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 June 29, 2018

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	**61-1430858**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
26462 Corporate Avenue, Hayward, California	**94545**
(Address of principal executive offices)	**(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, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (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 July 27, 2018: 38,935,221

ULTRA CLEAN HOLDINGS, INC.

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PART I. FINANCIA L INFORMATION

ITEM 1. Financial Statements

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

	June 29, 2018	December 29, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	$ 141,146	$ 68,306
Accounts receivable, net of allowance of $67 and $69, respectively	98,608	90,213
Inventories	228,570	236,840
Prepaid expenses and other	15,115	12,089
Total current assets	483,439	407,448
Equipment and leasehold improvements, net	38,769	32,246
Goodwill	85,248	85,248
Purchased intangibles, net	29,392	31,587
Deferred tax assets, net	5,067	4,951
Other non-current assets	1,830	1,932
Total assets	$ 643,745	$ 563,412
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Bank borrowings	$ 54,826	$ 12,381
Accounts payable	113,803	173,521
Accrued compensation and related benefits	9,416	10,788
Deferred rent, current portion	680	670
Other current liabilities	10,143	9,987
Total current liabilities	188,868	207,347
Bank borrowings, net of current portion	—	39,893
Deferred tax liability	9,868	9,981
Deferred rent and other liabilities	5,682	5,886
Total liabilities	204,418	263,107
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; 38,926,652 and 33,664,940 shares issued and outstanding, in 2018 and 2017, respectively	39	34
Additional paid-in capital	285,390	188,639
Common shares held in treasury, at cost, 601,944 shares in 2018 and 2017	(3,337)	(3,337)
Retained earnings	156,823	113,122
Accumulated other comprehensive gain	412	1,847
Total stockholders' equity	439,327	300,305
Total liabilities and stockholders' equity	$ 643,745	$ 563,412

(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		Six Months Ended	
	June 29, 2018	June 30, 2017	June 29, 2018	June 30, 2017
Sales	$ 290,213	$ 228,261	$ 605,055	$ 432,855
Cost of goods sold	244,148	184,890	510,186	351,989
Gross profit	46,065	43,371	94,869	80,866
Operating expenses:				
Research and development	2,915	2,774	5,944	5,680
Sales and marketing	3,630	3,351	7,435	6,402
General and administrative	16,856	12,841	31,918	24,606
Total operating expenses	23,401	18,966	45,297	36,688
Income from operations	22,664	24,405	49,572	44,178
Interest and other income (expense), net	(809)	(1,120)	(483)	(2,058)
Income before provision for income taxes	21,855	23,285	49,089	42,120
Income tax provision	2,895	3,106	5,388	7,600
Net income	$ 18,960	$ 20,179	$ 43,701	$ 34,520
Net income per share:				
Basic	$ 0.49	$ 0.60	$ 1.16	$ 1.04
Diluted	$ 0.48	$ 0.59	$ 1.14	$ 1.01
Shares used in computing net income per share:				
Basic	38,802	33,433	37,763	33,247
Diluted	39,297	34,064	38,418	34,017

(See accompanying Notes to Condensed Consolidated Financial Statements)

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

	Three Months Ended		Six Months Ended	
	June 29, 2018	June 30, 2017	June 29, 2018	June 30, 2017
Net income	$ 18,960	$ 20,179	$ 43,701	$ 34,520
Other comprehensive income:				
Change in cumulative translation adjustment	(799)	591	(463)	689
Cash flow hedges:				
Change in fair value of derivatives	(71)	679	(62)	692
Adjustment for net gain (loss) realized and included in net income	(24)	—	(910)	7
Total change in unrealized gain (loss) on derivative instruments	(95)	679	(972)	699
Other comprehensive income (loss), net of tax	(894)	1,270	(1,435)	1,388
Comprehensive income	$ 18,066	$ 21,449	$ 42,266	$ 35,908

(See accompanying Notes to Condensed Consolidated Financial Statements)

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

	Six Months Ended	
	June 29, 2018	June 30, 2017
Cash flows from operating activities:		
Net income	$ 43,701	$ 34,520
Adjustments to reconcile net income to net cash provided by (used for) operating activities:		
Depreciation and amortization	2,917	2,586
Amortization of finite-lived intangibles	2,195	2,462
Amortization of debt issuance costs	76	76
Stock-based compensation	4,920	2,762
Change in the fair value of financial instruments	(228)	619
Loss on the disposal of fixed assets	201	—
Changes in assets and liabilities:		
Accounts receivable	(8,758)	(26,717)
Inventories	7,766	(35,174)
Prepaid expenses and other	(3,558)	13
Deferred income taxes	(113)	(40)
Other non-current assets	(313)	(337)
Accounts payable	(59,490)	31,350
Accrued compensation and related benefits	(1,332)	3,010
Income taxes payable	(3,933)	3,993
Other liabilities	3,903	1,058
Net cash provided by (used for) operating activities	(12,046)	20,181
Cash flows from investing activities:		
Purchases of equipment and leasehold improvements	(9,666)	(5,770)
Net cash used for investing activities	(9,666)	(5,770)
Cash flows from financing activities:		
Proceeds from bank borrowings	21,886	5,205
Proceeds from issuance of common stock	94,454	1,677
Principal payments on bank borrowings	(19,148)	(12,607)
Employees' taxes paid upon vesting of restricted stock units	(2,618)	(1,810)
Net cash provided by (used for) financing activities	94,574	(7,535)
Effect of exchange rate changes on cash and cash equivalents	(22)	141
Net increase in cash and cash equivalents	$ 72,840	$ 7,017
Cash and cash equivalents at beginning of period	68,306	52,465
Cash and cash equivalents at end of period	$ 141,146	$ 59,482
Supplemental cash flow information:		
Income taxes paid	$ 9,200	$ 3,797
Income tax refunds	$ 43	$ 25
Interest paid	$ 942	$ 2,259
Non-cash investing and financing activities:		
Equipment and leasehold improvements purchased included in accounts payable	$ 2,575	$ 1,475

(See accompanying Notes to Condensed Consolidated Financial Statements)

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) 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, to expand the Company's capabilities with existing customers. In May 2018, Marchi and Miconex changed their names to UCT Thermal Solutions, Inc. ("Thermal") and to UCT Fluid Delivery Solutions s.r.o ("FDS"), respectively.

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 29, 2017 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 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.

Fair Value of Measurements — The Company measures its cash equivalents, interest rate swap contract and forward contracts 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 wo uld 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):

		Fair Value Measurement at Reporting Date Using		
Description	**June 29, 2018**	**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	$ 14	$ —	$ 14	$ —
Forward contracts	$ 457	$ —	$ 457	$ —

		Fair Value Measurement at Reporting Date Using		
Description	**December 29, 2017**	**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	$ 30	$ —	$ 30	$ —
Forward contracts	$ 1,302	$ —	$ 1,302	$ —

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 net realizable value. 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 o f 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 to five years. Costs related to the design or 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 Enterprise Resource Planning ("ERP") implementation project.

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 June 29, 2018. 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.

The determination of the Company's tax provision is subject to judgments and estimates.

Revenue Recognition — See Note 3 to the Company's Condensed Consolidated Financial Statements.

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 liabil ities 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.

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.

There were no RSUs and performance stock units ("PSUs") granted during the quarter ended June 29, 2018. During the quarter ended March 30, 2018, the Company granted 174,900 RSUs, with a weighted average fair value of $19.57 per share, and granted 87,050 performance stock units with a weighted average fair value of $19.25 per share.

During the six months ended June 29, 2018, 135,753 vested shares were withheld to satisfy withholding tax obligations, resulting in the net issuance of 448,439 shares. As of June 29, 2018, approximately $11.5 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 1.5 years. As of June 29, 2018, a total of 1,249,702 RSUs and PSUs remain outstanding with an aggregate intrinsic value of $20.7 million and a weighted average remaining contractual term of 1.1 years.

Restricted Stock Awards — As of June 29, 2018, a total of 38,010 RSAs were outstanding. The total unamortized expense of the Company's unvested restricted stock awards as of June 29, 2018 was $0.5 million.

The following table summarizes the Company's RSU, PSU and RSA activity for the six months ended June 29, 2018:

	Shares	Aggregate Fair Value (in thousands)
Unvested restricted stock units and restricted stock awards at December 29, 2017	1,676,312	$ 38,706
Granted	299,960	
Vested	(629,192)	
Forfeited	(97,378)	
Unvested restricted stock units and restricted stock awards at June 29, 2018	1,249,702	$ 20,745
Vested and expected to vest restricted stock units and restricted stock awards at June 29, 2018	1,069,087	$ 17,747

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

	Three Months Ended		Six Months Ended	
	June 29, 2018	June 30, 2017	June 29, 2018	June 30, 2017
Cost of sales (1)	$ 517	$ 258	$ 1,023	$ 601
Research and development	10	47	71	100
Sales and marketing	193	97	396	221
General and administrative	1,636	978	3,430	1,840
	2,356	1,380	4,920	2,762
Income tax benefit	(312)	(184)	(540)	(498)
Stock-based compensation expense, net of tax	$ 2,044	$ 1,196	$ 4,380	$ 2,264

(1) Stock-based compensation expense capitalized in inventory for the three and six months ended June 29, 2018 and June 30, 2017 was not significant.

Recently Adopted Accounting Pronouncements

Effective December 30, 2017, the Company adopted FASB Accounting Standards Codification (ASC) 606, *Revenue from Contracts with Customers (Topic 606)* using the modified retrospective approach, which requires the recognition of the cumulative effect of initially applying the standard (if any) as an adjustment to the opening retained earnings of the fiscal year beginning December 30, 2017. The adoption of Topic 606 did not result in the recognition of a cumulative adjustment to the opening retained earnings under the modified retrospective approach, nor did it have a material effect on the Company's financial position or results of operations. The adoption of Topic 606 did, however, result in the addition of required disclosures within the notes to financial statements. This new standard replaced the previous revenue recognition guidance under U.S. GAAP. See Note 3, Revenue Recognition in Notes to Condensed Consolidated Financial Statements.

Our implementation team consisted of senior leadership from finance, legal, sales and operations with periodic progress reporting to management and to the audit committee of our board of directors. Implementation consisted of a review of the Company's significant contracts and an evaluation of our systems and control environment to support additional disclosures under the new standard, as well as updates to our policies and procedures.

During our assessment, we considered whether the adoption would require a transition from point-in-time revenue recognition to an over-time approach for products produced by us without an alternative use, which would result in acceleration of revenue. We concluded based on enforceable rights or prevailing terms and conditions included in the agreements with our customers, an enforceable right of payment that includes a reasonable profit throughout the duration of the contract does not exist. Therefore, we will remain at a point-in-time approach and record revenue at the point control transfers to our customers.

Beginning fiscal 2018, the Company adopted ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments,* which clarifies clas sification of seven different cash receipts and payments on statement of cash flows and on how the predominance principle should be applied. The adoption of this guidance did not have an impact on the Company's consolidated financial statements.

Beginning fiscal 2018, the Company adopted ASU 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business* , which clarifies the definition of a business to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The impact of the adoption on the Company's financial position and results of operations will be dependent upon future acquisitions or disposals, if any.

Beginning fiscal 2018, the Company adopted ASU No. 2017-09, *Stock Compensation: Scope of Modification Accounting* , which clarifies when changes to the terms or conditions of a share-based payment award must be accounted for as a modification. The new guidance requires the application of modification accounting if the value, vesting conditions or classification of the award changes. The impact of the adoption of this guidance will depend on whether the Company makes any future modifications of share-based payment awards.

Recent Accounting Pronouncements Not Yet Adopted

In February 2016, the FASB issued Accounting Standards Update (ASU) No. 2016-02, *Leases (Topic 842)* . Topic 842 supersedes the lease recognition requirements in ASC Topic 840, Leases. 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. The Company currently expects that its operating lease commitments will be subject to the new standard and recognized as right-of-use asset and operating lease liability upon adoption of this standard, which will increase the total assets and total liabilities that it reports relative to such amounts prior to adoption.

In January 2017, the FASB issued Accounting Standards Update No. 2017-04, *Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* , which 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 2020. 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 August 2017, the FASB issued ASU 2017-12, *Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities* , 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 FDS 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 1.98%, as of June 29, 2018. This interest rate swap effectively locks in a fixed interest rate of 2.99% on $4.7 million of the $7.4 million term loan as of June 29, 2018, with a decreasing notional amount based on prorated quarterly principal payments over the remaining period of

the term loan. 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) when the hedged transactions are realized. If the hedged transactions beco me probable of not occurring, the corresponding amounts in AOCI would be immediately reclassified to interest and other income (expense), net. As of June 29, 2018, the effective portion of the Company's cash flow hedge before tax effect was less than $0.1 million, of which less than $0.1 million is expected to be reclassified from AOCI into earnings within the next 12 months.

Non-Designated Derivatives

A portion of FDS's forward contracts with a total notional amount of $4.7 million is not designated as a hedging instrument. The Company recognizes gains and losses on these contracts, 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 June 29, 2018 and December 29, 2017.

		June 29, 2018		
	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	Prepaid expenses and other	$ 14	$ —	$ 14
Forward contracts	Prepaid expenses and other	$ 61	$ 223	$ 284
Forward contracts	Other non-current assets	$ 21	$ 152	$ 173

		December 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:				
Level 2:				
Interest rate swap	Prepaid expenses and other	$ 30	$ —	$ 30
Forward contracts	Prepaid expenses and other	$ 714	$ —	$ 714
Forward contracts	Other non-current assets	$ 588	$ —	$ 588

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		Six Months Ended	
	June 29, 2018	June 30, 2017	June 29, 2018	June 30, 2017
Derivatives in Cash Flow Hedging Relationship				
Interest rate swap	$ (21)	$ (2)	$ (36)	$ 11
Forward contracts	$ (82)	$ 841	$ (71)	$ 841

		Gains Reclassified from AOCI into Income (Effective Portion)			
		Three Months Ended		Six Months Ended	
	Income Statement Location	June 29, 2018	June 30, 2017	June 29, 2018	June 30, 2017
Derivatives in Cash Flow Hedging Relationship					
Interest rate swap	Interest and other income (expense), net	$ 11	$ —	$ 20	$ 7
Forward contracts	Cost of goods sold	$ (35)	$ —	$ (930)	$ —

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 thre e and six months ended June 29, 2018 and June 30, 2017.

The effect of derivative instruments not designated as hedging instruments on income for the three and six months ended June 29, 2018 was $(0.6) million and none for the three and six months ended June 30, 2017.

3. Revenue Recognition

On December 30, 2017, the Company adopted Topic 606 using the modified retrospective method to value those contracts which were not completed as of December 30, 2017. The adoption of Topic 606 did not have a material effect on the Company's financial position or results of operations.

Revenue is recognized when control of the promised goods or services is transferred to the Company's customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for those goods or services. 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.

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. The Company sells its products primarily to customers in the semiconductor capital equipment industry. The Company's revenues are highly concentrated, and we are therefore highly dependent upon a small number of customers. Typical payment terms with our customers range from thirty to sixty days.

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		Six Months Ended	
	June 29, 2018	June 30, 2017	June 29, 2018	June 30, 2017
Lam Research Corporation	61.9 %	57.1 %	64.2 %	57.9 %
Applied Materials, Inc.	21.6	25.7	21.5	26.3
Total	83.5 %	82.8 %	85.7 %	84.2 %

Two customers' accounts receivable balances, Lam Research Corporation and Applied Materials, Inc., were individually greater than 10% of accounts receivable as of June 29, 2018 and as of December 29, 2017, and in the aggregate represented approximately 70.6% and 75.8% of accounts receivable, respectively.

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 and are not considered significant.

The Company's products are manufactured at our facilities in the U.S.A., China, Singapore and the Czech Republic. See Note 10 for geographical revenue details. Sales to customers are initiated through a purchase order and are governed by our standard terms and conditions, written agreements, or both. Revenue is recognized when performance obligations under the terms of an agreement with a customer are satisfied; generally, this occurs with the transfer of control of our products. Transfer of control occurs at a specific point-in-time. Based on the enforceable rights included in our agreements or prevailing terms and conditions, products produced by the Company without an alternative use are not protected by an enforceable right of payment that includes a reasonable profit throughout the duration of the agreement. Sales with terms f.o.b. shipping point are recognized at the time of shipment. For sales transactions with terms f.o.b. destination, revenue is recorded when the product is delivered to the customer's site. Consignment sales are recognized in revenue at the earlier of the period that the goods are consumed or after a period of time subsequent to receipt by the customer as specified by terms of the agreement, provided control of the promised goods or services has transferred.

Revenue is measured as the am ount of consideration we expect to receive in exchange for transferring goods or providing services. Sales, value-add, and other taxes we collect concurrent with revenue-producing activities are excluded from revenue. Certain of our customers may receive cash-based incentives, such as rebates or credits, which are accounted for as variable consideration. We estimate these amounts based on the expected amount to be provided to customers and reduce revenues recognized. As of June 29, 2018, an accrual for un paid customer rebates of $ 0. 7 million is included in accrued expenses on the Company's Condensed Consolidated Balance Sheet. The adoption of Topic 606 did not have a significant impact on our estimates for variable consideration.

4. Balance Sheet Information

Inventories consisted of the following (in thousands):

	June 29, 2018	December 29, 2017
Raw materials	$ 177,432	$ 183,457
Work in process	37,581	43,826
Finished goods	13,557	9,557
Total	$ 228,570	$ 236,840

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

	June 29, 2018	December 29, 2017
Computer equipment and software	$ 11,853	$ 11,672
Furniture and fixtures	3,355	3,318
Machinery and equipment	20,459	19,781
Leasehold improvements	24,006	22,839
Accumulated depreciation	(40,994)	(38,879)
	18,679	18,731
Construction in progress	20,090	13,515
Total	$ 38,769	$ 32,246

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 b usiness 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 tha t time. Details of goodwill and other intangible assets were as follows (in thousands):

	June 29, 2018			December 29, 2017		
	Goodwill	Intangible Assets	Total	Goodwill	Intangible Assets	Total
Carrying amount	$ 85,248	$ 29,392	$ 114,640	$ 85,248	$ 31,587	$ 116,835

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 June 29, 2018			As of December 29, 2017			
	Gross Carrying Amount	Accumulated Amortization	Carrying Value	Gross Carrying Amount	Accumulated Amortization	Carrying Value	Useful Life
AIT							
Customer relationships	$ 19,000	$ (18,307)	$ 693	$ 19,000	$ (17,998)	$ 1,002	7
Tradename	1,900	(1,900)	—	1,900	(1,900)	—	6
Intellectual property/know-how	1,600	(1,371)	229	1,600	(1,257)	343	7
Thermal							
Customer relationships	9,900	(3,383)	6,517	9,900	(2,887)	7,013	10
Tradename	1,170	(1,170)	—	1,170	(1,170)	—	6
Intellectual property/know-how	12,300	(4,712)	7,588	12,300	(4,023)	8,277	8-12
FDS							
Customer relationships	8,800	(3,422)	5,378	8,800	(2,835)	5,965	7.5
UCT							
Tradename	8,987	—	8,987	8,987	—	8,987	*
Total	$ 63,657	$ (34,265)	$ 29,392	$ 63,657	$ (32,070)	$ 31,587	

* 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 intellectual property/know-how and customer relationships intangible assets for Thermal and FDS 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 for the three months ended June 29, 2018 and June 30, 2017. Amortization expense is charged to general and administrative expense. As of June 29, 2018, future estimated amortization expense is expected to be as follows (in thousands):

	Amortization Expense
2018 (remaining in year)	$ 2,196
2019	4,040
2020	3,543
2021	3,543
2022	3,543
Thereafter	3,540
Total	$ 20,405

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 June 29, 2018, the interest rates on the outstanding Term Loan and Revolving Credit facility were 3.98% (2.0% fixed and 1.98% variable based on LIBOR) and 4.25% fixed, respectively. In order to manage interest rate risk on the variable component of the Term Loan the Company entered into an interest rate swap with the Lenders in September 2015 with a total 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 LIBOR rate the Company is required to pay under its Term Loan, or 1.98%, as of June 29, 2018. This interest rate swap effectively locked in a fixed interest rate of 2.99% on $4.7 million of the $7.4 million term loan balance outstanding as of June 29, 2018, with a decreasing notional amount based on principal payments over the remaining period of the term loan.

The Credit Agreement requires the Company to maintain certain financial covenants including a consolidated fixed charge coverage ratio (as defined in the Credit Agreement) of at least 1.25 to 1.00 starting with the end of the first quarter of fiscal 2015 and a consolidated leverage ratio (as defined in the Credit Agreement) no greater than 3.5 to 1.00 starting with the end of the first quarter of fiscal 2015. The Credit Agreement also includes other customary affirmative and negative covenants. In December 2015, the Credit Agreement was amended to add a covenant requiring the Company to maintain 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 June 29, 2018.

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 facility 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 facility.

As of June 29, 2018, the Company had outstanding amounts under the Term Loan and Revolving Credit Facility of $7.4 million and $39.9 million, respectively, which are gross of unamortized debt issuance costs of $0.1 million, for a total debt balance with this credit facility of $47.2 million.

As of June 29, 2018, FDS had outstanding amount under a revolving credit facility of 6.5 million euros (approximately $7.6 million) with an interest rate of 1.3% plus a variable rate based on the Euro Interbank Offered Rate.

As of June 29, 2018, the Company's total bank debt was $54.9 million. As of June 29, 2018, the Company had $0.1 million and 1.8 million euros (approximately $2.0 million) available to borrow on our revolving credit facilities in the U.S. and Czech Republic, respectively.

7. Income Tax

On December 22, 2017, the U.S. government enacted the Tax Cuts and Jobs Act of 2017 (TCJA). The TCJA significantly revised the future ongoing U.S. corporate income tax by, among other things, lowering U.S. corporate income tax rates from 35% to 21% and implementing a territorial tax system. Other provisions included an immediate deduction for qualified investments and limitations on the deductibility of interest expense and executive compensation. In December 2017, the SEC issued Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act (SAB 118), which allows companies to record provisional amounts during a measurement period not to extend more than one year beyond the Act enactment date. Since the TCJA was passed late in the fourth quarter of 2017, and ongoing guidance and accounting interpretation are expected during the year, the Company considers the accounting for deferred tax remeasurements, the impact of the transition of U.S. international taxation from a worldwide tax system to a territorial system and other provisions to be incomplete. There have been no material changes to the provisional adjustments disclosed in the Company's 2017 Form 10-K. The Company is continuing to evaluate the estimates used to record and disclose the effects of the Tax Act.

Effe ctive January 1, 2018, the TCJA created a new requirement to include in U.S. income global intangible low-taxed income (GILTI) earned by controlled foreign corporations ("CFC"). The effect of GILTI, and the associated foreign tax credit, is to effectively create a minimum floor of taxation on CFC profits that must be included currently in the gross income of the CFCs' U.S. shareholder. Under U.S. GAAP, we are allowed to make an accounting policy choice of either (1) treating taxes due on future U.S. inclusi ons related to GILTI as a current-period expense when incurred (the "period cost method") or (2) factoring such amounts into a company's measurement of its deferred taxes (the "deferred method"). The Company uses the period cost method in recording the tax effects of GILTI in its financial statements.

The Company's income tax provision and effective tax rates for the three and six months ended June 29, 2018 were $2.9 million and 13.2% and $5.4 million and 11.0% and $3.1 million and 13.3% and $7.6 million and 18.0% for the three and six months ended June 30, 2017. The change in respective rates reflects, primarily, the recently enacted TCJA as discussed above, changes in the geographic mix of worldwide earnings and financial results in jurisdictions which are taxed at different rates, the impact of losses in jurisdictions with full federal and state valuation allowances and tax benefits associated with share-based compensation.

Company management continuously evaluates the need for a valuation allowance and, as of June 29, 2018, 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 provides for U.S. income taxes on its undistributed earnings of foreign subsidiaries as required by the TCJA. However, the Company does not provide for any withholding taxes on its undistributed earnings of its subsidiaries that it intends to invest indefinitely outside the U.S. In prior years, 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. The Company does not currently plan to remit any earnings from its China subsidiaries to any other foreign subsidiary in 2018. 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 foreign taxes on some or all of these undistributed earnings. As of June 29, 2018, the Company had undistributed earnings of foreign subsidiaries that are indefinitely invested outside of the U.S. of approximately $207.6 million. It is not practicable to determine the tax liability that might be incurred if these earnings were to be distributed.

The Company's gross liability for unrecognized tax benefits as of June 29, 2018 and June 30, 2017 was $0.3 million and $0.3 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 (loss) per share (in thousands, except per share data):

	Three Months Ended		Six Months Ended	
	June 29, 2018	June 30, 2017	June 29, 2018	June 30, 2017
Numerator:				
Net income	$ 18,960	$ 20,179	$ 43,701	$ 34,520
Denominator:				
Shares used in computation — basic:				
Weighted average common shares outstanding	38,802	33,433	37,763	33,247
Shares used in computation — diluted:				
Shares used in computing basic net income per share	38,802	33,433	37,763	33,247
Dilutive effect of common shares outstanding subject to repurchase	489	622	649	749
Dilutive effect of options outstanding	6	9	6	21
Weighted average shares used in computing diluted net income per share	39,297	34,064	38,418	34,017
Net income per share — basic	$ 0.49	$ 0.60	$ 1.16	$ 1.04
Net income per share — diluted	$ 0.48	$ 0.59	$ 1.14	$ 1.01

On February 2, 2018, the Company successfully completed a follow-on offering whereby the Company issued 4,761,905 shares of its common stock. The weighted average impact for the six months ended June 29, 2018 was 3,872,318 shares.

9. Commitments and Contingencies

The Company had commitments to purchase inventory totaling approximately $134.2 million at June 29, 2018.

The Company leases properties domestically in Hayward, California, Austin, Texas, Chandler, Arizona and South San Francisco, California and internationally in China, Singapore, the 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 June 29, 2018, future minimum payments under these operating leases were as follows (in thousands):

Fiscal Year	
2018 (remaining in year)	$ 4,110
2019	6,256
2020	5,250
2021	4,640
2022	3,840
Thereafter	116
Total minimum lease payments	$ 24,212

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's principal markets include North America, Asia and Europe. The Company's foreign operations are conducted primarily through its wholly-owned subsidiaries in China, Singapore and the Czech Republic. 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		Six Months Ended	
	June 29, 2018	June 30, 2017	June 29, 2018	June 30, 2017
United States	$ 159,187	$ 129,349	$ 343,962	$ 233,705
China	16,812	5,166	18,978	18,113
Singapore	82,904	73,810	185,537	134,050
Austria	16,393	8,491	29,929	19,712
Other	14,917	11,445	26,649	27,275
	$ 290,213	$ 228,261	$ 605,055	$ 432,855

At June 29, 2018, approximately $10.0 million and $1.5 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 June 30, 2017, approximately $6.5 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.

11. Subsequent Events

On July 24, 2018, the Company entered into an Agreement and Plan of Merger (the "Merger Agreement") to acquire Quantum Global Technologies, LLC ("Quantum"), for approximately $342.0 million in cash, subject to certain closing adjustments as provided in the Merger Agreement, including a working capital adjustment, and up to $15.0 million of potential cash earn-out payments if Quantum achieves certain specified revenue levels through December 27, 2019, pursuant to the provisions of the Merger Agreement. The Company's primary reason for this acquisition is to expand UCT into an adjacent market and increase the served addressable market in its core semiconductor business.

The Company also entered into a commitment letter (the "Commitment Letter") with Barclays Bank PLC ("Barclays"), pursuant to which Barclays has committed to provide senior secured credit facilities to the Company in an aggregate amount of $400.0 million, comprised of (i) $350.0 million under a seven-year senior secured term loan B facility (the "Term Loan") and (ii) $50.0 million under a five-year senior secured revolving credit facility (the "Revolving Credit Facility" and, together with the Term Loan, the "Credit Facilities"). The Term Loan, together with cash on hand, will be used to finance the transaction contemplated by the Merger Agreement, refinance existing debt, and pay fees and expenses incurred in connection with the Credit Facilities and the acquisition. The Revolving Credit Facility will be used to provide ongoing working capital and capital for other general corporate purposes of the Company and its subsidiaries.

The Merger is expected to close in the third quarter of 2018, and is subject to customary regulatory approvals and closing conditions, including the expiration or termination of the waiting period under the Hart-Scott- Rodino Act. Barclays' commitment to provide the Credit Facilities is subject to customary closing conditions.

ITEM 2. Management's Discussion And Analy sis 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 14, 2018. 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 14, 2018. 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 industry and industry segments with similar requirements including display, consumer and medical. We focus on providing specialized engineering and manufacturing solutions for these applications. We enable our customers to realize lower manufacturing costs and reduced design-to-delivery cycle times while maintaining high quality standards.

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., Thermal and FDS.

Financial Highlights and Market Trends

We believe our ability to custom design, manufacture, and deliver on unexpected, time-sensitive orders, as well as our commitment to customer satisfaction, continues to strengthen our position as a critical supplier to our customers. Our ability to provide engineering, critical fabrication, integration and testing capabilities on short notice, while meeting stringent quality levels, has made us a preferred outsourcing partner in the semiconductor capital equipment industry. Healthy demand drivers supporting the WFE market positions us to take advantage of continued opportunities in the semiconductor market over the long-term. We also continue to actively consider ways to broaden our capabilities and offerings for our customers, both organically and through strategic acquisitions, and actively focus on driving operational efficiencies to adjust to market conditions.

We believe the overall semiconductor market will see sustained long-term strength from ongoing demand caused by a broad range of drivers, including emerging application such as autonomous vehicles, the Internet of Things, high performance computing, artificial intelligence, and technology to support the data sharing economy. We also believe that semiconductor equipment OEMs are increasingly relying on partners like UCT to fulfill their expanding capacity requirements. Midway through 2018, we began to see a reduction in orders from some of our OEM customers, as certain manufacturers announced they were deferring capital investment. We expect the impact of these reductions to be reflected beginning in the third quarter of 2018.

We have in the past made acquisitions of complementary businesses and assets and regularly evaluate opportunities to acquire complementary businesses or assets. On July 24, 2018, the Company entered into an Agreement and Plan of Merger (the "Merger Agreement") to acquire Quantum Global Technologies, LLC ("Quantum") for approximately $342.0 million in cash, subject to certain closing adjustments as provided in the Merger Agreement, including a working capital adjustment, and up to $15.0 million of potential cash earn-out payments if Quantum achieves certain specified revenue levels through December 27, 2019, pursuant to the provisions of the Merger Agreement. The Company's primary reason for this acquisition is to expand UCT into an adjacent market and increase the served addressable market in its core semiconductor business.

The Company also entered into a commitment letter (the " Commitment Letter ") with Barclays Bank PLC (" Barclays "), pursuant to which Barclays has committed to provide senior secured credit facilities to the Company in an aggregate amount of $400.0 million, comprised of (i) $350.0 million under a seven-year senior secured term loan B facility (th e " Term Loan ") and (ii) $50.0 million under a five-year senior secured revolving credit facility (the " Revolving Credit Facility " and, together with the Term Loan, the " Credit Facilities "). The Term Loan, together with cash on hand, will be used to finance the transaction contemplated by the Merger Agreement, refinance existing debt, and pay fees and expenses incurred in connection with the Credit Facilities and the acquisition. The Revolv ing Credit Facility will be used to provide ongoing working capital and capital for other general corporate purposes of the Company and its subsidiaries.

The Merger is expected to close in the third quarter of 2018, and is subject to customary regulatory approvals and closing conditions, including the expiration or termination of the waiting period under the Hart-Scott- Rodino Act. Barclays' commitment to provide the Credit Facilities is subject to customary closing conditions.

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		Six Months Ended	
	June 29, 2018	June 30, 2017	June 29, 2018	June 30, 2017
Sales	100.0 %	100.0 %	100.0 %	100.0 %
Cost of goods sold	84.1 %	81.0 %	84.3 %	81.3 %
Gross profit	15.9 %	19.0 %	15.7 %	18.7 %
Operating expenses:				
Research and development	1.0 %	1.2 %	1.0 %	1.3 %
Sales and marketing	1.3 %	1.5 %	1.2 %	1.5 %
General and administrative	5.8 %	5.6 %	5.3 %	5.6 %
Total operating expenses	8.1 %	8.3 %	7.5 %	8.4 %
Income from operations	7.8 %	10.7 %	8.2 %	10.3 %
Interest and other income (expense), net	(0.3) %	(0.5) %	(0.1) %	(0.5) %
Income before provision for income taxes	7.5 %	10.2 %	8.1 %	9.8 %
Income tax provision	1.0 %	1.4 %	0.9 %	1.8 %
Net income	6.5 %	8.8 %	7.2 %	8.0 %

Sales

Sales for the three months ended June 29, 2018 were $290.2 million, an increase of $61.9 million, or 27.1%, from $228.3 million in the comparable quarter of 2017. The increase in overall sales in the second quarter of 2018 compared to the second quarter of 2017 is primarily due to an increase in demand from our existing semiconductor customers as a result of generally strong demand in the semiconductor industry during the period. On a geographic basis, sales in the U.S. increased $10.8 million to $120.5 million, or 41.5% of sales, for the three months ended June 29, 2018 compared to $109.7 million, or 48.1% of sales, for the comparable period of 2017. Foreign sales increased $51.1 million to $169.7 million, or 58.5% of sales, for the three months ended June 29, 2018 compared to $118.6 million, or 51.9% of sales, for the comparable period of 2017.

Sales for the six months ended June 29, 2018, were $605.1 million, an increase of $172.2 million, or 39.8%, from $432.9 million in the comparable period of 2017. The increase in sales for the six months ended June 29, 2018, which includes increases of $170.7 million and $1.5 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 six months ended June 29, 2018 increased by $46.0 million to $254.5 million while foreign sales increased by $126.2 million to $350.6 million when compared to the same period in prior year.

We expect sales to be lower in the third quarter of fiscal 2018 due to forecasted weaker demand in the semiconductor industry.

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 June 29, 2018 increased $2.7 million to $46.1 million, or 15.9% of sales, from $43.4 million, or 19.0% of sales, for the three months ended June 30, 2017. Gross profit for the six months ended June 29, 2018, increased by $14.0 million to $94.9 million, or 15.7% of sales, from $80.9 million, or 18.7% of sales, for the six months ended June 30, 2017.

The increase in gross profit dollars for the three and six months ended June 29, 2018 compared to the same periods in 2017 was primarily due to higher volume of products shipped. The decrease in gross margin in the three and six months ended June 29, 2018 compared to the same periods in 2017 was due mostly to a change in product mix with higher costs required to meet higher customer demand during fiscal 2018, as well as due to an accelerated ramp of new products, offset partially by an increase in labor efficiency.

We expect gross profit to decrease in the third quarter of 2018 as compared to the second quarter of 2018 due to the expected decrease in revenues for the third quarter of 2018 as described above.

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 June 29, 2018 increased $0.1 million, or 5.1%, to $2.9 million, or 1.0% of sales, compared to $2.8 million, or 1.2% of sales in the comparable period in 2017.

Research and development expense for the six months ended June 29, 2018 increased by $0.2 million, or 4.6%, to $5.9 million, or 1.0% of sales, compared to $5.7 million, or 1.3% of sales in the comparable period in 2017.

The increase in research and development expense when comparing the three and six months ended June 29, 2018 with the comparable periods in 2017 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 profitability.

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 June 29, 2018 increased $0.2 million, or 8.3 %, to $3.6 million, or 1.3% of sales, compared to $3.4 million, or 1.5% of sales, in the comparable period of 2017. Sales and marketing expense for the six months ended June 29, 2018 increased by $1.0 million, or 16.1%, to $7.4 million, or 1.2% of sales, compared to $6.4 million, or 1.5% of sales in the comparable period in 2017.

The increase in sales and marketing expenses when comparing the three and six months ended June 29, 2018 with the comparable period in 2017 was due to an increase in employee incentive compensation related expenses as a result of increase in employee headcount and higher profitability.

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 $4.1 million, or 31.3%, for the three months ended June 29, 2018, to $16.9 million, or 5.8% of sales, compared with $12.8 million, or 5.6% of sales, in the comparable period of 2017. General and administrative expense increased approximately $7.3 million, or 29.7%, for the six months ended June 29, 2018, to $31.9 million, or 5.3% of sales, compared with $24.6 million, or 5.6% of sales, in the comparable period of 2017.

The increase in general and administrative expenses when comparing the three and six months ended June 29, 2018 with the comparable periods in 2017 was primarily due to an increase in outside services resulting from the non-capitalizeable implementation costs of our new enterprise reporting system, higher employee incentive compensation related expenses as a result of an increase in headcount, higher operating income and severance pay associated with the departure of an officer from the Company.

Interest and Other Income (Expense), net

Interest and other income (expense), net, for the three and six months ended June 29, 2018, was $(0.8) million and $(0.5) million, respectively, compared to $(1.1) million and $(2.1) million, respectively, in the comparable periods of 2017. The decrease in net expense for the three and six months ended June 29, 2018 compared to the same periods in the prior year was primarily due to an increase in the fair value of the Company's non-designated derivative financial instruments and to a decrease in interest expense as a result of a lower principal balance on our debt.

Income Tax Provision

Our tax expense and effective tax rates for the three months ended June 29, 2018 and June 30, 2017 were $2.9 million and 13.2%, and $3.1 million and 13.3%, respectively. Our tax expense and effective tax rate for the six months ended June 29, 2018 and June 30, 2017 was $5.4 million and 11.0%, and $7.6 million and 18.0%, respectively.

The change in respective rates reflected, primarily, recently enacted U.S. tax reform whereby the U.S. tax rate decreased from 35% to 21% among other tax changes, changes in the geographic mix of worldwide earnings and financial results, the impact of losses in jurisdictions with full federal and state valuation allowances and an increase in tax benefits associated with share-based compensation for the three and six months ended June 29, 2018. Company management continuously evaluates the need for a valuation allowance on its deferred tax assets and, as of June 29, 2018, 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 required capital to fund our working capital needs, satisfy our debt obligations, maintain our equipment, purchase new capital equipment and make strategic acquisitions from time to time. As of June 29, 2018, we had cash of $141.1 million compared to $68.3 million as of December 29, 2017. 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 June 29, 2018.

For the six months ended June 29, 2018, total cash used for operating activities was $12.0 million, a decrease of $32.2 million when compared to cash provided by operating activities of $20.2 million for the comparable period of 2017. Operating cash flows generated in the six months ended June 29, 2018 reflected net income adjusted for the effect of non-cash activities, including depreciation of equipment and leasehold improvements, amortization of intangible assets and debt issuance costs, stock-based compensation, loss from disposal of assets, change in the fair value of the financial instruments and changes in working capital components. The primary drivers of the decrease in cash from operating activities included increases in prepaid expenses and decreases of accounts and income tax payable and accrued compensation and related benefits offset by an increase in net income. 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 six months ended June 30, 2017 included $8.5 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 $31.4 million, accrued compensation and related benefits of $3.0 million, income taxes payable of $4.0 million and other liabilities of $1.1 million. These increases in cash flow were offset by increases in accounts receivable, inventories and other assets of $26.7 million, $35.2 million and $0.3 million, respectively.

Net cash used in investing activities for the six months e nded June 29, 2018 was approximately $9.7 million, attributable mostly to the costs related to the development of the Company's new enterprise reporting system and to the expansion of our facilities in Singapore and California. Net cash used in investing a ctivities for the six months ended June 30, 2017 was approximately $5.8 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 provided by financing activities for the six months ended June 29, 2018 was $94.6 million, primarily due to the $94.3 million net cash proceeds from the public offering of our common stock in February of 2018 and from net bank borrowings of $2.7 million. Net cash used in financing activities for the six months ended June 30, 2017 was due primarily to principal payments on bank borrowings of $12.6 million offset by bank borrowing proceeds of $5.2 million.

We anticipate that our existing cash and cash equivalents balance and operating cash flow will be sufficient to service our indebtedness and meet our working capital requirements and technology development projects 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, the size and number of any acquisitions, the state of the worldwide economy, our ability to meet our financial covenants in our credit facility, the cyclical expansion or contraction of the semiconductor capital equipment industry and the other industries we serve and capital expenditures required to meet possible increased demand for our products.

In order to expand our business or acquire additional complementary businesses or technologies, we may need to raise additional funds through equity or debt financings. 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 existing 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 existing or prospective 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.

In prior years, we determined that a portion of the current year and future year earnings of one of our China subsidiaries may be remitted in the future to one of our foreign subsidiaries outside of mainland China and, accordingly, we provided for the related withholding taxes in our consolidated financial statements. We do not currently plan to remit any earnings from our China subsidiaries to any other foreign subsidiary in 2018. As of June 29, 2018, we had undistributed earnings of foreign subsidiaries that are indefinitely invested outside of the U.S. of approximately $207.6 million. It is not practicable to determine the tax liability that might be incurred if these earnings were to be distributed. We anticipate that we have adequate liquidity and capital resources and would not need to repatriate additional earnings to the U.S. As of June 29, 2018, we have cash of approximately $65.2 million in our foreign subsidiaries.

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 June 29, 2018, we had outstanding amounts under our U.S. Term Loan and Revolving Credit facility of $7.4 million and $39.9 million, respectively, which are gross of unamortized debt issuance costs of $0.1 million. The aggregate principal amount of the Revolving Credit facility is $40.0 million. As of June 29, 2018, interest rates on the outstanding U.S. Term Loan and Revolving Credit facility were 3.98% 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 1.98%, as of June 29, 2018. This interest rate swap effectively locked in a fixed interest rate of 2.99% on $4.7 million of the $7.4 million term loan balance outstanding as of June 29, 2018.

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 June 29, 2018. The Credit Agreement also restricts us from declaring or paying any cash dividends.

As of June 29, 2018, FDS had an outstanding balance under a revolving credi t facility of 6.5 million euros (approximately $7.6 million) with an interest rate of 1.3% plus a variable rate based on the Euro Interbank Offered Rate.

As of June 29, 2018, our total bank debt was $54.9 million, and we have $0.1 million and 1.8 million euros (approximately $2.0 million) available to borrow on our credit facilities in the U.S. and Czech Republic, respectively.

On June 24, 2018, the Company entered into the Commitment Letter with Barclays, pursuant to which Barclays has committed to provide senior secured credit facilities to the Company in an aggregate amount of $400.0 million, comprised of (i) $350.0 million under the Term Loan and (ii) $50.0 million under the Revolving Credit Facility. The Term Loan, together with cash on hand, will be used to finance the transaction contemplated by the Merger Agreement, refinance existing debt, and pay fees and expenses incurred in connection with the Credit Facilities and the acquisition. The Revolving Credit Facility will be used to provide ongoing working capital and capital for other general corporate purposes of the Company and its subsidiaries. Barclays' commitment to provide the Credit Facilities is subject to customary closing conditions, including the closing of the transactions contemplated by the Merger Agreement.

Capital Expenditures

Capital expenditures were $9.7 million during the six months ended June 29, 2018 and were primarily attributable to the costs related to the development of the Company's planned new ERP system as well as to the expansion of our Singapore and US facilities. The Company's anticipated capital expenditures for the remainder of 2018 are expected to be financed primarily from 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 June 29, 2018 (in thousands):

	Total	Less than 1 Year	1-3 Years	3-5 Years	More Than 5 Years
Operating leases (1)	$ 24,212	$ 4,110	$ 11,506	$ 8,480	$ 116
Borrowing arrangements (2)	54,915	54,915	—	—	—
PO commitments (3)	134,208	134,208	—	—	—
Total	$ 213,335	$ 193,233	$ 11,506	$ 8,480	$ 116

(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 2018 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 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 Czech Republic which we expect to exercise.

(2) Amounts reflect obligations under our Revolving Credit Facility gross of $0.1 million of unamortized debt issuance costs, under which $7.4 million is outstanding under the Term Loan and approximately $39.9 million under the Revolving Credit Facility as of June 29, 2018 and of our bank debt of $7.6 million held by FDS, in the Czech Republic.

(3) Represents our outstanding purchase orders primarily for inventory.

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.

During the first quarter of fiscal 2018, the Company adopted the provisions of ASC 606 "Revenue from Contracts with Customers". Refer to topics in Note 1, Recently Adopted Accounting Pronouncements and Note 3, Revenue Recognition, in the Notes to Condensed Consolidated Financial Statements.

Other than the Revenue Recognition as described in the paragraph above, 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 29, 2017. 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 29, 2017, as filed with the SEC.

ITEM 3. Quantitative a nd Qualitative Disclosures About Market Risk

There were no significant changes to our quantitative and qualitative disclosures about market risk during the first six 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 29, 2017 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 June 29, 2018.

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 adverse 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 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 ("OEM") 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 85.7%, 84.4% and 82.2% of sales for the six months ended June 29, 2018, for fiscal years 2017 and 2016, 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, given market share to our competitors or declared bankruptcy. 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, give market share to our competitors or from whom we otherwise lose business, 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 ou r 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 shar e 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, inclu ding 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 liabi lity 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 coul d 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 in creased liability risk which, if realized, may have a material adverse effect on our business, cash flows, results of operations and financial condition.

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.

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 o f 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 shee t 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 fro m 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 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 our ability to 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 beginning in the third quarter of 2018 and fully implemented by the end of fiscal year 2019. Once operational, we expect amortization 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 these teams or key individuals are not retained through the implementation period, the success of our implementation could be compromised and the expected benefits of the ERP system may not be realized. If the new ERP system is not successfully implemented, it could negatively affect our financial reporting and inventory management and our future sales, profitability and financial condition.

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 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 effe ctively 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 a cquire 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 cont inue 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, w hich 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, financ ial condition and operating results.

Our results of operations, financial position and cash flows may suffer if we do not effectively manage our inventory.

Inventory is typically the largest asset on our balance sheet, representing 35.5% of our total assets as of June 29, 2018. We must manage our inventory of raw materials, work-in-process and finished goods effectively to meet changing customer requirements, while keeping inventory costs down and maintaining or improving gross margins.

Historically, the industries we serve (in particular the semiconductor capital equipment industry) have been highly cyclical, which makes accurately forecasting customers' product needs difficult. Although we seek to maintain sufficient inventory levels of materials to guard against interruptions in supply and to meet our customers' needs, we may experience shortages of certain key materials, particularly in times of high industry demand. We also face long lead times from our suppliers, which may be longer than the lead times provided to us by our customers. If we underestimate customer demand or if insufficient manufacturing capacity or raw materials are available, we may have to forego sales opportunities, lose market share and damage our customer relationships.

In the event we overestimate customer demand, we may allocate resources to manufacturing products that we may not be able to sell. As a result, we could hold excess or obsolete inventory, which would reduce our profit margins and adversely affect our financial results. Some of our products have in the past and may in the future become obsolete while in inventory due to changing customer specifications, or become excess inventory due to decreased demand for our products and an inability to sell the inventory within a foreseeable period. Furthermore, our customers may cancel orders on short notice. This could result in charges that reduce our gross profit and gross margin. Furthermore, if market prices drop below the prices at which we value inventory, we would need to take a charge for a reduction in inventory values in accordance with the lower of cost or net realizable value valuation rule. Any future unexpected changes in demand or increases in costs of production that cause us to take additional charges for un-saleable, obsolete or excess inventory, or to reduce inventory values, would adversely affect our results of operations.

We hold inventory at our various manufacturing sites globally and many of these sites have more than one inventory warehouse. Successfully managing our inventory is dependent upon our information technology systems and internal controls. We rely upon such information technology systems and internal controls to accurately and timely manage, store and replenish inventory, complete and track customer orders, coordinate sales activities across all of our products and maintain and report vital data and information. A disruption in our information technology systems or a failure of our internal controls (arising from, for example, system capacity limits from unexpected or prolonged increases in our volume of business, outages or delays in our service) could result in delays or disruptions in receiving inventory and supplies or filling customer orders, incorrect inventory counts, over or under stocking or loss of inventory and adversely affect our business, customer service and relationships. In particular, our largest customer requires that certain of our products are manufactured and shipped out of our Singapore facility. Recent high levels of customer demand at such facility have created substantial strain on our processes, internal controls and information technology systems. There can be no assurance that such delays, failures or disruptions will not have a material adverse effect on our cash flows, results of operations and financial condition.

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.

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 a larger, more complex and capital intensive, combined business, including integrating supply and distribution channels, computer and accounting systems, and other aspects of operations;
- Exposure to new operational risks, rules, regulations, worker expectations, customs and practices to the extent acquired businesses are located in regions where UCT has not historically conducted business;
- Inability to complete proposed transactions due to the failure to obtain regulatory or other approvals, litigation or other disputes, and any ensuing obligation to pay a termination fee;
- Deterioration of gross margins due to the acquisition of the same customer base resulting in reduced pricing leverage;
- The failure to realize expected returns from acquired businesses;
- Reductions in cash balances or increases in debt obligations to finance activities associated with a transaction, which reduce the availability of cash flow for general corporate or other purposes;
- 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;
- The risk of litigation or claims associated with a proposed or completed transaction;
- Inadequacy or ineffectiveness of an acquired company's internal financial controls, disclosure controls and procedures, or environmental, health and safety, anti-corruption, human resource, or other policies or practices;
- 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;
- Difficulties associated with the retention and transition of new customers and partners with different demographics 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.

Closing of the acquisition of Quantum Global Technologies, LLC is subject to several conditions and if these conditions are not satisfied or waived, the acquisition will not be completed.

As disclosed on July 25, 2018 in our Current Report on Form 8-K, on July 25, 2018, we entered into an Agreement and Plan of Merger (the "Merger Agreement") to acquire Quantum Global Technologies, LLC ("Quantum") on the terms and the conditions set forth in the Merger Agreement (the "Merger"). Completion of the Merger is subject to certain conditions contained in the Merger Agreement and we can make no assurances that the transaction will close in a timely manner or at all. If the Merger is not consummated, or closing is substantially delayed for any reason, our business may be materially and adversely affected as we will have incurred substantial costs and expenses and utilized considerable resources.

We may not be able to close on our committed financing for the acquisition of Quantum Global Technologies, LLC.

As disclosed, in our Current Report on Form 8-K, on July 25, 2018, we also entered into the Commitment Letter with Barclays, pursuant to which Barclays has committed to provide senior secured credit facilities to certain of our affiliates as the borrowers, subject to customary conditions precedent to funding. We can provide no assurance that Barclays will ultimately provide the financing contemplated by the Commitment Letter. Our obligation to complete the transactions contemplated by the Merger Agreement is not subject to a financing contingency. Accordingly, if debt financing is not available in sufficient amounts at a time when we are obligated to complete the transactions under the Merger Agreement, we could be in breach of our obligations under the Merger Agreement and could be liable for significant damages which could have a material adverse effect on our business and financial condition.

We are exposed to risks associated with volatility 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. Inflationary trends could also have an impact on labor costs and component costs, reducing our margins. 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 higher-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 change in the U.S. administration could have a material adverse effect on us.

On January 20, 2017, a new president of the United States was inaugurated as the president of the United States. While it is still uncertain at this time how the new administration and the results of other elections could affect changes in social, political, regulatory and economic conditions or laws and policies, the President has expressed apprehension towards existing trade agreements, such as the North American Free Trade Agreement, signed an executive order announcing his plan to withdraw the United States from the Trans-Pacific Partnership in favor of bilateral trade negotiations with the member countries, and in the first half of 2018, implemented new tariffs on imports of steel and aluminum into the United States, from countries including China, where we and our customers have significant operations. These tariffs could significantly impact the cost of domestic steel, a commodity that we consume in producing our products, which would negatively impact our gross margin and our operating performance. Additionally, the Chinese government has proposed tariffs on U.S. produced exports in response to the U.S. government's implementation of tariffs, and there is a risk that the U.S. tariffs on imports may be met with other tariffs on U.S. produced exports and that a broader trade conflict could ensue. This has the potential to impact global trade and economic conditions in many of the regions where we do business. Other 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 also 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.

We have total debt as of June 29, 2018, gross of capitalized loan costs, of $47.3 million under our Credit Agreement with East West Bank and City National Bank, including $7.4 outstanding under our term loan and $39.9 outstanding under our revolving loan (with $0.1 million of available borrowings) and $7.6 million under FDS's revolving credit facility in the Czech Republic.

Our indebtedness could have adverse consequences including:

- risk associated with any inability to satisfy debt obligations;
- the portion of our cash flows that must be dedicated to interest and principal payments and will 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, if needed.

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 contains certain covenants that restrict our ability to take certain actions, including our ability to incur additional debt, including guarantees, or create liens as well as engage in certain mergers and acquisitions.

Our Credit Agreement requires us to maintain certain financial covenants, including compliance with a maximum consolidated leverage ratio, a minimum fixed charge ratio and a minimum cash balance. 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.

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.

In addition, in connection with our announcement of the Merger Agreement, we entered into a commitment letter (the "Commitment Letter") with Barclays Bank PLC ("Barclays"), pursuant to which Barclays has committed to provide senior secured credit facilities to us and/or certain of our affiliates as the borrowers in an aggregate amount of $400.0 million, comprised of (i) $350.0 million under a seven-year senior secured term loan B facility (the "New Term Loan") and (ii) $50.0 million under a five year senior secured revolving credit facility (the "New Revolving Credit Facility" and, together with the New Term Loan, the "New Credit Facilities"). The New Term Loan, together with cash on hand, will be used to finance the transaction contemplated by the Merger Agreement, refinance existing debt, and pay fees and expenses incurred in connection with the New Credit Facilities and the acquisition. The New Revolving Credit Facility will be used to provide ongoing working capital and capital for other general corporate purposes. Barclays' commitment to provide the New Credit Facilities is subject to a number of conditions including, without limitation, (i) the nonoccurrence of a material adverse effect, the Company and its subsidiaries, taken as a whole, (ii) the completion of definitive documentation mutually acceptable to Ultra Clean and Barclays and (iii) other customary closing conditions. If the Credit Facilities are entered into, our consolidated indebtedness will increase substantially.

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 $9.7 million and $7.1 million for the six months ended June 29, 2018 and June 30, 2017, respectively, related to our planned new ERP system and to our manufacturing facilities in the United States, Czech Republic, China and Singapore. The amount of our future capital requirements 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 timing, size and availability of strategic transactions we may enter into;
- the cost required to integrate our acquisitions into our business, including into our enterprise resource planning system;
- changing manufacturing capabilities to meet new or increased customer requirements; and
- market acceptance of our products.

We regularly consider opportunities for strategic acquisitions.

Given our existing indebtedness, limited availability under our new revolving line of credit and the potential tax effects of r epatriating foreign cash or other factors, in order to finance our capital expenditures or any future strategic acquisitions, we may need to raise additional funds through public or private equity or debt financing, but such financing may not be available on terms satisfactory to us, or at all. Access to capital markets has, in the past, been unavailable to companies such as ours. In addition, equity financings could be dilutive to holders of our common stock, and debt financings would likely involve additi onal 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 b e 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, oper ating results 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 or Singapore;
- 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.

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 57.9% and 51.8% of our sales in international markets for the six months ended June 29, 2018 and June 30, 2017, respectively. Depending on market conditions, we intend to expand our operations in Asia and Europe, principally in China, 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 $10.0 million and $1.5 million, respectively as of June 29, 2018.

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 or from low cost Asian markets, such as China, to higher cost Asian markets, such as Singapore, 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.

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 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 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 and our financial reporting 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, or adversely affect our impact to accurately and timely report our financial results. 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. Some of 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.

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 June 29, 2018. 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, and 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 rec over 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 req uire us to spend significant time and money in litigation or pay significant damages or indemnification claims.

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, 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.

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.

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 busin ess 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 29, 2017, 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.

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 causalities 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 causalities 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 adve rsely 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.

On December 22, 2017, the Tax Act Cuts and Jobs ("TCJA") was signed into law. The TCJA contains significant changes to corporate taxation, including reduction of the corporate tax rate from 35% to 21%, additional limitations on the tax deductibility of interest, substantial changes to the taxation of foreign earnings, immediate deductions for certain new investments instead of deductions for depreciation expense over time, and modification or repeal of many business deductions and credits. The Company has made reasonable estimates of the financial impact of the TCJA on the Company. However, the estimates are provisional and a change in estimate can have an impact on our results of operations, cash flows and financial conditions, as well as the trading price of our Common Stock. UCT will continue to analyze the effects of the TCJA on its financial statements and operations. Additional impacts from the enactment of the TCJA will be recorded as they are identified during the one-year measurement period as provided for in SEC Staff Accounting Bulletin 118.

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.

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 ongoing 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 30, 2018 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, there is uncertainty about the future of the regulations related to conflict minerals as a result of legal challenges and statements by the SEC. 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 appr eciation 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.

From time to time, we may become involved in other litigation and regulatory proceedings, which could require significant attention from our management and result in significant expense to us and disruptions to our business.

In addition to any litigation related to our intellectual property rights, we may in the future be named as a defendant from time to time in other lawsuits and regulatory actions relating to our business, such as commercial contract claims, employment claims and tax examinations, some of which may claim significant damages or cause us reputational harm. Due to the inherent uncertainties of litigation and regulatory proceedings, we cannot predict the ultimate outcome of any such proceeding. An unfavorable outcome could have a material adverse effect on our business, financial condition and results of operations or limit our ability to engage in certain of our business activities. In addition, regardless of the outcome of any litigation or regulatory proceeding, such proceedings are often expensive, time-consuming and disruptive to normal business operations and require significant attention from our management. As a result, any such lawsuits or proceedings could materially adversely affect our business, financial condition and results of operations.

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

None.

ITEM 3. Defau lts 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 quarterly Report on Form 10-Q for the quarter ended June 29, 2018:

Exhibit Number	Description
10.1	Form of Consulting Agreement
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

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: August 8, 2018

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

Date: August 8, 2018

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)

Exhibit 10.1

[NAME]
[ADDRESS LINE 1]
[ADDRESS LINE 2]

[DATE]

Dear [NAME],

This letter agreement (this "Agreement") sets forth the terms and conditions whereby you agree to provide certain services (as described on Schedule 1) to [Ultra Clean Holdings, Inc.], a [Delaware corporation] (the "Company"), with offices located at [26462 Corporate Avenue, Hayward, CA 94545].

1. SERVICES .

    a. The Company hereby engages you, and you hereby accept such engagement, as an independent contractor to provide certain services to the Company on the terms and conditions set forth in this Agreement.

    b. You shall provide to the Company the services set forth on Schedule 1 (the " **Services** ").

    c. The Company shall not control the manner or means by which you or your employees or contractors perform the Services, including but not limited to the time and place you perform the Services.

    d. Unless otherwise set forth in Schedule 1, you shall furnish, at your own expense, the equipment, supplies, and other materials used to perform the Services.

    e. To the extent you perform any Services on the Company's premises or using the Company's equipment, you shall comply with all applicable policies of the Company relating to business and office conduct, health and safety, and use of the Company's facilities, supplies, information technology, equipment, networks, and other resources.

2. TERM . The term of this Agreement shall commence as of the date set forth above and shall continue until the Services are completed, unless earlier terminated in accordance with Section 10 (the " **Term** "). Any extension of the Term will be subject to mutual written agreement between the parties.

3. FEES AND EXPENSES .

    a. As full compensation for the Services and the rights granted to the Company in this Agreement, the Company shall pay you [a fixed fee of $[ ] per full day of completed Services] (the " **Fees** "), payable [monthly] in arrears. You acknowledge that you will receive an IRS Form 1099-MISC from the Company, and that you shall be solely responsible for all federal, state, and local taxes, as set out in Section 4(b).

    b. You are solely responsible for any travel or other costs or expenses incurred by you in connection with the performance of the Services, and in no event shall the Company reimburse you for any such costs or expenses.

    c. The Company shall pay all undisputed Fees within 10 calendar/business days after the Company's receipt of an invoice submitted by you in accordance with Section 3(a).

4. RELATIONSHIP OF THE PARTIES .

    a. You are an independent contractor of the Company, and this Agreement shall not be construed to create any association, partnership, joint venture, employee, or agency relationship between you and the Company for any purpose. You have no authority (and shall not hold yourself out as having authority) to bind the Company and you shall not make any agreements or representations on the Company's behalf without the Company's prior written consent.

b. Without limiting Section 4(a) , you will not be eligible to participate in any vacation, group medical or life insurance, disability, profit sharing or retirement benefits, or any other fringe benefits or benefit plans offered by the Company to its employees, and the Company will not be responsible for withholding or paying any income, payroll, Social Security, or other federal, state, or local taxes, making any insurance contributions, including for unemployment or disability, or obtaining workers' compensation insurance on your behalf. You shall be responsible for, and shall indemnify the Company against, all such taxes or contributions, including penalties and interest. Any persons employed or engaged by you in connection with the performance of the Services shall be your employees or contractors and you shall be fully responsible for them and indemnify the Company against any claims made by or on behalf of any such employee or contractor.

5. INTELLECTUAL PROPERTY RIGHTS .

a. The Company is and shall be, the sole and exclusive owner of all right, title, and interest throughout the world in and to all the results and proceeds of the Services performed under this Agreement (collectively, the " **Deliverables** "), including all patents, copyrights, trademarks, trade secrets, and other intellectual property rights (collectively " **Intellectual Property Rights** ") therein. You agree that the Deliverables are hereby deemed a "work made for hire" as defined in 17 U.S.C. § 101 for the Company. If, for any reason, any of the Deliverables do not constitute a "work made for hire," you hereby irrevocably assign to the Company, in each case without additional consideration, all right, title, and interest throughout the world in and to the Deliverables, including all Intellectual Property Rights therein.

b. Any assignment of copyrights under this Agreement includes all rights of paternity, integrity, disclosure, and withdrawal and any other rights that may be known as "moral rights" (collectively, " **Moral Rights** "). You hereby irrevocably waive, to the extent permitted by applicable law, any and all claims you may now or hereafter have in any jurisdiction to any Moral Rights with respect to the Deliverables.

c. You shall make full and prompt disclosure to the Company of any inventions or processes, as such terms are defined in 35 U.S.C. § 100 (the " **Patent Act** "), made or conceived by you alone or with others during the Term, related in any way to the Services described herein, whether or not such inventions or processes are patentable or protected as trade secrets and whether or not such inventions or processes are made or conceived during normal working hours or on the premises of the Company. You shall not disclose to any third party the nature or details of any such inventions or processes without the prior written consent of the Company. Any patent or copyright applications relating to the Services, related to trade secrets of the Company or which relate to tasks assigned to you by the Company, that you may file within one year after expiration or termination of this Agreement, shall belong to the Company, and you hereby assign same to the Company, as having been conceived or reduced to practice during the Term of this Agreement.

d. Upon the request of the Company, you shall promptly take such further actions, including execution and delivery of all appropriate instruments of conveyance, as may be necessary to assist the Company to prosecute, register, perfect, record, or enforce its rights in any Deliverables. In the event the Company is unable, after reasonable effort, to obtain your signature on any such documents, you hereby irrevocably designate and appoint the Company as your agent and attorney-in-fact, to act for and on your behalf solely to execute and file any such application or other document and do all other lawfully permitted acts to further the prosecution and issuance of patents, copyrights, or other intellectual property protection related to the Deliverables with the same legal force and effect as if you had executed them. You agree that this power of attorney is coupled with an interest.

e. You have no right or license to use, publish, reproduce, prepare derivative works based upon, distribute, perform, or display any Deliverables. You have no right or license to use the Company's trademarks, service marks, trade names, trade names, logos, symbols, or brand names.

f. If applicable, y ou shall require each of your employees and contractors to execute written agreements securing for the Company the rights provided for in this Section 5 prior to such employee or contractor providing any Services under this Agreement.

6. CONFIDENTIALITY .

a. You acknowledge that you will have access to information that is treated as confidential and proprietary by the Company including without limitation the existence and terms of this Agreement, trade secrets, technology, and information pertaining to business operations and strategies, customers, pricing, marketing, finances, sourcing, personnel, strategic transactions or operations of the Company, its affiliates, or their suppliers or customers or strategic partners, in each case whether spoken, written, printed, electronic, or in any other form or medium (collectively, the " **Confidential Information** "). Any Confidential Information that you develop in connection with the Services, including but not limited to any Deliverables, shall be subject to the terms and conditions of this clause. You agree to treat all Confidential Information as strictly confidential, not to disclose Confidential Information or permit it to be disclosed, in whole or part, to any third party without the prior written consent of the Company in each instance, and not to use any Confidential Information for any purpose except as required in the performance of the Services. You shall notify the Company immediately in the event you become aware of any loss or disclosure of any Confidential Information.

b. Confidential Information shall not include information that:

i. is or becomes generally available to the public other than through your breach of this Agreement; or

ii. is communicated to you by a third party that had no confidentiality obligations with respect to such information.

c. Nothing herein shall be construed to prevent disclosure of Confidential Information as may be required by applicable law or regulation, or pursuant to the valid order of a court of competent jurisdiction or an authorized government agency, provided that the disclosure does not exceed the extent of disclosure required by such law, regulation, or order. You agree to provide written notice of any such order to an authorized officer of the Company within two business days of receiving such order, but in any event sufficiently in advance of making any disclosure to permit the Company to contest the order or seek confidentiality protections, as determined in the Company's sole discretion.

d. Notice of Immunity Under the Economic Espionage Act of 1996, as amended by the Defend Trade Secrets Act of 2016 ("DTSA"). Notwithstanding any other provision of this Agreement:

i. You will not be held criminally or civilly liable under any federal or state trade secret law for any disclosure of a trade secret that:

1. is made: (A) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney; and (B) solely for the purpose of reporting or investigating a suspected violation of law; or

2. is made in a complaint or other document that is filed under seal in a lawsuit or other proceeding.

ii. If you file a lawsuit for retaliation by the Company for reporting a suspected violation of law, you may disclose the Company's trade secrets to your attorney and use the trade secret information in the court proceeding if you:

1. file any document containing the trade secret under seal; and

2. do not disclose the trade secret, except pursuant to court order.

7. REPRESENTATIONS AND WARRANTIES .

a. You represent and warrant to the Company that:

i. you have the right to enter into this Agreement, to grant the rights granted herein and to perform fully all of your obligations in this Agreement;

ii. your entering into this Agreement with the Company and your performance of the Services do not and will not conflict with or result in any breach or default under any other agreement to which you are subject;

iii. you have the required skill, experience, and qualifications to perform the Services, you shall perform the Services in a professional and workmanlike manner in accordance with industry standards for similar services and you shall devote sufficient resources to ensure that the Services are performed in a timely and reliable manner;

iv. you shall perform the Services in compliance with all applicable federal, state, and local laws and regulations;

v. the Company will receive good and valid title to all Deliverables, free and clear of all encumbrances and liens of any kind;

vi. all Deliverables are and shall be your original work (except for material in the public domain or provided by the Company) and do not and will not violate or infringe upon the intellectual property right or any other right whatsoever of any person, firm, corporation, or other entity.

b. The Company hereby represents and warrants to you that:

i. it has the full right, power, and authority to enter into this Agreement and to perform its obligations hereunder; and

ii. the execution of this Agreement by its representative whose signature is set forth at the end hereof has been duly authorized by all necessary corporate action.

8. INDEMNIFICATION .

a. You shall defend, indemnify, and hold harmless the Company and its affiliates and their officers, directors, employees, agents, successors, and assigns from and against all losses, damages, liabilities, deficiencies, actions, judgments, interest, awards, penalties, fines, costs, or expenses of whatever kind (including reasonable attorneys' fees) arising out of or resulting from:

i. bodily injury, death of any person, or damage to real or tangible, personal property resulting from your acts or omissions; and

ii. your breach of any representation, warranty, or obligation under this Agreement.

b. The Company may satisfy such indemnity (in whole or in part) by way of deduction from any payment due to you.

9. INSURANCE . During the Term, you shall maintain in force adequate workers' compensation, commercial general liability, errors and omissions, and other forms of insurance, in each case with insurers reasonably acceptable to the Company, with policy limits sufficient to protect and indemnify the Company and its affiliates, and each of their officers, directors, agents, employees, subsidiaries, partners, members, controlling persons, and successors and assigns, from any losses resulting from your conduct, acts, or omissions or the conduct, acts, or omissions of your agents, contractors, servants, or employees. The Company shall be listed as additional insured under such policy, and you shall forward a certificate of insurance verifying such insurance upon the Company's written request, which certificate will indicate that such insurance policies may not be cance led before the expiration of a 30 calendar day notification period and that the Company will be immediately notified in writing of any such notice of termination.

10. TERMINATION .

    a. The Company may terminate this Agreement without cause, effective immediately upon written notice to you. You may terminate this Agreement without cause upon 30 calendar days' written notice to the Company.

    b. You may also terminate this Agreement, effective immediately upon written notice by you to the Company, if the Company materially breaches this Agreement, and such breach is incapable of cure, or with respect to a material breach capable of cure, the Company does not cure such breach within 10 business days after receipt of written notice of such breach.

    c. Upon expiration or termination of this Agreement for any reason, or at any other time upon the Company's written request, you shall promptly after such expiration or termination:

        i. deliver to the Company all Deliverables (whether complete or incomplete) and all hardware, software, tools, equipment, or other materials provided for your use by the Company;

        ii. deliver to the Company all tangible documents and materials (and any copies) containing, reflecting, incorporating, or based on the Confidential Information;

        iii. permanently erase all of the Confidential Information from your computer systems; and

        iv. certify in writing to the Company that you have complied with the requirements of this clause.

    d. The terms and conditions of this clause and Section 4, Section 5, Section 6, Section 7, Section 8, Section 11, Section 13, and Section 14 shall survive the expiration or termination of this Agreement.

11. OTHER BUSINESS ACTIVITIES . You may be engaged or employed in any other business, trade, profession, or other activity which does not place you in a conflict of interest with the Company; provided, that, during the Term, you shall not be engaged in any business activities that do or may compete with the business of the Company without the Company's prior written consent to be given or withheld in its sole discretion.

12. NON-SOLICITATION . You agree that during the Term of this Agreement and for a period of 24 months following the termination or expiration of this Agreement, you shall not make any solicitation to employ the Company's personnel without written consent of the Company to be given or withheld in the Company's sole discretion .

13. ASSIGNMENT . You shall not assign any rights, or delegate or subcontract any obligations, under this Agreement without the Company's prior written consent. Any assignment in violation of the foregoing shall be deemed null and void. The Company may freely assign its rights and obligations under this Agreement at any time. Subject to the limits on assignment stated above, this Agreement will inure to the benefit of, be binding on, and be enforceable against each of the parties hereto and their respective successors and assigns.

14. MISCELLANEOUS .

a. You shall not export, directly or indirectly, any technical data acquired from the Company, or any products utilizing any such data, to any country in violation of any applicable export laws or regulations.

b. All notices, requests, consents, claims, demands, waivers, and other communications hereunder (each, a " **Notice** ") shall be in writing and addressed to the parties at the addresses set forth on the first page of this Agreement (or to such other address that may be designated by the receiving party from time to time in accordance with this Section). All Notices shall be delivered by personal delivery, nationally recognized overnight courier (with all fees prepaid), facsimile or email (with confirmation of transmission), or certified or registered mail (in each case, return receipt requested, postage prepaid). Except as otherwise provided in this Agreement, a Notice is effective only if (a) the receiving party has received the Notice and (b) the party giving the Notice has complied with the requirements of this Section.

c. This Agreement, together with any other documents incorporated herein by reference and related exhibits and schedules, constitutes the sole and entire agreement of the parties to this Agreement with respect to the subject matter contained herein, and supersedes all prior and contemporaneous understandings, agreements, representations, and warranties, both written and oral, with respect to such subject matter.

d. This Agreement may only be amended, modified, or supplemented by an agreement in writing signed by each party hereto, and any of the terms thereof may be waived, only by a written document signed by each party to this Agreement or, in the case of waiver, by the party or parties waiving compliance.

e. This Agreement and all related documents, and all matters arising out of or relating to this Agreement, whether sounding in contract, tort, or statute are governed by, and construed in accordance with, the laws of the State of California, without giving effect to the conflict of laws provisions thereof to the extent such principles or rules would require or permit the application of the laws of any jurisdiction other than those of the State of California.

f. If any term or provision of this Agreement is invalid, illegal, or unenforceable in any jurisdiction, such invalidity, illegality, or unenforceability shall not affect any other term or provision of this Agreement or invalidate or render unenforceable such term or provision in any other jurisdiction.

g. This Agreement may be executed in multiple counterparts and by facsimile signature, each of which shall be deemed an original and all of which together shall constitute one instrument.

If this letter accurately sets forth our understanding, kindly execute the enclosed copy of this letter and return it to the undersigned.

Very truly yours,

[ULTRA CLEAN HOLDINGS, INC.]

BY:.....
Name:
Title:

ACCEPTED AND AGREED:

[NAME]

BY:.....
Name:

Date:

Federal Tax Id. No./Social Security No.:

SCHEDULE 1

1. SERVICES: [ ]

Exhibit 31.1

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: August 8, 2018

/s/ JAMES P. SCHOLHAMER
James P. Scholhamer
Chief Executive Officer

Exhibit 31.2

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: August 8, 2018

/s/ SHERI SAVAGE

Sheri Savage
Chief Financial Officer and Senior Vice President of Finance

Exhibit 32.1

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: August 8, 2018

/s/ JAMES P. SCHOLHAMER
James P. Scholhamer
Chief Executive Officer

Date: August 8, 2018

/s/ SHERI SAVAGE
Sheri Savage
Chief Financial Officer and Senior Vice President of Finance