
**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 29, 2017

or

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

For the transition period from _____ to _____

Commission file number 000-50646

Ultra Clean Holdings, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

26462 Corporate Avenue, Hayward, California
(Address of principal executive offices)

61-1430858
(I.R.S. Employer
Identification No.)

94545
(Zip Code)

(510) 576-4400

Registrant's telephone number, including area code

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

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

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

Large accelerated filer ☐

Accelerated filer ☒

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

Smaller reporting company ☐

Emerging growth company ☐

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

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

Number of shares outstanding of the issuer's common stock as of October 27, 2017: 33,627,343

ULTRA CLEAN HOLDINGS, INC.

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PART I. FINANCIAL INFORMATION

ITEM 1. Financial Statements

ULTRA CLEAN HOLDINGS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited; in thousands, except share and per share amounts)

	September 29, 2017	December 30, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 65,939	\$ 52,465
Accounts receivable, net of allowance of \$44 and \$65, respectively	107,662	74,663
Inventories	165,303	103,861
Prepaid expenses and other	11,460	6,461
Total current assets	<u>350,364</u>	<u>237,450</u>
Equipment and leasehold improvements, net	28,943	18,858
Goodwill	85,248	85,248
Purchased intangibles, net	33,331	37,024
Deferred tax assets, net	1,098	1,355
Other non-current assets	1,769	762
Total assets	<u>\$ 500,753</u>	<u>\$ 380,697</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Bank borrowings	\$ 15,518	\$ 16,819
Accounts payable	130,539	71,189
Accrued compensation and related benefits	12,510	7,904
Deferred rent, current portion	661	634
Other current liabilities	11,020	4,515
Total current liabilities	<u>170,248</u>	<u>101,061</u>
Bank borrowings, net of current portion	41,810	50,931
Deferred tax liability	9,607	9,917
Deferred rent and other liabilities	2,408	2,657
Total liabilities	<u>224,073</u>	<u>164,566</u>
Commitments and contingencies (See Note 9)		
Stockholders' equity:		
Preferred stock — \$0.001 par value, 10,000,000 authorized; none outstanding	—	—
Common stock — \$0.001 par value, 90,000,000 authorized; 33,627,343 and 32,956,285 shares issued and outstanding, in 2017 and 2016, respectively	34	33
Additional paid-in capital	186,159	181,781
Common shares held in treasury, at cost, 601,944 shares in 2017 and 2016, respectively	(3,337)	(3,337)
Retained earnings	92,273	38,037
Accumulated other comprehensive gain (loss)	1,551	(383)
Total stockholders' equity	<u>276,680</u>	<u>216,131</u>
Total liabilities and stockholders' equity	<u>\$ 500,753</u>	<u>\$ 380,697</u>

(See accompanying Notes to Condensed Consolidated Financial Statements)

ULTRA CLEAN HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited; in thousands, except per share data)

	Three Months Ended		Nine Months Ended	
	September 29,	September 23,	September 29,	September 23,
	2017	2016	2017	2016
Sales	\$ 242,610	\$ 146,154	\$ 675,465	\$ 388,214
Cost of goods sold	199,914	122,663	551,903	331,132
Gross profit	42,696	23,491	123,562	57,082
Operating expenses:				
Research and development	2,722	2,447	8,402	7,082
Sales and marketing	3,662	2,819	10,064	8,537
General and administrative	13,050	11,525	37,656	31,742
Total operating expenses	19,434	16,791	56,122	47,361
Income from operations	23,262	6,700	67,440	9,721
Interest and other income (expense), net	(19)	(1,336)	(2,077)	(3,263)
Income before provision for income taxes	23,243	5,364	65,363	6,458
Income tax provision	3,527	2,750	11,127	6,360
Net income	\$ 19,716	\$ 2,614	\$ 54,236	\$ 98
Net income per share:				
Basic	\$ 0.59	\$ 0.08	\$ 1.63	\$ 0.00
Diluted	\$ 0.57	\$ 0.08	\$ 1.59	\$ 0.00
Shares used in computing net income per share:				
Basic	33,540	32,759	33,342	32,544
Diluted	34,360	33,100	34,216	32,887

(See accompanying Notes to Condensed Consolidated Financial Statements)

ULTRA CLEAN HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited; in thousands)

	Three Months Ended		Nine Months Ended	
	September 29, 2017	September 23, 2016	September 29, 2017	September 23, 2016
Net income	\$ 19,716	\$ 2,614	\$ 54,236	\$ 98
Other comprehensive income:				
Change in cumulative translation adjustment	312	50	1,001	125
Cash flow hedges:				
Change in fair value of derivatives	333	27	1,026	(101)
Adjustment for net gain (loss) realized and included in net income	(100)	20	(93)	71
Total change in unrealized gain (loss) on derivative instruments	233	47	933	(30)
Other comprehensive income	545	97	1,934	95
Comprehensive income	\$ 20,261	\$ 2,711	\$ 56,170	\$ 193

(See accompanying Notes to Condensed Consolidated Financial Statements)

ULTRA CLEAN HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited; in thousands)

	Nine Months Ended	
	September 29, 2017	September 23, 2016
Cash flows from operating activities:		
Net income	\$ 54,236	\$ 98
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	3,895	4,242
Amortization of finite-lived intangibles	3,693	4,318
Amortization of debt issuance costs	115	114
Stock-based compensation	5,059	4,040
Change in the fair value of the contingent earn out	(278)	1,405
Excess tax benefit from stock-based compensation	—	771
Loss in the disposal of fixed assets	72	—
Changes in assets and liabilities		
Accounts receivable	(32,387)	(6,567)
Inventories	(60,484)	(16,185)
Prepaid expenses and other	(4,386)	1,249
Deferred income taxes	(224)	1,276
Other non-current assets	(486)	(26)
Accounts payable	57,695	12,342
Accrued compensation and related benefits	4,514	443
Income taxes payable	4,614	450
Other liabilities	1,978	1,412
Net cash provided by operating activities	37,626	9,382
Cash flows from investing activities:		
Purchases of equipment and leasehold improvements	(12,534)	(5,460)
Disposal of equipment and leasehold improvements	—	34
Net cash used for investing activities	(12,534)	(5,426)
Cash flows from financing activities:		
Proceeds from bank borrowings	8,172	4,523
Proceeds from issuance of common stock	1,689	500
Principal payments on bank borrowings	(19,228)	(11,016)
Excess tax benefit from stock-based compensation	—	(771)
Employees' taxes paid upon vesting of restricted stock units	(2,369)	—
Net cash used for financing activities	(11,736)	(6,764)
Effect of exchange rate changes on cash and cash equivalents	118	(25)
Net increase (decrease) in cash and cash equivalents	\$ 13,474	\$ (2,833)
Cash and cash equivalents at beginning of period	52,465	50,103
Cash and cash equivalents at end of period	\$ 65,939	\$ 47,270
Supplemental cash flow information:		
Income taxes paid	\$ 6,860	\$ 2,988
Income tax refunds	\$ 25	\$ 591
Interest paid	\$ 3,409	\$ 1,920
Non-cash investing activities:		
Restricted stock issued	\$ 11,778	\$ 3,690
Equipment and leasehold improvements purchased included in accounts payable	\$ 1,514	\$ 483

(See accompanying Notes to Condensed Consolidated Financial Statements)

ULTRA CLEAN HOLDINGS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. Organization and Significant Accounting Policies

Organization — Ultra Clean Holdings, Inc. (the “Company” or “UCT”) was founded in November 2002 for the purpose of acquiring Ultra Clean Technology Systems and Service, Inc. Ultra Clean Technology Systems and Service, Inc. was founded in 1991 by Mitsubishi Corporation and was operated as a subsidiary of Mitsubishi until November 2002, when it was acquired by UCT. UCT became a publicly traded company in March 2004. Ultra Clean Technology (Shanghai) Co., Ltd (“UCTS”) and Ultra Clean Micro-Electronics Equipment (Shanghai) Co., Ltd. (“UCME”) were established in 2005 and 2007, respectively, to facilitate the Company’s operations in China. In December 2015, UCTS merged into UCME. Ultra Clean Asia Pacific, Pte, Ltd. (Singapore) (“UCAP”) was established in fiscal year 2008 to facilitate the Company’s operations in Singapore. In July 2012, UCT acquired American Integration Technologies LLC (“AIT”) to add to the Company’s existing customer base in the semiconductor and medical spaces and to provide additional manufacturing capabilities. In February 2015, UCT acquired Marchi Thermal Systems, Inc. (“Marchi”), a designer and manufacturer of specialty heaters, thermocouples and temperature controllers. Marchi delivers flexible heating elements and thermal solutions to our customers. The Company believes heaters are increasingly critical in equipment design for the most advanced semiconductor nodes. In July 2015, UCT acquired MICONEX s.r.o. (“Miconex”), a privately-held provider of advanced precision fabrication of plastics, primarily for the semiconductor industry that expands the Company’s capabilities with existing customers.

The Company is a global leader in the design, engineering, and manufacture of production tools, modules and subsystems for the semiconductor capital equipment and equipment industry segments with similar requirements including consumer, medical and flat panel display. The Company focuses on providing specialized engineering and manufacturing solutions for these highly complex, highly configurable, limited volume applications. In addition, the Company routinely handles major volume and design changes during the manufacturing process and provides equipment manufacturers flexibility when responding to dynamic demand changes. The Company enables its customers to realize lower manufacturing costs and reduced design-to-delivery cycle times while maintaining high quality standards.

The Company provides its customers with complete solutions that combine its expertise in design, assembly, test and component characterization. The Company’s customers value its highly flexible global manufacturing operations, its excellence in quality control and its scale and financial stability. The Company’s global footprint enables the Company to reduce manufacturing costs and design-to-delivery cycle times while maintaining high quality standards for the Company’s customers. The Company believes that these characteristics allow the Company to provide global solutions for its customers’ product demands. The Company ships the majority of its products to U.S. registered customers with locations both in and outside the U.S. In addition to its U.S. manufacturing capabilities, the Company manufactures products in its Asian facilities to support local and U.S. based customers. The Company conducts its operating activities primarily through its wholly-owned subsidiaries, Ultra Clean Technology Systems and Service, Inc., AIT, UCME, UCAP, Marchi and Miconex. The Company’s international sales represented 54.4% and 49.7% of total sales for the three months ended September 29, 2017 and September 23, 2016, respectively and 52.8% and 46.5% of total sales for the nine months ended September 29, 2017 and September 23, 2016, respectively. See Note 10 to the Company’s Condensed Consolidated Financial Statements for further information about the Company’s geographic areas.

Basis of Presentation — The unaudited condensed consolidated financial statements included in this quarterly report on Form 10-Q include the accounts of the Company and its wholly-owned subsidiaries and have been prepared in accordance with U.S. generally accepted accounting principles (“GAAP”). This financial information reflects all adjustments which are, in the opinion of the Company, normal, recurring and necessary for the fair financial statement presentation for the dates and periods presented. Certain information and footnote disclosures normally included in our annual financial statements, prepared in accordance with GAAP, have been condensed or omitted. The Company’s December 30, 2016 balance sheet data were derived from its audited financial statements as of that date.

Principles of Consolidation — The Company’s condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries and all intercompany accounts and transactions have been eliminated in consolidation. The Company uses a 52-53 week fiscal year ending on the Friday nearest December 31. All references to quarters refer to fiscal quarters and all references to years refer to fiscal years.

Foreign Currency Translation and Remeasurement — The Company has one foreign subsidiary, Miconex, whose functional currency is not its local currency or the U.S. dollar. The Company remeasures the monetary assets and liabilities of this subsidiary into its functional currency. Gains and losses from these remeasurements are recorded in interest and other income (expense), net. The Company then translates the assets and liabilities of this subsidiary into the U.S. dollar. Gains and losses from these translations are recognized in foreign currency translation included in accumulated other comprehensive income (AOCI) within stockholders’ equity. For the Company’s foreign subsidiaries where the U.S. dollar is the functional currency, any gains and losses resulting from the translation of the assets and liabilities of these subsidiaries are recorded in interest and other income (expense), net.

Use of Accounting Estimates — The presentation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosures of contingent liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Such estimates and assumptions include reserves on inventory, valuation of deferred tax assets and impairment of goodwill and other long-lived assets. The Company bases its estimates and judgments on historical experience and on various other assumptions that it believes are reasonable under the circumstances. However, future events are subject to change and the best estimates and judgments routinely require adjustment. Actual amounts may differ from those estimates.

Concentration of Credit Risk — Financial instruments which subject the Company to concentrations of credit risk consist principally of cash and cash equivalents and accounts receivable. The Company sells its products primarily to semiconductor capital equipment manufacturers in the United States. The Company performs credit evaluations of its customers' financial condition and generally requires no collateral.

Significant Sales to Customers — The Company's most significant customers (having accounted for 10% or more of sales) and their related sales as a percentage of total sales were as follows:

	Three Months Ended		Nine Months Ended	
	September 29, 2017	September 23, 2016	September 29, 2017	September 23, 2016
Lam Research Corporation	59.1 %	49.5 %	58.3 %	53.5 %
Applied Materials, Inc.	24.5	30.9	25.7	27.3
Total	83.6 %	80.4 %	84.0 %	80.8 %

Two customers' accounts receivable balances, Lam Research Corporation and Applied Materials, Inc., were individually greater than 10% of accounts receivable as of September 29, 2017 and as of December 30, 2016, and in the aggregate represented approximately 76.7% and 85.0% of accounts receivable, respectively.

Fair Value of Measurements — The Company measures its cash equivalents, foreign currency forward contracts, interest rate derivative contracts and contingent earn-out liability at fair value on a recurring basis. Fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that is determined based on assumptions that market participants would use in pricing an asset or a liability. Assets and liabilities recorded at fair value are measured and classified in accordance with a three-tier fair value hierarchy based on the observability of the inputs available in the market used to measure fair value:

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

Level 2 — Inputs that are based upon quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques for which all significant inputs are observable in the market or can be derived from observable market data. Where applicable, these models project future cash flows and discount the future amounts to a present value using market-based observable inputs including interest rate curves, foreign exchange rates, and credit ratings.

Level 3 — Unobservable inputs that are supported by little or no market activities.

The fair value hierarchy requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The following table summarizes, for assets or liabilities measured at fair value, the respective fair value and the classification by level of input within the fair value hierarchy (in thousands):

Description	September 29, 2017	Fair Value Measurement at Reporting Date Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Other assets:				
Interest rate swap	\$ 28	\$ —	\$ 28	\$ —
Forward contracts	\$ 1,097	\$ —	\$ 1,097	\$ —
Other liabilities:				
Interest rate swap	\$ 4	\$ —	\$ 4	\$ —
Contingent earn-out liability	\$ —	\$ —	\$ —	\$ —

Description	December 30, 2016	Fair Value Measurement at Reporting Date Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Other assets:				
Interest rate swap	\$ 15	\$ —	\$ 15	\$ —
Other liabilities:				
Interest rate swap	\$ 6	\$ —	\$ 6	\$ —
Contingent earn-out liability	\$ 278	\$ —	\$ —	\$ 278

Derivative Financial Instruments — The Company recognizes derivative instruments as either assets or liabilities in the accompanying Condensed Consolidated Balance Sheets at fair value. The Company records changes in the fair value of the derivatives in the accompanying Condensed Consolidated Statements of Operations as interest and other income (expense), net, or as a component of AOCI in the accompanying Condensed Consolidated Balance Sheets.

Inventories — Inventories are stated at the lower of standard cost (which approximates actual cost on a first-in, first-out basis) or market. The Company evaluates the valuation of all inventories, including raw materials, work-in-process, finished goods and spare parts on a periodic basis. Obsolete inventory or inventory in excess of management's estimated usage is written-down to its estimated market value less costs to sell, if less than its cost. Inherent in the estimates of market value are management's estimates related to economic trends, future demand for products, and technological obsolescence of the Company's products.

Inventory write downs inherently involve judgments as to assumptions about expected future demand and the impact of market conditions on those assumptions. Although the Company believes that the assumptions it used in estimating inventory write downs are reasonable, significant changes in any one of the assumptions in the future could produce a significantly different result. There can be no assurances that future events and changing market conditions will not result in significant increases in inventory write downs.

Equipment and Leasehold Improvements, net — Equipment and leasehold improvements are stated at cost, or, in the case of equipment under capital leases, the present value of future minimum lease payments at inception of the related lease. Depreciation and amortization are computed using the straight-line method over the lesser of the estimated useful lives of the assets or the terms of the leases. Useful lives range from three to fifteen years.

Internal use software — Direct costs incurred to develop software for internal use are capitalized and amortized over an estimated useful life of three or five years. Costs related to the maintenance of internal use software are expensed as incurred. Capitalized internal use software is included in computer equipment and software.

Construction in progress — Construction in progress is related to the construction or development of property and equipment that has not yet been placed in service for their intended use and is, therefore, not depreciated. Construction in progress currently includes capitalized costs related to the Company's new enterprise reporting system implementation project.

Product Warranty — The Company provides warranty on its products for a period of up to two years and provides for warranty costs at the time of sale based on historical activity. Determination of the warranty reserve requires the Company to make estimates of product return rates and expected costs to repair or replace the products under warranty. If actual return rates and/or repair and replacement costs differ significantly from these estimates, adjustments to recognize additional cost of sales may be required in future periods. The warranty reserve is included in other current liabilities on the Condensed Consolidated Balance Sheets.

Income Taxes — The Company utilizes the asset and liability method of accounting for income taxes, under which deferred taxes are determined based on the temporary differences between the financial statement and tax basis of assets and liabilities using tax rates expected to be in effect during the years in which the basis differences reverse. Deferred income taxes arise from temporary differences between the tax basis of assets and liabilities and their reported amounts in the financial statements, which will result in taxable or deductible amounts in the future. In evaluating our ability to realize our deferred tax assets within the jurisdiction from which they arise, we consider all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax-planning strategies, and results of recent operations. In projecting future taxable income, we begin with historical results and incorporate assumptions about the amount of future state, federal, and foreign pretax operating income adjusted for items that do not have tax consequences. The assumptions about future taxable income require significant judgment and are consistent with the plans and estimates we are using to manage the underlying businesses. In evaluating the objective evidence that historical results provide, we consider recent cumulative income (loss). A valuation allowance is recorded when it is more likely than not that some of the deferred tax assets will not be realized. The Company continued to maintain a full valuation allowance on its federal, state, and one of its Singapore subsidiary's deferred tax amounts as of September 29, 2017.

The determination of the Company's tax provision is subject to judgments and estimates. Income tax positions must meet a more likely than not recognition threshold to be recognized. Income tax positions that previously failed to meet the more likely than not threshold are recognized in the first subsequent financial reporting period in which that threshold is met. Previously recognized tax positions that no longer meet the more likely than not threshold are derecognized in the first subsequent financial reporting period in which that threshold is no longer met. The Company recognizes potential accrued interest and penalties related to unrecognized tax benefits within the Condensed Consolidated Statements of Operations as income tax expense. The calculation of tax liabilities involves significant judgment in estimating the impact of uncertainties in the application of complex tax laws. Resolution of these uncertainties in a manner inconsistent with the Company's expectations could have a material impact on its results of operations and financial position. Management believes that it has adequately provided for any adjustments that may result from these examinations; however, the outcome of tax audits cannot be predicted with certainty.

Revenue Recognition — Product revenue is generally recorded upon shipment. In arrangements that specify title transfer upon delivery, revenue is not recognized until ownership is transferred to the customer. The Company recognizes revenue when persuasive evidence of an arrangement exists, shipment has occurred, price is fixed or determinable and collectability is reasonably assured. If the Company has not substantially completed a product or fulfilled the terms of a sales agreement at the time of shipment, revenue recognition is deferred until fulfillment. The Company's standard arrangement for its customers includes a signed purchase order or contract, no right of return of delivered products and no customer acceptance provisions.

The Company assesses collectability based on the credit worthiness of the customer and past transaction history. The Company performs on-going credit evaluations of customers and generally does not require collateral from customers.

Research and Development Costs — Research and development costs are expensed as incurred.

Net Income per Share — Basic net income per share is computed by dividing net income by the weighted average number of shares outstanding for the period. Diluted net income per share is calculated by dividing net income by the weighted average number of common shares outstanding and common equivalent shares from dilutive stock options and restricted stock using the treasury stock method, except when such shares are anti-dilutive. See Note 8 to the Company's Condensed Consolidated Financial Statements.

Segments — The Financial Accounting Standards Board’s (FASB) guidance regarding disclosure about segments in an enterprise and related information establishes standards for the reporting by public business enterprises of information about reportable segments, products and services, geographic areas, and major customers. The method for determining what information to report is based on the manner in which management organizes the reportable segments within the Company for making operational decisions and assessments of financial performance. The Company’s chief operating decision-maker is considered to be the Chief Executive Officer. The Company operates in one operating segment, and therefore, has one reportable segment.

Business Combinations — The Company recognizes assets acquired (including goodwill and identifiable intangible assets) and liabilities assumed at fair value on the acquisition date. Subsequent changes to the fair value of such assets acquired and liabilities assumed are recognized in earnings, after the expiration of the measurement period, a period not to exceed 12 months from the acquisition date. Acquisition-related expenses and acquisition-related restructuring costs are recognized in earnings in the period in which they are incurred.

Stock-Based Compensation Expense

The Company maintains stock-based compensation plans which allow for the issuance of equity-based awards to executives, directors and certain employees. These equity-based awards include stock options, restricted stock awards (“RSAs”) and restricted stock units (“RSUs”) which can be either time-based or performance-based. The Company has not granted stock options to its employees since fiscal year 2010. The Company also maintains an employee stock purchase plan that provides for the issuance of shares to all eligible employees of the Company at a discounted price.

Stock-based compensation expense includes compensation costs related to estimated fair values of stock options and awards granted. The estimated fair value of the Company’s equity-based awards, net of expected forfeitures, is amortized on a straight-line basis over the awards’ vesting period, typically three years for RSUs and one year for RSAs, and is adjusted for subsequent changes in estimated forfeitures related to all equity-based awards and performance as it relates to performance-based RSUs. The Company applies the fair value recognition provisions based on the FASB’s guidance regarding stock-based compensation.

Stock Options

Stock option activity for the nine months ended September 29, 2017:

	<u>Shares</u>	<u>Weighted Average Exercise Price</u>	<u>Weighted Remaining Contractual Life (years)</u>	<u>Aggregate Intrinsic Value (in thousands)</u>
Outstanding at December 30, 2016	136,459	\$ 13.15	0.57	\$ 135
Granted	—			
Exercised	(113,362)	13.96		
Cancelled	(13,825)	14.56		
Outstanding at September 29, 2017	<u>9,272</u>	<u>\$ 1.17</u>	<u>1.49</u>	<u>\$ 273</u>
Options exercisable at September 29, 2017	9,272	\$ 1.17	1.49	\$ 273

There were no options granted by the Company during either of the nine months ended September 29, 2017 and September 23, 2016. As of September 29, 2017, there was no stock-based compensation expense attributable to stock options as all outstanding options were fully vested.

Employee Stock Purchase Plan

The Company also maintains an employee stock purchase plan (“ESPP”) that provides for the issuance of shares to all eligible employees of the Company at a discounted price. Under the ESPP, substantially all employees may purchase the Company’s common stock through payroll deductions at a price equal to 95 percent of the fair market value of the Company’s stock at the end of each applicable purchase period.

Restricted Stock Units and Restricted Stock Awards

The Company grants RSUs to employees and RSAs to non-employee directors as part of the Company's long term equity compensation plan.

Restricted Stock Units — RSUs are granted to employees with a per share or unit purchase price of zero dollars and either have time based or performance based vesting. RSUs typically vest over three years, subject to the employee's continued service with the Company. For purposes of determining compensation expense related to these RSUs, the fair value is determined based on the closing market price of the Company's common stock on the date of award. The expected cost of the grant is reflected over the service period, and is reduced for estimated forfeitures.

During the quarter ended September 29, 2017, the Company granted 353,880 RSUs, with a weighted average fair value of \$22.62 per share, and granted 18,750 performance stock units with a weighted average fair value of \$20.24 per share. During the second quarter ended June 30, 2017, the Company granted 185,752 RSUs, with a weighted average fair value of \$19.80 per share, and granted 108,498 performance stock units with a weighted average fair value of \$19.80 per share. There were no RSUs and PSUs granted during the quarter ended March 31, 2017.

During the nine months ended September 29, 2017, 145,023 vested shares were withheld to satisfy withholding tax obligations, resulting in the net issuance of 552,690 shares. As of September 29, 2017, approximately \$13.1 million of stock-based compensation cost, net of estimated forfeitures, related to RSUs and PSUs remains to be amortized over a weighted average period of two years. As of September 29, 2017, a total of 1,715,845 RSUs and PSUs remain outstanding with an aggregate intrinsic value of \$50.9 million and a weighted average remaining contractual term of 1.2 years.

Restricted Stock Awards — As of September 29, 2017, a total of 52,500 RSAs were outstanding. The total unamortized expense of the Company's unvested restricted stock awards as of September 29, 2017, was \$0.8 million.

The following table summarizes the Company's RSU and RSA activity for the nine months ended September 29, 2017:

	Shares	Aggregate Fair Value (in thousands)
Unvested restricted stock units and restricted stock awards at December 30, 2016	1,757,507	\$ 16,466
Granted	719,380	
Vested	(705,213)	
Forfeited	(55,829)	
Unvested restricted stock units and restricted stock awards at September 29, 2017	1,715,845	\$ 50,932
Vested and expected to vest restricted stock units and restricted stock awards at September 29, 2017	1,715,845	\$ 50,932

The following table shows the Company's stock-based compensation expense included in the Condensed Consolidated Statements of Operations (in thousands):

	Three Months Ended		Nine Months Ended	
	September 29, 2017	September 23, 2016	September 29, 2017	September 23, 2016
Cost of sales (1)	\$ 395	\$ 362	\$ 996	\$ 828
Research and development	77	1,277	177	1,405
Sales and marketing	190	76	411	253
General and administrative	1,635	142	3,475	1,554
	2,297	1,857	5,059	4,040
Income tax benefit	(349)	(935)	(860)	(3,979)
Stock-based compensation expense, net of tax	\$ 1,948	\$ 922	\$ 4,199	\$ 61

- (1) Stock-based compensation expenses capitalized in inventory for the three and nine months ended September 29, 2017 and September 23, 2016 were not significant.

Recent Accounting Pronouncements

In May 2014, the FASB amended the existing accounting standards for revenue recognition. In August 2015, the FASB delayed the effective date of the amended accounting standard for revenue recognition by one year. As such, the updated standard will be effective for the Company in the first quarter of 2018, which is when the Company plans to adopt this standard. The Company performed an assessment of the impact of these new accounting standards on its consolidated financial statements by outlining all revenue generating activities, mapping those activities to deliverables and tracing those deliverables to the standard. As a result, the Company does not believe that the adoption of this guidance will have a material impact on its consolidated financial statements and on its internal control over financial reporting. The Company plans to use the modified retrospective transition method. The standard requires new substantial disclosures and the Company will continue to evaluate these disclosure requirements.

In July 2015, the FASB issued authoritative guidance that requires inventory to be measured at the lower of cost and net realizable value instead of at lower of cost or market. This guidance does not apply to inventory that is measured using last-in, first out or the retail inventory method but applies to all other inventory including those measured using first-in, first-out or the average cost method. The authoritative guidance will be effective for the Company in the first quarter of fiscal 2018 and should be applied prospectively. Early adoption is permitted as of the beginning of an interim or annual reporting period. The Company is currently evaluating the effect of this new guidance on the Company's consolidated financial statements.

In February 2016, the FASB issued new guidance related to how an entity should recognize lease assets and lease liabilities. The guidance specifies that an entity who is a lessee under lease agreements should recognize lease assets and lease liabilities for those leases classified as operating leases under previous FASB guidance. The guidance is effective beginning in the first quarter of 2019. Early adoption is permitted. In transition, lessees and lessors are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. The Company is evaluating the impact of adopting this guidance on the Company's consolidated financial statements.

In March 2016, the FASB issued new guidance which involves several aspects of the accounting for share-based payment transactions including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. Under the new standard, income tax benefits and deficiencies are to be recognized as income tax expense or benefit in the income statement and the tax effects of exercised or vested awards should be treated as discrete items in the reporting period in which they occur. An entity should also recognize excess tax benefits regardless of whether the benefit reduces taxes payable in the current period. Excess tax benefits should be classified along with other income tax cash flows as an operating activity. In regards to forfeitures, the entity may make an entity-wide accounting policy election to either estimate the number of awards that are expected to vest or account for forfeitures when they occur. The Company adopted the amended accounting guidance in the first quarter of 2017 and recognized \$1.7 million of previously excluded tax attributes related to stock option windfall deductions and also recognized a corresponding offset to valuation allowance. Forfeitures will continue to be estimated consistent with the Company's existing accounting policies. The impact to the Company's financial condition, results of operations and cash flows will vary based on, among other factors, the market price of the Company's common stock.

In August 2016, the FASB issued an amendment to its accounting guidance related to the classification of certain cash receipts and cash payments. The amendment was issued to reduce the diversity in practice in how certain transactions are classified in the statement of cash flows. The amendment will be effective for the Company beginning in its first quarter of fiscal year 2019 with early adoption permitted. The amendment is required to be adopted retrospectively unless it is impracticable. The Company is evaluating the impact of adopting this amendment to its consolidated financial statements.

In January 2017, the FASB clarified its guidance to simplify the measurement of goodwill by eliminating the Step 2 impairment test. The new guidance requires companies to perform goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. The amendment will be effective for the Company beginning in its first quarter of fiscal year 2021. The amendment is required to be adopted prospectively. Early adoption is permitted. The Company is evaluating the impact of adopting this amendment to its consolidated financial statements.

In January 2017, the FASB clarified its guidance on the definition of a business in accounting for transactions when determining whether they represent acquisitions or disposals of assets or of a business. The amendment will be effective for the Company beginning in its first quarter of fiscal year 2019. The amendment is required to be adopted prospectively. The Company is evaluating the impact of adopting this amendment to its consolidated financial statements.

In August 2017, the FASB issued new guidance which improves the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements and simplifies the application of hedge accounting. This standard will be effective for the Company beginning in its first quarter of fiscal year 2019 with early adoption permitted. The Company is evaluating the impact of adopting this amendment to its consolidated financial statements and related disclosures.

2. Financial Instruments

Derivative Financial Instruments

The Company utilizes foreign currency forward contracts with a local financial institution in the Czech Republic to reduce the risk that its cash flows and earnings of its Miconex subsidiary will be adversely affected by foreign currency exchange rate fluctuations and uses certain interest rate derivative contracts to hedge interest rate exposures on existing floating rate debt. The Company classifies its foreign currency forward contracts and interest rate derivative contracts primarily within Level 2 of the fair-value hierarchy discussed in Note 1 of the Company's Consolidated Financial Statements as the valuation inputs are based on quoted prices and market observable data of similar instruments. The Company does not use derivatives for speculative or trading purposes.

Cash Flow Hedges

In September 2015, the Company entered into an interest rate swap with East West Bank and City National Bank with a notional amount of \$20.0 million pursuant to which the Company pays the counterparty a fixed rate of 0.99% and receives interest at a variable rate equal to the London Interbank Offered Rate (LIBOR) rate the Company is required to pay under its term loan, or 1.24%, as of September 29, 2017. This interest rate swap effectively locks in a fixed interest rate of 3.74% on \$9.3 million of the \$13.3 million term loan as of September 29, 2017, with a decreasing notional amount based on prorated quarterly principal payments over the remaining period of the term loan. In 2017, Miconex entered into foreign currency forward contracts to hedge certain forecasted costs and expenses transactions denominated in currencies other than Miconex's local currency. The notional principal of these contracts was approximately \$16.0 million as of September 29, 2017. These contracts have maturities of 36 months or less. Gains or losses on the effective portion of a cash flow hedge are reflected as a component of AOCI and subsequently recorded to interest and other income (expense) and/or to cost of goods sold when the hedged transactions are realized. If the hedged transactions become probable of not occurring, the corresponding amounts in AOCI would be immediately reclassified to interest and other income (expense), net. As of September 29, 2017, the effective portion of the Company's cash flow hedge before tax effect was \$1.1 million, of which \$0.6 million is expected to be reclassified from AOCI into earnings within the next 12 months.

Non-Designated Derivatives

The Miconex interest rate swap to convert the variable interest rates on Miconex debt to fixed rates with a total notional amount of \$0.3 million is not designated as a hedging instrument. The Company recognizes gains and losses on this contract, as well any related costs in interest and other income (expense), net.

The Company records all derivatives in the Condensed Consolidated Balance Sheets at fair value. The Company's accounting treatment for these derivative instruments is based on its hedge designation. The following tables show the Company's derivative instruments at gross fair value (in thousands) as of September 29, 2017 and December 30, 2016.

		September 29, 2017		
	Balance Sheet Location	Fair Value of Derivatives Designated as Hedge Instruments	Fair Value of Derivatives Not Designated as Hedge Instruments	Total Fair Value
Derivative assets and liabilities:				
<u>Level 2:</u>				
Forward contracts	Prepaid expenses and other	\$ 595	\$ —	\$ 595
Interest rate swap	Other non-current assets	\$ 28	\$ —	\$ 28
Forward contracts	Other non-current assets	\$ 502	\$ —	\$ 502
Interest rate swap	Deferred rent and other liabilities	\$ —	\$ 4	\$ 4

		December 30, 2016			
	Balance Sheet Location	Fair Value of Derivatives Designated as Hedge Instruments	Fair Value of Derivatives Not Designated as Hedge Instruments	Total Fair Value	
Derivative assets and liabilities:					
Level 2:					
Interest rate swap	Other non-current assets	\$ 15	\$ —	\$	15
Interest rate swap	Deferred rent and other liabilities	\$ —	\$ 6	\$	6

The effect of derivative instruments in cash flow hedging relationships on income and other comprehensive income (OCI) is summarized below (in thousands):

	Gains (Losses) Recognized in OCI on Derivatives Before Tax Effect (Effective Portion)			
	Three Months Ended		Nine Months Ended	
	September 29, 2017	September 23, 2016	September 29, 2017	September 23, 2016
Derivatives in Cash Flow Hedging Relationship				
Interest rate swap	\$ (11)	\$ 27	\$ —	\$ (101)
Forward contracts	\$ 356	\$ —	\$ 1,197	\$ —

	Gains Reclassified from AOCI into Income (Effective Portion)				
		Three Months Ended		Nine Months Ended	
	Income Statement Location	September 29, 2017	September 23, 2016	September 29, 2017	September 23, 2016
Derivatives in Cash Flow Hedging Relationship					
Interest rate swap	Interest and other income (expense), net	\$ (6)	\$ 20	\$ (13)	\$ 71
Forward contracts	Cost of goods sold	\$ 106	\$ —	\$ 106	\$ —

There were no gains (losses) recognized in income on derivatives that are excluded from the effectiveness testing and ineffective portion of the cash flow hedge for the three and nine months ended September 29, 2017 and September 23, 2016.

The effect of derivative instruments not designated as hedging instruments on income for the three and nine months ended September 29, 2017 and September 23, 2016 is not significant to the financial statements.

3. Balance Sheet Information

Inventories consisted of the following (in thousands):

	September 29, 2017	December 30, 2016
Raw materials	\$ 122,835	\$ 68,473
Work in process	34,948	26,529
Finished goods	7,520	8,859
Total	<u>\$ 165,303</u>	<u>\$ 103,861</u>

Equipment and leasehold improvements, net, consisted of the following (in thousands):

	September 29, 2017	December 30, 2016
Computer equipment and software	\$ 11,557	\$ 11,135
Furniture and fixtures	3,139	3,118
Machinery and equipment	19,227	17,016
Leasehold improvements	19,310	16,838
Accumulated depreciation	(37,523)	(33,825)
	15,710	14,282
Construction in progress	13,233	4,576
Total	\$ 28,943	\$ 18,858

4. Acquisition Earn-out

On July 31, 2015, the Company acquired 100% of the shareholding interest of Miconex. Pursuant to the purchase agreement, the Company paid \$15.6 million in cash and issued 500,000 shares of the Company's common stock. In addition, the former owners of Miconex are entitled up to \$4.0 million of potential cash "earn-out" payments over a two-year period following closing, based on Miconex's achievement of specified performance targets based on earnings before interest and taxes pursuant to the provisions of the purchase agreement. In 2016, Miconex achieved the specified performance targets for the first year and was paid the maximum of \$2.0 million of the \$4.0 million potential cash earn-out.

The fair value of the earn-out payments was determined by providing risk adjusted earnings projections using the Monte Carlo Simulation. These inputs are not observable in the market and thus represent a Level 3 measurement as discussed in Note 1 of the Company's Consolidated Financial Statements. During the fiscal year 2017, the Company reassessed the fair value of the earn-out payments, decreasing the fair value from \$0.3 million as of December 30, 2016 to nil as of September 29, 2017. Miconex failed to achieve the specified performance target for the second year. The decrease of \$0.3 million was recorded as other income in the Condensed Consolidated Statements of Operations.

5. Goodwill and Purchased Intangible Assets

The Company's methodology for allocating the purchase price relating to purchase acquisitions is determined through established and generally accepted valuation techniques. Goodwill is measured as the excess of the cost of the acquisition over the sum of the amounts assigned to tangible and identifiable intangible assets acquired less liabilities assumed. Goodwill and purchased intangible assets with indefinite useful lives are not amortized, but are reviewed for impairment at least annually and whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. The Company regularly monitors current business conditions and other factors including, but not limited to, adverse industry or economic trends and lower projections of profitability that may impact future operating results.

To test goodwill for impairment, the Company first performs a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. If it is concluded that this is the case, the Company then performs the two-step goodwill impairment test. Otherwise, the two-step goodwill impairment test is not required. Under the two-step goodwill impairment test, the Company would in the first step compare the estimated fair value of each reporting unit to its carrying value. The Company determines the fair value of each of its reporting units based on a weighting of income and market approaches. If the carrying value of a reporting unit exceeds its fair value, the Company would then perform the second step of the impairment test in order to determine the implied fair value of the reporting unit's goodwill. If the Company determines that the carrying value of a reporting unit's goodwill exceeds its implied fair value, the Company would record an impairment charge equal to the difference.

The evaluation of goodwill and intangible assets for impairment requires the exercise of significant judgment. In the event of future changes in business conditions, the Company will be required to reassess and update its forecasts and estimates used in future impairment analyses. If the results of these future analyses are lower than current estimates, a material impairment charge may result at that time. Details of goodwill and other intangible assets were as follows (in thousands):

	September 29, 2017			December 30, 2016		
	Goodwill	Intangible Assets	Total	Goodwill	Intangible Assets	Total
Carrying amount	\$ 85,248	\$ 33,331	\$ 118,579	\$ 85,248	\$ 37,024	\$ 122,272

Purchased Intangible Assets

Intangible assets are generally recorded in connection with a business acquisition. The Company evaluates the useful lives of its intangible assets each reporting period to determine whether events and circumstances require revising the remaining period of amortization. In addition, the Company reviews indefinite lived intangible assets for impairment when events or changes in circumstances indicate their carrying value may not be recoverable and tests definite lives intangible assets at least annually for impairment. Management considers such indicators as significant differences in product demand from the estimates, changes in the competitive and economic environment, technological advances, and changes in cost structure. Details of purchased intangible assets were as follows (in thousands):

	As of September 29, 2017			As of December 30, 2016			
	Gross Carrying Amount	Accumulated Amortization	Carrying Value	Gross Carrying Amount	Accumulated Amortization	Carrying Value	Useful Life
AIT							
Customer relationships	\$ 19,000	\$ (17,763)	\$ 1,237	\$ 19,000	\$ (17,058)	\$ 1,942	7
Tradename	1,900	(1,900)	—	1,900	(1,900)	—	6
Intellectual property/know-how	1,600	(1,200)	400	1,600	(1,029)	571	7
Marchi							
Customer relationships	9,900	(2,640)	7,260	9,900	(1,898)	8,002	10
Tradename	1,170	(603)	567	1,170	(443)	727	6
Intellectual property/know-how	12,300	(3,678)	8,622	12,300	(2,643)	9,657	8-12
Miconex							
Customer relationships	8,800	(2,542)	6,258	8,800	(1,662)	7,138	7.5
UCT							
Tradename	8,987	—	8,987	8,987	—	8,987	*
Total	<u>\$ 63,657</u>	<u>\$ (30,326)</u>	<u>\$ 33,331</u>	<u>\$ 63,657</u>	<u>\$ (26,633)</u>	<u>\$ 37,024</u>	

* The Company concluded that the UCT tradename intangible asset life is indefinite and is therefore not amortized but is reviewed for impairment at least annually and whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable.

The Company amortizes its tradenames for AIT and Marchi and customer relationships intangible asset for AIT using an accelerated method over the estimated economic life of the assets, ranging from 6 to 10 years. The Company amortizes its intellectual property/know-how and customer relationships intangible assets for Marchi and Miconex on a straight-line basis with an estimated economic life of the assets ranging from 7 to 12 years. Amortization expense was approximately \$1.2 million and \$1.4 million for the three months ended September 29, 2017 and September 23, 2016, respectively. Amortization expense is charged to general and administrative expense. As of September 29, 2017, future estimated amortization expense is expected to be as follows (in thousands):

	Amortization Expense
2017 (remaining in year)	\$ 1,231
2018	4,582
2019	4,210
2020	3,682
2021	3,554
Thereafter	7,085
Total	\$ 24,344

6. Borrowing Arrangements

The Company has credit facilities in the U.S. and Czech Republic that expire on February 2, 2019 and March 31, 2020, respectively. The Company and certain of its subsidiaries have agreed to secure all of their obligations under a credit agreement (the "Credit Agreement") by granting a first priority lien in substantially all of their respective personal property assets (subject to certain exceptions and limitations).

As of September 29, 2017, the outstanding amounts under the U.S. Term Loan and Revolving Credit facility were \$13.3 million and \$39.9 million, respectively, gross of unamortized debt issuance costs of \$0.2 million. The aggregate principal amount of the Revolving Credit facility is \$40.0 million. As of September 29, 2017, interest rates on the outstanding U.S. Term Loan and Revolving Credit facility were 3.99% and 4.25%, respectively.

In order to manage interest rate risk on the variable component of the Term Loan, the Company entered into an interest rate swap in September 2015 with a total notional amount of \$20.0 million (which amount decreases based on prorated quarterly principal payments over the remaining period of the Term Loan) pursuant to which the Company pays the counterparty a fixed rate of 0.99% and receives interest at a variable rate equal to the LIBOR rate the Company is required to pay under its Term Loan, or 1.24%, as of September 29, 2017. This interest rate swap effectively locks in a fixed interest rate of 3.74% on \$9.3 million of the \$13.3 million term loan balance outstanding as of September 29, 2017.

The Company is required to maintain certain financial covenants including a consolidated charge coverage ratio (as defined in the Credit Agreement) of at least 1.25 to 1.00, a consolidated leverage ratio (as defined in the Credit Agreement) no greater than 3.5 to 1.00 and a minimum cash balance of \$35.0 million at the end of each quarter. The Company was in compliance with all covenants for the quarter ended September 29, 2017.

The Credit Agreement also contains provisions requiring the following mandatory prepayments (subject to certain exceptions and limitations): annual prepayments in an amount equal to (a) 33% of excess cash flow (as defined in the Credit Agreement) if the aggregate outstanding principal amount of the Term Loan equals or exceeds \$20.0 million and (b) 25% of excess cash flow if the aggregate outstanding principal amount of the Term Loan equals or exceeds \$10.0 million but is less than \$20.0 million. The Credit Agreement also restricts the Company from declaring or paying any cash dividends.

In conjunction with the acquisition of Miconex in July 2015, the Company has a separate credit agreement with a local bank in the Czech Republic that provides for a term loan in an aggregate of 0.8 million euros and a revolving credit facility in the aggregate of up to 8.3 million euros. The credit agreement requires Miconex to maintain certain financial covenants, including a debt-to-earnings-before-interest-depreciation-and-amortization ratio no greater than 3.00 to 1.00 and an equity ratio of at least 15%. As of September 29, 2017, Miconex was in compliance with all of its covenants.

As of September 29, 2017, Miconex had outstanding amounts under the term loan and revolving credit facility of 0.3 million euros (approximately \$0.4 million) and 3.3 million euros (approximately \$ 3.9 million), respectively, for a total of \$4.3 million, with interest rates ranging from 1.3% to 2.3 % plus a variable rate based on the Euro Interbank Offered Rate with due dates ranging from 2017 to 2020.

As of September 29, 2017, the Company's total bank debt was \$57.3 million, and the Company has \$0.1 million and 4.9 million euros (approximately \$5.8 million) available to borrow on its revolving loans in the U.S. and Czech Republic, respectively.

The fair value of the Company's long term debt was based on Level 2 inputs, and fair value was determined using quoted prices for similar liabilities in inactive markets. The fair value of the Company's outstanding borrowings under the Company's revolving credit facilities was based on Level 2 inputs, and fair value was determined using inputs other than quoted prices that are observable, specifically, discounted cash flows of expected payments at current borrowing rates. The Company's carrying value approximates fair value for the Company's long term debt and revolving credit facilities.

7. Income Tax

The Company's income tax provision and effective tax rates for the three and nine months ended September 29, 2017 were \$3.5 million and 15.2% and \$11.1 million and 17.0%, respectively compared to \$2.8 million and 51.3% and \$6.4 million and 98.5%, respectively for the three and nine months ended September 23, 2016. The change in respective rates reflects, primarily, changes in the geographic mix of worldwide earnings and financial results, including the impact of income and losses in jurisdictions with full federal and state valuation allowances for the three and nine months ended September 29, 2017 compared to the impact of losses in jurisdictions with full federal and state valuation allowances for the three and nine months ended September 23, 2016.

Company management continuously evaluates the need for a valuation allowance and, as of September 29, 2017, concluded that a full valuation allowance on its federal and state deferred tax assets as well as the deferred tax assets of one its Singapore subsidiaries was still appropriate.

The Company adopted Accounting Standards Update No. 2016-09 (ASU 2016-09) in the first quarter of 2017. Prior to the adoption of ASU 2016-09, tax attributes related to stock option windfall deductions were not recorded until they resulted in a reduction of cash tax payable. As of December 30, 2016, the excluded windfall deductions for federal and state purposes were \$1.6 million and \$0.2 million (tax effected), respectively. Upon adoption of ASU 2016-09, the Company recognized the excluded windfall deductions as a deferred tax asset with a corresponding offset to a valuation allowance.

The Company does not provide for U.S. taxes on its undistributed earnings of foreign subsidiaries that it intends to invest indefinitely outside the U.S., unless such taxes are otherwise required under U.S. tax law. In 2016, the Company determined that a portion of the current year earnings of one of its China subsidiaries may be remitted in the future to one of its foreign subsidiaries outside of mainland China and, accordingly, the Company provided for the related withholding taxes in its Condensed Consolidated Financial Statements. If the Company changes its intent to reinvest its undistributed foreign earnings indefinitely or if a greater amount of undistributed earnings are needed than the previous anticipated remaining unremitted foreign earnings, the Company could be required to accrue or pay U.S. taxes on some or all of these undistributed earnings. As of September 29, 2017, the Company had undistributed earnings of foreign subsidiaries that are indefinitely invested outside of the U.S. of approximately \$158.0 million. It is not practicable to determine the income tax liability that might be incurred if these earnings were to be distributed.

The Company's gross liability for unrecognized tax benefits as of September 29, 2017 and September 23, 2016 was \$0.3 million and \$0.4 million, respectively. Although it is possible some of the unrecognized tax benefits could be settled within the next twelve months, the Company cannot reasonably estimate the outcome at this time.

8. Net Income Per Share

Basic net income per share excludes dilution and is computed by dividing net income by the weighted average number of common shares outstanding for the period. Diluted net income per share reflects the potential dilution that would occur if outstanding securities or other contracts to issue common stock were exercised or converted into common stock.

The following is a reconciliation of the numerators and denominators used in computing basic and diluted net income per share (in thousands, except per share data):

	Three Months Ended		Nine Months Ended	
	September 29, 2017	September 23, 2016	September 29, 2017	September 23, 2016
Numerator:				
Net income	\$ 19,716	\$ 2,614	\$ 54,236	\$ 98
Denominator:				
Shares used in computation — basic:				
Weighted average common shares outstanding	33,540	32,759	33,342	32,544
Shares used in computation — diluted:				
Shares used in computing basic net income per share	33,540	32,759	33,342	32,544
Dilutive effect of common shares outstanding subject to repurchase	813	313	856	305
Dilutive effect of options outstanding	7	28	18	38
Weighted average shares used in computing diluted net income per share	34,360	33,100	34,216	32,887
Net income per share — basic	\$ 0.59	\$ 0.08	\$ 1.63	\$ 0.00
Net income per share — diluted	\$ 0.57	\$ 0.08	\$ 1.59	\$ 0.00

The Company had securities outstanding which could potentially dilute basic net income per share in the future, but the incremental shares from the assumed exercise of these securities were excluded in the computation of diluted net income per share, as their effect would have been anti-dilutive. Such outstanding securities consisted of 174,202 and 187,389 options for the three and nine month periods ended September 23, 2016, respectively and none for the three and nine month periods ended September 29, 2017.

9. Commitments and Contingencies

The Company had commitments to purchase inventory totaling approximately \$169.2 million at September 29, 2017.

The Company leases properties domestically in Hayward, California, Austin, Texas, Chandler, Arizona and South San Francisco, California and internationally in China, Singapore, Philippines and the Czech Republic. The Company leases certain of its facilities under non-cancelable leases, which expire on various dates through 2023.

As of September 29, 2017, future minimum payments under these operating leases were as follows (in thousands):

Fiscal Year	
2017 (remaining in year)	\$ 1,858
2018	6,767
2019	5,214
2020	4,836
2021	4,344
Thereafter	3,712
Total minimum lease payments	<u>\$ 26,731</u>

From time to time, the Company is subject to various legal proceedings and claims, either asserted or unasserted, that arise in the ordinary course of business. Although the outcome of the various legal proceedings and claims cannot be predicted with certainty, the Company has not had a history of outcomes to date that have been material to the statement of operations and does not believe that any of these proceedings or other claims will have a material adverse effect on its consolidated financial condition or results of operations.

10. Geographical Information

The Company operates in one operating and reportable segment as the nature of the Company's products and production processes, as well as type of customers and distribution methods, is consistent among all of the Company's products and is engaged in the development, manufacture and supply of critical subsystems for the semiconductor capital equipment, consumer, medical, energy, industrial, flat panel and research industries. The Company's foreign operations are conducted primarily through its wholly-owned subsidiaries in China, Singapore and the Czech Republic. The Company's principal markets include North America, Asia and Europe. Sales by geographic area represent sales to unaffiliated customers and are based upon the location to which the products were shipped. The following table sets forth revenue by geographic area (in thousands):

	Three Months Ended		Nine Months Ended	
	September 29, 2017	September 23, 2016	September 29, 2017	September 23, 2016
United States	\$ 138,866	\$ 83,296	\$ 372,571	\$ 217,026
China	6,834	6,961	24,947	11,593
Singapore	73,427	39,310	207,477	115,353
Austria	6,132	7,994	25,844	25,805
Other	17,351	8,593	44,626	18,437
	<u>\$ 242,610</u>	<u>\$ 146,154</u>	<u>\$ 675,465</u>	<u>\$ 388,214</u>

At September 29, 2017, approximately \$9.9 million and \$1.6 million of the Company's net long-lived assets were located in Asia and the Czech Republic, respectively, and the remaining balances were located in the United States. At September 23, 2016, approximately \$7.4 million and \$1.8 million of the Company's net long-lived assets were located in Asia and the Czech Republic, respectively, and the remaining balances were located in the United States.

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

You should read the following discussion of our financial condition and results of operations in conjunction with the condensed consolidated financial statements and the notes thereto included elsewhere in this Quarterly Report on Form 10-Q and in our Annual Report on Form 10-K filed with the SEC on March 15, 2017. This Quarterly Report on Form 10-Q contains "forward-looking statements" that involve substantial risks and uncertainties. The statements contained in this Quarterly Report on Form 10-Q that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, including, but not limited to, statements regarding our expectations, beliefs, intentions, strategies, future operations, future financial position, future revenue, projected expenses, gross margins and plans and objectives of management. In some cases, you can identify forward-looking statements by terms such as "anticipate," "believe," "estimate," "expect," "intend," "may," "might," "plan," "project," "will," "would," "should," "could," "can," "predict," "potential," "continue," "objective," or the negative of these terms, and similar expressions intended to identify forward-looking statements. However, not all forward-looking statements contain these identifying words. These forward-looking statements reflect our current views about future events and involve known risks, uncertainties and other factors that may cause our actual results, performance or achievement to be materially different from those expressed or implied by the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified below, and those discussed in the section titled "Risk Factors" included in this Quarterly Report on Form 10-Q and in our Annual Report on Form 10-K filed with the SEC on March 15, 2017. Furthermore, such forward-looking statements speak only as of the date of this report. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements.

Overview

We are a global leader in the design, engineering, and manufacture of production tools, modules and subsystems for the semiconductor capital equipment and equipment industry segments with similar requirements including flat panel display, consumer, and medical. We provide our customers specialized engineering and manufacturing solutions for these highly complex, highly configurable, limited volume applications. In addition, we routinely handle major volume and design changes during the manufacturing process and provide equipment manufacturers flexibility when responding to dynamic market changes. We enable them to realize lower manufacturing costs and reduced design-to-delivery cycle times while maintaining high quality standards.

We provide our customers with complete solutions that combine our expertise in design, assembly, test and component characterization. Our customers value our highly flexible global manufacturing operations, our excellence in quality control and our scale and financial stability. Our global footprint helps us drive down total manufacturing costs, and reduce design-to-delivery cycle times while maintaining high quality standards for our customers. We believe these characteristics provide global solutions for our customers' product demands.

We ship a majority of our products to U.S. registered customers with locations both in and outside the U.S. In addition to U.S. manufacturing, we manufacture products in our Asian facilities to support local and U.S. based customers. We conduct our operating activities primarily through our wholly owned subsidiaries, Ultra Clean Technology Systems and Service, Inc., AIT, Ultra Clean Micro-Electronics Equipment (Shanghai) Co., Ltd., Ultra Clean Asia Pacific, Pte, Ltd., Marchi and Miconex.

Financial Highlights

The capital equipment market continued to show strength during the third quarter of 2017, primarily from multiple technological advances driving the semiconductor industry. We have expanded and continue to expand our capabilities to enable the manufacturing of additional major modules and further increase our critical content on our customers' platforms.

Sales for the three months ended September 29, 2017 were \$242.6 million, an increase of \$96.4 million, or 66.0%, from the comparable quarter of 2016. Semiconductor revenue increased \$92.9 million, or 71.8%, from the comparable quarter of 2016. Gross profit for the three months ended September 29, 2017 increased \$19.2 million to \$42.7 million, or 17.6% of sales, from \$23.5 million, or 16.1% of sales, for the three months ended September 23, 2016. Total operating expenses for the three months ended September 29, 2017, were \$19.4 million, or 8.0% of sales, compared to \$16.8 million, or 11.5% of sales, for the three months ended September 23, 2016. We had net income of \$19.7 million for the three months ended September 29, 2017, compared to net income of \$2.6 million for the three months ended September 23, 2016.

Sales for the nine months ended September 29, 2017, were \$675.5 million, an increase of \$287.3 million, or 74.0% from the comparable period of 2016. Gross profit for the nine months ended September 29, 2017 increased \$66.5 million to \$123.6 million, or 18.3% of sales, from \$57.1 million, or 14.7% of sales, during the comparable period of 2016. Total operating expenses for the nine months ended September 29, 2017, were \$56.1 million, or 8.3% of sales, compared to \$47.4 million, or 12.2% of sales, for the nine

months ended September 23, 2016 . We had a net income of \$ 54.2 million for the nine months ended September 29, 2017 as compared to net in come of \$ 0.1 million for the nine months ended September 23, 2016 .

We had significant sales to two customers for the three and nine months ended September 29, 2017 and September 23, 2016, for which each customer accounted for 10% or more of total sales. Their related sales as a percentage of total sales were as follows:

	Three Months Ended		Nine Months Ended	
	September 29, 2017	September 23, 2016	September 29, 2017	September 23, 2016
Lam Research Corporation	59.1 %	49.5 %	58.3 %	53.5 %
Applied Materials, Inc.	24.5	30.9	25.7	27.3
Total	83.6 %	80.4 %	84.0 %	80.8 %

Results of Operations

For the periods indicated, the following table sets forth certain costs and expenses and other income items as a percentage of sales. The table and subsequent discussion should be read in conjunction with our Condensed Consolidated Financial Statements and Notes thereto included elsewhere in our quarterly report.

	Three Months Ended		Nine Months Ended	
	September 29, 2017	September 23, 2016	September 29, 2017	September 23, 2016
Sales	100.0 %	100.0 %	100.0 %	100.0 %
Cost of goods sold	82.4 %	83.9 %	81.7 %	85.3 %
Gross profit	17.6 %	16.1 %	18.3 %	14.7 %
Operating expenses:				
Research and development	1.1 %	1.7 %	1.2 %	1.8 %
Sales and marketing	1.5 %	1.9 %	1.5 %	2.2 %
General and administrative	5.4 %	7.9 %	5.6 %	8.2 %
Total operating expenses	8.0 %	11.5 %	8.3 %	12.2 %
Income (loss) from operations	9.6 %	4.6 %	10.0 %	2.5 %
Interest and other income (expense), net	0.0 %	(0.9) %	(0.3) %	(0.8) %
Income before provision for income taxes	9.6 %	3.7 %	9.7 %	1.7 %
Income tax provision	1.5 %	1.9 %	1.6 %	1.6 %
Net income (loss)	8.1 %	\$ 1.8 %	8.1 %	0.1 %

Sales

Sales for the three months ended September 29, 2017 were \$242.6 million, an increase of \$96.4 million, or 66.0%, from \$146.2 million in the comparable quarter of 2016. The increase in overall sales in the third quarter of 2017 compared to the third quarter of 2016 is due to an increase in the volume of products shipped which is the result of higher demand from our existing semiconductor customers. Overall, the semiconductor industry has been trending upward since the second quarter of 2016. On a geographic basis, sales in the U.S. increased \$37.1 million to \$110.6 million, or 45.6% of sales, for the three months ended September 29, 2017 compared to \$73.5 million, or 50.3% of sales, for the comparable period of 2016. Foreign sales increased \$59.3 million to \$132.0 million, or 54.4% of sales, for the three months ended September 29, 2017 compared to \$72.7 million, or 49.7% of sales, for the comparable period of 2016.

Sales for the nine months ended September 29, 2017, were \$675.5 million, an increase of \$287.3 million, or 74.0%, from \$388.2 million in the comparable period of 2016. The increase in sales for the nine months ended September 29, 2017, which includes increases of \$271.3 million and \$16.0 million in semiconductor and non-semiconductor industries, respectively, was due to an increase in the volume of products shipped as a result of continued semiconductor demand from our major customers. Sales in the U.S. for the nine months ended September 29, 2017 increased by \$111.3 million to \$319.1 million while foreign sales increased by \$176.0 million to \$356.4 million when compared to the same period in prior year.

We expect sales to be relatively flat in the fourth quarter of fiscal 2017 as compared to the third quarter of 2017.

Gross Profit

Cost of goods sold consists primarily of purchased materials, labor and overhead, including depreciation related to certain capital assets associated with the design and manufacture of products sold.

Gross profit for the three months ended September 29, 2017 increased \$19.2 million to \$42.7 million, or 17.6% of sales, from \$23.5 million, or 16.1% of sales, for the three months ended September 23, 2016. The increases in gross profit and gross margin in the third quarter of 2017 compared to the same period in 2016 was due primarily to higher volume of products shipped, increased factory utilization and increased labor efficiency. We expect gross profit to be relatively flat in the fourth quarter of fiscal 2017 as compared to the third quarter of 2017.

Gross profit for the nine months ended September 29, 2017, increased by \$66.5 million to \$123.6 million, or 18.3% of sales, from \$57.1 million, or 14.7% of sales, for the nine months ended September 23, 2016. The increase in gross profit and gross margin when comparing the nine months ended September 29, 2017 with the same period in 2016 is primarily due to higher volume of products shipped compared to the same period in the prior year, increased factory utilization and increased labor efficiency.

Research and Development Expense

Research and development expense consists primarily of activities related to new component testing and evaluation, test equipment and fixture development, product design, and other product development activities. Research and development expense for the three months ended September 29, 2017 increased \$0.3 million, or 11.2%, to \$2.7 million, or 1.1% of sales, compared to \$2.4 million, or 1.7% of sales in the comparable period in 2016.

Research and development expense for the nine months ended September 29, 2017 increased by \$1.3 million, or 18.6%, to \$8.4 million, or 1.2% of sales, compared to \$7.1 million, or 1.8% of sales in the comparable period in 2016.

The increase in research and development expense when comparing the three and nine months ended September 29, 2017 with the comparable periods in 2016 was due to an increase in non-production related engineering work and an increase in employee incentive compensation related expenses as a result of higher operating income.

Sales and Marketing Expense

Sales and marketing expense consists primarily of salaries and commissions paid to our sales and service employees, salaries paid to our engineers who work with the sales and service employees to help determine the components and configuration requirements for new products and other costs related to the sales of our products. Sales and marketing expense for the three months ended September 29, 2017 increased \$0.8 million, or 29.9%, to \$3.6 million, or 1.5% of sales, compared to \$2.8 million, or 1.9% of sales, in the comparable period of 2016.

Sales and marketing expense for the nine months ended September 29, 2017 increased by \$1.6 million, or 17.9%, to \$10.1 million, or 1.5% of sales, compared to \$8.5 million, or 2.2% of sales in the comparable period in 2016.

The increase in sales and marketing expense when comparing the three and nine months ended September 29, 2017 with the comparable periods in 2016 was primarily due to an increase in employee incentive compensation related expense as a result of higher operating income.

General and Administrative Expense

Our general and administrative expense has historically consisted primarily of salaries and overhead associated with our administrative staff, professional fees and amortization of our intangible assets. General and administrative expense increased \$1.6 million, or 13.2%, for the three months ended September 29, 2017, to \$13.1 million, or 5.4% of sales, compared with \$11.5 million, or 7.9% of sales, in the comparable period of 2016.

General and administrative expense increased approximately \$6.0 million, or 18.6%, for the nine months ended September 29, 2017, to \$37.7 million, or 5.6% of sales, compared with \$31.7 million, or 8.2% of sales, in the comparable period of 2016.

The increase in general and administrative expenses when comparing the three and nine months ended September 29, 2017 with the comparable periods in 2016 was primarily due to an increase in outside services resulting from the non-capitalizable implementation costs of our new enterprise reporting system, higher employee incentive compensation related expenses as a result of higher operating income and an increase related to our year-end audit fees.

Interest and Other Income (Expense), net

Interest and other income (expense), net, for the three and nine months ended September 29, 2017, was \$(19) thousand and (\$2.1) million, respectively, compared to \$(1.3) million and (\$3.3) million, respectively, in the comparable periods of 2016. The decrease in net expense of \$1.3 million and \$1.2 million for the three and nine months ended September 29, 2017, respectively, when compared to the same period in the prior year is primarily due to the decrease in the fair value of the contingent earn-out liability incurred in conjunction with the acquisition of Miconex. See Note 4 to the Company's Condensed Consolidated Financial Statements for further discussion of the earn-out liability.

Income Tax Provision

Our tax expense and effective tax rates for the three months ended September 29, 2017 and September 23, 2016 were \$3.5 million and 15.2%, and \$2.8 million and 51.3%, respectively. Our tax expense and effective tax rate for the nine months ended September 29, 2017 and September 23, 2016 was \$11.1 million and 17.0%, and \$6.4 million and 98.5%, respectively. The change in respective rates reflects changes in the geographic mix of worldwide earnings and financial results, including the impact of income and losses in jurisdictions with full federal and state valuation allowances. Company management continuously evaluates the need for a valuation allowance on its deferred tax assets and, as of September 29, 2017, concluded that a full valuation allowance on its federal, state, and one of its Singapore subsidiaries was still appropriate.

Liquidity and Capital Resources

We have capital requirements to fund our working capital needs, satisfy our debt obligations, maintain our equipment and purchase new capital equipment. As of September 29, 2017, we had cash of \$65.9 million compared to \$52.5 million as of December 30, 2016. Our cash and cash equivalents, cash generated from operations and amounts available under our revolving line of credit described below were our principal source of liquidity as of September 29, 2017.

For the nine months ended September 29, 2017, total cash provided by operating activities was \$37.6 million compared to cash provided by operating activities of \$9.4 million for the comparable period of 2016. Operating cash flows in the nine months ended September 29, 2017 included \$12.6 million of non-cash activity comprised of depreciation, amortization of intangibles, stock compensation expense, amortization of debt issuance costs and a change in fair value of the contingent earn out payable to the former owners of Miconex. Cash generated from operating activities included increases in accounts payable of \$57.7 million, accrued compensation and related benefits of \$4.5 million, income taxes payable of \$4.6 million and other liabilities of \$2.0 million. These increases in cash flow were offset by increases in accounts receivable, inventories and other assets of \$32.4 million, \$60.5 million and \$5.1 million, respectively, and were driven primarily from our increase in revenues and related inventory purchases to drive our revenue growth during 2017. Our cash flows from operations in any given period are largely driven by the timing of sales, the collection of accounts receivable and the payment of accounts payable.

Operating cash flows in the nine months ended September 23, 2016 included \$14.9 million of non-cash activity comprised of depreciation, amortization of intangibles, stock compensation expense, amortization of debt issuance costs and a change in fair value of the contingent earn out payable to the former owners of Miconex. Cash generated from operating activities included decreases in deferred income taxes and prepaid expenses and other of \$1.3 million and \$1.2 million, respectively, and increases in accounts payable of \$12.3 million, accrued compensation and related benefits of \$0.4 million, income taxes payable of \$0.5 million and other liabilities of \$1.4 million. These increases in cash flow were offset by increases in accounts receivable and inventory of \$6.6 million and \$16.2 million, respectively.

Net cash used in investing activities for the nine months ended September 29, 2017 was approximately \$12.5 million, attributable to the expansion of our Singapore and Arizona facilities and to the costs related to the development of the Company's new enterprise reporting system. Net cash used in investing activities for the nine months ended September 23, 2016 was approximately \$5.4 million, attributable to the expansion of our Czech Republic and Texas facilities and to the costs related to the development of the Company's new enterprise reporting system.

Net cash used in financing activities for the nine months ended September 29, 2017 was due primarily to principal payments on bank borrowings of \$19.2 million offset by bank borrowing proceeds of \$8.2 million. For the nine months ended September 23, 2016, our net cash used in financing activities was due primarily to principal payments on borrowings of \$11.0 million offset by bank borrowing proceeds of \$4.5 million.

We anticipate that our existing cash balance and operating cash flow will be sufficient to service our indebtedness and meet our working capital requirements for at least the next twelve months. The adequacy of these resources to meet our liquidity needs beyond that period will depend on our growth and profitability, the state of the global economy, our ability to meet financial covenants under our credit facility, the cyclical expansion or contraction of the semiconductor capital equipment industry and the other industries we serve. As of September 29, 2017, approximately \$61.2 million of non-U.S. cash and cash equivalents held by foreign subsidiaries may be subject to U.S. taxes if repatriated for U.S. operations. Our intent is to reinvest all of these funds outside of the U.S.

We may need to raise additional funds through equity or debt financings in order to expand our business or acquire additional complementary businesses or technologies, or for other reasons, including working capital requirements. If required, additional financing may not be available on terms that are favorable to us, if at all. If we raise additional funds through the issuance of equity or convertible debt securities, our stockholders' equity interest will be diluted and these securities might have rights, preferences and privileges senior to those of our current stockholders. We may also require the consent of our lenders to raise additional funds through equity or debt financings. No assurance can be given that additional financing will be available or that, if available, such financing can be obtained on terms favorable to our stockholders and us.

Borrowing Arrangements

We have credit facilities in the U.S. and Czech Republic that expire on February 2, 2019 and March 31, 2020, respectively. We and certain of our subsidiaries agreed to secure all of our and their respective obligations under a credit agreement (the "Credit Agreement") by granting a first priority lien in substantially all of our and their respective personal property assets (subject to certain exceptions and limitations).

As of September 29, 2017, we have outstanding amounts under the U.S. Term Loan and Revolving Credit facility of \$13.3 million and \$39.9 million, respectively, which are gross of unamortized debt issuance costs of \$0.2 million. The aggregate principal amount of the Revolving Credit facility is \$40.0 million. As of September 29, 2017, interest rates on the outstanding U.S. Term Loan and Revolving Credit facility were 3.99% and 4.25%, respectively.

In order to manage interest rate risk on the variable component of the Term Loan we entered into an interest rate swap with the Lenders in September 2015 with a total notional amount of \$20.0 million (which amount decreases based on prorated quarterly principal payment over the remaining period of the Term Loan) pursuant to which we pay the counterparty a fixed rate of 0.99% and receive interest at a variable rate equal to the LIBOR rate we are required to pay under our Term Loan, or 1.24%, as of September 29, 2017. This interest rate swap effectively locked in a fixed interest rate of 3.74% on \$9.3 million of the \$13.3 million term loan balance outstanding as of September 29, 2017.

We are required to maintain certain financial covenants with our U.S. Credit facility including a consolidated charge coverage ratio (as defined in the Credit Agreement) of at least 1.25 to 1.00, a consolidated leverage ratio (as defined in the Credit Agreement) no greater than 3.5 to 1.00 and a minimum cash balance of \$35.0 million at the end of each quarter. We were in compliance with all covenants for the quarter ended September 29, 2017.

The Credit Agreement also contains provisions requiring the following mandatory prepayments (subject to certain exceptions and limitations): annual prepayments in an amount equal to (a) 33% of excess cash flow (as defined in the Credit Agreement) if the aggregate outstanding principal amount of the Term Loan equals or exceeds \$20.0 million and (b) 25% of excess cash flow if the aggregate outstanding principal amount of the Term Loan equals or exceeds \$10.0 million but is less than \$20.0 million. The Credit Agreement also restricts us from declaring or paying any cash dividends.

In conjunction with our acquisition of Miconex in July 2015, we have a separate credit agreement with a local bank in the Czech Republic that provides for a term loan in the aggregate of 0.8 million euros and a revolving credit facility in the aggregate of up to 8.3 million euros. The credit agreement requires Miconex to maintain certain financial covenants, including a debt-to-earnings-before-interest-depreciation-and-amortization ratio no greater than 3.00 to 1.00 and an equity ratio of at least 15%. As of September 29, 2017, Miconex was in compliance with all of its covenants.

As of September 29, 2017, Miconex had outstanding amounts under the term loan and revolving credit facility of 0.3 million euros (approximately \$0.4 million) and 3.3 million euros (approximately \$3.9 million), respectively, for a total of \$4.3 million, with interest rates ranging from 1.3% to 2.3% plus a variable rate based on the Euro Interbank Offered Rate.

As of September 29, 2017, our total bank debt was \$57.3 million, and we have \$0.1 million and 4.9 million euros (approximately \$5.8 million) available to borrow on our revolving loans in the U.S. and Czech Republic, respectively.

Capital Expenditures

Capital expenditures were \$13.9 million during the nine months ended September 29, 2017 and were primarily attributable to the expansion of our Singapore and Arizona facilities and to the costs related to the development of the Company's new enterprise reporting system. The Company's anticipated capital expenditures for the remainder of 2017 are expected to be financed primarily through cash from operations.

Off-Balance Sheet Arrangements

During the periods presented, we did not have any relations with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Contractual Obligations

Other than operating leases for certain equipment and real estate and purchase order commitments primarily for inventory, we have no off-balance sheet transactions, unconditional purchase obligations or similar instruments and, other than the arrangements described under "Borrowing Arrangements" above, are not a guarantor of any other entities' debt or other financial obligations. The following table summarizes our future minimum lease payments, principal payments under debt obligations and our purchase obligations for the purchase of inventory as of September 29, 2017 (in thousands):

	Total	Less than 1 Year	1-3 Years	3-5 Years	More Than 5 Years
Operating leases (1)	\$ 26,731	\$ 1,858	\$ 11,981	\$ 9,180	\$ 3,712
Borrowing arrangements (2)	57,532	6,921	50,601	10	—
PO commitments	169,219	169,219	—	—	—
Total	<u>\$ 253,482</u>	<u>\$ 177,998</u>	<u>\$ 62,582</u>	<u>\$ 9,190</u>	<u>\$ 3,712</u>

- (1) Operating lease obligations reflects (a) the leases for our headquarters and manufacturing facilities in Hayward, California that expire in 2020 through 2022; (b) the leases for manufacturing facilities in South San Francisco that expire in 2018; (c) the leases for manufacturing facilities in China, Singapore and the Philippines that expire in 2017 through 2023; (d) the leases for manufacturing facilities in Austin, Texas that expire in 2021; (e) the leases for manufacturing facilities in Chandler, Arizona that expire in 2017 through 2022; and (g) the leases for our manufacturing facilities in the Czech Republic that expires in 2019. We have options to renew certain of the leases in South San Francisco, Hayward, Austin, Singapore and in the Czech Republic which we expect to exercise.
- (2) Amounts reflect obligations under our New Revolving Credit Facility gross of \$0.2 million of unamortized debt issuance costs, under which \$13.3 million is outstanding under the New Term Loan and approximately \$39.9 million under the New Revolving Credit Facility as of September 29, 2017 and of our bank debt of \$4.3 million held by Miconex, in the Czech Republic.

Critical Accounting Policies, Significant Judgments and Estimates

Our Condensed Consolidated Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States, which require us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses and related disclosure at the date of our consolidated financial statements. On an on-going basis, we evaluate our estimates and judgments, including those related to sales, inventories, goodwill and intangible assets, stock compensation and income taxes. We base our estimates and judgments on historical experience and on various other factors that we believe to be reasonable under the circumstances, the results of which form the basis of our judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates. We consider certain accounting policies related to revenue recognition, inventory valuation, accounting for income taxes, business combinations, valuation of intangible assets and goodwill, and equity incentives to employees to be critical policies due to the estimates and judgments involved in each.

There have been no material changes to our critical accounting policies, significant judgments and estimates disclosed in our Annual Report on Form 10-K subsequent to December 30, 2016. For further information on our critical and other significant accounting policies and estimates, see Part II, Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" of our Annual Report on Form 10-K for the fiscal year ended December 30, 2016, filed with the SEC.

ITEM 3. Quantitative and Qualitative Disclosures About Market Risk

There were no significant changes to our quantitative and qualitative disclosures about market risk during the first nine months of fiscal 2017. Refer to Part II, Item 7A. “Quantitative and Qualitative Disclosures about Market Risk” included in our Annual Report on Form 10-K for our fiscal year ended December 30, 2016 for a more complete discussion of the market risks we encounter.

ITEM 4. Controls and Procedures

As required by Rule 13a-15(b) under the Securities Exchange Act of 1934 (the “Exchange Act”), management, including our Chief Executive Officer and Chief Financial Officer, conducted an evaluation as of the end of the period covered by this report, of the effectiveness of our disclosure controls and procedures as defined in Exchange Act Rule 13a-15(e). Based upon our evaluation, we concluded that our disclosure controls and procedures were effective as of September 29, 2017.

As required by Rule 13a-15(d), management, including our Chief Executive Officer and Chief Financial Officer, also conducted an evaluation of our internal control over financial reporting to determine whether any changes occurred during the period covered by this report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Based on our evaluation, we concluded that there has been no change during the fiscal quarter covered by this report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Any system of controls, however well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of the system will be met. In addition, the design of any control system is based in part upon certain assumptions about the likelihood of future events.

PART II. OTHER INFORMATION

ITEM 1. Legal Proceedings

From time to time, we are subject to various legal proceedings and claims, either asserted or unasserted, that arise in the ordinary course of business. Although the outcome of the various legal proceedings and claims cannot be predicted with certainty, we have not had a history of outcomes to date that have been material to our statement of operations and do not believe that any of these proceedings or other claims will have a material effect on our consolidated financial condition or results of operations.

ITEM 1A. Risk Factors

The cyclical and highly volatile nature of the industries we serve could harm our operating results.

Our business and operating results depend in significant part upon capital expenditures by manufacturers in the semiconductor capital equipment, consumer, medical, energy, industrial, flat panel and research industries, which in turn depend upon the current and anticipated market demand for such products. Historically, the industries we serve (in particular the semiconductor industry) have been highly cyclical, with recurring periods of over-supply of products that have had a severe negative effect on the demand for capital equipment used to manufacture such products. We have experienced and anticipate that we will continue to experience significant fluctuations in customer orders for our products through such cycles. Slowdowns in the industries we serve have had, and future slowdowns may also have, a material adverse effect on our operating results. During periods of decreasing demand for our products, we must be able to appropriately align our cost structure with prevailing market conditions, effectively manage our supply chain and motivate and retain employees. During periods of increased demand, we must increase manufacturing capacity and inventory to meet customer demands, effectively manage our supply chain and attract, retain and motivate a sufficient number of employees. If the industries we serve experience downturns, or if we are not able to timely and appropriately adapt to the changes in our business environment, our results of operations will be harmed. Also, the cyclical and volatile nature of the industries we serve make future revenues, results of operations and net cash flows difficult to estimate.

We rely on a small number of original equipment manufacturing customers for a significant portion of our sales, and any adverse change in our relationships with these customers, including a decision by such customers not to continue to outsource critical subsystems to us or to give market share to one of our competitors, would adversely affect our business, results of operations and financial condition. Our customers also exert a significant amount of negotiating leverage over us, which may require us to accept lower operating margins, increased liability risks or changes in our operations in order to retain or expand our market share with them.

A relatively small number of OEM customers have historically accounted for a significant portion of our sales, and we expect this trend to continue. As a group, two customers accounted for 84.0%, 86.4% and 84.3% of sales for the nine months ended September 29, 2017, for fiscal years 2016 and 2015, respectively, and we expect that our sales will continue to be concentrated among a small number of customers. In addition, our customer contracts generally do not require customers to place any orders. Accordingly, the success of our business depends on OEMs continuing to outsource the manufacturing of critical subsystems to us. Because of the small number of OEMs in the markets we serve, most of which are already our customers, it would be difficult to replace lost revenue resulting from the loss of, or the reduction, cancellation or delay in purchase orders by, any one of these customers, whether due to such customer's decision to not continue to outsource all or a portion of its critical subsystems for its capital equipment to us, such customer giving market share to our competitors or for other reasons, such as a customer's bankruptcy or insolvency or decreased demand for such customer's products. We have in the past lost business from customers who have taken the manufacturing of our products in-house or given market share to our competitors. Further, since our customers generally own the designs and other intellectual property to the products we manufacture, we cannot prevent them from licensing such designs and other intellectual property to our competitors for the manufacturing of such products. If we are unable to replace revenue from customers who determine to take subsystem assembly in-house or give market share to our competitors, such events could have a material adverse impact on our financial position and results of operations.

In addition, consolidation among our customers, or a decision by any one or more of our customers to outsource all or most manufacturing and assembly work to a single equipment manufacturer, may further concentrate our business in a limited number of customers and expose us to increased risks relating to dependence on an even smaller number of customers.

In addition, by virtue of our largest customers' sizes, and the significant portion of revenue that we derive from them, as well as the competitive landscape, our customers are able to exert significant influence and pricing pressure in the negotiation of our commercial agreements and individual purchase orders and on the conduct of our business with them. Our customers often require reduced prices or other pricing, quality, manufacturing or delivery commitments as a condition to their awarding of market share to us or the placement of orders with us in any given period, which may, among other things, result in reduced operating margins in order to maintain or expand our market share or require capital or other expenditures. Our customers' negotiating leverage also can result in customer agreements or terms and conditions that may contain significant liability risk to us. For example, some of our customers

insist that we provide them indemnification against certain liabilities in our agreements with them, including claims of losses by their customers caused by our products, which may be uncapped. In some cases, we have determined to self-insure against liability risk in our customer agreements, meaning that we may be directly responsible for high magnitude liability claims by our customers without recourse to insurance proceeds from third-party insurers. Our customers may also pressure us to make other concessions in order to preserve or expand our market share with them, which may harm our business. For example, one or more of our customers may require us to move the manufacture of our products from lower-cost geographies or locations such as China to higher-cost geographies or locations, such as Singapore, that are closer to such customer's facilities which could result in reduced margins and a sub-optimal cost structure. If we are unable to retain and expand our business with our customers on favorable terms, or at all, our business and operating results will be adversely affected, or we may be susceptible to increased liability risk which, if realized, may have a material adverse effect on our business, cash flows, results of operations and financial condition.

Our dependence on our suppliers may prevent us from delivering an acceptable product on a timely basis.

We rely on both single-source and sole-source suppliers, some of whom are relatively small, for many of the components we use in our products. In addition, our customers often specify components of particular suppliers that we must incorporate into our products. Our suppliers are under no obligation to accept or to provide us with components. As a result, the loss of or failure to perform by any of these suppliers could adversely affect our business and operating results. In addition, the manufacturing of certain components and subsystems is a complex process. Therefore, if a supplier were unable to provide the volume of components we require on a timely basis and at acceptable prices and quality, we would have to identify and qualify replacements from alternative sources. However, the process of qualifying new suppliers for complex components is lengthy and could delay our production, which would adversely affect our business, operating results and financial condition.

We may also experience difficulty in obtaining sufficient supplies of components and raw materials in times of growth in our business. For example, we have in the past experienced shortages in supplies of various components, such as mass flow controllers, valves and regulators, and certain prefabricated parts, such as sheet metal enclosures, used in the manufacture of our products. In addition, one of our competitors manufactures mass flow controllers that may be specified by one or more of our customers. If we are unable to obtain these particular mass flow controllers from our competitor or convince a customer to select alternative mass flow controllers, we may be unable to meet that customer's requirements, which could result in a loss of market share.

If we, or our suppliers, are unable to procure sufficient quantities of components or raw materials from suppliers, it could influence decisions by our customers to delay or cancel orders and decisions by our vendors to fulfill our purchase orders and, consequently, have a material adverse effect on our results of operations.

Our customers require our products to undergo a lengthy and expensive qualification process. If we are unsuccessful or delayed in qualifying any of our products with a customer, our results of operations and financial condition could suffer.

We have had to qualify, and are required to maintain our status, as a supplier for each of our customers. This is often a lengthy process that involves the inspection and approval by a customer of our engineering, documentation, manufacturing and quality control procedures before that customer will place volume orders. Our ability to lessen the adverse effect of any loss of, or reduction in sales to, an existing customer through the rapid addition of one or more new customers is limited because of these qualification requirements. Consequently, the risk that our business, operating results and financial condition would be adversely affected by the loss of, or any reduction in orders by, any of our significant customers is increased. Moreover, if we lose our existing status as a qualified supplier to any of our customers, such customer could cancel its orders from us or otherwise terminate its relationship with us, which could have a material adverse effect on our results of operations and financial condition.

Our quarterly revenue and operating results fluctuate significantly from period to period, and this may cause volatility in our common stock price.

Our quarterly revenue and operating results, including our gross margin, have fluctuated significantly in the past, and we expect them to continue to fluctuate in the future for a variety of reasons which may include:

- demand for and market acceptance of our products as a result of the cyclical nature of the industries we serve or otherwise, often resulting in reduced sales during industry downturns and increased sales during periods of industry recovery or growth;
- overall economic conditions;
- changes in the timing and size of orders by our customers;
- loss of business from one or more significant customers due to strategic decisions by our customers to terminate their outsourcing relationship with us or give market share to our competitors, or due to decreased demand for our customers' products by end customers;

- strategic consolidation by our customers;
- cancellations and postponements of previously placed orders;
- pricing pressure from either our competitors or our customers, resulting in the reduction of our product prices, margins or loss of market share;
- disruptions or delays in the manufacturing of our products or in the supply of components or raw materials that are incorporated into or used to manufacture our products, thereby causing us to delay the shipment of products;
- decreased margins for several or more quarters following the introduction of new products, especially as we introduce new subsystems;
- delays in ramp-up in production, low yields or other problems experienced at our manufacturing facilities in China;
- changes in design-to-delivery cycle times;
- inability to reduce our costs quickly in step with reductions in our prices or in response to decreased demand for our products;
- changes in our mix of products sold;
- write-offs of excess or obsolete inventory due to a customer's bankruptcy or insolvency;
- one-time expenses or charges associated with failed acquisition negotiations or completed acquisitions;
- inability to control our operating costs consistent with target levels;
- announcements by our competitors of new products, services or technological innovations, which may, among other things, render our products less competitive; and
- geographic mix of customer orders or worldwide earnings.

As a result of the foregoing, we believe that quarter-to-quarter comparisons of our revenue and operating results may not be meaningful and that these comparisons may not be an accurate indicator of our future performance. Changes in the timing or terms of a small number of transactions could disproportionately affect our operating results in any particular quarter. Moreover, our operating results in one or more future quarters may fail to meet our guidance or the expectations of securities analysts or investors. If this occurs, we would expect to experience an immediate and significant decline in the trading price of our common stock.

Our inability to successfully manage the implementation of a company-wide enterprise resource planning ("ERP") system could adversely affect our operating results.

We are in the process of implementing a new Company-wide ERP system. This process has been and continues to be complex and time-consuming and we expect to incur additional expenses. This ERP system will replace many of our existing operating and financial systems, which is a major undertaking from a financial management and personnel perspective. Should the new ERP system not be implemented successfully throughout all our business units and within budget and on time, or if the system does not perform in a satisfactory manner, it could be disruptive and adversely affect our operations, including our potential ability to report accurate, timely and consistent financial results; our ability to purchase raw material from and pay our suppliers; and deliver products to customers on a timely basis and to collect our receivables from them. Furthermore, this new ERP system is intended to be implemented in all locations over the course of fiscal year 2019. Once operational, we expect depreciation of our capitalized ERP costs will be significant and may not be offset by the efficiencies we expect this system to produce for the Company.

In addition, we have put teams together who are leading the implementation of the ERP system at all of our locations. To the extent that this team or key individuals are not retained through the implementation period, the success of our implementation could be compromised and the expected benefits would not be realized. If the new ERP system is not successfully implemented, it could negatively affect our future sales, profitability and financial condition.

We are exposed to risks associated with weakness in the global economy.

We rely to a significant extent on OEM customers, whose business, in turn, depends largely on consumer spending and capital expenditures by businesses. Uncertainty regarding the global economy may pose challenges to our business. Economic uncertainty may exacerbate negative trends in business and consumer spending and may cause certain of our customers to push out, cancel, or refrain from placing orders for products or services, which may reduce sales and materially affect our results of operations and financial condition. Difficulties in obtaining capital, uncertain market conditions, or reduced profitability may also cause some

customers to scale back operations, exit businesses, merge with other manufacturers, or file for bankruptcy protection and potentially cease operations, leading to customers' reduced research and development funding and/or capital expenditures and, in turn, lower orders from our customers and/or additional slow moving or obsolete inventory or bad debt expense for us. These conditions may also similarly affect key suppliers, which could impair their ability to deliver parts and result in delays for our products or require us to either procure products from high-cost suppliers, or if no additional suppliers exist, to reconfigure the design and manufacture of our products, and we may be unable to fulfill customer orders.

Significant developments stemming from the recent change in the U.S. administration could have a material adverse effect on us.

On January 20, 2017, Mr. Donald J. Trump was inaugurated as the president of the United States. While it is uncertain at this time how the Trump administration and the results of other elections could affect changes in social, political, regulatory and economic conditions or laws and policies, according to publicly released statements, one top legislative priority of the Trump administration and the new Congress may be reform of the Internal Revenue Code of 1986, as amended, including significant changes to taxation of business entities and the deductibility of interest expense. In addition, President Trump has expressed apprehension towards existing trade agreements, such as the North American Free Trade Agreement (NAFTA), signed an executive order announcing his plan to withdraw the United States from the Trans-Pacific Partnership (TPP) in favor of bilateral trade negotiations with the member countries, and has raised the possibility of imposing significant increases on tariffs on goods imported into the United States, including from China, where we and our customers have significant operations. Changes in U.S. social, political, regulatory and economic conditions or laws and policies governing U.S. tax laws, foreign trade, manufacturing, and development and investment in the countries where we or our customers operate could adversely affect our operating results and our business.

We have significant existing indebtedness; the restrictive covenants under our credit agreement or other limitations on financing may limit our ability to expand or pursue our business strategy or make capital expenditures; if we are forced to pay some or all of our indebtedness prior to its maturity, our financial position could be severely and adversely affected.

On February 2, 2015, we entered into a new credit agreement by and among us, certain of our subsidiaries, East West Bank and City National Bank. This agreement was subsequently amended in December 2015 with such amendments effective as of December 25, 2015 (as amended, the "Credit Agreement"). This Credit Agreement provides for a term loan in an aggregate principal amount of \$40.0 million and a revolving credit facility in an aggregate principal amount of \$40.0 million, a letter of credit facility in the aggregate availability amount of \$20.0 million and a swingline sub-facility in the aggregate availability amount of \$5.0 million. On February 2, 2015, we borrowed an aggregate of \$46.5 million under this Credit Agreement to repay the remaining outstanding balance from our prior loan with Silicon Valley Bank. On February 5, 2015, we borrowed an additional \$29.7 million under this Credit Agreement to finance the acquisition of Marchi. The Company has a balance of \$39.9 million on its revolving loan with \$0.1 million available to borrow as of September 29, 2017. The Company's term loan balance is \$13.3 million as of September 29, 2017. In addition, Miconex has a debt balance of \$4.3 million as of September 29, 2017. The Company's total debt as of September 29, 2017, gross of capitalized loan costs of \$0.2 million, was \$57.5 million.

Our indebtedness could have adverse consequences including:

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

Our ability to meet our expenses and debt obligations will depend on our future performance, which will be affected by financial, business, economic, regulatory, and other factors. Furthermore, our operations may not generate sufficient cash flows to enable us to meet our expenses and service our debt. If we are unable to meet our debt obligations as they come due, we could be forced to restructure or refinance such obligations, seek additional equity financing or sell assets, which we may not be able to do on satisfactory terms, or at all. If we determine it is necessary to seek additional funding for any reason, we may not be able to obtain such funding or, if funding is available, obtain it on acceptable terms.

Our Credit Agreement also contains certain covenants that restrict our ability to take certain actions, including our ability to:

- incur additional debt, including guarantees, or create liens;
- pay dividends and make distributions in respect of our capital stock;
- repurchase capital stock;
- make investments or other restricted payments;

- engage in transactions with stockholders and affiliates;
- sell or otherwise dispose of assets;
- make payments on subordinated indebtedness; and
- engage in certain mergers and acquisitions, new lines of business or make other fundamental changes.

The restrictive covenants in our Credit Agreement may therefore limit our strategic and financing options and limit our ability to return capital to our stockholders through dividends or stock buybacks.

Our Credit Agreement also requires us to maintain certain financial and other covenants, including compliance with a maximum consolidated leverage ratio, a minimum fixed charge ratio and a minimum cash balance. We cannot assure you that we will be able to maintain compliance with such financial or other covenants. Our failure to comply with these covenants could result in an event of default which, if not cured or waived, could result in the acceleration of all of our indebtedness, which would materially adversely affect our financial health if we are unable to access sufficient funds to repay all of the outstanding amounts.

In addition, the Credit Agreement has certain mandatory prepayment provisions, including annual prepayments of excess cash flow above certain thresholds. As long as our indebtedness remains outstanding, the restrictive covenants and mandatory prepayment provisions could impair our ability to expand or pursue our business strategies or obtain additional funding.

We may not be able to fund our future capital requirements or strategic acquisitions from our operations, and financing from other sources may not be available on favorable terms or at all.

We made capital expenditures of approximately \$13.9 million and \$5.8 million for the nine months ended September 29, 2017 and September 23, 2016, respectively related to our manufacturing facilities in the United States and Singapore. In February 2015, we paid approximately \$29.9 million and issued 1,437,500 shares of our common stock in connection with our acquisition of Marchi. The cash portion of the merger consideration was financed through the new credit facility described above; of which an aggregate of \$53.2 million was outstanding as of September 29, 2017. In July 2015, we acquired Miconex for total consideration of \$20.7 million which includes \$15.6 million paid in cash, 500,000 shares of Company's common stock, and up to \$4.0 million of potential cash "earn-out" payments over two-year period. In 2016, Miconex achieved the specified performance targets for the first year and was paid the maximum of \$2.0 million of the \$4.0 million potential cash earn-out. The amount of our future capital requirements or strategic acquisitions will depend on many factors, including:

- the cost required to ensure appropriate IT systems;
- the cost required to ensure access to adequate manufacturing capacity;
- the timing and extent of spending to support product development efforts;
- the timing of introductions of new products and enhancements to existing products;
- the cost required to integrate our acquisitions into our business, including into our enterprise resource planning system;
- changing manufacturing capabilities to meet new customer requirements;
- market acceptance of our products; and
- our ability to identify appropriate acquisition opportunities and successfully negotiate the terms of such acquisitions.

We had \$65.9 million in cash and cash equivalents as of September 29, 2017 of which \$61.2 million was held by our foreign subsidiaries. If the cash and cash equivalents held by our foreign subsidiaries is needed for our operations or to fund capital expenditures or other strategic acquisitions in the U.S., we would be required to accrue and pay U.S. taxes to repatriate these funds. In addition, such funds may not be readily available to meet our domestic cash requirements.

Given our significant existing leverage, limited availability under our new revolving line of credit and the potential tax effects of repatriating foreign cash or other factors, we may need to raise additional funds through public or private equity or debt financing if our current domestic cash and cash flow from operations are insufficient to fund our future activities. We may not be able to obtain additional debt financing when and if necessary in a timely manner. Access to capital markets has, in the past, been unavailable to companies such as ours and there can be no assurance that we would be able to complete an equity or other financing arrangement with terms satisfactory to us or at all. In addition, equity financings could be dilutive to holders of our common stock, and debt financings would likely involve additional covenants that restrict our business operations. Any potential strategic acquisition or significant capital expenditure may also require the consent of our existing lenders. If we cannot raise funds on acceptable terms if and

when needed, we may not be able to develop or enhance our products, take advantage of future opportunities, including potential acquisitions, grow our business or respond to competitive pressures or unanticipated requirements, any of which could adversely affect our business, operating results and financial condition.

The manufacturing of our products is highly complex, and if we are not able to manage our manufacturing and procurement process effectively, our business and operating results will suffer.

The manufacturing of our products is a highly complex process that involves the integration of multiple components and requires effective management of our supply chain while meeting our customers' design-to-delivery cycle time requirements. Through the course of the manufacturing process, our customers may modify design and system configurations in response to changes in their own customers' requirements. In order to rapidly respond to these modifications and deliver our products to our customers in a timely manner, we must effectively manage our manufacturing and procurement process. If we fail to manage this process effectively, we risk losing customers and damaging our reputation. We may also be subject to liability under our agreements with our customers if we or our suppliers fail to effectively or timely re-configure manufacturing processes or components in response to these modifications or if shipments of our products are delayed, which may lead to product defect or other claims by our customers or cancelled orders. In addition, if we acquire inventory in excess of demand or that does not meet customer specifications, we could incur excess or obsolete inventory charges. These risks are even greater during periods of macroeconomic uncertainty or down cycles in our industry, and as we continue to expand our business beyond gas delivery systems into new subsystems with which we have less experience. During periods of economic uncertainty or down cycles in our industry, certain of our suppliers may be forced to reduce or go out of business, which could require us to either procure products from higher-cost suppliers or, if no additional suppliers exist, reconfigure the design and manufacture of our products. This could limit our growth and have a material adverse effect on our business, financial condition and operating results.

We may not be able to respond quickly enough to changes in demand for our products.

Demand shifts in the industries we serve are rapid and difficult to predict, and we may not be able to anticipate or respond quickly enough to changes in demand. Our ability to increase sales of our products in periods of increasing demand depends, in part, upon our ability to:

- mobilize our supply chain in order to maintain component and raw material supply;
- optimize the use of our design, engineering and manufacturing capacity in a timely manner;
- deliver our products to our customers in a timely fashion;
- expand, if necessary, our manufacturing capacity; and
- maintain our product quality as we increase production.

If we are unable to respond to rapid increases in demand for our products on a timely basis or to manage any corresponding expansion of our manufacturing capacity effectively, our customers could increase their purchases from our competitors, which would adversely affect our business.

Our ability to remain profitable and mitigate the impact on our business in periods of decreasing demand depends, in part, upon our ability to:

- optimize our inventory levels and reduce or cancel orders to our suppliers without compromising our relationships with such suppliers;
- reduce our variable costs through a reduction of our manufacturing workforce;
- continue to motivate our employees; and
- maintain the prices, quality and delivery cycles of our products in order to retain our customers' business.

We have established and, as markets will allow, intend to expand our operations in Asia and Europe, which exposes us to risks associated with operating in foreign countries.

We generated approximately 52.8% and 46.5% of our sales in international markets for the nine months ended September 29, 2017 and September 23, 2016, respectively. Depending on market conditions, we intend to expand our operations in Asia and Europe, principally in China and Singapore and the Czech Republic. In addition, through our acquisition of AIT, we acquired a manufacturing facility in Cebu, Philippines. The carrying amount of our fixed assets in Asia and Europe were \$9.9 million and \$1.6 million, respectively as of September 29, 2017.

We are exposed to political, economic, legal and other risks associated with operating in Asia and Europe, including:

- foreign currency exchange fluctuations;
- political, civil and economic instability;
- tariffs and other barriers;
- timing and availability of export licenses;
- disruptions to our and our customers' operations due to increased risk of outbreak of diseases, such as SARS and avian flu;
- disruptions in operations due to China's developing domestic infrastructure, including transportation and energy;
- difficulties in developing relationships with local suppliers;
- difficulties in attracting new international customers;
- difficulties in accounts receivable collections;
- difficulties in staffing and managing distant international subsidiary and branch operations;
- the burden of complying with foreign and international laws and treaties;
- legal systems potentially subject to undue influence or corruption;
- difficulties in transferring funds to other geographic locations; and
- potentially adverse tax consequences, including restrictions on the repatriation of earnings to the United States.

Negative or uncertain global conditions could prevent us from accurately forecasting demand for our products which could adversely affect our results of operations. In addition, due to generally lower labor and materials costs in the Asian markets in which we currently operate, a shift in the mix of orders from our customers away from such Asian markets could adversely affect our operating margins.

Our operations in Asia and Europe are also subject us to U.S. laws governing the export of equipment. These laws are complex and require us to obtain clearances for the export to Asia and Europe of certain equipment. We may fail to comply with these laws and regulations, which could require us to cease the export of certain equipment and expose us to fines or penalties.

Over the past several years, the Chinese government has pursued economic reform policies, including the encouragement of private economic activity and greater economic decentralization. The Chinese government may not continue these policies or may significantly alter them to our detriment from time to time without notice. Changes in laws and regulations or their interpretation, the imposition of confiscatory taxation policies, new restrictions on currency conversion or limitations on sources of supply could materially and adversely affect our Chinese operations, which could result in the partial or total loss of our investment in that country and materially and adversely affect our future operating results.

We are subject to order and shipment uncertainties and any significant reductions, cancellations or delays in customer orders could cause our revenue to decline and our operating results to suffer.

Our revenue is difficult to forecast because we generally do not have a material backlog of unfilled orders and because of the short time frame within which we are often required to design, produce and deliver products to our customers. Most of our revenue in any quarter depends on customer orders for our products that we receive and fulfill in the same quarter. We do not have long-term purchase orders or contracts that contain minimum purchase commitments from our customers. Instead, we receive non-binding forecasts of the future volume of orders from our customers. Occasionally, we order and build component inventory in advance of the receipt of actual customer orders. Customers may cancel order forecasts, change production quantities from forecasted volumes or

delay production for reasons beyond our control. Furthermore, reductions, cancellations or delays in customer order forecasts, which may occur for various reasons, including reduced demand for our customer's products, customer bankruptcies or customer insolvency, usually occur without penalty to, or compensation from, the customer. Reductions, cancellations or delays in forecasted orders could cause us to hold inventory longer than anticipated, which could reduce our gross profit, restrict our ability to fund our operations and cause us to incur unanticipated reductions or delays in revenue. Moreover, most of the products we manufacture are custom built for our customers and are therefore not fungible with products we sell to other customers. If we do not obtain orders as we anticipate, we could have excess component inventory for a specific product that we would not be able to sell to another customer, likely resulting in inventory write-offs, which could have a material adverse effect on our business, financial condition and operating results. In addition, because many of our costs are fixed in the short term, we could experience deterioration in our gross profit and operating margins when our production volumes decline.

The industries in which we participate are highly competitive and rapidly evolving, and if we are unable to compete effectively, our operating results will be harmed.

We face intense competition from subsystem and component manufacturers in the industries we serve. Increased competition has in the past resulted, and could in the future result, in price reductions, reduced gross margins or loss of market share, any of which would harm our operating results. We are subject to significant pricing pressure as we attempt to maintain and increase market share with our existing customers. Competitors may offer reduced prices or introduce new products for the markets currently served by our products. These products may have better performance, lower prices and achieve broader market acceptance than our products. Further, OEMs typically own the design rights to their products and may provide these designs to other subsystem manufacturers. If our competitors obtain proprietary rights to these designs such that we are unable to obtain the designs necessary to manufacture products for our OEM customers, our business, financial condition and operating results could be adversely affected.

Our competitors may have greater financial, technical, manufacturing and marketing resources than we do. As a result, they may be able to respond more quickly to new or emerging technologies and changes in customer requirements, devote greater resources to the development, promotion, sale and support of their products, and reduce prices to increase market share. Moreover, there may be merger and acquisition activity among our competitors and potential competitors that may provide our competitors and potential competitors an advantage over us by enabling them to expand their product offerings and service capabilities to meet a broader range of customer needs. Further, if one of our customers develops or acquires the internal capability to develop and produce critical systems or subsystems that we produce, the loss of that customer could have a material adverse effect on our business, financial condition and operating results. The introduction of new technologies and new market entrants may also increase competitive pressures.

If our new products are not accepted by OEMs or other customers or if we are unable to obtain historical margins on our new products, our operating results would be adversely impacted.

We design, develop and market critical systems and subsystems to OEMs and other customers. The introduction of new products is inherently risky because it is difficult to foresee the adoption of new standards, coordinate our technical personnel and strategic relationships and win acceptance of new products by OEMs and other customers. We may not be able to recoup design and development expenditures if our new products are not accepted by OEMs or other customers. Newly introduced products typically carry lower gross margins than existing products for several or more quarters following their introduction. If any of our new systems or subsystems are not successful in the market, or if we are unable to obtain gross margins on new products that are similar to the gross margins we have historically achieved, our business, operating results and financial condition could be adversely affected.

Our business may be adversely affected by information technology, disruptions, including impairing our ability to effectively deliver our products, which could cause us to lose customers and harm our results of operations.

The manufacture and delivery of our products depends on the continuing operation of our technology infrastructure and systems, particularly our data center located in California. Any damage to or failure of our systems could result in interruptions in our ability to manufacture or deliver products on agreed upon lead times, or at all, on a local or worldwide basis. Interruptions could reduce our sales and profits, and our reputation could be damaged if people believe our systems are unreliable. Our systems and operations are vulnerable to damage or interruption from earthquakes, terrorist attacks, floods, fires, power loss, hardware or software failures, telecommunications failures, cybersecurity attacks, and similar events. The critical components of the system are not redundant and we currently do not have a backup data center. Accordingly, the risk associated with such events beyond our control is heightened.

Cybersecurity attacks, in particular, are evolving and include, but are not limited to, malicious software, attempts to gain unauthorized access to data, and other electronic security breaches that could lead to disruptions in systems, unauthorized release of confidential or otherwise protected information and corruption of data (our own or that of third parties). Although we have adopted certain measures to mitigate potential risks to our systems from information technology-related disruptions, given the unpredictability of the timing, nature and scope of such disruptions, we could potentially be subject to production downtimes, operational delays, other

detrimental impacts on our operations or ability to provide products and services to our customers, the compromising of confidential or otherwise protected information, misappropriation, destruction or corruption of data, security breaches, other manipulation or improper use of our systems or networks, financial losses from remedial actions, loss of business or potential liability, and/or damage to our reputation, any of which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

If we experience frequent or persistent system failures, the attractiveness of our products to customers could be permanently harmed. Any steps we take to increase the reliability and redundancy of our systems may be expensive, reduce our operating margin and may not be successful in reducing the frequency or duration of unscheduled interruptions.

Acquisitions could result in operating and integration difficulties, dilution, margin deterioration, diversion of management's attention, and other consequences that may adversely impact our business and results of operations.

We have made, and may in the future make, acquisitions of, or significant investments in, businesses that offer complementary products, services, technologies or market access. We expect that management will evaluate potential strategic transactions regularly with its advisors and our board of directors in the ordinary course of business. We may not be successful in negotiating the terms of potential acquisitions or financing potential acquisitions, and our due diligence may fail to identify all of the problems, liabilities or other challenges associated with an acquired business, product or technology, including issues related to intellectual property, product quality or product architecture, regulatory compliance practices, revenue recognition or other accounting practices or employee or customer retention issues. In addition, we may not be successful in effectively integrating the acquired business, product or technology into our existing business and operations. The areas where we face risks include:

- Management of the larger, more complex, combined business, including integrating supply and distribution channels, computer and accounting systems, and other aspects of operations;
- Deterioration of gross margins due to the acquisition of the same customer base resulting in reduced pricing leverage;
- Integration of the capabilities of the acquired businesses while maintaining focus on providing consistently high quality products;
- Incorporation of different financial and reporting controls, processes, systems and technologies into our existing business environment;
- Unknown liabilities and unforeseen expenses, delays or regulatory conditions associated with the acquisitions for which we do not have recourse under their respective agreements;
- Performance shortfalls as a result of the diversion of management's attention from the company's operations;
- Cultural challenges associated with integrating employees from the acquired business into our organization, and retention of employees from the businesses we acquire;
- Retention of customers and partners of acquired business; and/or
- Difficulties associated with the transition of customers into our existing business.

Our failure to address these risks or other problems encountered in connection with our past or future acquisitions and investments could cause us to fail to realize the anticipated benefits of such acquisitions or investments, incur unanticipated liabilities and substantial costs, and materially harm our business generally.

Our acquisitions could also result in dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities, or amortization expenses, impairment charges and restructuring charges, any of which could harm our financial condition. Also, the anticipated benefits or value of our acquisitions or investments may not materialize. Even if an acquisition or other investment is not completed, we may divert significant management time and effort and financial cost in evaluating such acquisition or investment, which could have an adverse effect on our results of operations. Furthermore, due to limited liquidity in the credit market and our existing leverage, the financing of any such acquisition may be difficult to obtain, and the terms of such financing may not be favorable.

If we were required to write down all or part of our goodwill, our net income and net worth could be materially adversely affected.

We had \$85.2 million of goodwill recorded on our consolidated balance sheet as of September 29, 2017. Goodwill represents the excess of cost over the fair market value of net tangible and finite lived, identifiable intangible assets acquired in business combinations. If our market capitalization drops significantly below the amount of net equity recorded on our balance sheet, it could indicate a decline in our value and would require us to further evaluate whether our goodwill has been impaired. During the fourth

quarter of each year, we perform an annual review of our goodwill to determine if it has become impaired, in which case we would write down the impaired portion of our goodwill. We also evaluate goodwill for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If we were required to write down all or a significant part of our goodwill, our financial results and net worth could be materially adversely affected.

Our business is largely dependent on the know-how of our employees, and we generally do not have an intellectual property position that is protected by patents.

Our business is largely dependent upon our design, engineering, manufacturing and testing know-how. We rely on a combination of trade secrets and contractual confidentiality provisions and, to a much lesser extent, patents, copyrights and trademarks to protect our proprietary rights. Confidentiality agreements with our employees and others may not adequately prevent disclosure of trade secrets and other proprietary information. Accordingly, our intellectual property position is more vulnerable than it would be if it were protected primarily by patents. If we fail to protect our proprietary rights successfully, our competitive position could suffer, which could harm our operating results. We may be required to spend significant resources to monitor and protect our proprietary rights, and, in the event infringement or breach of our proprietary rights occurs, our competitive position in the market may be harmed. In addition, competitors may design around our technology or develop competing technologies and know-how. Further, since our customers generally own the designs and other intellectual property to the products we manufacture, we cannot prevent them from licensing such designs and other intellectual property to our competitors for the manufacture of such products.

Third parties have claimed and may in the future claim we are infringing their intellectual property, which could subject us to litigation or licensing expenses, and we may be prevented from selling our products if any such claims prove successful.

We have in the past and may in the future receive claims that our products, processes or technologies infringe the patents or other proprietary rights of third parties. In addition, we may be unaware of intellectual property rights of others that may be applicable to our products. Any litigation regarding our patents or other intellectual property could be costly and time-consuming and divert the attention of our management and key personnel from our business operations, any of which could have a material adverse effect on our business and results of operations. The complexity of the technology involved in our products and the uncertainty of intellectual property litigation increase these risks. Claims of intellectual property infringement may also require us to enter into costly license agreements. However, we may not be able to obtain licenses on terms acceptable to us, or at all. We also may be subject to significant damages or injunctions against the development, manufacture and sale of certain of our products if any such claims prove successful. We also rely on design specifications and other intellectual property of our customers in the manufacture of products for such customers. While our customer agreements generally provide for indemnification of us by our customers if we are subjected to litigation for third-party claims of infringement of such customer intellectual property, such indemnification provisions may not be sufficient to fully protect us from such claims, or our customers may breach such indemnification obligations to us, which could result in costly litigation to defend against such claims or enforce our contractual rights to such indemnification.

If we do not keep pace with developments in the industries we serve and with technological innovation generally, our products may not be competitive.

Rapid technological innovation in the markets we serve requires us to anticipate and respond quickly to evolving customer requirements and could render our current product offerings and technology obsolete. Technological innovations are inherently complex. We must devote resources to technology development in order to keep pace with such rapidly evolving technologies. We believe that our future success will depend upon our ability to design, engineer and manufacture products that meet the changing needs of our customers. This requires that we successfully anticipate and respond to technological changes in design, engineering and manufacturing processes in a cost-effective and timely manner. If we are unable to integrate new technical specifications into competitive product designs, develop the technical capabilities necessary to manufacture new products or make necessary modifications or enhancements to existing products, our business prospects could be harmed.

The timely development of new or enhanced products is a complex and uncertain process which requires that we:

- design innovative and performance-enhancing features that differentiate our products from those of our competitors;
- identify emerging technological trends in the industries we serve, including new standards for our products;
- accurately identify and design new products to meet market needs;
- collaborate with OEMs to design and develop products on a timely and cost-effective basis;

- ramp-up production of new products, especially new subsystems, in a timely manner and with acceptable yields at acceptable costs;
- successfully manage development production cycles; and
- respond effectively to technological changes or product announcements by others.

If we are unsuccessful in keeping pace with technological developments for the reasons above or other reasons, our business prospects, results of operations and financial condition could be materially and adversely affected.

We must achieve design wins to retain our existing customers and to obtain new customers.

New capital equipment typically has a lifespan of several years, and OEMs frequently specify which systems, subsystems, components and instruments are to be used in their equipment. Once a specific system, subsystem, component or instrument is incorporated into a piece of capital equipment, it will likely continue to be incorporated into that piece of equipment for at least several months before the OEM would be in a position to switch to the product of another supplier. Accordingly, it is important that our products are designed into the new capital equipment of OEMs, which we refer to as a design win, in order to retain our competitive position with existing customers and to obtain new customers.

We incur technology development and sales expenses with no assurance that our products will ultimately be designed into an OEM's capital equipment. Further, developing new customer relationships, as well as maintaining and increasing our market share with existing customers, requires a substantial investment of our sales, engineering and management resources without any assurance from prospective customers that they will place significant orders. We believe that OEMs often consider long-term relationships in selecting and placing orders with suppliers. Accordingly, we may have difficulty achieving design wins from OEMs that are not currently our customers. Our operating results and potential growth could be adversely affected if we fail to achieve design wins with leading OEMs.

Defects in our products could damage our reputation, decrease market acceptance of our products, cause the unintended release of hazardous materials, result in potentially costly litigation, indemnification liability or unexpected warranty claims.

A number of factors, including design flaws, material and component failures, workmanship issues, contamination in the manufacturing environment, impurities in the materials used and unknown sensitivities to process conditions, such as temperature and humidity, as well as equipment failures, may cause our products to contain undetected errors or defects. Problems with our products may:

- cause delays in product introductions and shipments for us or our customers;
- result in increased costs and diversion of development resources;
- cause us to incur increased charges due to unusable inventory;
- require design modifications;
- result in liability for the unintended release of hazardous materials or other damages to our or our customers' property;
- create claims for rework, replacement and/or damages under our contracts with customers, as well as indemnification claims from customers;
- decrease market acceptance of, or customer satisfaction with, our products, which could result in decreased sales and product returns; or
- result in lower yields for semiconductor manufacturers.

If any of our products contain defects or have reliability, quality or compatibility problems, our reputation might be damaged and customers might be reluctant to buy our products. We may also face a higher rate of product defects as we increase our production levels. Product defects could result in warranty and indemnification liability, the loss of existing customers or impair our ability to attract new customers. In addition, we may not find defects or failures in our products until after they are installed in a manufacturer's fabrication facility. We may have to invest significant capital and other resources to correct these problems. Our current or potential customers also might seek to recover from us any losses resulting from defects or failures in our products. Hazardous materials flow through and are controlled by our products and an unintended release of these materials could result in serious injury or death. Liability claims could require us to spend significant time and money in litigation or pay significant damages or indemnification claims.

The technology labor market is very competitive, and our business will suffer if we are unable to effectively hire, promote and retain key personnel.

Our future success depends in part on the continued service of our key executive officers, as well as our research, engineering, sales, manufacturing and administrative personnel, most of whom are not subject to employment or non-competition agreements. In addition, competition for qualified personnel in the technology industry is intense, and we operate in geographic locations in which labor markets are particularly competitive.

Our business is particularly dependent on expertise which only a limited number of engineers possess. The loss of any of our key employees and officers, including our Chief Executive Officer, our Chief Financial Officer, any of our Senior Vice Presidents or any of our senior managers, or the failure to attract, promote and retain qualified employees, could adversely affect our business, operating results and financial condition.

Management transition also creates uncertainties and could harm our business. Disruption to our organization as a result of executive management transition could divert the executive management's attention away from certain key areas of our business and have a material adverse effect on our business, financial condition and results of operations.

The challenges of employee retention has also increased during the integration process with the companies we have acquired because of the necessity of combining personnel with varied business backgrounds and combining different corporate cultures and objectives, and several acquired employees, including members of the acquired companies' senior management, have left our company. The process of integrating operations and making such adjustments could cause an interruption of, or loss of momentum in, the activities of one or more of our businesses and the loss of key personnel. Employee uncertainty, lack of focus or turnover during the integration process may also disrupt our businesses.

If we fail to maintain an effective system of internal controls, we might not be able to report our financial results accurately or prevent fraud; in that case, our stockholders could lose confidence in our financial reporting, which would harm our business and could negatively impact the price of our stock.

Effective internal controls are necessary for us to provide reliable financial reports and prevent fraud. In addition, Section 404 of the Sarbanes-Oxley Act of 2002 requires us and our independent registered public accounting firm to evaluate and report on our internal control over financial reporting. The process of designing, implementing, maintaining and updating our internal controls and complying with Section 404 is expensive and time consuming, and requires significant attention from management and company resources. In addition, following the expiration of applicable grace periods, we are required to evaluate and report on the internal controls of the companies we acquire, and the attestation report we are required to obtain from our independent registered public accounting firm must include the internal control over financial reporting of the companies we acquire. Integrating acquired companies' internal control frameworks into the Company and upgrading acquired companies' controls to comply with the Sarbanes-Oxley Act has required and will require substantial resources, and we cannot assure you that we will be able to successfully or effectively maintain adequate controls over our financial processes at our acquired companies, or for our consolidated business. In addition, even though we have concluded, and our independent registered public accounting firm has concurred, that our internal control over financial reporting provides reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles as of December 30, 2016, because of its inherent limitations may not be effective as of future periods. Failure to maintain existing or implement new or improved controls, or difficulties encountered in their implementation, could harm our results of operations or cause us to fail to meet our reporting obligations. If we or our independent registered public accounting firm discover a material weakness, the disclosure of that fact, even if quickly remedied, could reduce the market's confidence in our financial statements and harm our stock price.

Fluctuations in currency exchange rates may adversely affect our financial condition and results of operations.

Our international sales are denominated primarily, though not entirely, in U.S. dollars. Many of the costs and expenses associated with our Chinese subsidiaries, Singaporean and Czech subsidiaries are paid in Chinese Renminbi, Singapore dollars, and Euro respectively and we expect our exposure to Chinese Renminbi, Singapore dollars and Euro to increase as we increase production in those facilities. In addition, purchases of some of our components are denominated in Japanese Yen and Euro. Changes in exchange rates among other currencies in which our revenue or costs are denominated and the U.S. dollar may affect our revenue, cost of sales and operating margins.

The Company uses derivative instruments, such as foreign currency forward contracts, to hedge certain exposures to fluctuations in foreign currency exchange rates. The use of such hedging activities may not offset any, or more than a portion, of the adverse financial effects of unfavorable movements in foreign exchange rates over the limited time the hedges are in place.

If environmental contamination were to occur in one of our manufacturing facilities, we could be subject to substantial liabilities.

We use substances regulated under various foreign, domestic, federal, state and local environmental laws in our manufacturing facilities. In addition, we may not be aware of or in compliance with all environmental laws or regulations that could subject us to liability in the U.S. or internationally. Our failure or inability to comply with existing or future environmental laws could result in significant remediation liabilities, the imposition of fines or the suspension or termination of the production of our products, and thus a material adverse impact on our business.

Our business is subject to the risks of earthquakes, fire, power outages, floods, and other catastrophic events, and to interruption by man-made disruptions, such as terrorism.

Our facilities could be subject to a catastrophic loss caused by natural disasters, including fires and earthquakes. We have facilities in areas with above average seismic activity, such as our manufacturing facility in South San Francisco, California and our manufacturing and headquarters facilities in Hayward, California. If any of our facilities were to experience a catastrophic loss, it could disrupt our operations, delay production and shipments, reduce revenue and result in large expenses to repair or replace the facility. In addition, we have in the past experienced, and may in the future experience, extended power outages at our facilities. We do not carry insurance policies that cover potential losses caused by earthquakes or other natural disasters or power loss.

In addition, disruption in supply resulting from natural disasters or other casualties or catastrophic events, such as earthquakes, severe weather such as storms or floods, fires, labor disruptions, power outages, terrorist attacks or political unrest, may result in certain of our suppliers being unable to deliver sufficient quantities of components or raw materials at all or in a timely manner, disruptions in our operations or disruptions in our customers' operations. For example, in 2011, the northern region of Japan experienced a severe earthquake followed by a tsunami. These geological events caused significant damage in that region and adversely affected Japan's infrastructure and economy. Some of our suppliers are located in Japan and they experienced, and may experience in the future, shutdowns or disruptions as a result of these types of events, and their operations may be negatively impacted by these events. Many of our customers and suppliers are also located in California, and may be subject to the same risk of seismic activity as described for us above.

To the extent that natural disasters or other calamities or casualties should result in delays or cancellations of customer orders, or the delay in the manufacture or shipment of our products or services, our business, financial condition and operating results would be adversely affected.

Changes in tax rates or tax assets and liabilities could affect results of operations.

As a global company, we are subject to taxation in the United States and various other countries. Significant judgment is required to determine and estimate worldwide tax liabilities. Our future annual and quarterly tax rates could be affected by numerous factors, including changes in the: (1) applicable tax laws; (2) amount and composition of pre-tax income in countries with differing tax rates; or (3) valuation of our deferred tax assets and liabilities.

In addition, we are subject to regular examination by the Internal Revenue Service and other tax authorities, and from time to time we initiate amendments to previously filed tax returns. We regularly assess the likelihood of favorable or unfavorable outcomes resulting from these examinations and amendments to determine the adequacy of our provision for income taxes, which requires estimates and judgments. Although we believe our tax estimates are reasonable, there can be no assurance that the tax authorities will agree with such estimates. We may have to engage in litigation to achieve the results reflected in the estimates, which may be time-consuming and expensive. There can be no assurance that we will be successful or that any final determination will not be materially different from the treatment reflected in our historical income tax provisions and accruals, which could materially and adversely affect our financial condition and results of operations.

The market for our stock is subject to significant fluctuation.

The size of our public market capitalization is relatively small, and the average volume of our shares that are traded is relatively low. The market price of our common stock could be subject to significant fluctuations. Among the factors that could affect our stock price are:

- quarterly variations in our operating results;
- our ability to successfully introduce new products and manage new product transitions;
- changes in revenue or earnings estimates or publication of research reports by analysts;
- speculation in the press or investment community;

- strategic actions by us, our customers or our competitors, such as acquisitions or restructurings;
- announcements relating to any of our key customers, significant suppliers or the semiconductor manufacturing and capital equipment industry generally;
- general market conditions;
- the effects of war and terrorist attacks; and
- domestic and international economic or political factors unrelated to our performance.

The stock markets in general, and the markets for technology stocks in particular, have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. These broad market fluctuations may adversely affect the trading price of our common stock.

Certain regulations related to conflict minerals could adversely impact our business.

The Dodd-Frank Wall Street Reform and Consumer Protection Act contains provisions to improve transparency and accountability concerning the supply of certain minerals, known as conflict minerals, originating from the Democratic Republic of Congo (DRC) and adjoining countries. As a result, in August 2012 the SEC adopted annual disclosure and reporting requirements for those companies who use conflict minerals mined from the DRC and adjoining countries in their products. These requirements require us to perform on-going due diligence efforts on our supply chain and require public disclosure of the nature and results of these efforts. We filed our most recent conflict minerals report on Form SD on May 27, 2016 reporting that we could not yet determine whether the conflict minerals we source were, directly or indirectly, used to finance or benefit armed groups in the Covered Countries. There have been and there will be costs associated with complying with these disclosure requirements to determine the sources of conflict minerals used in our products and other potential changes to products, processes or sources of supply as a consequence of such verification activities. Complying with these rules could adversely affect the sourcing, supply and pricing of materials used in our products and result in substantial additional costs. As there may be only a limited number of suppliers offering “conflict free” conflict minerals, we cannot be sure that we will be able to obtain necessary conflict minerals from such suppliers in sufficient quantities or at competitive prices. Also, we may face reputational challenges if we determine that certain of our products contain minerals not determined to be conflict free or if we are unable to sufficiently verify the origins for all conflict minerals used in our products through the procedures we may implement. In addition, if we are unable to comply with these rules, we could be subject to enforcement actions by the Securities and Exchange Commission and liability under the Securities Exchange Act of 1934, as amended, which could result in material adverse consequences to our business, as well as significant fines and penalties.

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

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

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

We do not intend to declare and pay dividends on our capital stock for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth. Additionally, the terms of our credit agreement also restrict our ability to pay dividends. Therefore, you are not likely to receive any dividends on your common stock for the foreseeable future.

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

None.

ITEM 3. Defaults Upon Senior Securities

None.

ITEM 4. Mine Safety Disclosures

Not Applicable.

ITEM 5. Other Information

None.

ITEM 6. Exhibits

(a) Exhibits

The following exhibits are filed with this current Report on Form 10-Q for the quarter ended September 29, 2017:

<u>Exhibit Number</u>	<u>Description</u>
10.1	Amendment to Offer Letter and change in Control Severance Agreement by and between Jim Scholhamer and Ultra Clean Holdings, Inc.(1)
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of the Chief Executive Officer and the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Calculation Linkbase Document
101.DEF	XBRL Taxonomy Definition Linkbase Document
101.LAB	XBRL Taxonomy Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

(1) Incorporated by reference to Exhibit 10.2 of the Company's Form 10-Q filed with the SEC on August 9, 2017.

Exhibit Index

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SIGNAT URES

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.

ULTRA CLEAN HOLDINGS, INC.
(Registrant)

Date: November 8, 2017

By: /S/ JAMES P. SCHOLHAMER
Name: **James P. Scholhamer**
Title: **Chief Executive Officer**
(Principal Executive Officer and duly authorized signatory)

Date: November 8, 2017

By: /S/ SHERI SAVAGE
Name: **Sheri Savage**
Title: **Chief Financial Officer, Senior Vice President and Secretary**
(Principal Financial and Accounting Officer and duly authorized signatory)

CERTIFICATION

I, James P. Scholhamer, certify that:

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

Date: November 8, 2017

/s/ JAMES P. SCHOLHAMER

James P. Scholhamer
Chief Executive Officer

CERTIFICATION

I, Sheri Savage, certify that:

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

Date: November 8, 2017

/s/ SHERI SAVAGE

Sheri Savage

Chief Financial Officer and Senior Vice President of Finance

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

The certification set forth below is being submitted in connection with the Quarterly Report on Form 10-Q (the “Report”) of Ultra Clean Holdings, Inc. (the “Company”) for the purpose of complying with Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 (the “Exchange Act”) and Section 1350 of Chapter 63 of Title 18 of the United States Code.

James P. Scholhamer, the Chief Executive Officer and Sheri Savage, the Chief Financial Officer of the Company, each certifies that, to the best of his or her knowledge:

- (1) the Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 8, 2017

/s/ JAMES P. SCHOLHAMER

James P. Scholhamer
Chief Executive Officer

Date: November 8, 2017

/s/ SHERI SAVAGE

Sheri Savage
Chief Financial Officer and Senior Vice President of Finance