consolidated Financial Statements for additional details.

RESULTS OF OPERATIONS

Revenues and Gross Margin

(Dollar amounts in thousands)	Three months ended		Q1 FY20 vs. Q1 FY19	
	September 30, 2019	September 30, 2018		
Revenues:				
Product	\$ 1,057,975	\$ 829,227	\$ 228,748	28%
Service	355,439	264,033	91,406	35%
Total revenues	\$ 1,413,414	\$ 1,093,260	\$ 320,154	29%
Costs of revenues	\$ 604,241	\$ 381,387	\$ 222,854	58%
Gross margin percentage	57%	65%		

Product revenues

Our business is affected by the concentration of our customer base and our customers’ capital equipment procurement schedules as a result of their investment plans. Our product revenues in any particular period are significantly impacted by the amount of new orders that we receive during that period and, depending upon the duration of manufacturing and installation cycles, in the preceding period.

Product revenues increased during the three months ended September 30, 2019 compared to the three months ended September 30, 2018, primarily due to a strong demand from our customers in the patterning business, \$157.6 million in product revenue from our Orbotech business which was acquired in February of 2019, partially offset by a lower products shipments to customers in the memory business.

Service revenues

Service revenues are generated from product maintenance and support services, as well as billable time and material service calls made to our customers. The amount of our service revenues is typically a function of the number of systems installed at our customers’ sites and the utilization of those systems, but it is also impacted by other factors, such as our rate of service contract renewals, the types of systems being serviced and fluctuations in foreign exchange rates.

Service revenues increased during the comparative periods presented primarily due to \$68.1 million from our Orbotech business which was acquired in February of 2019, and an increase in the number of systems installed at our customers' site.

Revenues by segment⁽¹⁾

<u>(Dollar amounts in thousands)</u>	Three months ended		Q1 FY20 vs. Q1 FY19	
	September 30, 2019	September 30, 2018		
Revenues:				
Semiconductor Process Control	\$ 1,163,632	\$ 1,069,959	\$ 93,673	9%
Specialty Semiconductor Process	69,139	—	69,139	(3)
PCB, Display and Component Inspection ⁽²⁾	178,552	23,615	154,937	(3)
Other	2,231	—	2,231	(3)
Total revenues	\$ 1,413,554	\$ 1,093,574	\$ 319,980	(3)

(1) Segment revenues exclude corporate allocations and the effects of foreign exchange rates. For additional details, refer to Note 18, “Segment Reporting and Geographic Information” to our Condensed Consolidated Financial Statements.

(2) Segment revenues for the three months ended September 30, 2018 include the component inspection business only.

(3) No meaningful comparative information exists for the three months ended September 30, 2018.

Three months ended September 30, 2019 compared to three months ended September 30, 2018

Revenue from our Semiconductor Process Control segment increased by 9% primarily due to a strong demand from our customers in the patterning business, and growth in service revenues. The increase in revenues from Specialty Semiconductor Process, PCB, Display and Component Inspection and Other segments primarily relates to the Orbotech business, which was acquired in February of 2019.

Revenues by region

The following is a summary of revenues by geographic region, based on ship-to location, for the indicated periods:

<u>(Dollar amounts in thousands)</u>	Three months ended			
	September 30, 2019		September 30, 2018	
Taiwan	\$ 386,729	27%	\$ 254,437	23%
China	345,856	24%	340,134	31%
Korea	197,450	14%	153,501	14%
North America	181,983	13%	102,129	9%
Japan	206,211	15%	135,578	12%
Europe and Israel	59,383	4%	71,669	7%
Rest of Asia	35,802	3%	35,812	4%
Total	\$ 1,413,414	100%	\$ 1,093,260	100%

A significant portion of our revenues continues to be generated in Asia, where a substantial portion of the world’s semiconductor manufacturing capacity is located, and we expect that trend to continue.

Gross margin

Our gross margin fluctuates with revenue levels and product mix and is affected by variations in costs related to manufacturing and servicing our products, including our ability to scale our operations efficiently and effectively in response to prevailing business conditions.

The following table summarizes the major factors that contributed to the changes in gross margin percentage:

	Gross Margin Percentage
	Three months ended
September 30, 2018	65.1%
Revenue volume of products and services	0.4%
Mix of products and services sold	(2.6)%
Manufacturing labor, overhead and efficiencies	(2.4)%
Other service and manufacturing costs	(0.1)%
Impact from Orbotech business	(3.2)%
September 30, 2019	57.2%

Changes in gross margin percentage, which are driven by the revenue volume of products and services, reflect our ability to leverage existing infrastructure to generate higher revenues. It also includes average customer pricing, customer revenue deferrals associated with volume purchase agreements, and the effect of fluctuations in foreign exchange rates. Changes in gross margin percentage from the mix of products and services sold, reflect the impact of changes within the composition of product and service offerings, and amortization of inventory fair value adjustments from business combinations. Changes in gross margin percentage from manufacturing labor, overhead and efficiencies reflect our ability to manage costs and drive productivity as we scale our manufacturing activity to respond to customer requirements, and amortization of intangible assets. Changes in gross margin percentage from other service and manufacturing costs include the impact of customer support costs, including the efficiencies with which we deliver services to our customers, and the effectiveness with which we manage our production plans and inventory risk.

The decrease in our gross margin during the comparative periods presented is primarily attributable to the impact from our acquired Orbotech business which had lower product gross margins, an increase in service and manufacturing costs, and an unfavorable mix of products and services sold from our Semiconductor Process Control business.

Segment gross margin⁽¹⁾

(Dollar amounts in thousands)	Three months ended		Q1 FY20 vs. Q1 FY19	
	September 30, 2019	September 30, 2018		
Segment gross margin:				
Semiconductor Process Control	\$ 742,342	\$ 702,231	\$ 40,111	6%
Specialty Semiconductor Process	38,164	—	38,164	(3)
PCB, Display and Component Inspection ⁽²⁾	76,068	10,533	65,535	(3)
Other	653	—	653	(3)
	<u>\$ 857,227</u>	<u>\$ 712,764</u>	<u>\$ 144,463</u>	(3)

(1) Segment gross margin is calculated as segment revenues less segment cost of revenues and excludes corporate allocations, amortization of intangible assets, inventory fair value adjustments, acquisition related costs, and the effects of foreign exchange rates. For additional details, refer to Note 18, "Segment Reporting and Geographic Information" to our Condensed Consolidated Financial Statements.

(2) Segment gross margin in the three months ended September 30, 2018 included the component inspection business only.

(3) No meaningful comparative information exists for the three months ended September 30, 2018.

Three months ended September 30, 2019 compared to three months ended September 30, 2018

Semiconductor Process Control segment gross margin increased primarily due to a higher revenue volume of products and services sold.

Segment gross margins of Specialty Semiconductor Process, PCB, Display and Component Inspection and Other segments primarily relate to the Orbotech business, which was acquired in February 2019.

Research and Development (“R&D”)

<u>(Dollar amounts in thousands)</u>	Three months ended		Q1 FY20 vs. Q1 FY19	
	September 30, 2019	September 30, 2018		
R&D expenses	\$ 210,580	\$ 153,530	\$ 57,050	37%
R&D expenses as a percentage of total revenues	15%	14%		

R&D expenses may fluctuate with product development phases and project timing as well as our R&D efforts. As technological innovation is essential to our success, we may incur significant costs associated with R&D projects, including compensation for engineering talent, engineering material costs, and other expenses.

R&D expenses during the three months ended September 30, 2019 increased compared to the three months ended September 30, 2018, primarily due to an increase in employee-related expenses of \$15.1 million as a result of additional engineering headcount and higher variable compensation, and \$38.6 million expenses from the Orbotech business.

Our future operating results will depend significantly on our ability to produce products and provide services that have a competitive advantage in our marketplace. To do this, we believe that we must continue to make substantial and focused investments in our research and development. We remain committed to product development in new and emerging technologies.

Selling, General and Administrative (“SG&A”)

<u>(Dollar amounts in thousands)</u>	Three months ended		Q1 FY20 vs. Q1 FY19	
	September 30, 2019	September 30, 2018		
SG&A expenses	\$ 188,345	\$ 114,438	\$ 73,907	65%
SG&A expenses as a percentage of total revenues	13%	10%		

SG&A expenses during the three months ended September 30, 2019 increased compared to the three months ended September 30, 2018, primarily due to an increase in employee-related expenses of \$17.2 million as a result of additional headcount, higher employee benefit costs and higher variable compensation, an increase of \$53.8 million in expenses from the Orbotech business which includes \$19.3 million of amortization expense for purchased intangible assets, partially offset by a \$3.0 million decrease in acquisition-related expenses.

Restructuring Charges

In September 2019, management approved a plan to streamline our organization and business processes that included the reduction of workforce, which is expected to be completed in the second half of our fiscal year 2021, and a potential disposition of our solar energy business. Restructuring charges were immaterial for the three months ended September 30, 2019.

We expect to incur additional restructuring charges in future periods in connection with the completion of our workforce reduction. Proceeds from disposition of our solar energy business is not expected to be material. For additional information refer to Note 19, “Restructuring Charges” of the Condensed Consolidated Financial Statements.

Interest Expense and Other Expense (Income), Net

<u>(Dollar amounts in thousands)</u>	Three months ended	
	September 30, 2019	September 30, 2018
Interest expense	\$ 40,350	\$ 26,362
Other expense (income), net	\$ (1,618)	\$ (10,025)
Interest expense as a percentage of total revenues	3%	2%
Other expense (income), net as a percentage of total revenues	—%	1%

The increase in interest expense during the three months ended September 30, 2019 compared to the three months ended September 30, 2018, is primarily due to interest on the \$1.20 billion Senior Notes issued in March 2019.

Other expense (income), net is comprised primarily of realized gains or losses on sales of marketable securities, gains or losses from revaluations of certain foreign currency denominated assets and liabilities as well as foreign currency contracts, and interest-related accruals (such as interest and penalty accruals related to our tax obligations) and interest income earned on our invested cash, cash equivalents and marketable securities.

The decrease in other expense (income), net during the three months ended September 30, 2019 compared to the three months ended September 30, 2018 was primarily due to an decrease in interest income of \$4.5 million, a higher net foreign currency revaluation loss of \$3.7 million and an impairment charge on an investment in a privately-held company of \$1.4 million.

Provision for Income Taxes

The following table provides details of income taxes:

<u>(Dollar amounts in thousands)</u>	Three Months Ended September 30,	
	2019	2018
Income before income taxes	\$ 371,516	\$ 427,568
Provision for income taxes	\$ 25,120	\$ 31,624
Effective tax rate	6.8%	7.4%

Tax expense was lower as a percentage of income before taxes during the three months ended September 30, 2019 compared to the three months ended September 30, 2018 primarily due to the impact of the following items:

- Tax expense decreased by \$10.8 million during the three months ended September 30, 2019 relating to a decrease in our unrecognized tax benefits as a result of an audit settlement;
- Tax expense decreased by \$5.5 million during the three months ended September 30, 2019 relating to an increase in the proportion of our earnings generated in jurisdictions with tax rates lower than the U.S. statutory rate; partially offset by
- Tax expense decreased by \$19.8 million during the three months ended September 30, 2018 relating to the one-time transition tax liability.

Our future effective income tax rate depends on various factors, such as tax legislation, the geographic composition of our pre-tax income, the amount of our pre-tax income as business activities fluctuate, non-deductible expenses incurred in connection with acquisitions, research and development credits as a percentage of aggregate pre-tax income, non-taxable or non-deductible increases or decreases in the assets held within our Executive Deferred Savings Plan, the tax effects of employee stock activity and the effectiveness of our tax planning strategies.

In the normal course of business, we are subject to examination by tax authorities throughout the world. We completed the U.S. federal income tax examination for the fiscal year ended June 30, 2016 and are subject to U.S. federal income tax examinations for all years beginning from the fiscal year ended June 30, 2017. We are subject to state income tax examinations for all years beginning from the fiscal year ended June 30, 2015. We are also subject to examinations in other major foreign jurisdictions, including Singapore and Israel, for all years beginning from the calendar year ended December 31, 2012. We are under audit in Germany related to Orbotech for the years ended December 31, 2013 to December 31, 2015. Although we believe our tax estimates are reasonable, the final determination of tax audits and any related litigation could be materially different from our historical income tax provisions and accruals. The results of an audit or litigation could have a material adverse effect on our results of operations or cash flows in the period or periods for which that determination is made.

In May 2017, Orbotech received an assessment from the Israel Tax Authority (“ITA”) with respect to its fiscal years 2012 through 2014 (the “Assessment”, and the “Audit Period”, respectively), for an aggregate amount of tax, after offsetting all NOLs available through the end of 2014, of approximately NIS 229 million (equivalent to approximately \$66 million which includes related interest and linkage differentials to the Israeli consumer price index as of date of the issuance of the Tax Decrees, as defined below).

On August 31, 2018, Orbotech filed an objection in respect of the tax assessment (the “Objection”). The ITA completed the second stage of the audit, in which the claims Orbotech raised in the Objection were examined by different personnel at the ITA. In addition, the ITA examined additional items during this second stage of the audit. As Orbotech and the ITA did not reach an agreement during the second stage, the ITA issued Tax Decrees to Orbotech on August 28, 2019 (“Tax Decrees”) for an aggregate amount of tax, after offsetting all NOLs available through the end of 2014, of approximately NIS 257 million

(equivalent to approximately \$74 million which includes related interest and linkage differentials to the Israeli consumer price index as of the date of the issuance of the Tax Decrees). These Tax Decrees replaced the Assessment. We believe that our recorded unrecognized tax benefits are sufficient to cover the resolution of these Tax Decrees.

Orbotech filed a notice of appeal with respect to the above Tax Decrees with the District Court of Tel Aviv on September 26, 2019. The ITA and Orbotech have agreed to extend the filing of the ITA's arguments in support of the Tax Decrees to February 28, 2020. The ITA and Orbotech are continuing discussions in an effort to resolve this matter in a mutually agreeable manner.

In connection with the above, there is an ongoing criminal investigation in Israel against Orbotech, certain of its employees and its tax consultant. On April 11, 2018, Orbotech received a "suspect notification letter" (dated March 28, 2018) from the Tel Aviv District Attorney's Office (Fiscal and Financial). In the letter, it was noted that the investigation file was transferred from the Assessment Investigation Officer to the District Attorney's Office. The letter further states that the District Attorney's Office has not yet made a decision regarding submission of an indictment against Orbotech; and that if after studying the case, a decision is made to consider prosecuting Orbotech, Orbotech will receive an additional letter, and within 30 days, Orbotech may present its arguments to the District Attorney's Office as to why it should not be indicted. On October 27, 2019, we received a request for additional information from the District Attorney's Office. We will continue to monitor the progress of the District Attorney's Office investigation, however, we cannot anticipate when the review of the case will be completed and what will be the results thereof. We intend to cooperate with the District Attorney's Office to enable them to conclude their investigation.

Liquidity and Capital Resources

(Dollar amounts in thousands)	As of September 30, 2019	As of June 30, 2019
Cash and cash equivalents	\$ 988,348	\$ 1,015,994
Marketable securities	763,174	723,391
Total cash, cash equivalents and marketable securities	<u>\$ 1,751,522</u>	<u>\$ 1,739,385</u>
Percentage of total assets	19%	19%

(In thousands)	Three months ended September 30,	
	2019	2018
Cash flows:		
Net cash provided by operating activities	\$ 496,245	\$ 381,405
Net cash (used in) provided by investing activities	(146,693)	314,871
Net cash used in financing activities	(373,613)	(449,692)
Effect of exchange rate changes on cash and cash equivalents	(3,585)	(1,452)
Net (decrease) increase in cash and cash equivalents	<u>\$ (27,646)</u>	<u>\$ 245,132</u>

Cash and Cash Equivalents and Marketable Securities:

As of September 30, 2019, our cash, cash equivalents and marketable securities totaled \$1.75 billion, which represents an increase of \$12.1 million from June 30, 2019. The increase is mainly due to cash provided by operating activities, partially offset by \$78.5 million paid to fund business acquisitions, stock repurchases of \$228.5 million, and cash used for payment of dividends and dividend equivalents of \$121.6 million.

As of September 30, 2019, \$691.7 million of our \$1.75 billion of cash, cash equivalents and marketable securities were held by our foreign subsidiaries and branch offices. We currently intend to indefinitely reinvest \$427.8 million of the cash, cash equivalents and marketable securities held by our foreign subsidiaries for which we assert that earnings are permanently reinvested. If, however, a portion of these funds were to be repatriated to the United States, we would be required to accrue and pay state and foreign taxes of approximately 1%-22% of the funds repatriated. The amount of taxes due will depend on the amount and manner of the repatriation, as well as the location from which the funds are repatriated. We have accrued state and foreign tax on the remaining cash of \$263.9 million of the \$691.7 million held by our foreign subsidiaries and branch offices. As such, these funds can be returned to the U.S. without accruing any additional U.S. tax expense.

Cash Dividends:

During the three months ended September 30, 2019, our Board of Directors declared a regular quarterly cash dividend of \$0.75 per share on our outstanding common stock, which was paid on September 3, 2019 to our stockholders of record as of the close of business on August 15, 2019. During the same period in fiscal year 2018, our Board of Directors declared and paid a regular quarterly cash dividend of \$0.75 per share on our outstanding common stock. The total amount of regular quarterly cash dividends and dividend equivalents paid during the three months ended September 30, 2019 and 2018 was \$121.6 million and \$119.9 million, respectively. The amount of accrued dividend equivalents payable for regular quarterly cash dividends on unvested restricted stock units (RSUs) with dividend equivalent rights as of September 30, 2019 and June 30, 2019 was \$6.4 million and \$7.3 million, respectively. These amounts will be paid upon vesting of the underlying unvested RSU as described in Note 10, "Equity, Long-term Incentive Compensation Plans and Non-Controlling Interest" to the Condensed Consolidated Financial Statements.

Stock Repurchases:

The shares repurchased under our stock repurchase program have reduced our basic and diluted weighted-average shares outstanding for the three months ended September 30, 2019 and 2018. The stock repurchase program is intended, in part, to offset shares issued in connection with the purchases under our Employee Stock Purchase Plan ("ESPP") program and the vesting of employee restricted stock units.

Cash Flows from Operating Activities:

We have historically financed our liquidity requirements through cash generated from our operations. Net cash provided by operating activities during the three months ended September 30, 2019 increased by \$114.8 million compared to the three months ended September 30, 2018 primarily as a result of the following factors:

- An increase in collections of approximately \$324.0 million mainly driven by higher shipments and inclusion of Orbotech during the three months ended September 30, 2019;
- Lower VAT and other tax payments of approximately \$15.0 million; partially offset by
- An increase in accounts payable payments of approximately \$105.0 million mainly due to the inclusion of Orbotech during the three months ended September 30, 2019;
- An increase in employee related payments of approximately \$84.0 million mainly due to the inclusion of Orbotech during the three months ended September 30, 2019;
- An increase of debt interest payments of approximately \$26.0 million related to Senior Notes issued in March 2019 for the Orbotech acquisition; and
- A decrease in interest income of approximately \$4.0 million mainly due to lower cash and investment balances.

Cash Flows from Investing Activities:

Net cash used in investing activities during the three months ended September 30, 2019 was \$146.7 million compared to cash provided by investing activities of \$314.9 million during the three months ended September 30, 2018. This change was mainly due to lower net sales and maturities of marketable securities of \$385.6 million, and an increase in cash paid for business acquisitions of \$66.7 million.

Cash Flows from Financing Activities:

Net cash used in financing activities during the three months ended September 30, 2019 was \$373.6 million compared to cash used in financing activities of \$449.7 million during the three months ended September 30, 2018. This change was mainly due to a decrease in cash used for common stock repurchases of \$71.5 million during the three months ended September 30, 2019.

Senior Notes:

In March 2019 and November 2014, we issued \$1.20 billion and \$2.50 billion, respectively (each a "2019 Senior Notes", a "2014 Senior Notes", and collectively the "Senior Notes"), aggregate principal amount of senior, unsecured long-term notes.

The interest rate specified for each series of the 2014 Senior Notes will be subject to adjustments from time to time if Moody's Investor Service, Inc. ("Moody's") or Standard & Poor's Ratings Services ("S&P") or, under certain circumstances, a substitute rating agency selected by us as a replacement for Moody's or S&P, as the case may be (a "Substitute Rating Agency"), downgrades (or subsequently upgrades) its rating assigned to the respective series of the 2014 Senior Notes such that the adjusted rating is below investment grade. Unlike the 2014 Senior Notes, the interest rate for each series of the 2019 Senior Notes will not be subject to such adjustments. During the fiscal year ended June 30, 2018, we entered into a series of forward contracts (the "2018 Rate Lock Agreements") to lock the benchmark interest rate with notional amount of \$500.0 million in aggregate. In October 2014, we entered into a series of forward contracts to lock the 10-year treasury rate ("benchmark rate") on a portion of the 2014 Senior Notes with a notional amount of \$1.00 billion in aggregate. For additional details, refer to Note 16, "Derivative Instruments and Hedging Activities" of this report, and Note 8 "Debt" of the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended June 30, 2019.

The original discounts on the 2019 Senior Notes and the 2014 Senior Notes amounted to \$6.7 million and \$4.0 million, respectively, and are being amortized over the life of the debt. Interest is payable semi-annually on May 1 and November 1 of each year for the 2014 Senior Notes and semi-annually on March 15 and September 15 of each year for the 2019 Senior Notes. The indenture for the Senior Notes (the "Indenture") includes covenants that limit our ability to grant liens on our facilities and enter into sale and leaseback transactions, subject to certain allowances under which certain sale and leaseback transactions are not restricted.

In certain circumstances involving a change of control followed by a downgrade of the rating of a series of Senior Notes by at least two of Moody's, S&P and Fitch Inc., unless we have exercised our rights to redeem the Senior Notes of such series, we will be required to make an offer to repurchase all or, at the holder's option, any part, of each holder's Senior Notes of that series pursuant to the offer described below (the "Change of Control Offer"). In the Change of Control Offer, we will be required to offer payment in cash equal to 101% of the aggregate principal amount of Senior Notes repurchased plus accrued and unpaid interest, if any, on the Senior Notes repurchased, up to, but not including, the date of repurchase.

As of September 30, 2019, we were in compliance with all of our covenants under the Indenture associated with the Senior Notes.

Revolving Credit Facility:

In November 2017, we entered into a Credit Agreement (the "Credit Agreement") providing for a \$750.0 million five-year unsecured Revolving Credit Facility (the "Revolving Credit Facility"), which replaced our prior Credit Facility. Subject to the terms of the Credit Agreement, the Revolving Credit Facility may be increased in an amount up to \$250.0 million in the aggregate. In November 2018, we entered into an Incremental Facility, Extension and Amendment Agreement (the "Amendment"), which amends the Credit Agreement to (a) extend the Maturity Date (the "Maturity Date") from November 30, 2022 to November 30, 2023, (b) increase the total commitment by \$250.0 million and (c) effect certain other amendments to the Credit Agreement as set forth in the Amendment. After giving effect to the Amendment, the total commitments under the Credit Agreement are \$1.00 billion.

We may borrow, repay and reborrow funds under the Revolving Credit Facility until the Maturity Date, at which time such Revolving Credit Facility will terminate, and all outstanding loans under such facility, together with all accrued and unpaid interest, must be repaid. We may prepay outstanding borrowings under the Revolving Credit Facility at any time without a prepayment penalty.

Borrowings under the Revolving Credit Facility will bear interest, at our option, at either: (i) the Alternative Base Rate ("ABR") plus a spread, which ranges from 0 bps to 75 bps, or (ii) the London Interbank Offered Rate ("LIBOR") plus a spread, which ranges from 100 bps to 175 bps. The spreads under ABR and LIBOR are subject to adjustment in conjunction with credit rating downgrades or upgrades. We are also obligated to pay an annual commitment fee on the daily undrawn balance of the Revolving Credit Facility, which ranges from 10 bps to 25 bps, subject to an adjustment in conjunction with changes to our credit rating. As of September 30, 2019, we pay an annual commitment fee of 12.5 bps on the daily undrawn balance of the Revolving Credit Facility.

The Revolving Credit Facility requires us to maintain an interest expense coverage ratio as described in the Credit Agreement, on a quarterly basis, covering the trailing four consecutive fiscal quarters of no less than 3.50 to 1.00. In addition, we are required to maintain the maximum leverage ratio as described in the Credit Agreement, on a quarterly basis of 3.00 to 1.00, covering the trailing four consecutive fiscal quarters for each fiscal quarter, which can be increased to 4.00 to 1.00 for a period of time in connection with a material acquisition or a series of material acquisitions. As of September 30, 2019, our maximum allowed leverage ratio was 4.00 to 1.00 following the Orbotech Acquisition.

We were in compliance with all covenants under the Credit Agreement as of September 30, 2019 (the interest expense coverage ratio was 13.14 to 1.00 and the leverage ratio was 1.8 to 1.00) and had no outstanding borrowings under the unfunded Revolving Credit Facility. Considering our current liquidity position, short-term financial forecasts and ability to prepay the Revolving Credit Facility, if necessary, we expect to continue to be in compliance with our financial covenants at the end of our fiscal year ending June 30, 2020.

Contractual Obligations:

There have been no material changes outside the ordinary course of business to our contractual obligations as disclosed on our Annual Report Form 10-K for the fiscal year ended June 30, 2019. For additional details regarding our contractual obligations, refer to our Annual Report Form 10-K for the fiscal year ended June 30, 2019. For additional details regarding our commitments, refer to Note 15, “Commitments and Contingencies” to our Condensed Consolidated Financial Statements.

Working Capital:

Working capital was \$2.41 billion as of September 30, 2019, which represents a decrease of \$134.3 million compared to our working capital of \$2.55 billion as of June 30, 2019. As of September 30, 2019, our principal sources of liquidity consisted of \$1.75 billion of cash, cash equivalents and marketable securities. Our liquidity may be affected by many factors, some of which are based on the normal ongoing operations of the business, spending for business acquisitions, and other factors such as uncertainty in the global and regional economies and the semiconductor, semiconductor related and electronic device industries. Although cash requirements will fluctuate based on the timing and extent of these factors, we believe that cash generated from operations, together with the liquidity provided by existing cash and cash equivalents balances and our \$1.00 billion Revolving Credit Facility, will be sufficient to satisfy our liquidity requirements associated with working capital needs, capital expenditures, cash dividends, stock repurchases and other contractual obligations, including repayment of outstanding debt, for at least the next 12 months.

Our credit ratings as of September 30, 2019 are summarized below:

<u>Rating Agency</u>	<u>Rating</u>
Fitch	BBB+
Moody's	Baa1
Standard & Poor's	BBB

Factors that can affect our credit ratings include changes in our operating performance, the economic environment, conditions in the semiconductor and semiconductor equipment industries, our financial position, material acquisitions and changes in our business strategy.

Off-Balance Sheet Arrangements

As of September 30, 2019, we did not have any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of SEC Regulation S-K, that have or are reasonably likely to have a current or future effect on our financial position, changes in financial condition, revenues and expenses, results of operations, liquidity, capital expenditures, or capital resources that are material to investors. Refer to Note 15 “Commitments and Contingencies” to the Condensed Consolidated Financial Statements for information related to indemnification obligations.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to financial market risks, including changes in interest rates, foreign currency exchange rates and marketable equity security prices. To mitigate these risks, we utilize derivative financial instruments, such as foreign currency hedges. All of the potential changes noted below are based on sensitivity analysis performed on our financial position as of September 30, 2019. Actual results may differ materially.

As of September 30, 2019, we had an investment portfolio of fixed income securities of \$769.2 million. These securities, as with all fixed income instruments, are subject to interest rate risk and will decline in value if market interest rates increase. If market interest rates were to increase immediately and uniformly by 100 bps from levels as of September 30, 2019, the fair value of the portfolio would have declined by \$5.4 million.

In March 2019 and November 2014, we issued \$1.20 billion and \$2.50 billion, respectively, (each, a “2019 Senior Notes”, a “2014 Senior Notes”, and collectively the “Senior Notes”) aggregate principal amount of fixed rate senior, unsecured long-term notes. The fair market value of long-term fixed interest rate notes is subject to interest rate risk. Generally, the fair market value of fixed interest rate notes will increase as interest rates fall and decrease as interest rates rise. As of September 30, 2019, the fair value and the book value of our Senior Notes were \$3.82 billion and \$3.45 billion, respectively, due in various fiscal years ranging from 2020 to 2049. Additionally, the interest expense for the 2014 Senior Notes is subject to interest rate adjustments following a downgrade of our credit ratings below investment grade by the credit rating agencies. Following a rating change below investment grade, the stated interest rate for each series of the 2014 Senior Notes may increase between 25 bps to 100 bps based on the adjusted credit rating. Refer to Note 8, “Debt,” to the Condensed Consolidated Financial Statements in Part I, Item 1 and Management’s Discussion and Analysis of Financial Condition and Results of Operations, “*Liquidity and Capital Resources*,” in Part I, Item 2 for additional details. Factors that can affect our credit ratings include changes in our operating performance, the economic environment, conditions in the semiconductor, semiconductor related, and electronic industries, our financial position, and changes in our business strategy. As of September 30, 2019, if our credit rating was downgraded below investment grade by Moody’s and S&P, the maximum potential increase to our annual interest expense on the 2014 Senior Notes, considering a 200 bps increase to the stated interest rate for each series of our 2014 Senior Notes, is estimated to be approximately \$40.4 million. Unlike the 2014 Senior Notes, the interest rate for each series of the 2019 Senior Notes will not be subject to such adjustments.

In November 2017, we entered into a Credit Agreement (the “Credit Agreement”) for a \$750.0 million five-year unsecured Revolving Credit Facility (the “Revolving Credit Facility”), which replaced our prior Credit Agreement. Subject to the terms of the Credit Agreement, the Revolving Credit Facility may be increased in an amount up to \$250.0 million in the aggregate. In November 2018, we entered into an Incremental Facility, Extension and Amendment Agreement (the “Amendment”), which amends the Credit Agreement to (a) extend the Maturity Date (the “Maturity Date”) from November 30, 2022 to November 30, 2023, (b) increase the total commitment by \$250.0 million and (c) effect certain other amendments to the Credit Agreement as set forth in the Amendment. After giving effect to the Amendment, the total commitments under the Credit Agreement are \$1.00 billion. As of September 30, 2019, we do not have any outstanding floating rate debts that are subject to an increase in interest rates. We are obligated to pay an annual commitment fee of 12.5 bps on the daily undrawn balance of the Revolving Credit Facility which is subject to an adjustment in conjunction with our credit rating downgrades or upgrades. The annual commitment fee ranges from 10 bps to 25 bps on the daily undrawn balance of the Revolving Credit Facility, depending upon the then effective credit rating. As of September 30, 2019, if our credit ratings were downgraded to be below investment grade, the maximum potential increase to our annual commitment fee for the Revolving Credit Facility, using the highest range of the ranges discussed above, is estimated to be approximately \$0.8 million.

See Note 5, “Marketable Securities,” to the Condensed Consolidated Financial Statements in Part I, Item 1; Management’s Discussion and Analysis of Financial Condition and Results of Operations, “*Liquidity and Capital Resources*,” in Part I, Item 2; and Risk Factors in Part II, Item 1A of this Quarterly Report on Form 10-Q for a description of recent market events that may affect the value of the investments in our portfolio that we held as of September 30, 2019.

As of September 30, 2019, we had net forward and option contracts to sell \$143.2 million in foreign currency in order to hedge certain currency exposures (see Note 16, “Derivative Instruments and Hedging Activities,” to the Condensed Consolidated Financial Statements for additional details). If we had entered into these contracts on September 30, 2019, the U.S. dollar equivalent would have been \$142.3 million. A 10% adverse move in all currency exchange rates affecting the contracts would decrease the fair value of the contracts by \$41.8 million. However, if this occurred, the fair value of the underlying exposures hedged by the contracts would increase by a similar amount. Accordingly, we believe that, as a result of the hedging of certain of our foreign currency exposure, changes in most relevant foreign currency exchange rates should have no material impact on our results of operations or cash flows.

ITEM 4 CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures and Related CEO and CFO Certifications

Evaluation of Disclosure Controls and Procedures

We conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”)) (“Disclosure Controls”) as of the end of the period covered by this Quarterly Report on Form 10-Q (this “Report”) required by Exchange Act Rules 13a-15(b) or 15d-15(b). The controls evaluation was conducted under the supervision and with the participation of our management, including our Chief Executive Officer (“CEO”) and Chief Financial Officer (“CFO”). Based on this evaluation, the CEO and CFO have concluded that as of the end of the period covered by this Report our Disclosure Controls were effective at a reasonable assurance level.

Attached as exhibits to this Report are certifications of the CEO and CFO, which are required in accordance with Rule 13a-14 of the Exchange Act. This Controls and Procedures section includes the information concerning the controls evaluation referred to in the certifications, and it should be read in conjunction with the certifications for a more complete understanding of the topics presented.

Definition of Disclosure Controls

Disclosure Controls are controls and procedures designed to reasonably assure that information required to be disclosed in our reports filed under the Exchange Act, such as this Report, is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms. Disclosure Controls are also designed to reasonably assure that such information is accumulated and communicated to our management, including our CEO and CFO, as appropriate to allow timely decisions regarding required disclosure. Our Disclosure Controls include components of our internal control over financial reporting, which consists of control processes designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements in accordance with generally accepted accounting principles in the United States. To the extent that components of our internal control over financial reporting are included within our Disclosure Controls, they are included in the scope of our annual controls evaluation.

Limitations on the Effectiveness of Controls

Our management, including our CEO and CFO, does not expect that our Disclosure Controls or internal control over financial reporting will prevent all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system’s objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision making can be faulty and that breakdowns can occur because of simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving our stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the most recent fiscal quarter covered by this Quarterly Report on Form 10-Q that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

The information set forth above under Note 14, "Litigation and Other Legal Matters," to the Condensed Consolidated Financial Statements in Item 1 of Part 1 is incorporated herein by reference.

ITEM 1A. RISK FACTORS

A description of factors that could materially affect our business, financial condition or operating results is provided below.

Risks Associated with Our Industry

Ongoing changes in the technology industry, as well as the semiconductor industry in particular, could expose our business to significant risks.

The industries that we serve, including the semiconductor, flat panel display and printed circuit board industries, are constantly developing and changing over time. Many of the risks associated with operating in these industries are comparable to the risks faced by all technology companies, such as the uncertainty of future growth rates in the industries that we serve, pricing trends in the end-markets for consumer electronics and other products (which place a growing emphasis on our customers' cost of ownership), changes in our customers' capital spending patterns and, in general, an environment of constant change and development, including decreasing product and component dimensions; use of new materials; and increasingly complex device structures, applications and process steps. If we fail to appropriately adjust our cost structure and operations to adapt to any of these trends, or, with respect to technological advances, if we do not timely develop new technologies and products that successfully anticipate and address these changes, we could experience a material adverse effect on our business, financial condition and operating results.

In addition, we face a number of risks specific to ongoing changes in the semiconductor industry, as a significant majority of our sales are our process control and yield management products sold to semiconductor manufacturers. Some of the trends that our management monitors in operating our business include the following:

- the potential for reversal of the long-term historical trend of declining cost per transistor with each new generation of technological advancement within the semiconductor industry, and the adverse impact that such reversal may have upon our business;
- the increasing cost of building and operating fabrication facilities and the impact of such increases on our customers' capital equipment investment decisions;
- differing market growth rates and capital requirements for different applications, such as memory, logic and foundry;
- lower level of process control adoption by our memory customers compared to our foundry and logic customers;
- our customers' reuse of existing and installed products, which may decrease their need to purchase new products or solutions at more advanced technology nodes;
- the emergence of disruptive technologies that change the prevailing semiconductor manufacturing processes (or the economics associated with semiconductor manufacturing) and, as a result, also impact the inspection and metrology requirements associated with such processes;
- the higher design costs for the most advanced integrated circuits, which could economically constrain leading-edge manufacturing technology customers to focus their resources on only the large, technologically advanced products and applications;
- the possible introduction of integrated products by our larger competitors that offer inspection and metrology functionality in addition to managing other semiconductor manufacturing processes;
- changes in semiconductor manufacturing processes that are extremely costly for our customers to implement and, accordingly, our customers could reduce their available budgets for process control equipment by reducing inspection and metrology sampling rates for certain technologies;
- the bifurcation of the semiconductor manufacturing industry into (a) leading edge manufacturers driving continued research and development into next-generation products and technologies and (b) other manufacturers that are content with existing (including previous generation) products and technologies;
- the ever escalating cost of next-generation product development, which may result in joint development programs between us and our customers or government entities to help fund such programs that could restrict our control of, ownership of and profitability from the products and technologies developed through those programs; and
- the entry by some semiconductor manufacturers into collaboration or sharing arrangements for capacity, cost or risk with other manufacturers, as well as increased outsourcing of their manufacturing activities, and greater focus only on specific markets or applications, whether in response to adverse market conditions or other market pressures.

Any of the changes described above may negatively affect our customers' rate of investment in the capital equipment that we produce, which could result in downward pressure on our prices, customer orders, revenues and gross margins. If we do not successfully manage the risks resulting from any of these or other potential changes in our industries, our business, financial condition and operating results could be adversely impacted.

We are exposed to risks associated with a highly concentrated customer base.

Our customer base, particularly in the semiconductor industry, historically has been highly concentrated due to corporate consolidation, acquisitions and business closures. In this environment, orders from a relatively limited number of manufacturers have accounted for, and are expected to continue to account for, a substantial portion of our sales. This increasing concentration exposes our business, financial condition and operating results to a number of risks, including the following:

- The mix and type of customers, and sales to any single customer, may vary significantly from quarter to quarter and from year to year, which exposes our business and operating results to increased volatility tied to individual customers.
- New orders from our foundry customers in the past several years have constituted a significant portion of our total orders. This concentration increases the impact that future business or technology changes within the foundry industry may have on our business, financial condition and operating results.
- In a highly concentrated business environment, if a particular customer does not place an order, or if they delay or cancel orders, we may not be able to replace the business. Furthermore, because our process control and yield management products are configured to each customer's specifications, any changes, delays or cancellations of orders may result in significant, non-recoverable costs.
- As a result of this consolidation, the customers that survive the consolidation represent a greater portion of our sales and, consequently, have greater commercial negotiating leverage. Many of our large customers have more aggressive policies regarding engaging alternative, second-source suppliers for the products we offer and, in addition, may seek and, on occasion, receive pricing, payment, intellectual property-related or other commercial terms that may have an adverse impact on our business. Any of these changes could negatively impact our prices, customer orders, revenues and gross margins.
- Certain customers have undergone significant ownership changes, created alliances with other companies, experienced management changes or have outsourced manufacturing activities, any of which may result in additional complexities in managing customer relationships and transactions. Any future change in ownership or management of our existing customers may result in similar challenges, including the possibility of the successor entity or new management deciding to select a competitor's products.
- The highly concentrated business environment also increases our exposure to risks related to the financial condition of each of our customers. For example, as a result of the challenging economic environment during fiscal year 2009, we were (and in some cases continue to be) exposed to additional risks related to the continued financial viability of certain of our customers. To the extent our customers experience liquidity issues in the future, we may be required to incur additional bad debt expense with respect to receivables owed to us by those customers. In addition, customers with liquidity issues may be forced to reduce purchases of our equipment, delay deliveries of our products, discontinue operations or may be acquired by one of our customers, and in either case such event would have the effect of further consolidating our customer base.
- Semiconductor manufacturers generally must commit significant resources to qualify, install and integrate process control and yield management equipment into a semiconductor production line. We believe that once a semiconductor manufacturer selects a particular supplier's process control and yield management equipment, the manufacturer generally relies upon that equipment for that specific production line application for an extended period of time. Accordingly, we expect it to be more difficult to sell our products to a given customer for that specific production line application and other similar production line applications if that customer initially selects a competitor's equipment. Similarly, we expect it to be challenging for a competitor to sell its products to a given customer for a specific production line application if that customer initially selects our equipment.
- Prices differ among the products we offer for different applications due to differences in features offered or manufacturing costs. If there is a shift in demand by our customers from our higher-priced to lower-priced products, our gross margin and revenue would decrease. In addition, when products are initially introduced, they tend to have higher costs because of initial development costs and lower production volumes relative to the previous product generation, which can impact gross margin.

Any of these factors could have a material adverse effect on our business, financial condition and operating results.

We operate in industries that have historically been cyclical, including the semiconductor industry. The purchasing decisions of our customers are highly dependent on the economies of both the local markets in which they are located and the condition of the industry worldwide. If we fail to respond to industry cycles, our business could be seriously harmed.

The timing, length and severity of the up-and-down cycles in the industries in which we serve are difficult to predict. The historically cyclical nature of the semiconductor industry in which we primarily operate is largely a function of our customers' capital spending patterns and need for expanded manufacturing capacity, which in turn are affected by factors such as capacity utilization, consumer demand for products, inventory levels and our customers' access to capital. Cyclical nature affects our ability to accurately predict future revenue and, in some cases, future expense levels. During down cycles in our industry, the financial results of our customers may be negatively impacted, which could result not only in a decrease in, or cancellation or delay of, orders (which are generally subject to cancellation or delay by the customer with limited or no penalty) but also a weakening of their financial condition that could impair their ability to pay for our products or our ability to recognize revenue from certain customers. Our ability to recognize revenue from a particular customer may also be negatively impacted by the customer's funding status, which could be weakened not only by adverse business conditions or inaccessibility to capital markets for any number of macroeconomic or company-specific reasons, but also by funding limitations imposed by the customer's unique organizational structure. Any of these factors could negatively impact our business, operating results and financial condition.

When cyclical fluctuations result in lower than expected revenue levels, operating results may be adversely affected and cost reduction measures may be necessary for us to remain competitive and financially sound. During periods of declining revenues, we must be in a position to adjust our cost and expense structure to prevailing market conditions and to continue to motivate and retain our key employees. If we fail to respond, or if our attempts to respond fail to accomplish our intended results, then our business could be seriously harmed. Furthermore, any workforce reductions and cost reduction actions that we adopt in response to down cycles may result in additional restructuring charges, disruptions in our operations and loss of key personnel. In addition, during periods of rapid growth, we must be able to increase manufacturing capacity and personnel to meet customer demand. We can provide no assurance that these objectives can be met in a timely manner in response to industry cycles. Each of these factors could adversely impact our operating results and financial condition.

In addition, our management typically provides quarterly forecasts for certain financial metrics, which, when made, are based on business and operational forecasts that are believed to be reasonable at the time. However, largely due to the historical cyclical nature of our business and the industries in which we operate, and the fact that business conditions in our industries can change very rapidly as part of these cycles, our actual results may vary (and have varied in the past) from forecasted results. These variations can occur for any number of reasons, including, but not limited to, unexpected changes in the volume or timing of customer orders, product shipments or product acceptance; an inability to adjust our operations rapidly enough to adapt to changing business conditions; or a different than anticipated effective tax rate. The impact on our business of delays or cancellations of customer orders may be exacerbated by the short lead times that our customers expect between order placement and product shipment. This is because order delays and cancellations may lead not only to lower revenues, but also, due to the advance work we must do in anticipation of receiving a product order to meet the expected lead times, to significant inventory write-offs and manufacturing inefficiencies that decrease our gross margin. Any of these factors could materially and adversely affect our financial results for a particular quarter and could cause those results to differ materially from financial forecasts we have previously provided. We provide these forecasts with the intent of giving investors and analysts a better understanding of management's expectations for the future, but those reviewing such forecasts must recognize that such forecasts are comprised of, and are themselves, forward-looking statements subject to the risks and uncertainties described in this Item 1A and elsewhere in this report and in our other public filings and public statements. If our operating or financial results for a particular period differ from our forecasts or the expectations of investment analysts, or if we revise our forecasts, the market price of our common stock could decline.

Risks Related to Our Business Model and Capital Structure

If we do not develop and introduce new products and technologies in a timely manner in response to changing market conditions or customer requirements, our business could be seriously harmed.

Success in the industries in which we serve, including the semiconductor, flat panel display and printed circuit board industries depends, in part, on continual improvement of existing technologies and rapid innovation of new solutions. 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 appears to be slowing, which may cause semiconductor manufacturers to delay investments in equipment, investigate more complex device architectures, use new materials and develop innovative fabrication processes. These and other evolving customer plans and needs require us to respond with continued development programs and cut back or discontinue older programs, which may no longer have industry-wide support. Technical innovations are inherently complex and require long development cycles and appropriate staffing of highly qualified employees. Our competitive advantage and future business success depend on our ability to accurately predict evolving industry standards, develop and introduce new products and solutions that successfully address changing customer needs, win market acceptance of these new products and solutions, and manufacture these new products in a timely and cost-effective manner. Our failure to accurately predict evolving industry standards and develop as well as offer competitive technology solutions in a timely manner with cost-effective products could result in loss of market share, unanticipated costs, and inventory obsolescence, which would adversely impact our business, operating results and financial condition.

We must continue to make significant investments in research and development in order to enhance the performance, features and functionality of our products, to keep pace with competitive products and to satisfy customer demands. Substantial research and development costs typically are incurred before we confirm the technical feasibility and commercial viability of a new product, and not all development activities result in commercially viable products. There can be no assurance that revenues from future products or product enhancements will be sufficient to recover the development costs associated with such products or enhancements. In addition, we cannot be sure that these products or enhancements will receive market acceptance or that we will be able to sell these products at prices that are favorable to us. Our business will be seriously harmed if we are unable to sell our products at favorable prices or if the market in which we operate does not accept our products.

In addition, the complexity of our products exposes us to other risks. We regularly recognize revenue from a sale upon shipment of the applicable product to the customer (even before receiving the customer's formal acceptance of that product) in certain situations, including sales of products for which installation is considered perfunctory, transactions in which the product is sold to an independent distributor and we have no installation obligations, and sales of products where we have previously delivered the same product to the same customer location and that prior delivery has been accepted. However, our products are very technologically complex and rely on the interconnection of numerous subcomponents (all of which must perform to their respective specifications), so it is conceivable that a product for which we recognize revenue upon shipment may ultimately fail to meet the overall product's required specifications. In such a situation, the customer may be entitled to certain remedies, which could materially and adversely affect our operating results for various periods and, as a result, our stock price.

We derive a substantial percentage of our revenues from sales of inspection products. As a result, any delay or reduction of sales of these products could have a material adverse effect on our business, financial condition and operating results. The continued customer demand for these products and the development, introduction and market acceptance of new products and technologies are critical to our future success.

Our success is dependent in part on our technology and other proprietary rights. If we are unable to maintain our lead or protect our proprietary technology, we may lose valuable assets.

Our success is dependent in part on our technology and other proprietary rights. We own various United States and international patents and have additional pending patent applications relating to some of our products and technologies. The process of seeking patent protection is lengthy and expensive, and we cannot be certain that pending or future applications will actually result in issued patents or that issued patents will be of sufficient scope or strength to provide meaningful protection or commercial advantage to us. Other companies and individuals, including our larger competitors, may develop technologies and obtain patents relating to our business that are similar or superior to our technology or may design around the patents we own, which may adversely affect our business. In addition, we at times engage in collaborative technology development efforts with our customers and suppliers, and these collaborations may constitute a key component of certain of our ongoing technology and product research and development projects. The termination of any such collaboration, or delays caused by disputes or other unanticipated challenges that may arise in connection with any such collaboration, could significantly impair our research and development efforts, which could have a material adverse impact on our business and operations.

We also maintain trademarks on certain of our products and services and claim copyright protection for certain proprietary software and documentation. However, we can give no assurance that our trademarks and copyrights will be upheld or successfully deter infringement by third parties.

While patent, copyright and trademark protection for our intellectual property is important, we believe our future success in highly dynamic markets is most dependent upon the technical competence and creative skills of our personnel. We attempt to protect our trade secrets and other proprietary information through confidentiality and other agreements with our customers, suppliers, employees and consultants and through other security measures. We also maintain exclusive and non-exclusive licenses with third parties for strategic technology used in certain products. However, these employees, consultants and third parties may breach these agreements, and we may not have adequate remedies for wrongdoing. In addition, the laws of certain territories in which we develop, manufacture or sell our products may not protect our intellectual property rights to the same extent as do the laws of the United States. In any event, the extent to which we can protect our trade secrets through the use of confidentiality agreements is limited, and our success will depend to a significant extent on our ability to innovate ahead of our competitors.

Our future performance depends, in part, upon our ability to continue to compete successfully worldwide.

Our industry includes large manufacturers with substantial resources to support customers worldwide. Some of our competitors are diversified companies with greater financial resources and more extensive research, engineering, manufacturing, marketing, and customer service and support capabilities than we possess. We face competition from companies whose strategy is to provide a broad array of products and services, some of which compete with the products and services that we offer. These competitors may bundle their products in a manner that may discourage customers from purchasing our products, including pricing such competitive tools significantly below our product offerings. In addition, we face competition from smaller emerging companies whose strategy is to provide a portion of the products and services that we offer, using innovative technology to sell products into specialized markets. The strength of our competitive positions in many of our existing markets is largely due to our leading technology, which is the result of continuing significant investments in product research and development. However, we may enter new markets, whether through acquisitions or new internal product development, in which competition is based primarily on product pricing, not technological superiority. Further, some new growth markets that emerge may not require leading technologies. Loss of competitive position in any of the markets we serve, or an inability to sell our products on favorable commercial terms in new markets we may enter, could negatively affect our prices, customer orders, revenues, gross margins and market share, any of which would negatively affect our operating results and financial condition.

Our business would be harmed if we do not receive parts sufficient in number and performance to meet our production requirements and product specifications in a timely and cost-effective manner.

We use a wide range of materials in the production of our products, including custom electronic and mechanical components, and we use numerous suppliers to supply these materials. We generally do not have guaranteed supply arrangements with our suppliers. Because of the variability and uniqueness of customers' orders, we do not maintain an extensive inventory of materials for manufacturing. Through our business interruption planning, we seek to minimize the risk of production and service interruptions and/or shortages of key parts by, among other things, monitoring the financial stability of key suppliers, identifying (but not necessarily qualifying) possible alternative suppliers and maintaining appropriate inventories of key parts. Although we make reasonable efforts to ensure that parts are available from multiple suppliers, certain key parts are available only from a single supplier or a limited group of suppliers. Also, key parts we obtain from some of our suppliers incorporate the suppliers' proprietary intellectual property; in those cases, we are increasingly reliant on third parties for high-performance, high-technology components, which reduces the amount of control we have over the availability and protection of the technology and intellectual property that is used in our products. In addition, if certain of our key suppliers experience liquidity issues and are forced to discontinue operations, which is a heightened risk especially during economic downturns, it could affect their ability to deliver parts and could result in delays for our products. Similarly, especially with respect to suppliers of high-technology components, our suppliers themselves have increasingly complex supply chains, and delays or disruptions at any stage of their supply chains may prevent us from obtaining parts in a timely manner and result in delays for our products. Our operating results and business may be adversely impacted if we are unable to obtain parts to meet our production requirements and product specifications, or if we are only able to do so on unfavorable terms. Furthermore, a supplier may discontinue production of a particular part for any number of reasons, including the supplier's financial condition or business operational decisions, which would require us to purchase, in a single transaction, a large number of such discontinued parts in order to ensure that a continuous supply of such parts remains available to our customers. Such "end-of-life" parts purchases could result in significant expenditures by us in a particular period, and ultimately any unused parts may result in a significant inventory write-off, either of which could have an adverse impact on our financial condition and results of operations for the applicable periods.

If we fail to operate our business in accordance with our business plan, our operating results, business and stock price may be significantly and adversely impacted.

We attempt to operate our business in accordance with a business plan that is established annually, revised frequently (generally quarterly), and reviewed by management even more frequently (at least monthly). Our business plan is developed based on a number of factors, many of which require estimates and assumptions, such as our expectations of the economic environment, future business levels, our customers' willingness and ability to place orders, lead-times, and future revenue and cash flow. Our budgeted operating expenses, for example, are based in part on our future revenue expectations. However, our ability to achieve our anticipated revenue levels is a function of numerous factors, including the volatile and historically cyclical nature of our primary industry, customer order cancellations, macroeconomic changes, operational matters regarding particular agreements, our ability to manage customer deliveries, the availability of resources for the installation of our products, delays or accelerations by customers in taking deliveries and the acceptance of our products (for products where customer acceptance is required before we can recognize revenue from such sales), our ability to operate our business and sales processes effectively, and a number of the other risk factors set forth in this Item 1A.

Because our expenses are in most cases relatively fixed in the short term, any revenue shortfall below expectations could have an immediate and significant adverse effect on our operating results. Similarly, if we fail to manage our expenses effectively or otherwise fail to maintain rigorous cost controls, we could experience greater than anticipated expenses during an operating period, which would also negatively affect our results of operations. If we fail to operate our business consistent with our business plan, our operating results in any period may be significantly and adversely impacted. Such an outcome could cause customers, suppliers or investors to view us as less stable, or could cause us to fail to meet financial analysts' revenue or earnings estimates, any of which could have an adverse impact on our stock price.

In addition, our management is constantly striving to balance the requirements and demands of our customers with the availability of resources, the need to manage our operating model and other factors. In furtherance of those efforts, we often must exercise discretion and judgment as to the timing and prioritization of manufacturing, deliveries, installations and payment scheduling. Any such decisions may impact our ability to recognize revenue, including the fiscal period during which such revenue may be recognized, with respect to such products, which could have a material adverse effect on our business, results of operations or stock price.

We have a leveraged capital structure.

As of September 30, 2019, we had \$3.45 billion aggregate principal amount of senior, unsecured long-term notes. Additionally, we have commitments for an unfunded Revolving Credit Facility of \$1.00 billion under the Credit Agreement. We may incur additional indebtedness in the future by accessing the unfunded portion of our Revolving Credit Facility and/or entering into new financing arrangements. For example, at the same time we announced our intention to acquire Orbotech, we also announced a new stock repurchase program authorizing the repurchase up to \$2.00 billion of our common stock, a large portion of which would be financed with new indebtedness. Our ability to pay interest and repay the principal of our current indebtedness is dependent upon our ability to manage our business operations, our credit rating, the ongoing interest rate environment and the other risk factors discussed in this section. There can be no assurance that we will be able to manage any of these risks successfully.

In addition, the interest rates of the senior, unsecured long-term notes may be subject to adjustments from time to time if Moody's Investors Service, Inc. ("Moody's"), Standard & Poor's Ratings Services ("S&P") or, under certain circumstances, a substitute rating agency selected by us as a replacement for Moody's or S&P, as the case may be (a "Substitute Rating Agency"), downgrades (or subsequently upgrades) its rating assigned to the respective series of notes such that the adjusted rating is below investment grade. Accordingly, changes by Moody's, S&P, or a Substitute Rating Agency to the rating of any series of notes, our outlook or credit rating could require us to pay additional interest, which may negatively affect the value and liquidity of our debt and the market price of our common stock could decline. Factors that can affect our credit rating include changes in our operating performance, the economic environment, conditions in the industries we serve, our financial position, including the incurrence of additional indebtedness, and our business strategy.

In certain circumstances involving a change of control followed by a downgrade of the rating of a series of notes by at least two of Moody's, S&P and Fitch Inc., unless we have exercised our right to redeem the notes of such series, we will be required to make an offer to repurchase all or, at the holder's option, any part, of each holder's notes of that series pursuant to the offer described below (the "Change of Control Offer"). In the Change of Control Offer, we will be required to offer payment in cash equal to 101% of the aggregate principal amount of notes repurchased plus accrued and unpaid interest, if any, on the notes repurchased, up to, but not including, the date of repurchase. We cannot make any assurance that we will have sufficient financial resources at such time or will be able to arrange financing to pay the repurchase price of that series of notes. Our ability to repurchase that series of notes in such event may be limited by law, by the indenture associated with that series of notes, or by the terms of other agreements to which we may be party at such time. If we fail to repurchase that series of notes as required by the terms of such notes, it would constitute an event of default under the indenture governing that series of notes which, in turn, may also constitute an event of default under other of our obligations.

Borrowings under our Revolving Credit Facility bear interest at a floating rate, and an increase in interest rates would require us to pay additional interest on any borrowings, which may have an adverse effect on the value and liquidity of our debt and the market price of our common stock could decline. The interest rate under our Revolving Credit Facility is also subject to an adjustment in conjunction with our credit rating downgrades or upgrades. Additionally, under our Revolving Credit Facility, we are required to comply with affirmative and negative covenants, which include the maintenance of certain financial ratios, the details of which can be found in Note 8, "Debt," to our Condensed Consolidated Financial Statements.

If we fail to comply with these covenants, we will be in default and our borrowings will become immediately due and payable. There can be no assurance that we will have sufficient financial resources or we will be able to arrange financing to repay our borrowings at such time. In addition, certain of our domestic subsidiaries are required to guarantee our borrowings under our Revolving Credit Facility. In the event that we default on our borrowings, these domestic subsidiaries shall be liable for our borrowings, which could disrupt our operations and result in a material adverse impact on our business, financial condition or stock price.

Our leveraged capital structure may adversely affect our financial condition, results of operations and net income per share.

Our issuance and maintenance of higher levels of indebtedness could have adverse consequences including, but not limited to:

- a negative impact on our ability to satisfy our future obligations;
- an increase in the portion of our cash flows that may have to be dedicated to increased interest and principal payments that may not be available for operations, working capital, capital expenditures, acquisitions, investments, dividends, stock repurchases, general corporate or other purposes;
- an impairment of our ability to obtain additional financing in the future; and
- obligations to comply with restrictive and financial covenants as noted in the above risk factor and Note 8, "Debt," to our Condensed Consolidated Financial Statements.

Our ability to satisfy our future expenses as well as our new debt obligations will depend on our future performance, which will be affected by financial, business, economic, regulatory and other factors. Furthermore, our future operations may not generate sufficient cash flows to enable us to meet our future expenses and service our new debt obligations, which may impact our ability to manage our capital structure to preserve and maintain our investment grade rating. If our future operations do not generate sufficient cash flows, we may need to access the money available for borrowing under our Revolving Credit Facility or enter into new financing arrangements to obtain 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, we may not be able to obtain it on acceptable terms. Any borrowings under our Revolving Credit Facility will place further pressure on us to comply with the financial covenants. If we fail to make a payment associated with our debt obligations, we could be in default on such debt, and such a default could cause us to be in default on our other obligations.

There can be no assurance that we will continue to declare cash dividends at all or in any particular amounts.

Our Board of Directors first instituted a quarterly dividend during the fiscal year ended June 30, 2005. Since that time, we have announced a number of increases in the amount of our quarterly dividend level as well as payment of a special cash dividend that was declared and substantially paid in the second quarter of our fiscal year ended June 30, 2015. We intend to continue to pay quarterly dividends subject to capital availability and periodic determinations by our Board of Directors that cash dividends 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 by us. Future dividends may 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; stock repurchase programs; changes in federal and state income tax laws or corporate laws; changes to our business model; and our increased interest and principal payments required by our outstanding indebtedness and any additional indebtedness that we may incur in the future. Our dividend payments may change from time to time, and we cannot provide assurance that we will continue to declare dividends at all or in any particular amounts. A reduction in our dividend payments could have a negative effect on our stock price.

We are exposed to risks related to our commercial terms and conditions, including our indemnification of third parties, as well as the performance of our products.

Although our standard commercial documentation sets forth the terms and conditions that we intend to apply to commercial transactions with our business partners, counterparties to such transactions may not explicitly agree to our terms and conditions. In situations where we engage in business with a third party without an explicit master agreement regarding the applicable terms and conditions, or where the commercial documentation applicable to the transaction is subject to varying interpretations, we may have disputes with those third parties regarding the applicable terms and conditions of our business relationship with them. Such disputes could lead to a deterioration of our commercial relationship with those parties, costly and time-consuming litigation, or additional concessions or obligations being offered by us to resolve such disputes, or could impact our revenue or cost recognition. Any of these outcomes could materially and adversely affect our business, financial condition and results of operations.

In addition, in our commercial agreements, from time to time in the normal course of business we indemnify third parties with whom we enter into contractual relationships, including customers, suppliers and lessors, 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. We may be compelled to enter into or accrue for probable settlements of alleged indemnification obligations, or we may be subject to potential liability arising from our customers' involvements in legal disputes. In addition, notwithstanding the provisions related to limitations on our liability that we seek to include in our business agreements, the counterparties to such agreements may dispute our interpretation or application of such provisions, and a court of law may not interpret or apply such provisions in our favor, any of which could result in an obligation for us to pay material damages to third parties and engage in costly legal proceedings. It is difficult to determine the maximum potential amount of liability under any indemnification obligations, whether or not asserted, due to our limited history of prior indemnification claims and the unique facts and circumstances that are likely to be involved in any particular claim. Our business, financial condition and results of operations in a reported fiscal period could be materially and adversely affected if we expend significant amounts in defending or settling any purported claims, regardless of their merit or outcomes.

We are also exposed to potential costs associated with unexpected product performance issues. Our products and production processes are extremely complex and thus could contain unexpected product defects, especially when products are first introduced. Unexpected product performance issues could result in significant costs being incurred by us, including increased service or warranty costs, providing product replacements for (or modifications to) defective products, litigation related to defective products, reimbursement for damages caused by our products, product recalls, or product write-offs or disposal costs. These costs could be substantial and could have an adverse impact upon our business, financial condition and operating results. In addition, our reputation with our customers could be damaged as a result of such product defects, which could reduce demand for our products and negatively impact our business.

Furthermore, we occasionally enter into volume purchase agreements with our larger customers, and these agreements may provide for certain volume purchase incentives, such as credits toward future purchases. We believe that these arrangements are beneficial to our long-term business, as they are designed to encourage our customers to purchase higher volumes of our products. However, these arrangements could require us to recognize a reduced level of revenue for the products that are initially purchased, to account for the potential future credits or other volume purchase incentives. Our volume purchase agreements require significant estimation for the amounts to be accrued depending upon the estimate of volume of future purchases. As such, we are required to update our estimates of the accruals on a periodic basis. Until the earnings process is complete, our estimates could differ in comparison to actual results. As a result, these volume purchase arrangements, while expected to be beneficial to our business over time, could materially and adversely affect our results of operations in near-term periods, including the revenue we can recognize on product sales and therefore our gross margins.

In addition, we may in limited circumstances enter into agreements that contain customer-specific commitments on pricing, tool reliability, spare parts stocking levels, response time and other commitments. Furthermore, we may give these customers limited audit or inspection rights to enable them to confirm that we are complying with these commitments. If a customer elects to exercise its audit or inspection rights, we may be required to expend significant resources to support the audit or inspection, as well as to defend or settle any dispute with a customer that could potentially arise out of such audit or inspection. To date, we have made no significant accruals in our Condensed Consolidated Financial Statements for this contingency. While we have not in the past incurred significant expenses for resolving disputes regarding these types of commitments, we cannot make any assurance that we will not incur any such liabilities in the future. Our business, financial condition and results of operations in a reported fiscal period could be materially and adversely affected if we expend significant amounts in supporting an audit or inspection, or defending or settling any purported claims, regardless of their merit or outcomes.

There are risks associated with our receipt of government funding for research and development.

We are exposed to additional risks related to our receipt of external funding for certain strategic development programs from various governments and government agencies, both domestically and internationally. Governments and government agencies typically have the right to terminate funding programs at any time in their sole discretion, or a project may be terminated by mutual agreement if the parties determine that the project's goals or milestones are not being achieved, so there is no assurance that these sources of external funding will continue to be available to us in the future. In addition, under the terms of these government grants, the applicable granting agency typically has the right to audit the costs that we incur, directly and indirectly, in connection with such programs. Any such audit could result in modifications to, or even termination of, the applicable government funding program. For example, if an audit were to identify any costs as being improperly allocated to the applicable program, those costs would not be reimbursed, and any such costs that had already been reimbursed would have to be refunded. We do not know the outcome of any future audits. Any adverse finding resulting from any such audit could lead to penalties (financial or otherwise), termination of funding programs, suspension of payments, fines and suspension or prohibition from receiving future government funding from the applicable government or government agency, any of which could adversely impact our operating results, financial condition and ability to operate our business.

We have recorded significant restructuring, inventory write-off and asset impairment charges in the past and may do so again in the future, which could have a material negative impact on our business.

Historically, we have recorded material restructuring charges related to our prior global workforce reductions, large excess inventory write-offs, and material impairment charges related to our goodwill and purchased intangible assets. Workforce changes can also temporarily reduce workforce productivity, which could be disruptive to our business and adversely affect our results of operations. In addition, we may not achieve or sustain the expected cost savings or other benefits of our restructuring plans, or do so within the expected time frame. If we again restructure our organization and business processes, implement additional cost reduction actions or discontinue certain business operations, we may take additional, potentially material, restructuring charges related to, among other things, employee terminations or exit costs. We may also be required to write-off additional inventory if our product build plans or usage of service inventory decline. Also, as our lead times from suppliers increase (due to the increasing complexity of the parts and components they provide) and the lead times demanded by our customers decrease (due to the time pressures they face when introducing new products or technology or bringing new facilities into production), we may be compelled to increase our commitments, and therefore our risk exposure, to inventory purchases to meet our customers' demands in a timely manner, and that inventory may need to be written-off if demand for the underlying product declines for any reason. Such additional write-offs could result in material charges.

In the past, we have recorded material charges related to the impairment of our goodwill and purchased intangible assets. Goodwill represents the excess of costs over the net fair value of net assets acquired in a business combination. Goodwill is not amortized, but is instead tested for impairment at least annually in accordance with authoritative guidance for goodwill. Purchased intangible assets with estimable useful lives are amortized over their respective estimated useful lives based on economic benefit if known or using the straight-line method, and are reviewed for impairment in accordance with authoritative guidance for long-lived assets. The valuation of goodwill and intangible assets requires assumptions and estimates of many critical factors, including revenue and market growth, operating cash flows, market multiples, and discount rates. A substantial decline in our stock price, or any other adverse change in market conditions, particularly if such change has the effect of changing one of the critical assumptions or estimates we previously used to calculate the value of our goodwill or intangible assets (and, as applicable, the amount of any previous impairment charge), could result in a change to the estimation of fair value that could result in an additional impairment charge.

Any such additional material charges, whether related to restructuring or goodwill or purchased intangible asset impairment, may have a material negative impact on our operating results and related financial statements.

We are exposed to risks related to our financial arrangements with respect to receivables factoring and banking arrangements.

We enter into factoring arrangements with financial institutions to sell certain of our trade receivables and promissory notes from customers without recourse. In addition, we maintain bank accounts with several domestic and foreign financial institutions, any of which may prove not to be financially viable. If we were to stop entering into these factoring arrangements, our operating results, financial condition and cash flows could be adversely impacted by delays or failures in collecting trade receivables. However, by entering into these arrangements, and by engaging these financial institutions for banking services, we are exposed to additional risks. If any of these financial institutions experiences financial difficulties or is otherwise unable to honor the terms of our factoring or deposit arrangements, we may experience material financial losses due to the failure of such arrangements or a lack of access to our funds, any of which could have an adverse impact upon our operating results, financial condition and cash flows.

We are subject to the risks of additional government actions in the event we were to breach the terms of any settlement arrangement into which we have entered.

In connection with the settlement of certain government actions and other legal proceedings related to our historical stock option practices, we have explicitly agreed as a condition to such settlements that we will comply with certain laws, such as the books and records provisions of the federal securities laws. If we were to violate any such law, we might not only be subject to the significant penalties applicable to such violation, but our past settlements may also be impacted by such violation, which could give rise to additional government actions or other legal proceedings. Any such additional actions or proceedings may require us to expend significant management time and incur significant accounting, legal and other expenses, and may divert attention and resources from the operation of our business. These expenditures and diversions, as well as an adverse resolution of any such action or proceeding, could have a material adverse effect on our business, financial condition and results of operations.

General Commercial, Operational, Financial and Regulatory Risks

A majority of our annual revenues are derived from outside the United States, and we maintain significant operations outside the United States. We are exposed to numerous risks as a result of the international nature of our business and operations.

A majority of our annual revenues are derived from outside the United States, and we maintain significant operations outside the United States. We expect that these conditions will continue in the foreseeable future. Managing global operations and sites located throughout the world presents a number of challenges, including but not limited to:

- managing cultural diversity and organizational alignment;
- exposure to the unique characteristics of each region in the global market, which can cause capital equipment investment patterns to vary significantly from period to period;
- periodic local or international economic downturns;
- potential adverse tax consequences, including withholding tax rules that may limit the repatriation of our earnings, and higher effective income tax rates in foreign countries where we do business;
- compliance with customs regulations in the countries in which we do business;
- tariffs or other trade barriers (including those applied to our products or to parts and supplies that we purchase);
- political instability, natural disasters, legal or regulatory changes, acts of war or terrorism in regions where we have operations or where we do business;

- fluctuations in interest and currency exchange rates may adversely impact our ability to compete on price with local providers or the value of revenues we generate from our international business. Although we attempt to manage some of our near-term currency risks through the use of hedging instruments, there can be no assurance that such efforts will be adequate;
- receiving prepayments for certain of our products and services sold in certain jurisdictions. These prepayments increase our cash flows for the quarter in which they are received. If our practice of requiring prepayments in those jurisdictions changes or deteriorates, our cash flows would be harmed.
- longer payment cycles and difficulties in collecting accounts receivable outside of the United States;
- difficulties in managing foreign distributors (including monitoring and ensuring our distributors' compliance with applicable laws); and
- inadequate protection or enforcement of our intellectual property and other legal rights in foreign jurisdictions.

In addition, government controls, either by the United States or other countries, that restrict our business overseas or the import or export of our products or increase the cost of our operations through the imposition of tariffs or otherwise, could harm our business. For example, effective on October 30, 2018, the United States Department of Commerce added Fujian Jinhua Integrated Circuit Company, Ltd. ("JHICC") to its entity list, restricting exports of technology to JHICC without a license. As a result, unless JHICC is subsequently removed from the entity list, we will be unable to fulfill orders JHICC has made for our products, accept future orders placed by JHICC for our products, and provide services for any of our products already installed at JHICC.

Any of the factors above could have a significant negative impact on our business and results of operations.

We are exposed to risks associated with a weakening in the condition of the financial markets and the global economy.

Demand for our products is ultimately driven by the global demand for electronic devices by consumers and businesses. Economic uncertainty frequently leads to reduced consumer and business spending, which caused our customers to decrease, cancel or delay their equipment and service orders from us in the economic slowdown during fiscal year 2009. In addition, the tightening of credit markets and concerns regarding the availability of credit that accompanied that slowdown made it more difficult for our customers to raise capital, whether debt or equity, to finance their purchases of capital equipment, including the products we sell. Reduced demand, combined with delays in our customers' ability to obtain financing (or the unavailability of such financing), has at times in the past adversely affected our product and service sales and revenues and therefore has harmed our business and operating results, and our operating results and financial condition may again be adversely impacted if economic conditions decline from their current levels.

In addition, a decline in the condition of the global financial markets could adversely impact the market values or liquidity of our investments. Our investment portfolio includes corporate and government securities, money market funds and other types of debt and equity investments. Although we believe our portfolio continues to be comprised of sound investments due to the quality and (where applicable) credit ratings, a decline in the capital and financial markets would adversely impact the market value of our investments and their liquidity. If the market value of such investments were to decline, or if we were to have to sell some of our investments under illiquid market conditions, we may be required to recognize an impairment charge on such investments or a loss on such sales, either of which could have an adverse effect on our financial condition and operating results.

If we are unable to timely and appropriately adapt to changes resulting from difficult macroeconomic conditions, our business, financial condition or results of operations may be materially and adversely affected.

We might be involved in claims or disputes related to intellectual property or other confidential information that may be costly to resolve, prevent us from selling or using the challenged technology and seriously harm our operating results and financial condition.

As is typical in the industries in which we serve, from time to time we have received communications from other parties asserting the existence of patent rights, copyrights, trademark rights or other intellectual property rights which they believe cover certain of our products, processes, technologies or information. In addition, we occasionally receive notification from customers who believe that we owe them indemnification or other obligations related to intellectual property claims made against such customers by third parties. With respect to intellectual property infringement disputes, our customary practice is to evaluate such infringement assertions and to consider whether to seek licenses where appropriate. However, there can be no assurance that licenses can be obtained or, if obtained, will be on acceptable terms or that costly litigation or other administrative proceedings will not occur. The inability to obtain necessary licenses or other rights on reasonable terms could seriously harm our results of operations and financial condition. Furthermore, we may potentially be subject to claims by customers, suppliers or other business partners, or by governmental law enforcement agencies, related to our receipt, distribution and/or use of third-party intellectual property or confidential information. Legal proceedings and claims, regardless

of their merit, and associated internal investigations with respect to intellectual property or confidential information disputes are often expensive to prosecute, defend or conduct; may divert management's attention and other company resources; and/or may result in restrictions on our ability to sell our products, settlements on significantly adverse terms or adverse judgments for damages, injunctive relief, penalties and fines, any of which could have a significant negative effect on our business, results of operations and financial condition. There can be no assurance regarding the outcome of future legal proceedings, claims or investigations. The instigation of legal proceedings or claims, our inability to favorably resolve or settle such proceedings or claims, or the determination of any adverse findings against us or any of our employees in connection with such proceedings or claims could materially and adversely affect our business, financial condition and results of operations, as well as our business reputation.

We are exposed to various risks related to the legal, regulatory and tax environments in which we perform our operations and conduct our business.

We are subject to various risks related to compliance with new, existing, different, inconsistent or even conflicting laws, rules and regulations enacted by legislative bodies and/or regulatory agencies in the countries in which we operate and with which we must comply, including environmental, safety, antitrust, anti-corruption/anti-bribery, unclaimed property and export control regulations. Our failure or inability to comply with existing or future laws, rules or regulations, or changes to existing laws, rules or regulations (including changes that result in inconsistent or conflicting laws, rules or regulations), in the countries in which we operate could result in violations of contractual or regulatory obligations that may adversely affect our operating results, financial condition and ability to conduct our business. From time to time, we may receive inquiries or audit notices from governmental or regulatory bodies, or we may participate in voluntary disclosure programs, related to legal, regulatory or tax compliance matters, and these inquiries, notices or programs may result in significant financial cost (including investigation expenses, defense costs, assessments and penalties), reputational harm and other consequences that could materially and adversely affect our operating results and financial condition.

Our properties and many aspects of our business operations are subject to various domestic and international environmental laws and regulations, including those that control and restrict the use, transportation, emission, discharge, storage and disposal of certain chemicals, gases and other substances. Any failure to comply with applicable environmental laws, regulations or requirements may subject us to a range of consequences, including fines, suspension of certain of our business activities, limitations on our ability to sell our products, obligations to remediate environmental contamination, and criminal and civil liabilities or other sanctions. In addition, changes in environmental regulations (including regulations relating to climate change and greenhouse gas emissions) could require us to invest in potentially costly pollution control equipment, alter our manufacturing processes or use substitute (potentially more expensive and/or rarer) materials. Further, we use hazardous and other regulated materials that subject us to risks of strict liability for damages caused by any release, regardless of fault. We also face increasing complexity in our manufacturing, product design and procurement operations as we adjust to new and prospective requirements relating to the materials composition of our products, including restrictions on lead and other substances and requirements to track the sources of certain metals and other materials. The cost of complying, or of failing to comply, with these and other regulatory restrictions or contractual obligations could adversely affect our operating results, financial condition and ability to conduct our business.

In addition, we may from time to time be involved in legal proceedings or claims regarding employment, immigration, contracts, product performance, product liability, antitrust, environmental regulations, securities, unfair competition and other matters. These legal proceedings and claims, regardless of their merit, may be time-consuming and expensive to prosecute or defend, divert management's attention and resources, and/or inhibit our ability to sell our products. There can be no assurance regarding the outcome of current or future legal proceedings or claims, which could adversely affect our operating results, financial condition and ability to operate our business.

We depend on key personnel to manage our business effectively, and if we are unable to attract, retain and motivate our key employees, our sales and product development could be harmed.

Our employees are vital to our success, and our key management, engineering and other employees are difficult to replace. We generally do not have employment contracts with our key employees. Further, we do not maintain key person life insurance on any of our employees. The expansion of high technology companies worldwide has increased demand and competition for qualified personnel. If we are unable to attract and retain key personnel, or if we are not able to attract, assimilate and retain additional highly qualified employees to meet our current and future needs, our business and operations could be harmed.

We outsource a number of services to third-party service providers, which decreases our control over the performance of these functions. Disruptions or delays at our third-party service providers could adversely impact our operations.

We outsource a number of services, including our transportation, information systems management and logistics management of spare parts and certain accounting and procurement functions, to domestic and overseas third-party service providers. While outsourcing arrangements may lower our cost of operations, they also reduce our direct control over the services rendered. It is uncertain what effect such diminished control will have on the quality or quantity of products delivered or services rendered, on our ability to quickly respond to changing market conditions, or on our ability to ensure compliance with all applicable domestic and foreign laws and regulations. In addition, many of these outsourced service providers, including certain hosted software applications that we use for confidential data storage, employ cloud computing technology for such storage. These providers' cloud computing systems may be susceptible to "cyber incidents," such as intentional cyber attacks aimed at theft of sensitive data or inadvertent cyber-security compromises, which are outside of our control. If we do not effectively develop and manage our outsourcing strategies, if required export and other governmental approvals are not timely obtained, if our third-party service providers do not perform as anticipated, or do not adequately protect our data from cyber-related security breaches, or if there are delays or difficulties in enhancing business processes, we may experience operational difficulties (such as limitations on our ability to ship products), increased costs, manufacturing or service interruptions or delays, loss of intellectual property rights or other sensitive data, quality and compliance issues, and challenges in managing our product inventory or recording and reporting financial and management information, any of which could materially and adversely affect our business, financial condition and results of operations.

We are exposed to risks related to cybersecurity threats and cyber incidents.

In the conduct of our business, we collect, use, transmit and store data on information systems. This data includes confidential information, transactional information and intellectual property belonging to us, our customers and our business partners, as well as personally-identifiable information of individuals. We allocate significant resources to network security, data encryption and other measures to protect our information systems and data from unauthorized access or misuse. Despite our ongoing efforts to enhance our network security measures, our information systems are susceptible to computer viruses, cyber-related security breaches and similar disruptions from unauthorized intrusions, tampering, misuse, criminal acts, including phishing, or other events or developments that we may be unable to anticipate or fail to mitigate and are subject to the inherent vulnerabilities of network security measures. We have experienced cyber-related attacks in the past, and may experience cyber-related attacks in the future. Our security measures may also be breached due to employee errors, malfeasance, or otherwise. Third parties may also attempt to influence employees, users, suppliers or customers to disclose sensitive information in order to gain access to our, our customers' or business partners' data. Because the techniques used to obtain unauthorized access to the information systems change frequently, and may not be recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures.

Any of such occurrences could result in disruptions to our operations; misappropriation, corruption or theft of confidential information, including intellectual property and other critical data, of KLA, our customers and other business partners; misappropriation of funds and company assets; reduced value of our investments in research, development and engineering; litigation with, or payment of damages to, third parties; reputational damage; costs to comply with regulatory inquiries or actions; data privacy issues; costs to rebuild our internal information systems; and increased cybersecurity protection and remediation costs.

We carry insurance that provides some protection against the potential losses arising from a cybersecurity incident but it will not likely cover all such losses, and the losses that it does not cover may be significant.

We rely upon certain critical information systems for our daily business operations. Our inability to use or access our information systems at critical points in time could unfavorably impact our business operations.

Our global operations are dependent upon certain information systems, including telecommunications, the internet, our corporate intranet, network communications, email and various computer hardware and software applications. System failures or malfunctioning, such as difficulties with our customer relationship management ("CRM") system, could disrupt our operations and our ability to timely and accurately process and report key components of our financial results. Our enterprise resource planning ("ERP") system is integral to our ability to accurately and efficiently maintain our books and records, record transactions, provide critical information to our management, and prepare our financial statements. Any disruptions or difficulties that may occur in connection with our ERP system or other systems (whether in connection with the regular operation, periodic enhancements, modifications or upgrades of such systems or the integration of our acquired businesses into such systems) could adversely affect our ability to complete important business processes, such as the evaluation of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act of 2002. Any of these events could have an adverse effect on our business, operating results and financial condition.

Acquisitions are an important element of our strategy but, because of the uncertainties involved, we may not find suitable acquisition candidates and we may not be able to successfully integrate and manage acquired businesses. We are also exposed to risks in connection with strategic alliances into which we may enter.

In addition to our efforts to develop new technologies from internal sources, part of our growth strategy is to pursue acquisitions and acquire new technologies from external sources. As part of this effort, in February 2019, we announced that we had consummated our acquisition of Orbotech. We may also enter into definitive agreements for and consummate acquisitions of, or significant investments in, businesses with complementary products, services and/or technologies. There can be no assurance that we will find suitable acquisition candidates or that acquisitions we complete will be successful. In addition, we may use equity to finance future acquisitions, which would increase our number of shares outstanding and be dilutive to current stockholders.

If we are unable to successfully integrate and manage acquired businesses, if the costs associated with integrating the acquired business exceeds our expectations, or if acquired businesses perform poorly, then our business and financial results may suffer. It is possible that the businesses we have acquired, as well as businesses that we may acquire in the future, may perform worse than expected or prove to be more difficult to integrate and manage than anticipated. In addition, we may lose key employees of the acquired companies. As a result, risks associated with acquisition transactions may lead to a material adverse effect on our business and financial results for a number of reasons, including:

- we may have to devote unanticipated financial and management resources to acquired businesses;
- the combination of businesses may result in the loss of key personnel or an interruption of, or loss of momentum in, the activities of our company and/or the acquired business;
- we may not be able to realize expected operating efficiencies or product integration benefits from our acquisitions;
- we may experience challenges in entering into new market segments for which we have not previously manufactured and sold products;
- we may face difficulties in coordinating geographically separated organizations, systems and facilities;
- the customers, distributors, suppliers, employees and others with whom the companies we acquire have business dealings may have a potentially adverse reaction to the acquisition;
- we may have difficulty implementing a cohesive framework of internal controls over the entire organization;
- we may have to write-off goodwill or other intangible assets;
- and
- we may incur unforeseen obligations or liabilities in connection with acquisitions.

At times, we may also enter into strategic alliances with customers, suppliers or other business partners with respect to development of technology and intellectual property. These alliances typically require significant investments of capital and exchange of proprietary, highly sensitive information. The success of these alliances depends on various factors over which we may have limited or no control and requires ongoing and effective cooperation with our strategic partners. Mergers and acquisitions and strategic alliances are inherently subject to significant risks, and the inability to effectively manage these risks could materially and adversely affect our business, financial condition and operating results.

Disruption of our manufacturing facilities or other operations, or in the operations of our customers, due to earthquake, flood, other natural catastrophic events, health epidemics or terrorism could result in cancellation of orders, delays in deliveries or other business activities, or loss of customers and could seriously harm our business.

We have significant manufacturing operations in the United States, Singapore, Israel, Germany, United Kingdom, Italy and China. In addition, our business is international in nature, with our sales, service and administrative personnel and our customers located in numerous countries throughout the world. Operations at our manufacturing facilities and our assembly subcontractors, as well as our other operations and those of our customers, are subject to disruption for a variety of reasons, including work stoppages, acts of war, terrorism, health epidemics, fire, earthquake, volcanic eruptions, energy shortages, flooding or other natural disasters. Such disruption could cause delays in, among other things, shipments of products to our customers, our ability to perform services requested by our customers, or the installation and acceptance of our products at customer sites. We cannot provide any assurance that alternate means of conducting our operations (whether through alternate production capacity or service providers or otherwise) would be available if a major disruption were to occur or that, if such alternate means were available, they could be obtained on favorable terms.

In addition, as part of our cost-cutting actions, we have consolidated several operating facilities. Our California operations are now primarily centralized in our Milpitas facility. The consolidation of our California operations into a single campus could further concentrate the risks related to any of the disruptive events described above, such as acts of war or terrorism, earthquakes, fires or other natural disasters, if any such event were to impact our Milpitas facility.

We are predominantly uninsured for losses and interruptions caused by terrorist acts and acts of war. If international political instability continues or increases, our business and results of operations could be harmed.

The threat of terrorism targeted at, or acts of war in, the regions of the world in which we do business increases the uncertainty in our markets. Any act of terrorism or war that affects the economy or the industries we serve could adversely affect our business. Increased international political instability in various parts of the world, disruption in air transportation and further enhanced security measures as a result of terrorist attacks may hinder our ability to do business and may increase our costs of operations. We maintain significant operations in Israel. Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its Arab neighbors, and a state of hostility varying in degree and intensity, has led to security and economic challenges for Israel. In addition, some of our employees in Israel are obligated to perform annual reserve duty in the Israel Defense Forces, and may be called to active military duty in emergency circumstances. We cannot assess the impact that emergency conditions in Israel in the future may have on our business, operations, financial condition or results of operations, but it could be material. Instability in any region could directly impact our ability to operate our business (or our customers' ability to operate their businesses), cause us to incur increased costs in transportation, make such transportation unreliable, increase our insurance costs, and cause international currency markets to fluctuate. Instability in the region could also have the same effects on our suppliers and their ability to timely deliver their products. If international political instability continues or increases in any region in which we do business, our business and results of operations could be harmed. We are predominantly uninsured for losses and interruptions caused by terrorist acts and acts of war.

We self-insure certain risks including earthquake risk. If one or more of the uninsured events occurs, we could suffer major financial loss.

We purchase insurance to help mitigate the economic impact of certain insurable risks; however, certain risks are uninsurable, are insurable only at significant cost or cannot be mitigated with insurance. Accordingly, we may experience a loss that is not covered by insurance, either because we do not carry applicable insurance or because the loss exceeds the applicable policy amount or is less than the deductible amount of the applicable policy. For example, we do not currently hold earthquake insurance. An earthquake could significantly disrupt our manufacturing operations, a significant portion of which are conducted in California, an area highly susceptible to earthquakes. It could also significantly delay our research and engineering efforts on new products, much of which is also conducted in California. We take steps to minimize the damage that would be caused by an earthquake, but there is no certainty that our efforts will prove successful in the event of an earthquake. We self-insure earthquake risks because we believe this is a prudent financial decision based on our cash reserves and the high cost and limited coverage available in the earthquake insurance market. Certain other risks are also self-insured either based on a similar cost-benefit analysis, or based on the unavailability of insurance. If one or more of the uninsured events occurs, we could suffer major financial loss.

We are exposed to foreign currency exchange rate fluctuations. Although we hedge certain currency risks, we may still be adversely affected by changes in foreign currency exchange rates or declining economic conditions in these countries.

We have some exposure to fluctuations in foreign currency exchange rates, primarily the Japanese Yen, the euro, the pound sterling and the Israeli new shekel. We have international subsidiaries that operate and sell our products globally. In addition, an increasing proportion of our manufacturing activities are conducted outside of the United States, and many of the costs associated with such activities are denominated in foreign currencies. We routinely hedge our exposures to certain foreign currencies with certain financial institutions in an effort to minimize the impact of certain currency exchange rate fluctuations, but these hedges may be inadequate to protect us from currency exchange rate fluctuations. To the extent that these hedges are inadequate, or if there are significant currency exchange rate fluctuations in currencies for which we do not have hedges in place, our reported financial results or the way we conduct our business could be adversely affected. Furthermore, if a financial counterparty to our hedges experiences financial difficulties or is otherwise unable to honor the terms of the foreign currency hedge, we may experience material financial losses.

We are exposed to fluctuations in interest rates and the market values of our portfolio investments; impairment of our investments could harm our earnings. In addition, we and our stockholders are exposed to risks related to the volatility of the market for our common stock.

Our investment portfolio primarily consists of both corporate and government debt securities that are susceptible to changes in market interest rates and bond yields. As market interest rates and bond yields increase, those securities with a lower yield-at-cost show a mark-to-market unrealized loss. We believe we have the ability to realize the full value of all these investments upon maturity. However, an impairment of the fair market value of our investments, even if unrealized, must be reflected in our financial statements for the applicable period and may therefore have a material adverse effect on our results of operations for that period.

In addition, the market price for our common stock is volatile and has fluctuated significantly during recent years. The trading price of our common stock could continue to be highly volatile and fluctuate widely in response to various factors, including without limitation conditions in the semiconductor industry and other industries in which we operate, fluctuations in the global economy or capital markets, our operating results or other performance metrics, or adverse consequences experienced by us as a result of any of the risks described elsewhere in this Item 1A. Volatility in the market price of our common stock could cause an investor in our common stock to experience a loss on the value of their investment in us and could also adversely impact our ability to raise capital through the sale of our common stock or to use our common stock as consideration to acquire other companies.

We are exposed to risks in connection with tax and regulatory compliance audits in various jurisdictions.

We are subject to tax and regulatory compliance audits (such as related to customs or product safety requirements) in various jurisdictions, and such jurisdictions may assess additional income or other taxes, penalties, fines or other prohibitions against us. Although we believe our tax estimates are reasonable and that our products and practices comply with applicable regulations, the final determination of any such audit and any related litigation could be materially different from our historical income tax provisions and accruals related to income taxes and other contingencies. In addition to and in connection with the Israel Tax Authority (“ITA”) Assessment described in more detail in Note 13, “Income Taxes” to our Consolidated Financial Statements, there is an ongoing criminal investigation against our Orbotech subsidiary, certain of its employees and its tax consultant that began prior to the Acquisition Date. We can make no assurances that an indictment will not result from the criminal investigation. The results of an audit or litigation could have a material adverse effect on our operating results or cash flows in the period or periods for which that determination is made.

A change in our effective tax rate can have a significant adverse impact on our business.

We earn profits in, and are therefore potentially subject to taxes in, the U.S. and numerous foreign jurisdictions, including Singapore, Israel and the Cayman Islands, the countries in which we earn the majority of our non-U.S. profits. Due to economic, political or other conditions, tax rates in those jurisdictions may be subject to significant change. A number of factors may adversely impact our future effective tax rates, such as the jurisdictions in which our profits are determined to be earned and taxed; changes in the tax rates imposed by those jurisdictions; expiration of tax holidays in certain jurisdictions that are not renewed; the resolution of issues arising from tax audits with various tax authorities; changes in the valuation of our deferred tax assets and liabilities; adjustments to estimated taxes upon finalization of various tax returns; increases in expenses not deductible for tax purposes, including write-offs of acquired in-process research and development and impairment of goodwill in connection with acquisitions; changes in available tax credits; changes in stock-based compensation expense; changes in tax laws or the interpretation of such tax laws; changes in generally accepted accounting principles; and the repatriation of earnings from outside the U.S. for which we have not previously provided for U.S. taxes. A change in our effective tax rate can materially and adversely impact our results from operations.

In addition, recent changes to U.S. tax laws will significantly impact how U.S. multinational corporations are taxed on foreign earnings. Numerous countries are evaluating their existing tax laws due in part, to recommendations made by the Organization for Economic Co-operation and Development’s (“OECD’s”) Base Erosion and Profit Shifting (“BEPS”) project. As of December 31, 2018, we have completed our accounting for the tax effects of the Act, which was enacted into law on December 22, 2017. However, the recent U.S. tax law changes are subject to future guidance from U.S. federal and state governments, such as the Treasury Department and/or the IRS. Any future guidance can change our tax liability. A significant portion of the income taxes due to the enactment of the Act is payable by us over a period of eight years. As a result, our cash flows from operating activities will be adversely impacted until tax liability is paid in full.

Compliance with federal securities laws, rules and regulations, as well as NASDAQ requirements, has become increasingly complex, and the significant attention and expense we must devote to those areas may have an adverse impact on our business.

Federal securities laws, rules and regulations, as well as NASDAQ rules and regulations, require companies to maintain extensive corporate governance measures, impose comprehensive reporting and disclosure requirements, set strict independence and financial expertise standards for audit and other committee members and impose civil and criminal penalties for companies and their chief executive officers, chief financial officers and directors for securities law violations. These laws, rules and regulations have increased, and in the future are expected to continue to increase, the scope, complexity and cost of our corporate governance, reporting and disclosure practices, which could harm our results of operations and divert management’s attention from business operations.

A change in accounting standards or practices or a change in existing taxation rules or practices (or changes in interpretations of such standards, practices or rules) can have a significant effect on our reported results and may even affect reporting of transactions completed before the change is effective.

New accounting standards and taxation rules and varying interpretations of accounting pronouncements and taxation rules have occurred and will continue to occur in the future. Changes to (or revised interpretations or applications of) existing accounting standards or tax rules or the questioning of current or past practices may adversely affect our reported financial results or the way we conduct our business. For example, in the quarter ended September 30, 2019, we adopted the FASB accounting standard update and amended our accounting for leases. Adoption of new standards may require changes to our processes, accounting systems, and internal controls. Difficulties encountered during adoption could result in internal control deficiencies or delay the reporting of our financial results. In addition, the passing of the Act in December 2017 caused us to significantly increase our provision for income taxes, which had a material adverse effect on our net income for the fiscal year ended June 30, 2018. Further interpretations of the Act from the government and regulatory organizations may change our tax expense provided for our transitional tax liability and deferred tax adjustments as well as our provision liability or accounting treatment of the provisional liability which may potentially affect the measurement of these balances or potentially give rise to new deferred tax amounts.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS**Equity Repurchase Plans**

The following is a summary of stock repurchases for the three months ended September 30, 2019:

<u>Period</u>	<u>Total Number of Shares Purchased</u>	<u>Average Price Paid per Share</u>	<u>Total Number of Shares Purchased As Part of Publicly Announced Plans or Programs⁽¹⁾</u>	<u>Approximate Dollar Value that May Yet Be Purchased Under the Plans or Programs⁽¹⁾</u>
July 1, 2019 to July 31, 2019	689,499	\$ 127.63	689,499	\$ 770,694,435
August 1, 2019 to August 30, 2019	570,047	\$ 137.71	570,047	\$ 692,196,039
September 3, 2019 to September 30, 2019	399,684	\$ 155.12	399,684	\$ 1,630,197,966
Total	<u>1,659,230</u>	\$ 137.71	<u>1,659,230</u>	

(1) The stock repurchase program was announced on March 19, 2018, with an approved dollar amount of \$2 billion. An additional \$1 billion was authorized and announced on September 17, 2019. The program has no expiration date and may be suspended at any time. Future repurchases of our common stock under our repurchase program may be effected through various different repurchase transaction structures, including isolated open market transactions or systematic repurchase plans.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibit Number	Exhibit Description	Form	Incorporated by Reference		Filing Date
			File Number	Exhibit Number	
<u>3.1</u>	<u>Restated Certificate of Incorporation</u>	10-K	000-09992	3.1	August 16, 2019
<u>3.2</u>	<u>Amended and Restated Bylaws of the Company effective as of July 15, 2019</u>	8-K	000-09992	3.2	July 16, 2019
<u>31.1</u>	<u>Certification of Chief Executive Officer under Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934</u>				
<u>31.2</u>	<u>Certification of Chief Financial Officer under Rule 13a-14(a) /15d-14(a) of the Securities Exchange Act of 1934</u>				
<u>32</u>	<u>Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350</u>				
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				
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)				

* Denotes a management contract, plan or arrangement.

+ Confidential treatment has been requested as to a portion of this exhibit.

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.

KLA CORPORATION

(Registrant)

October 31, 2019

(Date)

/s/ RICHARD P. WALLACE

Richard P. Wallace

President and Chief Executive Officer
(Principal Executive Officer)

October 31, 2019

(Date)

/s/ BREN D. HIGGINS

Bren D. Higgins

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

October 31, 2019

(Date)

/s/ VIRENDRA A. KIRLOSKAR

Virendra A. Kirloskar

Senior Vice President and Chief Accounting Officer
(Principal Accounting Officer)

**Certification of Chief Executive Officer
Pursuant to Exchange Act Rule 13a-14(a)/15d-14(a) As Adopted
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Richard P. Wallace, certify that:

- 1 I have reviewed this Quarterly Report on Form 10-Q of KLA 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(s) 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(s) 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.

October 31, 2019

(Date)

/s/ RICHARD P. WALLACE

Richard P. Wallace

President and Chief Executive Officer
(Principal Executive Officer)

Certification of Chief Financial Officer
Pursuant to Exchange Act Rule 13a-14(a)/15d-14(a) As Adopted
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Bren D. Higgins, certify that:

- 1 I have reviewed this Quarterly Report on Form 10-Q of KLA 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(s) 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(s) 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.

October 31, 2019

(Date)

/s/ BREN D. HIGGINS

Bren D. Higgins
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

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

I, Richard P. Wallace, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of KLA Corporation on Form 10-Q for the fiscal quarter ended September 30, 2019 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of KLA Corporation.

October 31, 2019

(Date)

By: /s/ RICHARD P. WALLACE

Name: Richard P. Wallace

Title: President and Chief Executive Officer

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

I, Bren D. Higgins, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of KLA Corporation on Form 10-Q for the fiscal quarter ended September 30, 2019 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of KLA Corporation.

October 31, 2019

(Date)

By: /s/ BREN D. HIGGINS

Name: Bren D. Higgins

Title: Executive Vice President and Chief Financial Officer