UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 30, 2016

or

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

For the transition period from to

Commission file number 000-50646

Ultra Clean Holdings, Inc.

(Exact name of Registrant as specified in its charter)

Delaware	**61-1430858**
(State or other jurisdiction of incorporation or organization)	**(IRS Employer Identification No.)**
26462 Corporate Avenue Hayward, California	**94545**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code:
(510) 576-4400

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

Title of Each Class	**Name of Each Exchange on Which Registered**
Common Stock, $0.001 par value	**The NASDAQ Global Market LLC**

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

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

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	☐

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

The aggregate market value of the voting and non-voting stock held by non-affiliates of the Registrant, based on the closing sale price of the Registrant's common stock on June 24, 2016 as reported on the NASDAQ Global Market, was approximately $180.1 million. Shares of common stock held by each executive officer and director have been excluded from this computation. The determination of affiliate status for this purpose is not necessarily a conclusive determination for other purposes.

Number of shares of the registrant's common stock outstanding as of February 28, 2017: 33,402,457

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement to be delivered to stockholders in connection with the 2017 annual meeting of stockholders are incorporated by reference in Part III of this Form 10-K where indicated. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 30, 2016.

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This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "expects," "anticipates," "targets," "goals," "projects," "intends," "plans," "believes," "seeks," "estimates," "continues," "may," "will be," "will continue," "will likely results," variations of such words, and similar expressions are intended to identify such forward-looking statements, but the absence of these words does not necessarily mean that a statement is not forward-looking. These forward-looking statements include, but are not limited to, statements concerning the following: projections of our financial performance, our anticipated growth and trends in our business, levels of capital expenditures, the adequacy of our capital resources to fund operations and growth, our ability to compete effectively with our competitors, our strategies an d ability to protect our intellectual property, future acquisitions, customer demand, our manufacturing and procurement process, employee matters, supplier relations, foreign operations (including our operations in China and Singapore), the legal and regul atory backdrop (including environmental regulation), our exposure to market risks and other characterizations of future events or circumstances described in this Annual Report. Readers are cautioned that these forward-looking statements are only prediction s and are subject to risks, uncertainties, and assumptions that are difficult to predict, including those identified below, under "Risk Factors," and elsewhere herein. Therefore, actual results may differ materially and adversely from those expressed in an y forward-looking statements. We undertake no obligation to revise or update any forward-looking statements for any reason, except as required by law.

Item 1. Business

Overview

Ultra Clean Holdings, Inc. ("UCT", the "Company" or "We") was founded in November 2002 for the purpose of acquiring Ultra Clean Technology Systems and Services, Inc. a US-based company founded in 1991 by Mitsubishi Corporation and operated as a subsidiary of Mitsubishi. UCT became a publicly traded company in March 2004. In 2006, we acquired Sieger Engineering, Inc. to better position ourselves as a subsystem supplier to the semiconductor, research, flat panel, energy and medical equipment industries. To facilitate Asia operations, Ultra Clean Technology (Shanghai) Co., Ltd and Ultra Clean Micro-Electronics Equipment (Shanghai) Co., Ltd. were established in China in 2005 and 2007, respectively, and Ultra Clean Asia Pacific, Pte, Ltd. was established in Singapore in 2008. Our July 2012 American Integration Technologies LLC ("AIT") acquisition added to our existing customer base in the semiconductor and medical spaces and provided additional manufacturing capabilities. In 2014, we launched Prototype Asia, our 3D printing business in Singapore, to develop additive manufacturing capabilities for our customer base. In February 2015, we acquired Marchi Thermal Systems, Inc. ("Marchi") and in July 2015, we acquired MICONEX s.r.o ("Miconex"), both privately held companies with a majority of their sales in the semiconductor market. Marchi designs and manufactures specialty heaters, thermocouples and temperature controllers, delivering 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. Miconex is a provider of advanced precision fabrication of plastics that has expanded our capabilities with existing customers. Separately, in November 2016, we approved a plan to dispose of a portion of our 3D printing business. The decision to dispose is consistent with our strategy to focus on producing product tools for the semiconductor capital equipment industry.

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

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

manufacturing, we manufacture products in our Asian facilities to support local and U.S. based customers. We conduct our operating activities primarily through our w holly owned subsidiaries, Ultra Clean Technology Systems and Service, Inc., AIT, Ultra Clean Micro-Electronics Equipment (Shanghai) Co., Ltd., Ultra Clean Asia Pacific, Pte, Ltd., Marchi Thermal Systems, Inc. and MICONEX s.r.o. Our international sales repr esented 48.0%, 34.5% and 29.6% of sales for fiscal years ended 2016, 2015 and 2014, respectively. See Note 11 to the Notes to Consolidated Financial Statements for further information about our geographic areas.

Our Solution

Our focus is on providing specialized engineering and manufacturing solutions for highly complex, highly configurable, limited volume systems. We enable our customers to realize lower manufacturing costs and reduced design-to-delivery cycle times while maintaining high quality standards. We offer our customers:

- *Vertically integrated solution for complex and highly configurable systems* . We provide our original equipment manufacturing (OEM) customers a complete outsourced solution for the development, design, component sourcing, prototyping, engineering, turnkey manufacturing and testing of advanced systems. We utilize our machining, sheet metal, and frame fabrication capabilities with highly specialized engineering, global supply chain management, and assembly capabilities to produce high performance products that are customized to meet the needs of our customers, as well as their respective end users. We minimize the overall number of suppliers and manage our global supply chain logistics to reduce inventory levels that our customers would otherwise be required to manage.
- *Improved design-to-delivery cycle times* . Our strong relationships with our customers and familiarity with their product requirements and the ever changing needs of their customer base help us reduce their design-to-delivery cycle times. We have optimized our supply chain management, design and manufacturing coordination and controls to respond rapidly to order requests, enabling us to decrease design-to-delivery cycle times for our customers. Because our engineers work closely with our customers' engineers and understand the fabrication, assembly and testing of their products, we often can improve their design for manufacturability, thereby improving their cost, quality and consistency.
- *Component neutral design and manufacturing* . We do not manufacture components such as mass flow controllers and valves which are selected based on manufacturer published specifications. Our component neutral position enables us to recommend components on the basis of technology, performance and cost and to optimize our customers' overall designs based on these criteria. Furthermore, our neutral approach allows us to maintain close relationships with a wide range of component suppliers.
- *Component testing capabilities* . We utilize our technical expertise to test and characterize key components and subsystems. We have made significant investments in advanced analytical and automated test equipment, enabling us to test and qualify key components. We can perform diagnostic tests, design verifications and failure analyses for our customers and suppliers. Our analytical and testing capabilities of supplier components provide us the ability to recommend to our customers a wide range of appropriate component and design choices for their products.
- *Increased integration with OEMs through local presence* . Our local presence in close proximity to the facilities of most of our OEM customers enables us to remain closely integrated with their design, development and implementation teams. This level of integration enables us to respond quickly and efficiently to customer changes and requests.
- *Precision machining capabilities* . We manufacture high quality, precision machined parts using equipment capable of efficiently providing complex parts with exacting tolerances. Our diverse precision fabrication equipment enables us to manufacture a broad range of machined parts using a wide range of materials, from exotic metals to high purity plastics. Our manufacturing capabilities include horizontal and vertical milling, turning, welding and joining, amongst numerous others. We own and operate advanced machining and fabrication systems at multiple sites in the U.S., Europe and Asia.

- *Precision frame fabrication* . We design and manufacture frames using tubing or sheet metal in all sizes with exacting standards to meet and exceed our customers' needs. We utilize over 25 years of experience in the fabrication of complex frames to provide a cost competitive edge in our vertical integration model. Many of our customers require frames th at are powder coated and in 2016, we added this capability to our Chandler, Arizona frame fabrication facility.
- *Precision sheet metal fabrication* . Our ability to provide complete sheet metal solutions for our customers enables us to support prototype to volume production, from brackets to sheet metal frames, and from structural to high quality cosmetic finishing of the final product. Our automated equipment and design capabilities allow us to develop accurate prototype and final production products for our customers.
- *Custom fabricated heaters* . Our acquisition of Marchi enables us to design and manufacture heaters, sensors, and controllers for precise temperature control. These products are complementary to our gas delivery systems products.

Our Strategy

Our objective is to maintain our position as a leading solutions provider in the markets we serve, primarily the semiconductor capital equipment market, while supporting other technologically similar markets in the flat panel, consumer, medical, energy, industrial and research industries. Our strategy is comprised of the following key elements:

- *Expand our market share with semiconductor capital equipment OEMs* . We believe that outsourcing among OEMs creates a significant market opportunity for us to grow our business with existing and new customers. We believe our customers will continue to outsource critical subsystems and that we are well positioned to capture a significant portion of these outsourcing opportunities. We believe that our continued focus on efficient manufacturing, reduced design-to-delivery cycle times, and quality and reliability will also allow us to gain market share.
- *Develop solutions that allow our customer's customers to succeed at the latest 2x or 1x nanometer semiconductor processing nodes* . We are expanding the number and type of subsystems that we offer in this advanced semiconductor market.
- *Leverage our geographic presence in lower cost manufacturing regions* . Our manufacturing facilities in Shanghai, China allow us to produce in a low cost region. Our manufacturing facilities in Shanghai, China house our precision machined parts and subsystem assembly operations. Together, these facilities put us in close proximity to the manufacturing facilities of existing and potential customers and their end users. In Singapore, we have a procurement office and substantial manufacturing capabilities. Our manufacturing facilities all use the same processes and procedures, enabling us to respond rapidly to demand changes from our customer.
- *Drive profitable growth with our flexible cost structure* . We implement cost containment and capacity enhancement initiatives throughout the semiconductor capital equipment demand cycle and benefit greatly from the global presence and efficiencies of our supply chain. In addition, we believe our Shanghai and Singapore facilities position us to respond effectively to future business demands. We employ a core engineering strategy with flexible partnering to augment our staff during the steep rise and fall associated with cycles in the semiconductor industry.
- *Continue to selectively pursue strategic acquisitions* . We will continue to consider strategic acquisitions that will enable us to expand our geographic presence, secure new customers and diversify into complementary products and markets as well as broaden our technological capabilities in the markets we serve.
- *Develop unique solutions to enhance our customers' manufacturing* . With the acquisition of Marchi, we are able to provide additional thermal products, leveraging our core capability in heaters, thermocouples and controllers. With the acquisition of Miconex, we further expanded our capabilities to include manufacturing services in advanced precision milling and welding of plastics.

- *Expand our market share in other industries* . We believe we can leverage the attributes and skill sets to succeed in the semiconductor capital equipment industry and to increase our market share in technologically similar markets including medical, flat panel and research equipment.

Products

We design, develop, prototype, manufacture and test subsystems, primarily for semiconductor capital equipment. We also support customers in the flat panel, consumer, medical, energy, industrial, and research industries. Our products include precision robotic solutions, gas delivery systems, a variety of industrial and automation production equipment products; subsystems that includes wafer cleaning sub-systems, chemical delivery modules, top-plate assemblies, frame assemblies, and process modules.

- *Chemical delivery modules* : Chemical delivery modules deliver gases and reactive chemicals in a liquid or gaseous form from a centralized subsystem to the reaction chamber. The module may be a gas delivery system in combination with liquid and vapor precursor delivery systems or may be a liquid delivery system in combination with a liquid storage system.
- *Frame assemblies:* Frame assemblies are support structures fabricated from steel tubing or folded sheet metal and form the backbone to which all other assemblies are attached. The complexity of the frames includes powder coating, pneumatic harnesses and cables that connect other critical subsystems together.
- *Gas delivery systems:* A typical OEM gas delivery system consists of one or more gas lines, comprised of small diameter internally polished stainless steel tubing, filters, mass flow controllers, regulators, pressure transducers and valves, component heaters, and an integrated electronic and/or pneumatic control system. These systems are mounted on a pallet and are typically enclosed in a sheet metal encasing. Our gas delivery system designs are developed in collaboration with our customers and are customized to meet the needs of specific processing requirements for OEMs. Our customers either specify the particular brands of components they want incorporated into a particular system or rely on our design expertise and component characterization capabilities to help them select the appropriate components for their particular system.
- *Liquid delivery system:* A typical OEM liquid delivery system consists of one or more chemical delivery units, comprised of small diameter high purity PFA tubing, filters, flow controllers, regulators, component heaters, and an integrated electronic and/or pneumatic control system. These units are typically contained in a plastic enclosure and further integrated into a frame. Our liquid delivery system designs are developed in collaboration with our customers and are customized to meet the needs of specific processing requirement for OEMs. Our customers either specify the particular materials and the brands of components they want incorporated into a particular system or rely on our design expertise and component characterization capabilities to help them select the appropriate components for their particular system.
- *Precision robotics:* Precision robotic systems are used when accurate controlled motion is required. Some of the systems that employ robotic systems are: semiconductor wafer and chip handling, wire bonding and industrial equipment.
- *Process modules:* Process modules refer to the larger subsystems of semiconductor manufacturing tools that process integrated circuits onto wafers. Process modules include several smaller subsystems such as the frame assembly, top-plate assembly and gas and chemical delivery modules, as well as the chamber and electronic, pneumatic and mechanical subsystems.
- *Other high level assemblies:* Other high level assemblies refer to large subsystems used in semiconductor manufacturing, medical, energy, industrial, flat panel and research industries.

Customers

We sell our products primarily to customers in the semiconductor capital equipment industry, and we also have sales to the flat panel, consumer, medical, energy, industrial, and research equipment industries. The majority of our revenue is in the semiconductor capital equipment industry, which is highly concentrated, and we are therefore highly dependent upon a small number of customers. Our three largest customers in fiscal year 2016, 2015 and 2014 were Applied Materials, Inc., Lam Research Corporation and ASM International, Inc. Lam Research Corporation and Applied Materials, Inc. each accounted for more than 10.0% of our total sales in fiscal years 2016 and 2015. Applied Materials, Inc., Lam Research Corporation and ASM International, Inc. each accounted for more than 10.0% of our total sales in fiscal year 2014. As a group, the respective year's top three customers accounted for 86.4%, 84.3% and 75.7% of the Company's sales for fiscal years 2016, 2015 and 2014, respectively. The composition of our most significant customers has changed from time to time based on various factors, including acquisition activity by our customers.

We have successfully qualified as a supplier with each of our customers who require it. This lengthy qualification process involves the inspection and audit of our facilities and evaluation by our customers of our engineering, documentation, manufacturing and quality control processes and procedures. Our customers generally place orders with suppliers who have met and continue to meet their qualification criteria.

Customer Business Management

We sell and support our products through our Customer Business Management organization which, as of December 30, 2016, consisted of approximately 95 customer relationship directors, managers and support staff. Our customer relationship directors are responsible for establishing sales strategy and setting the objectives for specific customer accounts. Each customer relationship manager is dedicated to a specific customer account and is responsible for the day-to-day management of that customer. Customer relationship managers work closely with customers and in many cases provide on-site support. Customer relationship managers often attend customers' internal meetings related to production and engineering design and quality to ensure that customer expectations are interpreted and communicated properly to our operations group. Customer relationship managers also work with our customers to identify and meet their cost and design-to-delivery cycle time objectives.

We have dedicated business development managers responsible for new business development for gas delivery systems and other critical subsystems. Our new business development managers initiate and develop long-term, multilevel relationships with customers and work closely with customers on new business opportunities throughout the design-to-delivery cycle. Our customer relationship organization includes technical sales support for order placement, spare parts quotes and production status updates. We have a technical relationship representative located at each of our manufacturing facilities.

We integrate new business wins into our facilities via a rigorous product transition process, working in concert with our customers to ensure all product production and test requirements are identified, documented, and validated. We employ the same process at all our sites, enabling products to smoothly transition into and between our sites as needed to support customer demand.

In addition, we have developed a service and support infrastructure to provide our customers with service and support 24 hours a day, seven days a week. Our dedicated global field service engineers provide customer support through the performance of on-site installation, servicing and repair of our subsystems.

Technology Development

We engage in ongoing technology development efforts in order to remain a technology leader for gas delivery systems and to further develop our expertise in other critical subsystems. Our design engineering and new product engineering groups support our technology development activities. Our technology development group works closely with our customers to identify and anticipate changes and trends in next-generation equipment. Our technology development group participates in customer technology partnership programs that focus on process application requirements for gas and liquid delivery systems and other critical subsystems. These development efforts are designed to meet specific customer requirements in the areas of subsystem design, materials, component

selection and functionality. Our technology development group also works directly with our suppliers to help them identify new component technologie s and make necessary changes in, and enhancements to, the components that we integrate into our products. Our analytical and testing capabilities enable us to evaluate multiple supplier component technologies and provide our customers with a wide range of appropriate component and design choices for their gas delivery systems and other critical subsystems.

Our analytical and testing capabilities also help us anticipate technological changes and requirements in component features for next-generation gas delivery systems and other critical subsystems. We are developing additional features to improve the performance and functionality of our gas delivery systems and other critical subsystems. Our technology development and new product engineering expenses were approximately $9.9 million, $9.6 million and $7.1 million for the 2016, 2015 and 2014 fiscal years, respectively. We perform our technology development activities principally at our facilities in Hayward, California.

Intellectual Property

Our success depends in part on our ability to maintain and protect our proprietary technology and to conduct our business without infringing the proprietary rights of others. Our business is largely dependent upon our design, engineering, manufacturing and testing know-how. We also rely on a combination of trade secrets and confidentiality provisions, and to a much lesser extent, patents, copyrights and trademarks, to protect our proprietary rights. We have four patents with various expiration dates ranging from 2019 to 2034 as a result of our acquisition of Marchi in February 2015. We have no pending U.S. patents. Intellectual property that we develop on behalf of our customers is generally owned exclusively by those customers.

We require our employees, suppliers and potential business partners to enter into confidentiality and non-disclosure agreements before we disclose to them any sensitive or proprietary information regarding our products, technology or business plans. We require employees to assign to us proprietary information, inventions and other intellectual property they create, modify or improve.

Competition

Our industry is highly fragmented. When we compete for new business, we face competition from other suppliers of gas delivery systems and other critical subsystems as well as the internal manufacturing groups of our customers. Customers that have elected to outsource their gas delivery systems and other critical subsystems could elect in the future to develop and manufacture these subsystems internally, leading to further competition.

Our principal competitor for our gas delivery systems is Ichor Systems, Inc., and our principal competitors for other critical subsystems are Flex Ltd., Foxsemicon Integrated Technology Inc. and Celestica Inc. Some of these competitors have substantially greater financial, technical, manufacturing and marketing resources than we do. We expect our competitors to continue to improve the performance of their current products and to introduce new products or new technologies that could adversely affect sales of our current and future products. In addition, the limited number of potential customers in our industry further intensifies competition. The primary competitive factors in our industry are price, technology, quality, design-to-delivery cycle time, reliability in meeting product demand, service and historical customer relationships. We anticipate that increased competitive pressures will cause intensified price-based competition and we may have to reduce the prices of our products. In addition, we expect to face new competitors as we enter new markets.

Employees

As of December 30, 2016, we had 2,182 employees, of which 384 were temporary. Of our total employees, there were 29 in engineering, 13 in technology development, 95 in sales and support, 1,391 in direct manufacturing, 518 in indirect manufacturing and 136 in executive and administrative functions. These figures include 706 employees in Asia and 317 employees in Europe. None of our employees are represented by a labor union and we have not experienced any work stoppages.

Governmental Regulation and Environmental Matters

Our operations are subject to federal, state and local regulatory requirements and foreign laws relating to environmental, waste management and health and safety matters, including measures relating to the release, use, storage, treatment, transportation, discharge, disposal and remediation of contaminants, hazardous substances and waste, as well as practices and procedures applicable to the construction and operation of our facilities.

Our past or future operations may result in injury or claims of injury by employees or the public which may result in material costs and liabilities to us. Although some risk of costs and liabilities related to these matters is inherent in our business, we believe that our business is in compliance with applicable regulations. However, new, modified or more stringent requirements or enforcement policies could be adopted, which could adversely affect us.

Available Information

We file with the Securities and Exchange Commission ("SEC") annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act. You may read and copy any materials we file with the SEC at the Public Reference Room maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. You may also request copies of all or any portion of such material from the SEC at prescribed rates. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference room. In addition, materials filed electronically with the SEC are available at the SEC's website at http://www.sec.gov.

In addition, we make available free of charge, on or through our website at http://www.uct.com, our annual, quarterly and current reports and any amendments to those reports, as soon as reasonably practicable after electronically filing such reports with, or furnishing them to, the SEC. This website address is intended to be an inactive textual reference only; none of the information contained on our website is part of this report or is incorporated by reference herein.

Executive Officers

Set forth below is information concerning our executive officers as of February 24, 2017.

Name	Age	Position
James P. Scholhamer	50	Chief Executive Officer & Director
Sheri Brumm	46	Chief Financial Officer & Senior Vice President of Finance
Michael Henderson	56	Senior Vice President of Engineering
Deborah Hayward	55	Senior Vice President of Global Account Management
Lavi A. Lev	60	Senior Vice President of Asia
Mark G. Bingaman	61	Senior Vice President of Global Materials and Supply Chain Management
Joe Williams	44	Senior Vice President of Customer Business Management
David Speirs	55	Senior Vice President of North America Operations
Joan Sterling	59	Senior Vice President of Global Human Resources
Ron D'Ercole	55	Senior Vice President of Global Quality

James P. Scholhamer joined UCT as Chief Executive Officer and a member of the Board of Directors of UCT in January 2015. Prior to joining UCT, Mr. Scholhamer served in various capacities with Applied Materials Inc., most recently as corporate vice president and general manager of the Equipment Products Group and Display Services Group within its Global Service Division from February 2011 to January 2015. Mr. Scholhamer was the corporate vice president and general manager of the Display Business Group from December 2008 to February 2011 and vice president of Operations-Energy for the Environmental and Display Products Division from July 2006 to December 2008 at Applied Materials, Inc. Mr. Scholhamer held various positions at Applied Films Corporation from August 1997 to July 2006, including chief operating officer, chief technology officer and executive vice president as well as vice president of Operations, Engineering and Research & Development. In addition to managing Applied Films Germany and Taiwan sites, Mr. Scholhamer served as vice president and general manager of the Thin Film Coating Division and the Thin Film Equipment Division in the company's Colorado office from July 2000 to September 2004. Prior to that, Mr. Scholhamer held various operational and technical positions in several companies related to the design and fabrication of optical components such as Visible, UV and X-ray optics. Mr. Scholhamer holds a Bachelor of Science degree in materials and metallurgical engineering from the University of Michigan.

Sheri Brumm has served as our Chief Financial Officer since July 2016. Ms. Brumm joined the Company as the Senior Director of Finance in April 2009. She was Senior Vice President of Finance and Chief Accounting Officer from February 2016 to July 2016. Prior to joining UC T, Ms. Brumm served at Credence Systems Corporation, a manufacturer of test equipment for the global semiconductor industry, as its Corporate Controller and Vice President of Finance from February 2008 to February 2009 and as Director of Internal Audit fro m May 2006 to February 2008. Prior to Credence Systems, Ms. Brumm served in various accounting and finance roles at Protiviti, a global business consulting and internal audit firm, and KLA-Tencor Corporation, a supplier of process control and yield managem ent solutions for the semiconductor and related nanoelectronics industries. Ms. Brumm also served as Manager, Business Process Risk Accounting, at Arthur Anderson LLP, the former accounting firm, from May 1996 to October 1999. Ms. Brumm holds a Bachelor of Science degree in Managerial Economics from the University of California, Davis.

Michael Henderson joined UCT as our Senior Vice President of Engineering in May 2016. Mr. Henderson has more than 25 years of high tech engineering leadership experience with senior roles in R&D, process development, and production management. With tenures at Seagate, Avaya, Modumetal, and Grote Industries, he has had responsibilities worldwide leading aggressive product development and production ramps, manufacturing site transitions and outsourced partner management. Mr. Henderson has a M.S. in Physics from the University of Minnesota.

Deborah Hayward has served as our Senior Vice President of Global Account Management since January 2007 and Vice President of Sales since October 2002. Ms. Hayward served as our Senior Sales Director from May 2001 to October 2002, as Sales Director from February 1998 to May 2001 and as a major account manager from October 1995 to February 1998. Prior to joining UCT in 1995, she was a customer service manager and account manager at Brooks Instruments from 1985 to 1995.

Lavi A. Lev has served as our Senior Vice President of Asia since November 2011. Prior to joining UCT, Mr. Lev served in 2008 as a director and executive chairman of the Board of LTX-Credence Corporation, a provider of automated test equipment for the semiconductor industry. Mr. Lev was chief executive officer and president of Credence Systems Corporation from 2006 to 2008. Prior to that, Mr. Lev served as executive vice president and general manager of the products and solution business at Cadence Design Systems, Inc. from 2000. Mr. Lev has 30 years of business, research and development and operational management experience in the Microprocessor Chip Design, Electronic Design Automation Software, Test Equipment and Contract Manufacturing industries. Mr. Lev holds a Bachelor of Science degree in electrical engineering from Technion, Israel Institute of Technology and also graduated from the Jerusalem Rubin Academy of Music.

Mark G. Bingaman has served as our Senior Vice President of Global Materials and Supply Chain Management since February 2010. Prior to joining UCT, Mr. Bingaman was the managing director at Applied Materials, Inc. in charge of the site in Tainan, Taiwan which manufactured equipment for solar, glass and display industries. He held additional senior management positions at Applied Materials, Inc. starting from 2000. From 1999 to 2000, Mr. Bingaman was the director for supply chain management integration for Eaton Corporation. Mr. Bingaman held multiple positions at Aeroquip-Vickers, Inc. from 1995 to 1999 including vice president for global supply chain management for Vickers, Incorporated. He held various positions at McDonnell Douglas from 1977 to 1994 including vice president of operations for the McDonnell Douglas Helicopter Company from 1990 to 1994. Mr. Bingaman holds a Bachelor of Science degree in accounting from the University of Missouri and a Master of Science degree in management information systems from Southern Illinois University.

Joe Williams joined UCT in February 2015 with the acquisition of Marchi as President of Marchi. He continues to manage Marchi and serves as our Senior Vice President of Customer Business Management since October 2016. Mr. Williams was president of Marchi from April 2013 to 2015. He worked previously at UCT as vice president of new business development. Mr. Williams was Senior Vice President of Business Development & Engineering at AIT from 2007 to 2013. Prior to that, Mr. Williams co-founded Integrated Flow Systems and served as vice president of engineering and operations and director of engineering and operations from 1997 to 2004. He worked at Watkins-Johnson Company as a mechanical design engineer from 1994 to 1997. Mr. Williams holds a Bachelor of Science Degree in Mechanical Engineering from North Carolina State University.

David Speirs has served as our Senior Vice President of North America Operations since 2010. Working in the semiconductor capital equipment industry fo r more than 20 years, Mr. Speirs has management experience in manufacturing, quality and operations. Mr. Speirs joined UCT in 2006 to manage the manufacturing operations of UCT's Sieger Engineering, Inc. acquisition. He was instrumental in expanding the ne w product introduction group for UCT into a global organization. Prior to joining UCT, he was previously the Vice President of Operations for Metara Inc. a start-up venture manufacturing chemical metrology equipment for the semiconductor industry. From 199 4 to 2004, he held several director level management positions at Novellus Systems, Inc. including Manufacturing, Operations Quality and CVD/PVD Operations. Mr. Speirs holds a SCOTEC degree in Electrical Engineering from Stow College of Engineering.

Joan Sterling has served as our Senior Vice President of Global Human Resource since 2016. Ms. Sterling joined UCT in March 2013 as Director of Global Human Resources. Prior to joining UCT, Ms. Sterling was the Human Resource Director for Engineering and Broadcast Operations at SiriusXM Satellite Radio from 2009 to 2013. She worked at Hitachi Data Systems from 2007 to 2009 as an executive change management consultant for a global IT redesign. Ms. Sterling served as human resource senior vice president for the consumer credit group at Wells Fargo from 2005 to 2007. From 2000 to 2005, Ms. Sterling served in several senior director roles at Hewlett Packard managing human resources sites and functions of staffing, compensation, benefits, training and development. She was the corporate director of human resource strategic planning for First Energy Corporation from 1999 to 2000. She worked at Hewlett Packard Enterprise from 1994 to 1999 as the Midwest Region Headquarters Human Resource Manager. Ms. Sterling holds a Bachelor of Science in business from DePaul University and a Master of Arts in organizational development from Loyola University.

Ron D'Ercole has served as our Senior Vice President of Global Quality since 2016. Mr. D'Ercole joined UCT in December 2014 as Vice President of Quality. Prior to joining UCT, he worked at Lam Research Corporation for twelve years and held director level positions for customer experience and corporate quality and services. Mr. D'Ercole worked at Novellus Systems, Inc. from 1997 to 2002 as director of global spares and corporate quality assurance. From 1992 to 1997, he worked at LSA Anodic Technologies, Inc. where he was a founder and the chief operations officer. Mr. D'Ercole holds a Bachelor of Science degree in chemical engineering from the University of California, Berkeley and a MBA from the University of San Francisco.

Item 1A. Risk Factors

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

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

We rely on a small number of original equipment manufacturing customers for a significant portion of our sales, and any adverse change in our relationships with these customers, inclu ding 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 signi ficant 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, the respective year's top three customers accounted for 86.4%, 84.3% and 75.7% of our sales for fiscal years 2016, 2015 and 2014, respectively, and we expect that our sales will continue to be concentrated among a small number of customers. In addition, our customer contracts generally do not require customers to place any orders. Accordingly, the success of our business depends on OEMs continuing to outsource the manufacturing of critical subsystems to us. Because of the small number of OEMs in the markets we serve, most of which are already our customers, it would be difficult to replace lost revenue resulting from the loss of, or the reduction, cancellation or delay in purchase orders by, any one of these customers, whether due to such customer's decision to not continue to outsource all or a portion of its critical subsystems for its capital equipment to us, such customer giving market share to our competitors or for other reasons, such as a customer's bankruptcy or insolvency or decreased demand for such customer's products. We have in the past lost business from customers who have taken the manufacturing of our products in-house or given market share to our competitors. For example, in February 2015, we entered into an agreement with Intuitive Surgical (ISI) pursuant to which ISI would begin insourcing of manufacturing for its next generation robot. Further, since our customers generally own the designs and other intellectual property to the products we manufacture, we cannot prevent them from licensing such designs and other intellectual property to our competitors for the manufacturing of such products. If we are unable to replace revenue from customers who determine to take subsystem assembly in-house or give market share to our competitors, such events could have a material adverse impact on our financial position and results of operations.

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

In addition, by virtue of our largest customers' sizes, and the significant portion of revenue that we derive from them, as well as the competitive landscape, our customers are able to exert significant influence and pricing pressure in the negotiation of our commercial agreements and individual purchase orders and on the conduct of our business with them. Our customers often require reduced prices or other pricing, quality, manufacturing or delivery commitments as a condition to their awarding of market share to us or the placement of orders with us in any given period, which may, among other things, result in reduced operating margins in order to maintain or expand our market share or require capital or other expenditures. Our customers' negotiating leverage also can result in customer agreements or terms and conditions that may contain significant liability risk to us. For example, some of our customers insist that we provide them indemnification against certain liabilities in our agreements with them, including claims of losses by their customers caused by our products, which may be uncapped. In some cases, we have determined to self-insure against liability risk in our customer agreements, meaning that we may be directly responsible for high magnitude liability claims by our customers without recourse to insurance proceeds from third-party insurers. Our customers may also pressure us to make other concessions in order to preserve or expand our market share with them, which may harm our business. For example, one or more of our customers may require us to move the manufacture of our products from lower-cost geographies or locations such as China to higher-cost geographies or locations, such as Singapore, that are closer to such customer's facilities which could result in reduced margins and a sub-optimal cost structure. If we are unable to retain and expand our business with our customers on favorable terms, or at all, our business and operating results will be adversely affected, or we may be susceptible to increased liability risk which, if realized, may have a material adverse effect on our business, cash flows, results of operations and financial condition.

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

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

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

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

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

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

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. Difficulties in obtaining capital, uncertain market conditions, or reduced profitability may also cause some customers to scale back operations, exit businesses, merge with other manufacturers, or file for bankruptcy protection and potentially cease operations, leading to customers' reduced research and development funding and/or capital expenditures and, in turn, lower orders from our customers and/or additional slow moving or obsolete inventory or bad debt expense for us. These conditions may also similarly affect key suppliers, which could impair their ability to deliver parts and result in delays for our products or require us to either procure products from high-cost suppliers, or if no additional suppliers exist, to reconfigure the design and manufacture of our products, and we may be unable to fulfill customer orders. For example, on October 6, 2014, one of our customers, GT Advanced Technologies (GTAT), filed for bankruptcy under chapter 11 of the Bankruptcy Code in the United States Bankruptcy Court for the District of New Hampshire, which impaired the collectability of our outstanding accounts receivable as well as the value of our on-hand inventory related to GTAT and also resulted in a charge for non-cancelable vendor commitments.

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

We are in the process of implementing a new Company-wide ERP system. This process has been and continues to be complex and time-consuming and we expect to incur additional expenses. This ERP system will replace many of our existing operating and financial systems, which is a major undertaking from a financial management and personnel perspective. Should the new ERP system not be implemented successfully throughout all our business units and within budget and on time, or if the system does not perform in a satisfactory manner, it could be disruptive and adversely affect our operations, including our potential ability to report accurate, timely and consistent financial results; our ability to purchase raw material from and pay our suppliers; and deliver products to customers on a timely basis and to collect our receivables from them. Furthermore, this new ERP system is intended to be implemented in all locations over the course of fiscal year 2018.

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

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

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

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

On February 2, 2015, we entered into a new credit agreement by and among us, certain of our subsidiaries, East West Bank and City National Bank. This agreement was subsequently amended in December 2015 with such amendments effective as of December 25, 2015 (as amended, the "Credit Agreement"). This Credit Agreement provides for a term loan in an aggregate principal amount of $40.0 million and a revolving credit facility in an aggregate principal amount of $40.0 million, a letter of credit facility in the aggregate availability amount of $20.0 million and a swingline sub-facility in the aggregate availability amount of $5.0 million. On February 2, 2015, we borrowed an aggregate of $46.5 million under this Credit Agreement to repay the remaining outstanding balance from our prior loan with Silicon Valley Bank. On February 5, 2015, we borrowed an additional $29.7 million under this Credit Agreement to finance the acquisition of Marchi. The Company has a balance of $36.2 million on its revolving loan with $3.8 million available to borrow as of December 30, 2016. The Company's term loan balance is $26.2 million as of December 30, 2016, with required payments of $2.9 million per quarter through February 2, 2019. In addition, Miconex has a debt balance of $5.7 million as of December 30, 2016. The Company's total debt as of December 30, 2016, gross of capitalized loan costs of $0.3 million, was $68.1 million.

Our indebtedness could have adverse consequences including:

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

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

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

- incur additional debt, including guarantees, or create liens;
- pay dividends and make distributions in respect of our capital stock;
- repurchase capital stock;
- make investments or other restricted payments;
- engage in transactions with stockholders and affiliates;
- sell or otherwise dispose of assets;
- make payments on subordinated indebtedness; and
- engage in certain mergers and acquisitions, new lines of business or make other fundamental changes.

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

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

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

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

We made capital expenditures of approximately $7.8 million and $10.0 million for fiscal year 2016 and 2015, respectively related to our manufacturing facilities in the United States, China and Singapore. In February 2015, we paid approximately $29.9 million and issued 1,437,500 shares of our common stock in connection with our acquisition of Marchi. The cash portion of the merger consideration was financed through the new credit facility described above; of which an aggregate of $62.4 million was outstanding as of December 30, 2016. In July 2015, we

acquired M iconex for total consideration of $20.7 million which includes $15.6 million paid in cash, 500,000 shares of Company's common stock, and up to $4.0 million of potential cash "earn-out" payments over two-year period. In 2016, Miconex achieved the specified performance targets for the first year and was paid the maximum of $2.0 million of the $4.0 million potential cash earn-out. The amount of our future capital requirements or strategic acquisitions will depend on many factors, including:

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

We had $52.5 million in cash and cash equivalents as of December 30, 2016 of which $38.1 million was held by our foreign subsidiaries. If the cash and cash equivalents held by our foreign subsidiaries is needed for our operations or to fund capital expenditures or other strategic acquisitions in the U.S., we would be required to accrue and pay U.S. taxes to repatriate these funds. In addition, such funds may not be readily available to meet our domestic cash requirements.

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

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

The manufacturing of our products is a highly complex process that involves the integration of multiple components and requires effective management of our supply chain while meeting our customers' design-to-delivery cycle time requirements. Through the course of the manufacturing process, our customers may modify design and system configurations in response to changes in their own customers' requirements. In order to rapidly respond to these modifications and deliver our products to our customers in a timely manner, we must effectively manage our manufacturing and procurement process. If we fail to manage this process effectively, we risk losing customers and damaging our reputation. We may also be subject to liability under our agreements with our customers if we or our suppliers fail to effectively or timely re-configure manufacturing processes or components in response to these modifications or if shipments of our products are delayed, which may lead to product defect or other claims by our customers or cancelled orders. In addition, if we acquire inventory in excess of demand or that does not meet customer specifications, we could incur excess or obsolete inventory charges. These risks are even greater during periods of macroeconomic uncertainty or down cycles in our industry, and as we continue to expand

our business beyond gas delivery systems into new subsystems with which we have less experience. Dur ing periods of economic uncertainty or down cycles in our industry, certain of our suppliers may be forced to reduce or go out of business, which could require us to either procure products from higher-cost suppliers or, if no additional suppliers exist, r econfigure the design and manufacture of our products. This could limit our growth and have a material adverse effect on our business, financial condition and operating results.

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

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

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

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

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

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

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

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

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

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

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

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 48.0% and 34.5% of our sales in international markets for fiscal 2016 and 2015, respectively. Depending on market conditions, we intend to expand our operations in Asia and Europe, principally in China and Singapore and the Czech Republic. In addition, through our acquisition of AIT, we acquired a manufacturing facility in Cebu, Philippines. The carrying amount of our fixed assets in Asia and Europe were $6.5 million and $1.6 million, respectively as of December 30, 2016.

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

- foreign currency exchange fluctuations;
- political, civil and economic instability;
- tariffs and other barriers;
- timing and availability of export licenses;
- disruptions to our and our customers' operations due to increased risk of outbreak of diseases, such as SARS and avian flu;
- disruptions in operations due to China's developing domestic infrastructure, including transportation and energy;

- difficulties in developing relationships with local suppliers;
- difficulties in attracting new international customers;
- difficulties in accounts receivable collections;
- difficulties in staffing and managing distant international subsidiary and branch operations;
- the burden of complying with foreign and international laws and treaties;
- legal systems potentially subject to undue influence or corruption;
- difficulties in transferring funds to other geographic locations; and
- potentially adverse tax consequences, including restrictions on the repatriation of earnings to the United States.

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

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

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

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

Our revenue is difficult to forecast because we generally do not have a material backlog of unfilled orders and because of the short time frame within which we are often required to design, produce and deliver products to our customers. Most of our revenue in any quarter depends on customer orders for our products that we receive and fulfill in the same quarter. We do not have long-term purchase orders or contracts that contain minimum purchase commitments from our customers. Instead, we receive non-binding forecasts of the future volume of orders from our customers. Occasionally, we order and build component inventory in advance of the receipt of actual customer orders. Customers may cancel order forecasts, change production quantities from forecasted volumes or delay production for reasons beyond our control. Furthermore, reductions, cancellations or delays in customer order forecasts, which may occur for various reasons, including reduced demand for our customer's products, customer bankruptcies or customer insolvency, usually occur without penalty to, or compensation from, the customer. Reductions, cancellations or delays in forecasted orders could cause us to hold inventory longer than anticipated, which could reduce our gross profit, restrict our ability to fund our operations and cause us to incur unanticipated reductions or delays in revenue. Moreover, most of the products we manufacture are custom built for our customers and are therefore not fungible with products we sell to other customers. If we do not obtain orders as we anticipate, we could have excess component inventory for a specific product that we would not be able to sell to another customer, likely resulting in inventory write-offs, which could have a material adverse effect on our business, financial condition and operating results. In addition, because many of our costs are fixed in the short term, we could experience deterioration in our gross profit and operating margins when our production volumes decline.

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

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

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

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

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

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

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

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

disruptions, we could potentially be subject to production downtimes, operational delays, other detrimental impacts on o ur 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 o ur systems or networks, financial losses from remedial actions, loss of business or potential liability, and/or damage to our reputation, any of which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

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

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

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

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

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

Our acquisitions could also result in dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities, or amortization expenses, impairment charges and restructuring charges, any of which could harm our financial condition. Also, the anticipated benefits or value of our acquisitions or investments may not materialize. Even if an acquisition or other investment is not completed, we may divert significant management time and effort and financial co st 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 t o obtain, and the terms of such financing may not be favorable.

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

We had $85.2 million of goodwill recorded on our consolidated balance sheet as of December 30, 2016. Goodwill represents the excess of cost over the fair market value of net tangible and finite lived, identifiable intangible assets acquired in business combinations. If our market capitalization drops significantly below the amount of net equity recorded on our balance sheet, it could indicate a decline in our value and would require us to further evaluate whether our goodwill has been impaired. During the fourth quarter of each year, we perform an annual review of our goodwill to determine if it has become impaired, in which case we would write down the impaired portion of our goodwill. We also evaluate goodwill for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If we were required to write down all or a significant part of our goodwill, our financial results and net worth could be materially adversely affected.

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

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

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

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

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

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

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

- design innovative and performance-enhancing features that differentiate our products from those of our competitors;
- identify emerging technological trends in the industries we serve, including new standards for our products;
- accurately identify and design new products to meet market needs;
- collaborate with OEMs to design and develop products on a timely and cost-effective basis;
- ramp-up production of new products, especially new subsystems, in a timely manner and with acceptable yields at acceptable costs;
- successfully manage development production cycles; and
- respond effectively to technological changes or product announcements by others.

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

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

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

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

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

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

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

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

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

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

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

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

The challenges of employee retention has also increased during the integration process with the companies we have acquired because of the necessity of combining personnel with varied business backgrounds and combining different c orporate 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 lo ss of momentum in, the activities of one or more of our businesses and the loss of key personnel. Employee uncertainty, lack of focus or turnover during the integration process may also disrupt our businesses.

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

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

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

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

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

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

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

Our bus iness 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 adversely affected.

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

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

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

The market for our stock is subject to significant fluctuation.

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

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

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

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

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

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

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

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

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

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

Item 1B. Unresolve d Staff Comments

None.

Item 2. Properties

Our headquarters is located in a 108,000 square foot facility in Hayward, California. This is our principal administrative, sales and support, engineering and technology development and manufacturing facility. This lease expires in 2022. We also have manufacturing and engineering facilities in South San Francisco and Fremont, California, and Austin, Texas. In South San Francisco we lease an aggregate of approximately 124,000 square feet under several leases which expire in 2018. In Fremont, we lease approximately 9,000 square feet under a lease that expires in 2018. As a result of the acquisition of Marchi, also located in Hayward, California, we lease approximately 22,000 square feet under a lease that expires in 2020. We also have manufacturing facilities in Chandler, Arizona; Shanghai, China; Singapore; Cebu, Philippines and Liberec, Czech Republic. In Arizona, we lease approximately 120,000 square feet under leases that expire in 2017 and 2022. In Austin, we lease an aggregate of approximately 56,000 square feet under leases that expire in 2021. Approximately 14,000 square feet in Austin is a clean room manufacturing facility. In Shanghai, we lease approximately 136,000 square feet of commercial space under two leases that expire in 2017 and 2019. Approximately 37,000 square feet of this space is a clean room facility. In Singapore, we lease approximately 88,000 square feet under two separate leases that expire in 2017 and 2023 with extension provisions. In the Philippines, we lease approximately 16,000 square feet under three separate leases that expire in 2017 and 2019. With the acquisition of Miconex in the Czech Republic, we have approximately 74,000 square feet of manufacturing facilities under two separate leases that expire in 2023.

The table below lists our properties as of March 15, 2017:

Location	Principal Use	Square Footage	Ownership
Hayward, California	Headquarters, manufacturing, sales, engineering, technology development	131,000	Leased
South San Francisco, California	Manufacturing, engineering	124,000	Leased(1)
Fremont, California	Manufacturing, engineering	9,000	Leased
Austin, Texas	Manufacturing, engineering	56,000	Leased
Chandler, Arizona	Manufacturing	120,000	Leased
Cebu, Philippines	Manufacturing	16,000	Leased
Singapore	Manufacturing, customer support	88,000	Leased
Shanghai, China	Manufacturing	136,000	Leased
Czech Republic	Manufacturing, customer support	74,000	Leased

(1) We lease this facility from one of our directors. We incurred rent expense resulting from the lease of this facility of $0.3 million for each of fiscal years 2016 and 2015.

Item 3. Legal Proceedings

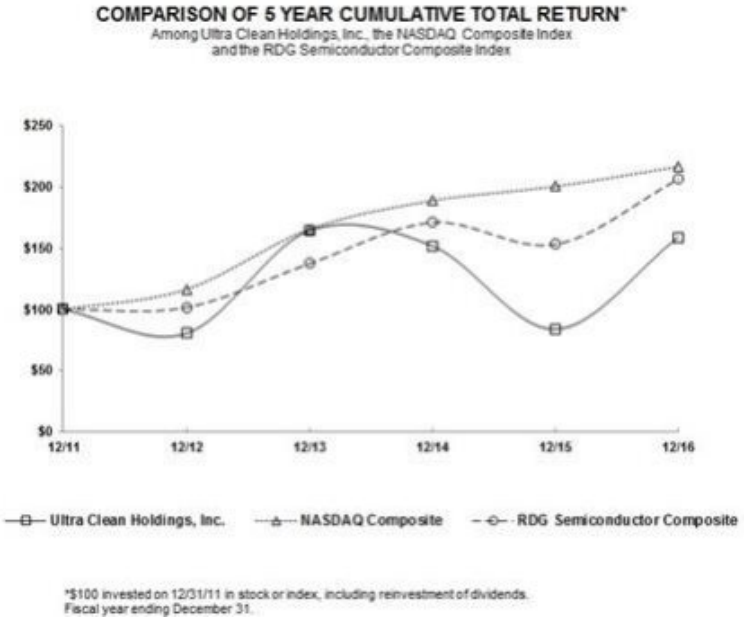
From time to time, we are subject to various legal proceedings and claims, either asserted or unasserted, that arise in the ordinary course of business. Although the outcome of the various legal proceedings and claims cannot be predicted with certainty, we have not had a history of outcomes to date that 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 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities



Our common stock has been traded on the NASDAQ Global Market under the symbol "UCTT" since March 25, 2004. The following table sets forth for the periods indicated the high and low sales prices per share of our common stock as reported by the NASDAQ Global Market:

	High	Low
Fiscal year 2015		
First quarter	$ 10.29	$ 7.17
Second quarter	$ 7.51	$ 5.26
Third quarter	$ 8.16	$ 5.29
Fourth quarter	$ 5.91	$ 4.60
Fiscal year 2016		
First quarter	$ 5.72	$ 4.50
Second quarter	$ 6.07	$ 4.95
Third quarter	$ 7.50	$ 5.40
Fourth quarter	$ 10.65	$ 6.79

To date, we have not declared or paid cash dividends to our stockholders and we do not intend to do so for the foreseeable future in order to retain earnings for use in our business. Our credit facility also limits our ability to pay dividends. As of February 24, 2017, we had five stockholders of record.

Recent Sales of Unregistered Sales of Equity Securities

None.

Purchase of Equity Securities by the Issuer and Affiliated Purchasers

None.

Item 6. Selected Consolidated Financial Data

You should read the following tables in conjunction with other information contained under "Management's Discussion and Analysis of Financial Condition and Results of Operations," our consolidated financial statements and related notes and other financial information contained elsewhere in this Annual Report on Form 10-K.

Statements of Operations Data (in thousands, except per share amounts):

	Years Ended				
	12/30/2016	12/25/2015**	12/26/2014	12/27/2013	12/28/2012*
Consolidated Statements of Operations Data:					
Sales	$ 562,759	$ 469,103	$ 513,957	$ 444,022	$ 403,430
Cost of goods sold	475,976	398,073	440,824	376,693	347,642
Gross profit	86,783	71,030	73,133	67,329	55,788
Operating expenses, excluding acquisition costs	64,392	64,605	54,949	51,421	45,012
Acquisition costs	—	584	—	—	2,431
Income from operations	22,391	5,841	18,184	15,908	8,345
Interest expense and other, net	(3,444)	(2,234)	(1,854)	(3,309)	(1,648)
Income before income taxes	18,947	3,607	16,330	12,599	6,697
Income tax provision	8,896	14,339	4,973	2,175	1,544
Net income (loss)	$ 10,051	$ (10,732)	$ 11,357	$ 10,424	$ 5,153
Net income (loss) per share:					
Basic	$ 0.31	$ (0.34)	$ 0.39	$ 0.37	$ 0.20
Diluted	$ 0.30	$ (0.34)	$ 0.38	$ 0.36	$ 0.20
Shares used in computation:					
Basic	32,632	31,564	29,301	28,346	25,698
Diluted	33,150	31,564	29,936	29,037	26,261

Consolidated Balance Sheet Data (in thousands):

	12/30/2016	12/25/2015**	12/26/2014	12/27/2013	12/28/2012*
Cash & cash equivalents	$ 52,465	$ 50,103	$ 78,997	$ 60,415	$ 54,311
Working capital	136,389	125,428	142,279	100,415	85,883
Total assets	380,697	336,153	296,142	292,543	265,929
Bank borrowings and long-term debt	67,750	75,539	48,155	55,126	75,640
Short-and long-term rent obligations	3,291	3,769	2,948	3,302	2,818
Total stockholders' equity	216,131	200,943	188,552	171,929	156,780

* Includes the results of operations of AIT for the period July 3, 2012 through December 28, 2012.

** Includes the results of operations of Marchi and Miconex for the period February 5, 2015 through December 25, 2015 and for the period from July 31, 2015 to December 25, 2015, respectively. See Note 4 to the Notes to Consolidated Financial Statements for further information.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

This section and other parts of this Annual Report on Form 10-K contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements involve risks and uncertainties. Forward-looking statements can also be identified by words such as *"anticipate," "believe," "estimate," "expect," "intend," "may," "might," "plan," "project," "will," "would," "should," "could," "can," "predict," "potential," "continue," "objective,"* and similar terms. Forward-looking statements are not guarantees of future performance and our actual results may differ significantly from the results discussed in the forward-looking statements. Factors that might cause such differences include, but are not limited to, those discussed in "Item 1A — Risk Factors" above. The following discussion should be read in conjunction with the consolidated financial statement and notes thereto included in Item 8 of this report. We assume no obligation to revise or update any forward-looking statements for any reason, except as required by law.

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 flat panel 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.

With our acquisition of Marchi on February 5, 2015, we expanded our capabilities to include the design and manufacture of application-specific thermal solutions to solve semiconductor equipment customers' temperature management challenges. The acquisition of Marchi further expanded our footprint with our pre-existing customers and brings us closer to the customers in the design stage of new products and next generation equipment. With our acquisition of Miconex on July 31, 2015, we further expanded our capabilities to include manufacturing services in advanced precision milling and welding of plastics for the semiconductor industry.

In November 2016, we approved a plan to dispose of a portion of our 3D printing business in order to focus on producing product tools for the semiconductor capital equipment industry. We are actively seeking a buyer for a portion of our 3D printing business and we expect to complete the sale in 2017.

Our sales were $562.8 million for fiscal year 2016, $469.1 million for fiscal year 2015, and $514.0 million for fiscal year 2014. Our three largest customers were Applied Materials, Inc., Lam Research Corporation and ASM International, Inc., each of which accounted for more than 10% of our total sales in fiscal year 2016, 2015 and 2014, with the exception of our sales to ASM International, Inc. in 2016 and 2015. As a group, these customers accounted for 86.4%, 84.3% and 75.7% of our sales for fiscal years 2016, 2015 and 2014, respectively.

Results of Operations

The following table sets forth income statement data for the periods indicated as a percentage of revenue:

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
Sales	100.0 %	100.0 %	100.0 %
Cost of goods sold	84.6	84.9	85.8
Gross profit	15.4	15.1	14.2
Operating expenses:			
Research and development	1.8	2.0	1.4
Sales and marketing	2.1	2.5	2.0
General and administrative	7.6	9.3	7.3
Total operating expenses	11.5	13.8	10.7
Income from operations	3.9	1.3	3.5
Interest and other income (expense), net	(0.6)	(0.5)	(0.3)
Income before provision for income taxes	3.3	0.8	3.2
Income tax provision	1.6	3.1	1.0
Net income (loss)	1.7 %	(2.3)%	2.2 %

Fiscal Year 2016 Compared With Fiscal Year 2015

Sales

Sales for fiscal year 2016 increased $93.7 million, or 20.0% to $562.8 million from $469.1 million for fiscal year 2015. The increase in sales for the fiscal year ended 2016 when compared to the same period of 2015 reflects an increase in semiconductor sales of $75.1 million and an increase in non-semiconductor sales of $18.6 million. The increase in overall sales for fiscal year 2016 compared to the same period in fiscal year 2015 was due primarily to an increase in the volume of products shipped, which was attributable to an increase in customer demand from 2015 levels. On a geographic basis, sales in the U.S. decreased by $15.1 million to $292.3 million, or 52.0% of sales, for the year ended December 30, 2016 as compared to $307.4 million, or 65.5% of sales for the same period of 2015. Foreign sales increased by $108.7 million to $270.4 million, or 48.0% of sales, for the year ended December 30, 2016 as compared to $161.7 million, or 34.5% of sales, for the same period of 2015. The increase in foreign sales is due primarily to the full year of operations of Miconex in fiscal 2016 and the continuing migration of certain business with a U.S. customer from our U.S. operations to our Singapore location.

Gross Profit

Gross profit for fiscal year 2016 increased to $86.8 million or 15.4% of sales, from $71.0 million, or 15.1% of sales, for fiscal year 2015. Our gross margin percentage and absolute dollars of gross profit increased in fiscal year 2016 from the comparable period in 2015 due to higher sales volume, a sales mix which included higher margin products and certain improvements in operational efficiencies at our manufacturing locations in the U.S., which typically deliver lower margins due to higher labor and overhead costs.

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 fiscal year 2016 was $9.9 million or 1.8% of sales, compared to $9.6 million, or 2.0% of sales, for fiscal year 2015. The increase in research and development expense in absolute dollars was due primarily to the full year inclusion of Miconex and Marchi's research and development activities in 2016.

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 increased approximately $0.1 million, or 0.6%, to $11.6 million, or 2.1% of sales, compared to $11.5 million, or 2.5% of sales, in the comparable period of 2015.

General and Administrative Expense

General and administrative expense consists primarily of salaries and overhead associated with our administrative staff and professional fees. General and administrative expense decreased $1.2 million, or 2.7%, to $42.9 million, or 7.6% of sales, for fiscal year 2016 compared to $44.1 million, or 9.3% of sales, for fiscal year 2015. The decrease in absolute dollars was primarily due to a $2.4 million payment to our former CEO in the first quarter of 2015 upon his retirement and a $0.5 million write off of the tradename intangible we acquired from AIT in the fourth quarter of 2015, offset by an increase of $0.8 million due to the full year inclusion of Marchi and Miconex in 2016 and by an $0.8 million payment made to our former CFO upon his retirement on July 29, 2016.

Interest and O ther Income (Expense), net

Interest and other income (expense) for fiscal year 2016 was $(3.4) million compared to $(2.2) million for fiscal year 2015. The increase in net expense was primarily due to an increase in the change in fair value of the Miconex contingent earn-out liability of $1.9 million, offset by a decrease in interest expense of $0.4 million resulting from the overall decrease in outstanding debt in fiscal year 2016 and of $0.3 million grants received from the Singapore Economic Development Board.

Income Tax Provision

Income tax expense was $8.9 million for fiscal year 2016 compared to $14.3 million for fiscal year 2015. Our effective tax rate for fiscal year 2016 was 46.9% compared to 397.5% for fiscal year 2015. The change in respective rates reflects, primarily, a charge in the fourth quarter of fiscal 2015 related to recording a full valuation allowance on our U.S. federal and state net deferred tax assets. Our effective tax rate was higher than the statutory rates for fiscal year 2016 primarily due to the geographic distribution of our worldwide earnings in foreign jurisdictions with lower tax rates as well as the impact of losses in jurisdictions with full federal and state valuation allowances.

For the year ended December 30, 2016, the Company concluded that a full valuation allowance against its U.S. federal and state deferred tax assets continues to be necessary. The total U.S. federal and state valuation allowance as of December 30, 2016 was $23.6 million.

For the year ended December 30, 2016, the Company concluded that a full valuation allowance against one of its Singapore subsidiaries' deferred tax assets continues to be necessary. The total valuation allowance of the Singapore loss entity as of December 30, 2016 was $0.2 million.

Our ability to realize deferred tax assets depends on our ability to generate sufficient taxable income within the carryback or carry forward periods. In assessing our future taxable income, we have considered all sources of future taxable income available to realize our deferred tax assets, including the taxable income from future reversal of existing temporary differences, carry forwards, taxable income in carryback years and tax-planning strategies. If changes occur in the assumptions underlying our tax planning strategies or in the scheduling of the reversal of our deferred tax liabilities, the valuation allowance may need to be adjusted in the future.

For the year ended December 30, 2016, we determined that a portion of the current year earnings of one of our China subsidiaries will be remitted in the future to one of our foreign subsidiaries outside of mainland China and, accordingly, we provided for the related foreign withholding taxes in our consolidated financial statements. For the year ended December 30, 2016, we also determined that a portion of the current year earnings of one of our Singapore subsidiaries will be remitted in the future to the US. If we change our intent to reinvest our undistributed foreign earnings indefinitely or if a greater amount of undistributed earnings are needed than the previously anticipated remaining unremitted foreign earnings, we could be required to accrue or pay U.S. taxes on some or all of these undistributed earnings.

Fiscal Year 2015 Compared With Fiscal Year 2014

Sales

Sales for fiscal year 2015 decreased $44.9 million, or 8.7% to $469.1 million from $514.0 million for fiscal year 2014. The decrease in sales for the fiscal year ended 2015 when compared to the same period of 2014 includes a decrease of $54.8 million in non-semiconductor sales attributable in part to the GTAT bankruptcy in 2014 and in part to ISI's insourcing the manufacturing of its products in the first quarter of 2015. The decrease in non-semiconductor sales was offset by an increase in semiconductor sales of $10.0 million due primarily to the acquisitions of Marchi and Miconex in 2015. On a geographic basis, sales in the U.S. decreased by $54.2 million to $307.4 million, or 65.5% of sales, for the year ended December 25, 2015 as compared to $361.7 million, or 70.4% of sales for the same period of 2014. Foreign sales increased by $9.4 million to $161.7 million, or 34.5% of sales, for the year ended December 25, 2015 as compared to $152.3 million, or 29.6% of sales, for the same period of 2014. The increase in foreign sales is due primarily to the addition of the operations of Miconex in fiscal 2015 and to the migration of certain business with a U.S. customer from our U.S. operations to our Singapore location.

Gross Profit

Gross profit for fiscal year 2015 decreased to $71.0 million or 15.1% of sales, from $73.1 million, or 14.2% of sales, for fiscal year 2014. Our gross margin percentage increased in fiscal 2015 from the comparable period in 2014 due primarily to the declaration of bankruptcy of GTAT whereby the cost of sales associated with the goods shipped to GTAT during the third quarter of fiscal 2014 did not have corresponding revenues and the on-hand and non-cancelable inventory commitments related to this customer of $4.6 million was charged. Gross margins for 2015 also increased in 2015 when compared to 2014 due to the acquisitions of Marchi and Miconex. The decrease in absolute dollars of gross profit when comparing fiscal year 2015 with 2014 is primarily due to lower sales volume.

Research and Development Expense

Research and development expense for fiscal year 2015 was $9.6 million or 2.0% of sales, compared to $7.1 million, or 1.4% of sales, for fiscal year 2014. The increase in research and development expense in absolute dollars was due primarily to the inclusion of Miconex and Marchi's research and development activities in 2015 and to a lesser degree, to an increase in headcount.

Sales and Marketing Expense

Sales and marketing expense increased $1.1 million, or 10.2%, to $11.5 million, or 2.5% of sales, compared to $10.4 million, or 2.0% of sales, in the comparable period of 2014. The increase in the sales and marketing expense was primarily due to an increase in headcount and related payroll expenses as well as to the inclusion of Marchi sales and marketing activities in 2015.

General and Administrative Expense

General and administrative expense increased $6.1 million, or 16.2%, to $43.5 million, or 9.3% of sales, for fiscal year 2015 compared to $37.5 million, or 7.3% of sales, for fiscal year 2014. The increase in absolute dollars was primarily due to a $2.4 million payment to our former CEO in the first quarter of 2015 upon his retirement, $2.9 million amortization of finite-lived intangibles acquired in 2015 as a result of the acquisitions of Marchi and Miconex and $2.9 million general and administrative expense of Marchi and Miconex included in fiscal year 2015 primarily related to headcount and related payroll expense. These increases were offset by a decrease of $0.9 million in share-based compensation expense due to the cancellation of the unvested restricted stock units of our former CEO upon his retirement on January 19, 2015 and $1.6 million decrease in the amortization of finite-lived intangibles acquired in 2012 through our acquisition of AIT. We amortize AIT's customer relationships and tradename using an accelerated method over the estimated economic life of these assets. In the fourth quarter of 2015, we wrote off the remaining $0.5 million of the tradename intangible we acquired from AIT as we no longer believe the AIT tradename has value to the Company.

Interest and Other Income (Expense), net

Interest and other income (expense), net for fiscal year 2015 was $(2.2) million compared to $(1.9) million for fiscal year 2014. The increase in net expense was primarily due to the increase in outstanding debt in fiscal year 2015 as a result of the acquisition of Marchi in the first quarter of fiscal 2015.

Income Tax Provision

Income tax expense was $14.3 million for fiscal year 2015 compared to $5.0 million for fiscal year 2014. Our effective tax rate for fiscal year 2015 was 397.5% compared to 30.5% for fiscal year 2014. The change in respective rates reflects, primarily, a charge in the fourth quarter of fiscal 2015 related to recording a full valuation allowance on our U.S. federal and state net deferred tax assets. Our effective tax rate was higher than the statutory rates for fiscal year 2015 primarily due to the geographic distribution of our worldwide earnings in foreign jurisdictions with lower tax rates or tax holidays offset by the full valuation allowance against our U.S. federal and state net deferred tax assets. Our 2014 effective tax rate was lower than the statutory rates for fiscal year 2014 primarily due to the geographic distribution of our worldwide earnings in foreign jurisdictions with lower tax rates or tax holidays offset by a valuation allowance against our California and Oregon deferred tax assets.

During the quarter ended December 25, 2015, we determined that it was no longer more likely than not that we have the ability to project sufficient domestic taxable income necessary over the foreseeable future to realize our U.S. federal and state deferred tax assets. Therefore, during the quarter ended December 25, 2015, the Company concluded that a valuation allowance was required on its U.S. federal and remaining state deferred tax assets. The resulting charge to income tax expense was $15.6 million. The Company had a valuation allowance on its California and O regon state net deferred tax assets in the amount of $2.8 million as of December 25, 2015. The total U.S. federal and state valuation allowance as of December 25, 2015 was $18.4 million.

During the quarter ended December 25, 2015, we finalized the restructuring of certain of our operations in China. This restructuring resulted in our ability to use certain net operating loss carryforwards, and, accordingly, we concluded that a previously accrued valuation allowance was no longer required, resulting in an income tax benefit of $2.1 million.

During the fourth quarter of fiscal 2015 we recorded a full valuation allowance on the deferred assets of one of our Singapore subsidiaries in the amount of $0.3 million.

Critical Accounting Policies, Significant Judgments and Estimates

Our consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States, which requires 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.

Revenue Recognition

Our revenue for fiscal years 2016, 2015 and 2014 was highly concentrated in a small number of OEM customers in the semiconductor capital equipment, consumer, medical, energy, industrial, flat panel and research industries. Our standard arrangement for our customers includes a signed purchase order or contract, no right of return of delivered products and no customer acceptance provisions. Revenue from sales of products is recognized when:

- we enter into a legally binding arrangement with a customer;
- title transfers to the customer, which generally occurs upon shipment;
- customer payment is deemed fixed or determinable and free of contingencies or significant uncertainties; and
- collection is reasonably assured.

Revenue is recognized upon shipment of the product. In arrangements which specify title transfer upon delivery, revenue is not recognized until the product is delivered. In addition, if we have not fulfilled the terms of the agreement at the time of shipment, revenue recognition is deferred until fulfillment.

We assess collectability based on the creditworthiness of the customer and past transaction history. We perform on-going credit evaluations of, and do not require collateral from, our customers. We have not experienced significant collection losses in the past except for collection losses related to the bankruptcy of GTAT in fiscal 2014. A significant change in the liquidity or financial position of any one customer could make it more difficult for us to assess collectability.

Inventory Valuation

We write down the carrying value of our inventory to net realizable value for estimated obsolescence or unmarketable inventory in an amount equal to the difference between the cost of inventory and its estimated realizable value based upon assumptions about future demand and market conditions. We assess 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 our estimated usage is written down to its estimated market value less costs to sell, if less than its cost. The inventory write-downs are recorded as an inventory valuation allowance established on the basis of obsolete inventory or specific identified inventory in excess of established usage. Inherent in our estimates of demand and market value in determining inventory valuation are estimates related to economic trends, future demand for our products and technological obsolescence of our products. If actual demand and market conditions are less favorable than our projections, additional inventory write-downs may be required. If the inventory value is written down to its net realizable value, and subsequently there is an increased demand for the inventory at a higher value, the increased value of the inventory is not realized until the inventory is sold either as a component of a subsystem or as separate inventory. For fiscal years 2016, 2015 and 2014, we wrote down $2.3 million, $2.4 million, and $4.6 million, respectively, including $2.6 million of inventory written off as part of the GTAT bankruptcy in the third quarter of 2014.

Accounting for Income Taxes

The determination of our tax provision is highly dependent upon the geographic composition of worldwide earnings and tax regulations governing each region and is subject to judgments and estimates. Management carefully monitors the changes in many factors and adjusts the effective tax rate as required. The carrying value of our net deferred tax assets, which consist primarily of future tax deductions, assumes we will be able to generate sufficient future income to fully realize these deductions. In determining whether the realization of these deferred tax assets may be impaired, we make judgments with respect to whether we are likely to generate sufficient future taxable income to realize these assets. In order to reverse a valuation allowance, accounting principles generally accepted in the United States of America suggest that we review our recent cumulative income/loss as well as determine our ability to generate sufficient future taxable income to realize our net deferred tax assets. As of December 30, 2016, we maintained full valuation allowances on our U.S. federal and state deferred tax assets in the amount of $23.6 million as we believe it is more likely than not that these deferred tax assets will not be realized. During the quarter ended December 25, 2015, we finalized the restructuring of certain of our operations in China. This restructuring resulted in our ability to use certain net operating loss carryforwards, and, accordingly, we concluded that a previously accrued valuation allowance was no longer required, resulting in an income tax benefit of $2.1 million.

In addition, 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 our expectations could have a material impact on our results of operations and financial position. We believe we have adequately reserved for our uncertain tax positions, however, no assurance can be given that the final tax outcome of these matters will not be different than what we expect. We adjust these reserves in light of changing facts and circumstances, such as the closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will impact the provision for income taxes in the period in which such determination is made. The provision for income taxes includes the impact of reserve provisions and changes to reserves that are considered appropriate, as well as the related net interest.

We file income tax returns in the U.S. federal jurisdiction, various states and foreign jurisdictions. Our 2013 through 2015 federal income tax returns are open to audit through the statute of limitations by the Internal Revenue Service. The Company’s 2012 through 2015 state income tax returns are open to audit by the California Franchise Tax Board. The Company is also subject to examination in various other jurisdictions for various periods.

Business Combinations

In accordance with accounting for business combinations, we allocate the purchase price of acquired companies to the tangible and intangible assets acquired and liabilities assumed based on their estimated fair values. We may engage third-party valuation firms to assist management in reviewing management's determination of the fair values of acquired intangible assets such as trade name and customer relationships. Such valuations require management to make significant estimates and assumptions. Management makes estimates of fair value based upon assumptions believed to be reasonable. These estimates are based on historical experience and information obtained from the management of the acquired companies and are inherently uncertain.

Goodwill, Intangibles Assets, and Long-lived Assets

Goodwill is measured as the excess of the cost of an acquisition over the sum of the amounts assigned to identifiable assets acquired less liabilities assumed.

We evaluate our goodwill and indefinite life trade name for impairment on an annual basis, and whenever events or changes in circumstances indicate that the carrying value may not be fully recoverable. In addition, we evaluate our identifiable intangible assets and other long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Factors we consider important which could trigger an impairment review include the following:

- Significant changes in the manner of our use of the acquired assets or the strategy of our overall business;
- Significant negative changes in revenue of specific products or services;
- Significant negative industry or economic trends;
- Significant decline in our stock price for a sustained period; and

We continually apply judgment when performing these evaluations and continuously monitor for events and circumstances that could negatively impact the key assumptions in determining fair value, including long-term revenue growth projections, undiscounted net cash flows, discount rates, recent market valuations from transactions by comparable companies, volatility in our market capitalization and general industry, market and macroeconomic conditions. It is possible that changes in such circumstances, or in the variables associated with the judgments, assumptions and estimates used in assessing fair value, would require us to record a non-cash impairment charge.

Assets held for sale

Non-current assets, or disposal groups comprising assets and liabilities, that are expected to be recovered primarily through sale or distribution rather than through continuing use, are classified as held for sale. Immediately before classification as held for sale or distribution, the assets, or components of a disposal group, are measured at the lower of the carrying amount or fair value less costs to sell. Impairment losses on initial classification as held for sale and subsequent gains and losses on remeasurement are recognized in the statement of operations. Gains are not recognized in excess of any cumulative impairment loss. Once classified as held for sale, intangible assets and property, plant and equipment are no longer amortized or depreciated. The Company recognized a $0.7 million loss upon reclassification of held for sale assets of our 3D printing business in Singapore (UAMC) as of December 30, 2016. The loss was recorded in cost of goods in the statements of operations. Total assets of UAMC at the end of the reporting period were $1.6 million.

Equity Incentives to Employees

We issue restricted stock units to our employees and outside directors and provide our employees the right to purchase common stock under our employee stock purchase plan. Under current accounting guidance, stock-based compensation cost is measured at the grant date based on the fair value of the award and is recognized as expense over the service (vesting) period. See Note 9 to the Notes to Consolidated Financial Statements for a detailed description.

Unaudited Quarterly Financial Results

The following table sets forth statement of operations data for the periods indicated. The information for each of these periods is unaudited and has been prepared on the same basis as our audited consolidated financial statements included herein and includes all adjustments, consisting only of normal recurring adjustments that we consider necessary for a fair presentation of our unaudited operations data for the periods presented. Historical results are not necessarily indicative of the results to be expected in the future (in thousands, except per share data):

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Fiscal Year (1)
2016					
Sales	$ 112,229	$ 129,831	$ 146,154	$ 174,545	$ 562,759
Gross profit	$ 14,570	$ 19,021	$ 23,491	$ 29,701	$ 86,783
Net income (loss)	$ (3,239)	$ 723	$ 2,614	$ 9,953	$ 10,051
Earnings (loss) per share — basic	$ (0.10)	$ 0.02	$ 0.08	$ 0.30	$ 0.31
Earnings (loss) per share — diluted	$ (0.10)	$ 0.02	$ 0.08	$ 0.30	$ 0.30
2015					
Sales	$ 125,318	$ 117,549	$ 122,816	$ 103,420	$ 469,103
Gross profit	$ 19,919	$ 18,822	$ 18,948	$ 13,341	$ 71,030
Net income (loss)	$ 1,173	$ 2,207	$ 1,676	$ (15,788)	$ (10,732)
Earnings (loss) per share — basic	$ 0.04	$ 0.07	$ 0.05	$ (0.49)	$ (0.34)
Earnings (loss) per share — diluted	$ 0.04	$ 0.07	$ 0.05	$ (0.49)	$ (0.34)

(1) Earnings per share is calculated independently each quarter and for the full year based upon their respective weighted average shares outstanding. Therefore, the sum of the quarterly earnings per share may not equal the annual earnings per share reported.

Liquidity and Capital Resources

We have the required capital principally to fund our working capital needs, satisfy our debt obligations, maintain our equipment and purchase new capital equipment. As of December 30, 2016, we had cash and cash equivalents of $52.5 million compared to $50.1 million as of December 25, 2015. The increase in our cash position during 2016 was primarily due to cash generated from operations, our principal source of liquidity as of December 30, 2016.

For the twelve months ended December 30, 2016, we generated cash from operating activities of $17.6 million, an increase of $16.7 million when compared to $0.9 million for fiscal 2015. Operating cash flows generated in the twelve months ended December 30, 2016 were from non-cash activities, including depreciation of equipment and leasehold improvements, amortization of intangible assets and debt issuance costs, excess tax benefit from stock-based compensation, stock-based compensation, loss from disposal of assets and change in the fair value of the contingent earn-out aggregating to $19.9 million. Operating cash flows were also generated by decreases in prepaid expenses and other and deferred tax assets, net and increases in accounts payable and accrued compensation of $1.7 million, $3.5 million, $31.7 million and $1.4 million, respectively. These were offset by increases in accounts receivable, inventory and other non-current assets of $15.8 million, $31.5 million and $0.1 million, respectively, and by the net decrease in income tax payable and other liabilities of $0.1 million and $3.4 million, respectively.

Cash generated from operating activities for fiscal year 2015 reflected a decrease of $29.4 million when compared to $30.4 million for fiscal 2014. Operating cash flows generated in the twelve months ended December 25, 2015, were from non-cash activities, including depreciation of equipment and leasehold improvements, amortization of intangible assets, debt issuance costs, excess tax benefit from stock-based compensation and stock-based compensation aggregating to $15.5 million. Operating cash flows were also generated by decreases in accounts receivable, deferred tax assets net of deferred tax liabilities, and increases in accrued compensation and other liabilities of $5.8 million, $10.4 million, $0.8 million and $1.6 million, respectively. These were offset by changes in the fair value of a contingent earn-out of $0.4 million, increases in inventory, prepaid expenses and other non-current assets of $8.3 million and $1.0 million, respectively, and by decreases in accounts payable and income tax payable of $12.6 million and $0.1 million, respectively.

T he net cash used in investing activities in fiscal year 2016 was $7.3 million and consisted mainly of purchases of equipment. Net cash used in investing activities for the twelve months ended December 25, 2015, was $55.2 million, consisting mainly of cash paid in connection with the acquisitions of Marchi and Miconex of $29.7 million and $15.6 million, respectively, and capital expenditures of $10.2 million, primarily attributable to the expansion of our facilities in the U.S. and in Singapore, offset by Mi conex cash acquired of $0.2 million.

Net cash used in financing activities for the twelve months ended December 30, 2016, was $7.9 million, a decrease of $33.3 million when compared to net cash provided by financing activities of $25.4 million for the comparable period of 2015. The decrease was primarily due to proceeds from the new credit facility in 2015 offset by principal payments on bank borrowings related to the old facility. For the twelve months ended December 25, 2015, our net cash provided by financing activities was due primarily to cash proceeds from bank borrowings of $76.2 million from our new credit facility, from Miconex bank borrowings of $3.0 million and net proceeds of $2.4 million from the issuance of common stock related to our employee stock plans. These increases were offset by principal debt payments of $55.2 million related to the payoff of our old credit facility, payment of $0.6 million of debt issuance costs related to the new credit facility, $0.1 million of excess tax benefit from stock-based compensation and $0.3 million of employees' taxes paid upon vesting of restricted stock units.

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 state of the worldwide economy, our ability to meet our financial covenants with 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 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 new 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.

Beginning in 2013, 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 and no provisions for U.S. income taxes have been provided thereon. During the fiscal year ended December 30, 2016, we remitted a portion of the current year earnings of one of our Singapore subsidiaries to the U.S. If we change our intent to reinvest our undistributed foreign earnings indefinitely or if a greater amount of undistributed earnings are needed than the previously anticipated remaining unremitted foreign earnings, we could be required to accrue or pay U.S. taxes on some or all of these undistributed earnings. As of December 30, 2016, we had undistributed earnings of foreign subsidiaries that are indefinitely invested outside of the U.S. of approximately $90.6 million. It is not practicable to determine the income 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 December 30, 2016, we have cash of approximately $38.1 million in our foreign subsidiaries.

Borrowing Arrangements

On February 2, 2015, we entered into a new credit agreement (the "Credit Agreement") by and among us, certain of our subsidiaries, East West Bank and City National Bank (collectively, the "Lenders"). The Credit Agreement provides for a term loan in an aggregate principal amount of $40.0 million (the "Term Loan") and a revolving credit facility in an aggregate principal amount of $40.0 million (the "Revolving Credit Facility"), a letter of credit facility in the aggregate availability amount of $20.0 million (as a sublimit of such Revolving Credit Facility) (the "L/C Facility") and a swingline sub-facility in the aggregate availability amount of $5.0 million (as a sublimit of the Revolving Credit Facility) (together with the Term Loan, the Revolving Credit Facility and the L/C Facility, the "Senior Secured Credit Facility").

On February 2, 2015, we b orrowed an aggregate of $40.0 million under the Term Loan and approximately $6.5 million under the Revolving Credit Facility. The borrowed funds were used to repay the outstanding balance to Silicon Valley Bank as lender under our prior loan agreement. The prior loan agreement was terminated in connection with this transaction. In addition, we expensed the unamortized debt issuance costs relating to the prior loan agreement of approximately $0.7 million in the first quarter of 2015. On February 5, 2015, in order to finance the cash portion of the acquisition of Marchi, we borrowed an additional $29.7 million under the Revolving Credit Facility.

As of December 30, 2016, the Term Loan consists of nine remaining quarterly installments of $2.9 million with the balance of the outstanding principal amount due at maturity, which is February 2, 2019. The Revolving Credit Facility is available through February 2, 2019. The Credit Agreement includes customary representations, warranties, covenants and events of default. We and certain of our subsidiaries agreed to secure all of our and their respective obligations under 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).

At our option, borrowings under the Term Loan and New Revolving Credit Facility (subject to certain limitations) bear interest at either a base rate or at the London Interbank Offered Rate ("LIBOR") (with the LIBOR being adjusted for certain Eurocurrency reserve requirements, if any, as described in the Credit Agreement), plus, in each case, an applicable margin based on our consolidated leverage ratio. All loans described above made on February 2, 2015 were initially base rate loans, carrying interest of 3.25%. The effective interest rate will be higher due to the incurrence of certain loan-related costs of $0.6 million that have been treated as a discount on the debt and amortized over the life of the loan.

As of December 30, 2016, the interest rates on the outstanding Term Loan and Revolving Credit facility were 3.38% (2.75% applicable margin and 0.63% LIBOR) and 3.75% fixed, 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 0.63%, as of December 30, 2016. This interest rate swap effectively locked in a fixed interest rate of 3.49% on $14.0 million of the $26.2 million term loan balance outstanding as of December 30, 2016.

The Credit Agreement requires us 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 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 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 include a provision requiring the Company to maintain a minimum cash balance of $35.0 million every quarter end. We were in compliance with all covenants for the quarter ended December 30, 2016.

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

As of December 30, 2016, we have outstanding amounts under the Term Loan and Revolving Credit Facility of $26.2 million and $36.2 million, respectively, which are gross of unamortized debt issuance costs of $0.3 million.

In conjunction with our acquisition of Miconex in July 2015, we have a credit agreement with a local bank in the Czech Republic that provides for a term loan in the aggregate of 0.8 million euros and a revolving credit facility in the aggregate of up to 8.3 million euros. The credit agreement requires Miconex to maintain certain financial covenants, including a debt-to-earnings-before-interest-depreciation-and-amortization ratio no greater than 3.00 to 1.00 and an equity ratio of at least 15%. This agreement also includes other affirmative and negative covenants. As of December 30, 2016, Miconex was in compliance with all of its covenants.

As of December 30, 2016, Mico nex had outstanding amounts under the term loan and the revolving credit facility of 0.4 million euros (approximately $0.5 million) and 4.9 million euros (approximately $5.2 million), respectively, for a total of $5.7 million, with interest rates ranging f rom 1.3% to 2.3% plus a variable rate based on the Euro Interbank Offered Rate with due dates ranging from 2017 to 2020. The credit facility expires on March 31, 2020.

As of December 30, 2016 our total bank debt was $68.1 million. As of December 30, 2016, we had $3.8 million and 3.3 million euros (approximately $3.5 million) available to borrow on our revolving loans in the U.S. and Czech Republic, respectively.

Capital Expenditures

Capital expenditures were $7.8 million for the year ended December 30, 2016 primarily attributable to the expansion of our Singapore, Czech Republic and certain U.S. facilities.

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 December 30, 2016:

	Total	Less than 1 Year	1 - 3 Years	3 - 5 Years	More than 5 Years
Operating leases(1)	$ 26,789	$ 6,000	$ 9,515	$ 7,963	$ 3,311
Borrowing Arrangement(2)	68,067	16,971	51,062	34	—
Purchase order commitments	94,566	94,566	—	—	—
Total	$ 189,422	$ 117,537	$ 60,577	$ 7,997	$ 3,311

(1) Operating lease obligations reflects (a) the leases for our headquarters and manufacturing facilities in Hayward, California that expire in 2020 through 2022; (b) the leases for manufacturing facilities in South San Francisco that expire in 2018; (c) the leases for manufacturing facilities in China, Singapore and the Philippines that expire in 2017 through 2023; (d) the leases for manufacturing facilities in Austin, Texas that expire in 2021; (e) the leases for manufacturing facilities in Chandler, Arizona that expire in 2017 through 2022; and (g) the leases for our manufacturing facilities in the Czech Republic that expires in 2019. We have options to renew certain of the leases in South San Francisco, Hayward, Austin, Singapore and in the Czech Republic which we expect to exercise.

(2) Amounts reflect obligations under our New Revolving Credit Facility gross of $0.3 million of unamortized debt issuance costs, under which $26.2 million is outstanding under the New Term Loan and approximately $36.2 million under the New Revolving Credit Facility as of December 30, 2016 and of our bank debt of $5.7 million held by Miconex, in the Czech Republic.

Recently Issued and Adopted Accounting Pronouncement

For a description of recent accounting pronouncements, including the expected dates of adoption and estimated effects, if any, on UCT's consolidated financial statements, see Note 1, "Organization and Significant Accounting Policies," of the Notes to Consolidated Financial Statements.

Item 7A. Quantitative and Qualitat ive Disclosures About Market Risk

We are exposed to financial market risks, including changes in currency exchange rates and interest rates.

Foreign Exchange Rates

Currently, a significant majority of our sales and arrangements with third-party suppliers provide for pricing and payment in US dollars, which are not subject to material exchange rate fluctuations. Increases in the value of the U.S. dollar relative to other currencies would make our products more expensive relative to competing products priced in such other currencies, which could negatively impact our ability to compete. Conversely, decreases in the value of the U.S. dollar relative to other currencies could result in our foreign suppliers raising their prices in order to continue doing business with us. However, we do not expect foreign currency exchange rate fluctuations to have a material effect on our results of operations.

Chinese authorities recently relaxed controls of China's currency, the Renminbi, and allowed the currency to strengthen against other world currencies, including the U.S. dollar. We continue to monitor any potential impact of the depreciation or appreciation of the Renminbi on our operations in China as well as globally. Changes in the value of the Renminbi did not have a material impact on our results of operations for any period presented in this Form 10-K.

Miconex uses derivative instruments, such as foreign currency exchange contracts, to hedge certain exposures to fluctuations in foreign currency exchange rates. These contracts reduce, but do not entirely eliminate the impact of currency exchange rates movement on Miconex's assets and liabilities.

Interest Rates

Our interest rate risk relates primarily to outstanding amounts under our New Term Loan and New Revolving Credit Facility which totaled $62.1 million (net of debt issuance costs) as of December 30, 2016, and carries interest rates pegged to either the prime rate or LIBOR. To reduce our exposure to potentially rising interest rates, on September 17, 2015, we entered into an interest rate swap with the Lenders, encompassing $20.0 million of the New Term Loan. The interest rate swap exchanges the variable interest rate component where LIBOR was at 0.63% as of December 30, 2016, with a fixed interest rate of 0.99% over the remaining term of the New Term Loan. This interest rate swap is designated as a cash flow hedge of the interest rate risk attributable to forecasted variable interest payments.

An immediate increase in interest rates of 100 basis points would increase our interest expense by approximately $0.2 million per quarter. This would be partially offset by increased interest income on our invested cash. Conversely, an immediate decline of 100 basis points in interest rates would decrease our interest expense by approximately $0.2 million per quarter. This would be partially offset by decreased interest income on our invested cash.

Item 8. Financial Statemen ts and Supplementary Data

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REPORTS OF INDEPENDENT REGIST ERED PUBLIC ACCOUNTING FIRMS

The Board of Directors and Stockholders
Ultra Clean Holdings, Inc.

We have audited the accompanying consolidated balance sheets of Ultra Clean Holdings, Inc. (the Company), as of December 30, 2016 and December 25, 2015, and the related consolidated statements of operations, comprehensive income, stockholders' equity and cash flows for the years then ended. We also have audited the Company's internal control over financial reporting as of December 30, 2016, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express an opinion on these consolidated financial statements and an opinion on the Company's internal control over financial reporting based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the consolidated financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Ultra Clean Holdings, Inc., as of December 30, 2016 and December 25, 2015, and the consolidated results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, Ultra Clean Holdings, Inc., maintained, in all material respects, effective internal control over financial reporting as of December 30, 2016, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

/s/ Moss Adams LLP
San Francisco, California
March 15, 2017

To the Board of Directors and Stockholders of
Ultra Clean Holdings, Inc.
Hayward, California

We have audited the accompanying consolidated statements of operations, stockholders' equity, and cash flows of Ultra Clean Holdings, Inc. and subsidiaries (the "Company") for the year ended December 26, 2014 . These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the results of operations and cash flows of Ultra Clean Holdings, Inc. and subsidiaries for year ended December 26, 2014, in conformity with accounting principles generally accepted in the United States of America.

/s/ Deloitte & Touche LLP

San Jose, California
March 11, 2015

Ultra C lean Holdings, Inc.

Consolidated Balance Sheets

	December 30, 2016	December 25, 2015
	(In thousands, except share and per share amounts)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 52,465	$ 50,103
Accounts receivable, net of allowance of $65 and $158, respectively	74,663	59,148
Inventories	103,861	72,716
Prepaid expenses and other	6,461	8,172
Total current assets	237,450	190,139
Equipment and leasehold improvements, net	18,858	17,267
Goodwill	85,248	85,248
Purchased intangibles, net	37,024	42,782
Deferred tax assets, net	1,355	—
Other non-current assets	762	717
Total assets	$ 380,697	$ 336,153
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Bank borrowings	$ 16,819	$ 12,744
Accounts payable	71,189	39,660
Accrued compensation and related benefits	7,904	6,536
Deferred rent, current portion	634	584
Other current liabilities	4,515	4,680
Total current liabilities	101,061	64,204
Bank borrowings, net of current portion	50,931	62,795
Deferred tax liability	9,917	5,026
Deferred rent and other liabilities	2,657	3,185
Total liabilities	164,566	135,210
Commitments and contingencies (See Note 12)		
Stockholders' equity:		
Preferred stock — $0.001 par value, 10,000,000 authorized; none outstanding	—	—
Common stock — $0.001 par value, 90,000,000 authorized; 32,956,285 and 32,279,429 shares issued and outstanding, in 2016 and 2015, respectively	33	32
Additional paid-in capital	181,781	176,280
Common shares held in treasury, at cost, 601,944 shares in 2016 and 2015, respectively	(3,337)	(3,337)
Retained earnings	38,037	27,986
Accumulated other comprehensive loss	(383)	(18)
Total stockholders' equity	216,131	200,943
Total liabilities and stockholders' equity	$ 380,697	$ 336,153

(See notes to consolidated financial statements)

Ultra Clean Holdings, Inc.

Consolidated Statements of Operations

	Fiscal Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
	(In thousands, except per share amounts)		
Sales	$ 562,759	$ 469,103	$ 513,957
Cost of goods sold	475,976	398,073	440,824
Gross profit	86,783	71,030	73,133
Operating expenses:			
Research and development	9,900	9,578	7,067
Sales and marketing	11,568	11,499	10,432
General and administrative	42,924	44,112	37,450
Total operating expenses	64,392	65,189	54,949
Income from operations	22,391	5,841	18,184
Interest and other income (expense), net	(3,444)	(2,234)	(1,854)
Income before provision for income taxes	18,947	3,607	16,330
Income tax provision	8,896	14,339	4,973
Net income (loss)	$ 10,051	$ (10,732)	$ 11,357
Net income (loss) per share:			
Basic	$ 0.31	$ (0.34)	$ 0.39
Diluted	$ 0.30	$ (0.34)	$ 0.38
Shares used in computing net income (loss) per share:			
Basic	32,632	31,564	29,301
Diluted	33,150	31,564	29,936

(See notes to consolidated financial statements)

Ultra Clean Holdings, Inc.

Consolidated Statements of Comprehensive Income

	Fiscal Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
Net income (loss)	$ 10,051	$ (10,732)	$ 11,357
Other comprehensive income (loss):			
Change in cumulative translation adjustment	(393)	(5)	—
Cash flow hedges:			
Change in fair value of derivatives	(60)	23	—
Adjustment for net gain (loss) realized and included in net income	88	(36)	—
Total change in unrealized gain (loss) on derivative instruments	28	(13)	—
Other comprehensive loss	(365)	(18)	—
Comprehensive income (loss)	$ 9,686	$ (10,750)	$ 11,357

(See notes to consolidated financial statements)

Ultra Clean Holdings, Inc.

Consolidated Statements of Stockholders' Equity

	Common Stock		Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive (Loss) Income	Total Stockholders' Equity
	Shares	Amount				
	(in thousands, except share amounts)					
Balance December 27, 2013	28,694,762	$ 29	$ 144,539	$ 27,361	$ —	$ 171,929
Issuance of restricted common stock	47,000	—	—	—	—	—
Issuance under employee stock plans	919,446	1	1,939	—	—	1,940
Amortization of stock-based compensation	—	—	4,400	—	—	4,400
Excess tax benefit from stock-based compensation	—	—	284	—	—	284
Employees' taxes paid upon vesting of restricted stock units	(98,870)	—	(1,358)	—	—	(1,358)
Net income	—	—	—	11,357	—	11,357
Balance December 26, 2014	29,562,338	$ 30	$ 149,804	$ 38,718	$ —	$ 188,552
Issuance of restricted common stock	56,000	—	—	—	—	—
Issuance under employee stock plans	763,529	—	2,411	—	—	2,411
Amortization of stock-based compensation	—	—	3,660	—	—	3,660
Excess tax benefit from stock-based compensation	—	—	(77)	—	—	(77)
Employees' taxes paid upon vesting of restricted stock units	(39,938)	—	(330)	—	—	(330)
Common stock issued for acquisitions	1,937,500	2	17,475	—	—	17,477
Net loss	—	—	—	(10,732)	—	(10,732)
Other comprehensive loss	—	—		—	(18)	(18)
Balance December 25, 2015	32,279,429	$ 32	$ 172,943	$ 27,986	$ (18)	$ 200,943
Issuance of restricted common stock	52,000	—	—	—	—	—
Issuance under employee stock plans	761,824	1	601	—	—	602
Amortization of stock-based compensation	—	—	5,671	—	—	5,671
Employees' taxes paid upon vesting of restricted stock units	(136,968)	—	(771)	—	—	(771)
Net income	—	—	—	10,051	—	10,051
Other comprehensive loss	—	—	—	—	(365)	(365)
Balance December 30, 2016	32,956,285	$ 33	$ 178,444	$ 38,037	$ (383)	$ 216,131

(See notes to consolidated financial statements)

Ultra Clean Holdings, Inc.

Consolidated Statements of Cash Flows

	Fiscal Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
	(In thousands)		
Cash flows from operating activities:			
Net income (loss)	$ 10,051	$ (10,732)	$ 11,357
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	5,981	4,728	3,004
Amortization of finite-lived intangibles	5,758	6,212	4,884
Amortization of debt issuance costs	153	829	529
Excess tax benefit from stock-based compensation	771	77	(284)
Stock-based compensation	5,671	3,660	4,400
Loss from disposal of fixed assets	169	—	—
Change in the fair value of the contingent earn out	1,446	(449)	—
Changes in assets and liabilities, net of effects of acquisitions:			
Accounts receivable	(15,834)	5,818	5,633
Inventories	(31,516)	(8,329)	7,092
Prepaid expenses and other	1,709	(948)	(2,425)
Deferred income taxes	3,534	10,352	2,190
Other non-current assets	(45)	(24)	(84)
Accounts payable	31,705	(12,593)	(5,186)
Accrued compensation and related benefits	1,397	798	(422)
Income taxes payable	(16)	(77)	284
Other liabilities	(3,357)	1,604	(613)
Net cash provided by operating activities	17,577	926	30,359
Cash flows from investing activities:			
Purchases of equipment and leasehold improvements	(7,278)	(10,152)	(5,334)
Acquisition of businesses, net of cash acquired	—	(45,064)	—
Proceeds from disposal of equipment and leasehold improvements	—	—	191
Net cash used in investing activities	(7,278)	(55,216)	(5,143)
Cash flows from financing activities:			
Proceeds from bank borrowings	6,657	79,212	48,500
Proceeds from issuance of common stock	602	2,411	1,940
Principal payments on bank borrowings	(14,341)	(55,205)	(56,000)
Payments of debt issuance costs	—	(611)	—
Excess tax benefit from stock-based compensation	(771)	(77)	284
Employees' taxes paid upon vesting of restricted stock units	—	(331)	(1,358)
Net cash provided by (used in) financing activities	(7,853)	25,399	(6,634)
Effect of exchange rate changes on cash and cash equivalents	(84)	(3)	—
Net increase (decrease) in cash	2,362	(28,894)	18,582
Cash and cash equivalents at beginning of year	50,103	78,997	60,415
Cash and cash equivalents at end of year	$ 52,465	$ 50,103	$ 78,997
Supplemental cash flow information:			
Income taxes paid	$ 4,463	$ 2,900	$ 3,525
Income tax refunds	$ 646	$ 622	$ 1,356
Interest paid	$ 2,505	$ 2,163	$ 2,035
Non-cash investing and financing activities:			
Fair value of common shares issued for acquisition	$ —	$ 17,661	$ —
Fair value of earn-out payments related to Miconex acquisition	$ —	$ 1,280	$ —
Restricted stock issued	$ 2,986	$ 2,950	$ 7,190
Equipment and leasehold improvements purchased included in accounts payable and other current liabilities	$ 701	$ 153	$ 348

(See notes to 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, primarily for the semiconductor industry that, initially, is expected to expand the Company's capabilities with existing customers.

Principles of Consolidation — The Company's 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.

Significant Sales to Customers — The Company's most significant custo mers (having accounted for 10% or more of sales) and their related sales as a percentage of total sales for each of the previous three years, were as follows:

	Fiscal Year Ended		
	2016	2015	2014
Lam Research Corporation	53.3 %	50.6 %	38.0 %
Applied Materials, Inc.	28.9	26.4	22.8
ASM International, Inc.	— *	— *	14.9
Total	82.2 %	77.0 %	75.7 %

* Total sales for the period are below 10%.

Two customers' accounts receivable balances: Lam Research Corporation and Applied Materials, Inc. were individually greater than 10% of total accounts receivable as of December 30, 2016, and there were three customers' accounts receivable balances: Lam Research Corporation, Applied Materials, Inc. and ASM International, Inc., that were individually greater than 10% of accounts receivable as of December 25, 2015 and, in the aggregate, represented approximately 85.0% and 84.6% of accounts receivable at December 30, 2016 and December 25, 2015, respectively.

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

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

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

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

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

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

Description	December 25, 2015	Fair Value Measurement at Reporting Date Using: Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and cash equivalents:				
Money market fund deposits	$ 640	$ 640	$ —	$ —
Other liabilities:				
Interest rate swap	$ 23	$ —	$ 23	$ —
Contingent earn-out liability	$ 831	$ —	$ —	$ 831

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

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

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

At December 30, 2016 and December 25, 2015, inventory balances were $103.9 million and $72.7 million, respectively, net of reserves of $6.9 million and $5.7 million, respectively. The inventory write-downs are recorded as an inventory valuation allowance established on the basis of obsolete inventory or specific identified inventory in excess of estimated usage. For fiscal years 2016, 2015 and 2014, inventory write-downs were $2.3 million, $2.4 million and $4.6 million, including $2.6 million of inventory written off as part of the GTAT bankruptcy in the third quarter of 2014.

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

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

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.

Product Warranty — The Company provides a war ranty 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 reser ve is included in other current liabilities on the consolidated balance sheet.

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.

During the quarter ended December 30, 2016, the Company performed a twelve quarter analysis of its U.S. cumulative pretax profit position as of December 30, 2016 and, weighing both positive and negative evidence, determined that it is more likely than not that the Company will not have the ability to generate sufficient taxable income over the foreseeable future to realize its U.S. federal and state deferred tax assets. Therefore, during the quarter ended December 30, 2016, the Company continues to believe that a valuation allowance is required on its U.S. federal net deferred tax assets. The total U.S. federal and state valuation allowance as of December 30, 2016 was $23.6 million.

During the quarter ended December 30, 2016, the Company has concluded that a full valuation allowance against one of its Singapore subsidiaries' deferred tax assets continues to be necessary. The total valuation allowance of the Singapore loss entity as of December 30, 2016 is $0.2 million.

The Company's ability to realize deferred tax assets depends on its ability to generate sufficient taxable income within the carryback or carry forward periods. In assessing the Company's future taxable income, the Company considered all sources of future taxable income available to realize its deferred tax assets, including the taxable income from future reversal of existing temporary differences, carry forwards, taxable income in carryback years and tax-planning strategies. If changes occur in the assumptions underlying the Company's tax planning strategies or in the scheduling of the reversal of its deferred tax liabilities, the valuation allowance may need to be adjusted in the future.

The Company had a total valuation allowance on its net deferred tax assets in the amount of $23.8 million and $18.7 million as of December 30, 2016 and December 25, 2015, respectively.

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 consolidated statements of income as income tax expense. The calculation of tax liabilities involves significant judgment in estimating the impact of uncertainties in the application of complex tax laws. Resolution of these uncertainties in a manner inconsistent with the Company's expectations could have a material impact on its results of operations and financial position. Management believes that it has adequately provided for any adjustments that may result from these examinations; however, the outcome of tax audits cannot be predicted with certainty.

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

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

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

Net Income per Share — Basic net income per share is computed by dividing net income by the weighted average number of shares outstanding for the period. Diluted net income per share is calculated by dividing net income by the weighted average number of common shares outstanding and common equivalent shares from dilutive stock options and restricted stock using the treasury stock method, except when such shares are anti-dilutive (see Note 9 to the Notes to 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 reporting segment, and therefore, has one reportable segment.

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

Stock-based compensation

The Company maintains stock-based compensation plans which allow for the issuance of equity-based awards to executives and certain employees. These equity-based awards include stock options, restricted stock awards and restricted stock units. 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.

Stock-based compensation expense includes compensation costs related to estimated fair values of stock options, units and awards granted. Stock-based compensation expense from stock options, restricted stock units and stock awards and the related income tax benefit recognized were $5.7 million and $2.7 million, respectively, for fiscal year 2016, $3.7 million and $0.5 million, respectively, for fiscal year 2015 and $4.4 million and $1.3 million, respectively, for fiscal year 2014.

The estimated fair value of the Company's equity-based awards, net of expected forfeitures, is amortized over the awards' vesting period on a straight-line basis over a weighted average period of four years for stock options, three years for restricted stock units and one year for restricted stock awards and will be adjusted for subsequent changes in estimated forfeitures and future option grants.

The Company uses historical data to estimate pre-existing forfeitures, and records stock-based compensation for those awards that are expected to vest at the time of grant and revises those estimates in subsequent periods if actual forfeitures differ from those estimates.

The stockholders of the Company approved an increase in the number of shares available for issuance under our amended and restated stock incentiv e plan by 1,500,000 and 3,100,000 on June 10, 2010 and May 22, 2013, respectively.

There were no employee stock option grants by the Company for years 2016, 2015 and 2014. Generally, options vest over four years and expire no later than ten years from the grant date. During fiscal years 2016, 2015 and 2014, the Company recorded $3.0 million, $3.2 million and $3.1 million, respectively, of stock-based compensation expense, net of tax, associated with employee and director stock plans and employee stock purchase plan programs. As of December 30, 2016, there was $6.4 million, net of forfeitures of $1.5 million, of unrecognized compensation cost related to employee and director stock which is expected to be recognized on a straight-line basis over a weighted average period of approximately 1.83 years, and will be adjusted for subsequent changes in estimated forfeitures and future grants.

Total stock-based compensation during the fiscal years 2016, 2015 and 2014, respectively, to various expense categories was as follows (in thousands):

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
Cost of goods sold (1)	$ 1,254	$ 1,175	$ 1,195
Sales and marketing	3,673	414	428
Research and development	281	202	156
General and administrative	463	1,869	2,621
	5,671	3,660	4,400
Income tax benefit	(2,660)	(487)	(1,342)
Stock-based compensation expense, net of tax	$ 3,011	$ 3,173	$ 3,058

(1) Stock-based compensation expenses capitalized in inventory for fiscal years 2016, 2015 and 2014 were considered immaterial.

Intangible Assets

Goodwill and indefinite-lived intangible assets are not amortized, but are reviewed for impairment annually. Purchased intangible assets are presented at cost, net of accumulated amortization, and are amortized on either a straight-line method or on an accelerated method over their estimated future discounted cash flows. The Company accounts for intangible assets in accordance with ASC 360. The Company reviews goodwill and purchased intangible assets with indefinite lives for impairment annually and whenever events or changes in circumstances indicate the carrying value of an asset may not be recoverable, such as when reductions in demand or significant economic slowdowns in the semiconductor industry are present.

Intangible assets reviews are performed to determine whether the carrying value is impaired, based on comparisons to undiscounted expected future cash flows. If this comparison indicates that there is impairment, the impaired asset is written down to fair value, which is typically calculated using: (i) quoted market prices or (ii) discounted expected future cash flows utilizing a discount rate. See Note 5 to the Notes to Consolidated Financial Statements for further discussion.

Goodwill is recorded as the difference, if any, between the aggregate consideration paid for an acquisition and the fair value of the net tangible and intangible assets acquired. The Company tests goodwill for impairment at the reporting unit level (operating segment or one level below an operating segment) on an annual basis in the fourth quarter of each fiscal year or more frequently if the Company believes indicators of impairment exist. The performance of the test involves a two-step process. The first step of the impairment test involves comparing the fair values of the applicable reporting units with their aggregate carrying values, including goodwill. The Company generally determines the fair value of the Company's reporting units using the income approach methodology of valuation that includes the discounted cash flow method as well as other generally accepted valuation methodologies. If the carrying amount of a reporting unit exceeds the reporting unit's fair value, the Company

performs the second step of the goodwill impairment test to determine the amount of impairment loss. The second step of the goodwill impairment test involves comparing the implied fair value of the affected reporting unit's goodwill with the carrying value of that goodwill. The Company would the n record a charge based on the results of the second step.

Long-lived Assets

The Company evaluates long-lived assets for impairment whenever events or changes in circumstances indicate the carrying value of an asset group may not be recoverable. The Company assesses the fair value of the assets based on the amount of the undiscounted future cash flows that the assets are expected to generate and recognizes an impairment loss when estimated undiscounted future cash flows expected to result from the use of the asset are less than the carrying value of the asset. If the Company identifies an impairment, the Company reduces the carrying value of the group of assets to comparable market values, when available and appropriate, or to its estimated fair value based on a discounted cash flow approach.

At the end of fiscal years 2016, 2015 and 2014, the Company assessed the useful lives of its long-lived assets, including property, plant and equipment as well as its intangible assets and concluded that no impairment was required, except for UAMC assets, as discussed below.

Non-current assets, or disposal groups comprising assets and liabilities, that are expected to be recovered primarily through sale rather than through continuing use, are classified as held for sale. Immediately before classification as held for sale or distribution, the assets, or components of a disposal group, are measured at the lower of the carrying amount and fair value less costs to sell. Impairment losses on initial classification as held for sale and subsequent gains and losses on remeasurement are recognized in the statement of operations. Gains are not recognized in excess of any cumulative impairment loss. Once classified as held for sale, intangible assets and property, plant and equipment are no longer amortized or depreciated.

In November 2016, the Company approved a plan to dispose of a portion of its 3D printing business in Singapore (UAMC). This plan is consistent with the Company's strategy to focus on producing products for the semiconductor capital equipment industry. The Company is actively seeking a buyer for a portion of its 3D printing business and expects to complete the sale in 2017. The Company recognized a $0.7 million loss on reclassification of the assets of UAMC as held for sale as at December 30, 2016. This loss was recorded in the cost of goods in the statements of operations. The total assets of UAMC at the end of the reporting period were $1.6 million.

Recent Accounting Pronouncements

In May 2014, the FASB amended the existing accounting standards for revenue recognition. In August 2015, the FASB delayed the effective date of the amended accounting standard for revenue recognition by one year. As such, the updated standard will be effective for the Company in the first quarter of 2018, which is when the Company plans to adopt this standard. The Company has not yet determined whether it would use the retrospective or cumulative effect transition method. The Company is currently evaluating the effects, if any, that the adoption of this guidance will have on the Company's consolidated financial statements and disclosures.

In August 2014, the FASB amended the guidance related to an entity's evaluations and disclosures of going concern uncertainties. The new guidance requires management to perform interim and annual assessments of the entity's ability to continue as a going concern within one year of the date the financial statements are issued, and to provide certain disclosures if conditions or events raise substantial doubt about the entity's ability to continue as a going concern. The Company adopted the amended guidance for annual and interim periods beginning on December 26, 2015. The adoption of the amended guidance did not impact the Company's balance sheets, results of operations or cash flows.

In April 2015, the FASB issued authoritative guidance that requires debt issuance costs to be presented in the balance sheet as a direct deduction from the carrying amount of the related debt liability, consistent with debt discou nts. The Company adopted this guidance with retrospective application in the first quarter of 2016. The adoption of this standard did not have a material impact on the Company's consolidated financial statements.

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

In November 2015, the FASB issued authoritative guidance on income taxes, which simplifies the presentation of deferred income taxes by requiring deferred tax assets and liabilities be classified as noncurrent on the balance sheet. The update is effective for annual period beginning after December 15, 2016, and interim periods within those annual periods. Early adoption is permitted as of the beginning of any interim or annual reporting period. Additionally, this guidance may be applied either prospectively or retrospectively to all periods presented. The Company early adopted this standard during the quarter ended December 30, 2016 using the prospective method. A change was made to the prior year consolidated balance sheets to reclassify the current deferred tax liability of $0.5 million from other current liabilities to deferred tax liability. This change was made to conform with the current year presentation. See Note 7, Income Taxes, for additional information.

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

In March 2016, the FASB issued new guidance which involves several aspects of the accounting for share-based payment transactions including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. Under the new standard, income tax benefits and deficiencies are to be recognized as income tax expense or benefit in the income statement and the tax effects of exercised or vested awards should be treated as discrete items in the reporting period in which they occur. An entity should also recognize excess tax benefits regardless of whether the benefit reduces taxes payable in the current period. Excess tax benefits should be classified along with other income tax cash flows as an operating activity. In regards to forfeitures, the entity may make an entity-wide accounting policy election to either estimate the number of awards that are expected to vest or account for forfeitures when they occur. The guidance is effective for fiscal years beginning after December 15, 2016 including interim periods within that reporting period, however early adoption is permitted. The Company adopted the amended accounting guidance as of December 31, 2016 and recognized an insignificant cumulative-effect adjustment to equity as of the beginning of the period. Forfeitures will continue to be estimated consistent with the Company's existing accounting policies. The impact to the Company's financial condition, results of operations and cash flows will vary based on, among other factors, the market price of the Company's common stock.

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

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

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

2. Financial Instruments

Cash Equivalents

As of December 25, 2015, the Company had an overnight sweep account invested in money market funds with maturities of less than 90 days from purchase and is thus classified as cash and cash equivalents on the Company's balance sheet. The carrying value and fair value of these money market funds as of December 25, 2015 was $0.6 million, based on Level 1 inputs. There were no money market funds as of December 30, 2016.

Derivative Financial Instruments

The Company uses certain interest rate derivative contracts to hedge interest rate exposures on existing floating rate debt. The Company classifies its interest rate derivative contracts primarily within Level 2 of the fair-value hierarchy discussed in Note 1of 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 and City National banks 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 LIBOR rate the Company is required to pay under its term loan, or 0.63%, as of December 30, 2016. This interest rate swap effectively locks in a fixed interest rate of 3.49% on $14.0 million of the $26.2 million term loan as of December 30, 2016, 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 income (expense) when the hedged transactions are realized. If the hedged transactions become probable of not occurring, the corresponding amounts in AOCI would be immediately reclassified to interest and other income, net. As of December 30, 2016, the effective portion of the Company's cash flow hedge before tax effect was approximately $0.1 million, of which $5,600 is expected to be reclassified from AOCI into earnings within the next 12 months.

Non-Designated Derivatives

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

The Company records all derivatives in the 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 Comp any's derivative instruments at gross fair value (in thousands) as of December 30, 2016 and December 25, 2015.

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

		December 25, 2015		
	Balance Sheet Location	Fair Value of Derivatives Designated as Hedge Instruments	Fair Value of Derivatives Not Designated as Hedge Instruments	Total Fair Value
Derivative liabilities:				
Level 2:				
Interest rate swap	Deferred rent and other liabilities	$ 23	$ 10	$ 33

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)	
	Twelve Months Ended	
	December 30, 2016	December 25, 2015
Derivatives in Cash Flow Hedging Relationship		
Interest rate swap	$ (60)	$ (55)

		Gains Reclassified from AOCI into Income (Effective Portion)	
		Twelve Months Ended	
	Income Statement Location	December 30, 2016	December 25, 2015
Derivatives in Cash Flow Hedging Relationship			
Interest rate swap	Interest and other income (expense), net	$ 88	$ (39)

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 fiscal year ended December 30, 2016 and December 25, 2015.

The effect of derivative instruments not designated as hedging instruments on income for the fiscal year ended December 30, 2016 and December 25, 2015 is immaterial to the financial statements.

3. Balance Sheet Information

Inventories consisted of the following (in thousands):

	December 30, 2016	December 25, 2015
Raw materials	$ 75,060	$ 57,321
Work in process	26,529	17,954
Finished goods	9,140	4,561
	110,729	79,836
Reserve for excess and obsolete	(6,868)	(7,120)
Total	$ 103,861	$ 72,716

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

	December 30, 2016	December 25, 2015
Computer equipment and software	$ 11,135	$ 10,308
Furniture and fixtures	3,118	3,201
Machinery and equipment	17,016	16,253
Leasehold improvements	16,838	14,951
Construction in progress	4,576	1,168
	52,683	45,881
Accumulated depreciation	(33,825)	(28,614)
Total	$ 18,858	$ 17,267

4. Acquisitions

Miconex

On July 31, 2015, the Company acquired 100.0% of the shareholding interest of Miconex, a limited liability company incorporated under the laws of the Czech Republic and a provider of advanced precision fabrication of plastics, primarily for the semiconductor industry. This acquisition is expected to expand the Company's capabilities with existing customers. Pursuant to the purchase agreement, the Company paid $15.6 million in cash and issued 500,000 shares of the Company's common stock. In addition, the former owners of Miconex are entitled to up to $4.0 million of potential cash "earn-out" payments over a two-year period following closing, based on Miconex's achievement of specified performance targets based on earnings before interest and taxes pursuant to the provisions of the purchase agreement. In 2016, Miconex achieved the specified performance targets for the first year and was paid the maximum of $2.0 million of the $4.0 million potential cash earn-out. The acquisition price of Miconex for purposes of the Company's purchase price allocation was determined to be $20.7 million, which includes the cash payment of $15.6 million, the stock consideration valued at $3.8 million and the fair value of the potential earn-out payments of approximately $1.3 million.

The fair value of the common stock issued was determined based on the average of the high and low trading prices per share of the Company's common stock on the acquisition date of approximately $7.64 per share. The fair value of the earn-out payments at the acquisition date was determined providing risk adjusted earnings projections using the Monte Carlo Simulation. These inputs are not observable in the market and thus represent a Level 3 measurement as discussed in Note 1 of the Company's Consolidated Financial Statements. During the fourth quarter of fiscal year 2015, the Company reassessed the fair value of the earn-out payments, reducing the fair value from $1.3 million at the end of the third quarter of fiscal year 2015 to $0.3 million as of December 30, 2016. The increase in the fair value of the contingent earn out of $1.4 million was recorded as other expense.

The Company allocated the purchase price of Miconex to the tangible and intangible assets acquired and liabilities assumed based on their estimated fair values. The excess of the purchase price over the aggregate fair value was recorded as goodwill. Goodwill associat ed with this acquisition is primarily attributable to future technology, market presence and knowledgeable and experienced workforce. The fair value assigned to identifiable intangible assets acquired was determined using the income approach taking into ac count the Company's consideration of a number of inputs, including an independent third party analysis that was based upon estimates and assumptions provided by the Company. These estimates and assumptions were determined through established and generally accepted valuation techniques.

The purchase price for this acquisition has been allocated as follows:

Fair Market Values (in thousands)		
Cash and cash equivalents	$	239
Accounts receivable		3,065
Inventories		6,198
Deferred tax assets		196
Prepaid expenses and other		214
Equipment and leasehold improvements		428
Goodwill		10,950
Purchased intangible assets		8,800
Total assets acquired		30,090
Bank borrowings		(3,027)
Accounts payable		(3,509)
Accrued compensation and related benefits		(432)
Other current liabilities		(576)
Deferred tax liability		(1,856)
Other liabilities		(24)
Total liabilities assumed		(9,424)
Purchase price allocated	$	20,666

	Useful Life (In years)	Purchased Intangible Assets (In thousands)
Customer relationships	7.5	$ 8,800

Goodwill is 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. Although goodwill is not amortized for financial accounting purposes, it is amortized in its entirety for tax purposes over fifteen years.

The results of operations for the Company for the fiscal period ended December 25, 2015 include five months of operating activity for Miconex. Net sales of approximately $14.2 million and operating income of approximately $2.0 million attributable to Miconex were included in the consolidated results of operations. For the fiscal year ended December 25, 2015, results of operations included charges of $0.5 million attributable to amortization of purchased intangible assets and $0.4 million of deal costs associated with the acquisition. Deal costs are included in general and administrative expenses in the Company's Consolidated Statements of Operations.

Marchi

On February 5, 2015, the Company acquired 100.0% of the shareholding interest of Marchi, a designer and manufacturer of specialty thermocouples, heaters and temperature controllers, for approximately $29.9 million in cash and 1,437,500 shares of newly issued common stock for a total purchase price of approximately $43.7 million. In addition, the Company incurred approximately $0.2 million of costs related to the acquisition. The Company completed this acquisition primarily in order to expand its capabilities with existing customers and to bring the Company closer to

the customer in the design stage of new products and next generation equipment. The Company financed th e cash portion of the acquisition by borrowing a total of $29.7 million under a new Credit Agreement. See further discussion of the borrowing arrangements in Note 6 to the Company's Consolidated Financial Statements.

The Company allocated the purchase price of Marchi to the tangible assets, liabilities and identifiable intangible assets acquired, based on their calculated fair values. The excess of purchase price over the aggregate fair value was recorded as goodwill. Goodwill associated with the Marchi acquisition is primarily attributable to the future technology, market presence and the knowledgeable and experienced workforce. The fair value assigned to identifiable intangible assets acquired was determined using the income approach taking into account the Company's consideration of a number of inputs, including an independent third party analysis that was based upon estimates and assumptions provided by the Company. These estimates and assumptions were determined through established and generally accepted valuation techniques. The estimated fair value of the tangible and intangible assets acquired was allocated at Marchi's acquisition date.

The purchase price for this acquisition has been allocated as follows:

Fair Market Values (in thousands)	
Inventories	$ 1,297
Equipment and leasehold improvements	767
Goodwill	18,380
Purchased intangible assets	23,370
Other non-current assets	26
Total assets acquired	43,840
Other liabilities	(100)
Total liabilities assumed	(100)
Purchase price allocated	$ 43,740

	Useful Life	**Purchased Intangible Assets**
	(In years)	**(In thousands)**
Customer relationships	10	$ 9,900
Trade name	6	1,170
Intellectual properties/know-how	8 - 12	12,300
Total purchased intangible assets		$ 23,370

The results of operations for the Company for fiscal year ended December 25, 2015 include eleven full months of operating activity for Marchi. Net sales of approximately $12.9 million and operating income of approximately $4.8 million attributable to Marchi were included in the consolidated results of operations. For the fiscal year ended December 30, 2016, results of operations included charges of $2.4 million attributable to amortization of purchased intangible assets and $0.2 million of deal costs associated with the acquisition. Deal costs are included in general and administrative expenses in the Company's consolidated results of operations.

The following unaudited pro forma consolidated results of operations assume the Marchi and Miconex acquisitions were completed as of the beginning of the year of the reporting periods presented (in thousands, except per share amounts):

	Year Ended	
	December 25, 2015	**December 26, 2014**
Net sales	$ 490,927	$ 562,918
Net loss	$ (9,161)	$ 13,371
Basic loss per share	$ (0.29)	$ 0.43
Diluted loss per share	$ (0.29)	$ 0.42

The unaudited pro forma results above include adjustments related to the purchase price allocation and financing of the Marchi and Miconex acquisitions, primarily to increase amortization for the identifiable intangible assets, to increase interest expense for the additional debt incurred to c omplete the acquisition of Marchi, to reflect the related income tax effect of the pro forma adjustments and to adjust weighted shares issued as part of the acquisitions. The unaudited pro forma results for the year ended December 25, 2015 include acquisit ions related costs of $0.6 million which are not expected to occur in future quarters. The unaudited pro forma condensed combined financial information has been prepared by management for illustrative purposes only and are not necessarily indicative of the condensed consolidated financial position or results of income in future periods or the results that actually would have been realized had UCT, Marchi and Miconex been a combined company during the specified periods. The unaudited pro forma condensed comb ined financial information does not reflect any operating efficiencies and/or cost savings that we may achieve with respect to the combined companies, or any liabilities that may result from integration activities.

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. 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 process of evaluating the potential impairment of goodwill and intangible assets requires significant judgment. 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.

As part of the Company's annual testing of goodwill impairment, in the fourth quarter of fiscal 2016, the Company performed the two-step impairment test of the Company's three reporting units for potential impairment. The Company utilized the discounted cash flow method of the income approach to estimate the fair values of each of the reporting units. The estimates used in the impairment testing were consistent with the discrete forecasts that the Company uses to manage its business, and, additionally, considered the developments that occurred since the dates of the acquisitions. Under the discounted cash flow method, cash flows beyond the discrete forecasts were estimated using terminal growth rates ranging from 4.0%—4.8%, which are considered to be the long-term earnings growth rates specific to the reporting units. The estimated future cash flows were discounted to present value using discount rates between 12.0%—17.0% that were the value-weighted average of the reporting units' estimated cost of equity and debt derived using both known and estimated market metrics. These discount rates were adjusted to reflect risk factors that considered both the timing and risks associated with the estimated cash flows for each of the respective reporting units. The tax rates used in the discounted cash flows reflected the international structure currently in place, which is consistent with the market participant perspective. The Company then allocated the fair values of the reporting units to the assets and liabilities of each of the reporting units. Based on the Company's analyses, the Company concluded that the fair value of each of the reporting units was greater than their carrying amount, including goodwill, and, therefore, the second step of the goodwill impairment test was not required.

Details of aggregate goodwill of the Company are as follows (in thousands):

	Gross Amount	Accumulated Impairment*	Net Carrying Amount
Year Ended December 30, 2016			
Goodwill	$ 119,291	$ (34,043)	$ 85,248
Year Ended December 25, 2015			
Goodwill	$ 119,291	$ (34,043)	$ 85,248

* Represents goodwill recorded for UCT in 2002 and Sieger Engineering in 2006, which was fully impaired in prior years.

Details of goodwill and other intangible assets were as follows (in thousands):

	December 30, 2016			December 25, 2015		
	Goodwill	Intangible Assets	Total	Goodwill	Intangible Assets	Total
Carrying amount	$ 85,248	$ 37,024	$ 122,272	85,248	$ 42,782	$ 128,030

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 December 30, 2016			As of December 25, 2015			
	Gross Carrying Amount	Accumulated Amortization	Carrying Value	Gross Carrying Amount	Accumulated Amortization	Carrying Value	Useful Life (in years)
AIT							
Customer relationships	$ 19,000	$ (17,058)	$ 1,942	$ 19,000	$ (15,298)	$ 3,702	7
Tradename	1,900	(1,900)	—	1,900	(1,900)	—	6
Intellectual property/know-how	1,600	(1,029)	571	1,600	(800)	800	7
Marchi							
Customer relationships	9,900	(1,898)	8,002	9,900	(907)	8,993	10
Tradename	1,170	(443)	727	1,170	(217)	953	6
Intellectual property/know-how	12,300	(2,643)	9,657	12,300	(1,264)	11,036	8-12
Miconex							
Customer relationships	8,800	(1,662)	7,138	8,800	(489)	8,311	7.5
UCT							
Tradename	8,987	—	8,987	8,987	—	8,987	
Total	$ 63,657	$ (26,633)	$ 37,024	$ 63,657	$ (20,875)	$ 42,782	

The Company amortizes its tradenames for AIT and Marchi and customer relationships intangible asset for AIT using an accelerated method over the estimated economic life of the assets, ranging from 6 to 10 years. The Company amortizes its intellectual property/know-how and customer relationships intangible assets for Marchi and Miconex on a straight-line basis with an estimated economic life of the assets ranging from 7 to 12 years. Amortization expense was approximately $5.8 million for the year ended December 30, 2016, $6.2 million for the year ended December 25, 2015, and $4.9 million for the year ended December 26, 2014.

In the fourth quarter of 2015, the Company wrote off the remaining book value of the tradename intangible acquired from AIT of $0.5 million as the Company no longer believed the AIT name has value. The Company also carries a UCT trade-name intangible asset of $9.0 million as a result of a previous acquisition. The Company concluded that the UCT trade-name intangible asset life is indefinite and is therefore not amortized. The Company concluded that the UCT trade-name as of December 30, 2016 is not impaired as there were no new events or changes in circumstances that would indicate that its carrying amount may not be recoverable.

As of December 30, 2016, future estimated amortization expense is expected to be as follows:

	Amortization Expense (in thousands)
2017	$ 4,924
2018	4,582
2019	4,210
2020	3,682
2021	3,554
2022 and thereafter	7,085
Total	$ 28,037

6. Borrowing Arrangements

On February 2, 2015, the Company entered into a credit agreement (the "Credit Agreement") by and among the Company, certain of its subsidiaries and East West Bank and City National Bank (collectively, the "Lenders"). The credit agreement was amended on April 3, 2015 (as amended, the "Credit Agreement") to modify certain terms of the agreement. The Credit Agreement provides for a term loan in an aggregate principal amount of $40.0 million (the "Term Loan") and a revolving credit facility in an aggregate principal amount of $40.0 million (the "Revolving Credit Facility"), a letter of credit facility in the aggregate availability amount of $20.0 million (as a sublimit of such Revolving Credit Facility) (the "L/C Facility") and a swingline sub-facility in the aggregate availability amount of $5.0 million (as a sublimit of the Revolving Credit Facility) (together with the Term Loan, the Revolving Credit Facility and the L/C Facility, the "Senior Secured Credit Facility").

On February 2, 2015, the Company borrowed an aggregate of $40.0 million under the Term Loan and approximately $6.5 million under the Revolving Credit Facility. The borrowed funds were used to repay the outstanding balance to Silicon Valley Bank as lender under our prior loan agreement, which loan agreement was terminated in connection with this transaction. In addition, the Company expensed the unamortized debt issuance costs of approximately $0.7 million in the first quarter of 2015. On February 5, 2015, in order to finance the acquisition of Marchi, the Company borrowed $29.7 million under the Revolving Credit Facility.

As of December 30, 2016, the Term Loan consists of nine remaining quarterly installments of $2.9 million with the balance of the outstanding principal amount due at maturity, which is February 2, 2019. The Revolving Credit Facility is available through February 2, 2019. The Credit Agreement includes customary representations, warranties, covenants and events of default. The Company and certain of its subsidiaries have agreed to secure all of their obligations under the Credit Agreement by granting a first priority lien in substantially all of their respective personal property assets (subject to certain exceptions and limitations).

At the Company's option, borrowings under the Term Loan and Revolving Credit Facility (subject to certain limitations) bear interest at either a base rate or at the London Interbank Offered Rate ("LIBOR") (with the LIBOR being adjusted for certain Eurocurrency reserve requirements, if any, as described in the Credit Agreement), plus, in each case, an applicable margin based on the Company's consolidated leverage ratio. All loans described above made on February 2, 2015 were initially base rate loans, carrying interest of 3.25%. The effective interest rate will be higher due to the incurrence of certain loan-related costs of $0.6 million that have been treated as a discount on the debt and amortized over the life of the loan.

As of December 30, 2016, the interest rates on the outstanding Term Loan and Revolving Credit facility were 3.38% (2.75% fixed and 0.63% variable based on LIBOR) and 3.75% fixed, respectively. In order to manage interest rate risk on the variable component of the New 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 varia ble rate equal to the LIBOR rate the Company is required to pay under its New Term Loan, or 0.63%, as of December 30, 2016. This interest rate swap effectively locked in a fixed interest rate of 3.49% on $14.0 million of the $26.2 million term loan balance outstanding as of December 30, 2016, with a decreasing notional amount based on prorated quarterly 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 December 30, 2016.

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

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 December 30, 2016, the Company has outstanding amounts under the Term Loan and Revolving Credit Facility of $26.2 million and $36.2 million, respectively, which are gross of unamortized debt issuance costs of $0.3 million, for a total debt balance with this credit facility of $62.4 million.

In conjunction with our acquisition of Miconex in July 2015, the Company has a credit agreement with a local bank in the Czech Republic that provides for a term loan in the aggregate of 0.8 million euros and a revolving credit facility in the aggregate of up to 8.3 million euros. The credit agreement requires Miconex to maintain certain financial covenants, including a debt-to-earnings-before-interest-depreciation-and-amortization ratio no greater than 3.00 to 1.00 and an equity ratio of at least 15%. This agreement also includes other affirmative and negative covenants. As of December 30, 2016, Miconex was in compliance with all of its covenants.

As of December 30, 2016, Miconex had outstanding amounts under the term loan and the revolving credit facility of 0.4 million euros (approximately $0.5 million) and 4.9 million euros (approximately $5.2 million), respectively, for a total of $5.7 million, with interest rates ranging from 1.3% to 2.3% plus a variable rate based on the Euro Interbank Offered Rate with due dates ranging from 2017 to 2020. The Credit facility expires on March 31, 2020.

As of December 30, 2016, the Company’s total bank debt was $68.1 million. As of December 30, 2016, the Company has $3.8 million and 3.3 million euros (approximately $3.5 million) available to borrow on our revolving loans in the U.S. and Czech Republic, respectively.

7. Income Taxes

U.S. and foreign components of income before income taxes were (in thousands):

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
U.S. operations	$ (17,459)	$ (10,910)	$ (452)
Foreign operations	36,406	14,517	16,782
Total pretax income	$ 18,947	$ 3,607	$ 16,330

The provision for income taxes consisted of the following (in thousands):

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
Current:			
Federal	$ —	$ (52)	$ (451)
State	110	158	118
Foreign	5,321	3,777	2,839
Total current	5,431	3,883	2,506
Deferred:			
Federal	1,706	12,043	(404)
State	202	714	2,722
Foreign	1,557	(2,301)	149
Total deferred	3,465	10,456	2,467
Total provision	$ 8,896	$ 14,339	$ 4,973

Significant components of net deferred tax assets and deferred tax liabilities for federal and state income taxes were as follows (in thousands):

	Year Ended	
	December 30, 2016	December 25, 2015
Net non-current deferred tax asset:		
Inventory valuation and basis difference	$ 3,359	$ 2,999
State taxes	49	50
Deferred rent	20	69
Other accrued expenses	3,516	3,867
Depreciation	1,347	1,697
Intangibles	5,105	3,799
Net operating losses	9,588	7,281
Research & other credits	980	20
	23,964	19,782
Valuation allowance	(23,844)	(18,723)
Net non-current deferred tax asset	120	1,059
Total deferred tax asset	120	1,059
Current deferred tax liability:		
Undistributed earnings	(1,126)	(507)
Non-current deferred tax liability:		
Goodwill	(7,556)	(5,649)
Net deferred tax asset (liability)	$ (8,562)	$ (5,097)

The effective tax rate differs from the U.S. federal statutory tax rate as follows:

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
Federal income tax provision at statutory rate	34.0 %	34.0 %	34.0 %
State income taxes, net of federal benefit	(0.6)%	(3.1)%	0.2 %
Effect of foreign operations	(15.3)%	(102.5)%	(19.8)%
Change in valuation allowance	30.8 %	445.8 %	11.3 %
China withholding taxes	— %	10.3 %	2.3 %
Acquisition related costs	1.0 %	8.3 %	— %
Other	(3.0)%	4.7 %	2.5 %
Effective Tax Rate	46.9 %	397.5 %	30.5 %

The Company earns a significant amount of its operating income outside the United States, which is deemed to be indefinitely reinvested in foreign jurisdictions, except as disclosed below. As a result, most of the Company's cash and cash equivalents are held by foreign subsidiaries. The Company currently does not intend nor foresee a need to repatriate any other funds to the U.S., except for a portion of current year earnings from one of our Singapore subsidiaries. The Company expects domestic cash and cash flows from operations to continue to be sufficient to fund its domestic operating activities and cash commitments for investing and financing activities, such as debt repayment and capital expenditures, for the foreseeable future. If the Company should require more capital in the U.S. than is generated by its domestic operations, for example to fund significant discretionary activities such as business acquisitions, the Company could or raise capital in the United States through debt or equity issuances. These alternatives could result in higher effective tax rates, increased interest expense, or dilution of our earnings. The Company has borrowed funds domestically and continues to believe it has the ability to do so at reasonable interest rates. The Company does not provide for U.S. taxes on its undistributed earnings of foreign subsidiaries that it intends to invest indefinitely outside the U.S., unless such taxes are otherwise required under U.S. tax law. In 2016, the Company determined that a portion of the current year earnings of one of its China subsidiaries may be remitted in the future to one of its foreign subsidiaries outside of mainland China and, accordingly, the Company provided for the related withholding taxes in its consolidated financial statements. As of December 30, 2016, the Company had undistributed earnings of foreign subsidiaries that are indefinitely invested outside of the U.S. of approximately $80.6 million. It is not practicable to determine the income tax liability that might be incurred if these earnings were to be distributed.

The following table summarizes the activity related to the Company's unrecognized tax benefits (in thousands):

Balance as of December 26, 2014	$ 356
Increases related to prior year tax positions	—
Increases related to current year tax positions	17
Releases due to settlements	(36)
Balance as of December 25, 2015	337
Decreases related to prior year tax positions	(28)
Increases related to current year tax positions	13
Expiration of the statute of limitations for the assessment of taxes	(24)
Balance as of December 30, 2016	$ 298

The Company's gross liability for unrecognized tax benefits as of December 30, 2016 and December 25, 2015 was $0.3 million and $ 0.4 million, respectively. Increases or decreases to interest and penalties on uncertain tax positions are included in the income tax provision in the Consolidated Statements of Operations. Interest related to uncertain tax positions for the periods ended December 30, 2016, December 25, 2015 and December 26, 2014 was considered to be de minimis. 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.

Tax attributes related to equity award windfall deductions are not recorded until they result in a reduction of cash tax payable. As of December 30, 2016, the benefit of the federal net operating losses from windfall deductions were excluded from the deferred tax asset balance as of December 30, 2016. As of December 30, 2016, the benefit of federal and California net operating loss deductions of $4.7 million and $1.7 million, respectively, will be recorded to additional paid-in capital when it reduces cash taxes payable.

As of December 30, 2016, the Company had federal and California net operating loss carryforwards ("NOLs") of approximately $24.2 million and $24.0 million, respectively. The federal NOLs begin expiring after 2035 and the California NOLs begin expiring after 2031.

The Company files income tax returns in the U.S. federal jurisdiction, various states and foreign jurisdictions. The Company's 2013 through 2015 federal income tax returns are open to audit through the statute of limitations by the Internal Revenue Service. The Company's 2011 through 2015 state income tax returns are open to audit by the California Franchise Tax Board. The Company is also subject to examination in various other jurisdictions for various periods.

8. Stockholders' Equity

Stock Repurchase Plan — On July 24, 2008, the Board of Directors approved a stock repurchase program for up to $10.0 million. The Company commenced the repurchase of its common stock on August 4, 2008. The total number of shares repurchased and related cost of the stock repurchase program were 601,994 shares at a cost of $3,337,000, or an average cost of $5.54 per share. The Company has not repurchased stock during any of the fiscal years after 2008.

9. Employee Benefit Plans

Stock Options — On February 20, 2003, the Company adopted the 2003 Stock Incentive Plan (the "2003 Incentive Plan") which was subsequently amended and restated. The Company has reserved 4,515,239 shares of its common stock for issuance under the 2003 Incentive Plan. The 2003 Incentive Plan provides for the issuance of options and other stock-based awards. Options are generally granted at fair value at the date of grant as determined by the Board of Directors and have terms up to ten years and generally vest over four years.

The stockholders of the Company approved amendments to the Company's 2003 Stock Incentive Plan, which included an increase in shares available for issuance by 1,500,000 and 3,100,000 common shares which are more fully described in the Company's definitive proxy statements filed on April 23, 2010 and May 27, 2013, respectively. At December 30, 2016, 667,034 shares were available for future grants under the 2003 Incentive Plan.

Option activity under the 2003 Incentive Plan is as follows:

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value (in thousands)
Outstanding, December 27, 2013	1,209,119	$ 7.86	2.86	$ 3,976
Exercised	(343,947)	5.11		
Cancelled	(11,621)	14.40		
Outstanding, December 26, 2014	853,551	$ 8.87	1.35	$ 1,798
Exercised	(339,303)			
Cancelled	(198,600)			
Outstanding, December 25, 2015	315,648	$ 10.02	2.06	$ 216
Exercised	(101,700)	3.91		
Cancelled	(77,489)	12.54		
Outstanding, December 30, 2016	136,459	$ 13.15	0.57	$ 135
Options exercisable and expected to vest, December 30, 2016	136,459	$ 13.15	0.57	$ 135

The following table summarizes information with respect to options outstanding and exercisable at December 30, 2016:

Range of Exercise Price	Shares Outstanding	Weighted Average Remaining Average Life (Years)	Weighted Average Exercise Price	Shares Exercisable	Weighted Average Exercise Price
$ 1.17	15,784	2.24	$ 1.17	15,784	$ 1.17
$12.99 – 13.71	10,500	0.72	13.09	10,500	13.09
$14.31 – 14.90	110,175	0.32	14.87	110,175	14.87
Grand Total	136,459	0.57	$ 13.15	136,459	$ 13.15

For the fiscal years 2016, 2015 and 2014, the intrinsic value of the Company's exercised stock options was $0.1 million, $0.2 million and $1.8 million respectively. For the fiscal years 2016, 2015 and 2014, the Company's vested share recognized expense was zero. There was no stock-based compensation expense for fiscal year 2016, 2015 and 2014 attributable to stock options as all outstanding options were fully vested at the beginning of the 2014 fiscal year.

Restricted Stock Units and Restricted Stock Awards — In fiscal years 2016, 2015 and 2014, the Company granted 52,000, 56,000 and 47,000 shares, respectively, of common stock to its board members under the 2003 Incentive Plan. These Restricted Share Awards (RSAs) vest on the earlier of 1) the next Annual Shareholder Meeting, or 2) 365 days from date of grant. The total unamortized expense of the Company's unvested RSAs as of December 30, 2016, is approximately $0.1 million. During the first quarter of fiscal year 2008, the Company began granting stock awards in the forms of Restricted Stock Units (RSUs) and Performance Stock Units (PSUs) to its employees as part of the Company's long term equity compensation plan. These stock awards are granted to employees with a unit purchase price of zero dollars and typically vest over three years, subject to the employee's continued service with the Company and, in the case of PSUs, subject to achieving certain performance goals. The expected cost of the grant is recognized over the service period, and is reduced for estimated forfeitures and, in the case of PSUs, is reduced based on estimated achievement of performance goals. During the year ended December 30, 2016, the Company approved and granted 1,092,360 RSU's to employees with a weighted average grant date fair value of $6.11 per share and 280,500 PSUs with a weighted average grant date fair value of $5.47 per share. As of December 30, 2016, $6.3 million of unrecognized stock-based compensation cost, net of estimated forfeitures, related to RSUs remains to be amortized and is expected to be recognized over an estimated period of 1.8 years. The unvested amount is subject to forfeiture, until fully vested. At December 30, 2016, 1,757,507 shares were subject to forfeiture.

The following table summarizes the Company's restricted stock unit and restricted stock award activity through the year ended December 30, 2016:

	Number of Shares	Aggregate Intrinsic Value (in thousands)
Unvested restricted stock units and restricted stock awards at December 27, 2014	1,078,279	$ 9,673
Granted	875,500	
Vested	(430,380)	
Forfeited	(255,457)	
Unvested restricted stock units and restricted stock awards at December 25, 2015	1,267,942	$ 6,563
Granted	1,432,860	
Vested	(675,591)	
Forfeited	(267,704)	
Unvested restricted stock units and restricted stock awards at December 30, 2016	1,757,507	$ 16,466
Vested and expected to vest restricted stock units and restricted stock awards	1,446,944	$ 14,035

Employee Stock Purchase Plan — In 2004 the Company adopted an Employee Stock Purchase Plan ("ESPP") and is authorized to issue 555,343 shares of common stock under the ESPP. The ESPP permits employees to purchase common stock at a discount through payroll withholdings at certain specified dates (purchase period) within a defined offering period. The purchase price is 95% of the fair market value of the common stock at the end of the purchase period and is intended to qualify as an "employee stock purchase plan" under Section 423 of the Internal Revenue Code. There were 32,533 shares issued under the ESPP during the year ended December 30, 2016.

Employee Savings and Retirement Plan — The Company sponsors a 401(k) savings and retirement plan (the "401(k) Plan") for all employees who meet certain eligibility requirements. Participants could elect to contribute to the 401(k) Plan, on a pre-tax basis, up to 25% of their salary to a maximum of $18,000. The Company may make matching contributions of up to 3% of employee contributions based upon eligibility. The Company made approximately $1.1 million, $1.0 million, and $0.9 million discretionary employer contributions to the 401(k) Plan in the years ended December 30, 2016, December 25, 2015 and December 26, 2014, respectively.

10. Net Income (Loss) Per Share

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

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
Numerator:			
Net income (loss)	$ 10,051	$ (10,732)	$ 11,357
Denominator:			
Shares used in computation — basic:			
Weighted average common shares outstanding	32,632	31,564	29,301
Shares used in computation — diluted:			
Weighted average common shares outstanding	32,632	31,564	29,301
Dilutive effect of common shares outstanding subject to repurchase	485	—	396
Dilutive effect of options outstanding	33	—	239
Shares used in computing diluted net income (loss) per share	33,150	31,564	29,936
Net income (loss) per share — basic	$ 0.31	$ (0.34)	$ 0.39
Net income (loss) per share — diluted	$ 0.30	$ (0.34)	$ 0.38

The Company had securities outstanding which could potentially dilute basic earnings per share in the future, but the incremental shares from the assumed exercise of these securities were excluded in the computation of diluted net income per share, as their effect would have been anti-dilutive. Such outstanding securities consist of the following (in thousands):

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
Outstanding options	174	261	266

11. Geographical Information

The Company's principal markets include North America, Asia and Europe. Sales by geographic area represent sales to unaffiliated customers and are based upon the location to which the products were shipped. The following table sets forth revenue by geographic area (in thousands):

	Year Ended		
Sales	December 30, 2016	December 25, 2015	December 26, 2014
United States	$ 308,129	$ 313,090	$ 372,200
China	13,152	21,464	64,376
Singapore	175,843	103,176	55,491
Austria	35,729	12,568	—
Others	29,906	18,805	21,890
Total	$ 562,759	$ 469,103	$ 513,957

At December 30, 2016 and December 25, 2015, approximately $8.1 million and $10.0 million, respectively, of the Company's long-lived assets were located in China, Singapore and the Czech Republic, and the remaining balances were located in the United States.

12. Commitments and Contingencies

The Company had commitments to purchase inventory totaling approximately $94.6 million at December 30, 2016.

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

As of December 30, 2016, future minimum payments under these operating leases were as follows (in thousands):

Fiscal year		
2017	$	6,000
2018		5,246
2019		4,269
2020		4,226
2021		3,737
Thereafter		3,311
Total minimum lease payments	$	26,789

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 individually or in the aggregate 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, results of operations or cash flows.

Item 9. Changes in and Disagreements with Acco untants on Accounting and Financial Disclosure

Not Applicable

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer ("CEO") and our chief financial officer ("CFO"), evaluated the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") as of December 30, 2016. Based upon the evaluation, our management, including our CEO and our CFO, concluded that the design and operation of our disclosure controls and procedures were effective at the reasonable assurance level to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act (i) is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and (ii) is accumulated and communicated to our management, including our CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

As required by Rule 13a-15(d) of the Exchange Act, our management, including our CEO and CFO, conducted an evaluation of our "internal control over financial reporting" as defined in Exchange Act Rule 13a-15(f) to determine whether any changes in our internal control over financial reporting occurring during the fourth quarter of fiscal year 2015 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Based on that evaluation, there have been no such changes during the fourth quarter of fiscal year 2016.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined under Rule 13a-15(f) promulgated under the Exchange Act. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officers, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013). The objective of this evaluation was to determine whether the Company's internal control over financial reporting was effective as of December 30, 2016. Our assessment included internal control over financial reporting at Marchi Thermal Systems, Inc., which was acquired on February 5, 2015 and whose financial statements constitute 2.1% and 3.3% of the Company's consolidated total assets (excluding $36.8 million of goodwill and intangible assets, net) and revenue, respectively for the year ended December 30, 2016. Our assessment also included internal controls over financial reporting at MICONEX s.r.o., which was acquired on July 31, 2015 and whose financial statements constitute 4.4% and 7.5% of the Company's consolidated total assets (excluding $18.1 million of goodwill and intangible assets, net) and revenue, respectively for the year ended December 30, 2016. Based on our evaluation under the framework set forth in *Internal Control — Integrated Framework (2013)* , our management concluded that our internal control over financial reporting was effective as of December 30, 2016.

The effectiveness of our internal control over financial reporting as of December 30, 2016 has been audited by Moss Adams LLP, an independent registered public accounting firm, as stated in their report which appears in this Form 10-K.

Item 9B. Other Information

None.

PART III

Pursuant to Paragraph G(3) of the General Instructions to Form 10-K, portions of the information required by Part III of Form 10-K are incorporated by reference from our definitive Proxy Statement to be filed with the SEC in connection with our 2017 Annual Meeting of Stockholders.

Item 10. Directors and Executive Officers of the Registrant

The information required by this item concerning directors, including our audit committee financial expert, is incorporated by reference to the section entitled, "Election of Directors" in our Proxy Statement for the 2017 Annual Meeting of Stockholders.

For information with respect to Executive Officers, see Part I, Item 1 of this Annual Report on Form 10-K, under "Executive Officers."

The information required by this item with respect to Section 16(a) beneficial reporting compliance is incorporated by reference to the section entitled, "Section 16(a) Beneficial Ownership Reporting Compliance" in our Proxy Statement for the 2017 Annual Meeting of Stockholders.

We have adopted a code of ethics that is designed to qualify as a "code of ethics" within the meaning of Section 406 of the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder. This code of ethics is available on our website at *www.uct.com* . To the extent required by law, any amendments to, or waivers from, any provision of the code of ethics will be promptly disclosed to the public. To the extent permitted by such legal requirements, we intend to make such public disclosure by posting the relative material on our website in accordance with SEC rules.

Item 11. Executive Compensation

The information required by this item regarding the security ownership of certain beneficial owners is incorporated by reference to the sections entitled "Executive Officer Compensation" and "Election of Directors" in our Proxy Statement for the 2017 Annual Meeting of Stockholders.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this item is incorporated by reference to the sections entitled "Security Ownership of Certain Beneficial Owners and Management" in our Proxy Statement for the 2017 Annual Meeting of Stockholders.

The table below summarizes our equity plan information as of December 30, 2016:

Plan Category	(a) Number of Securities to be Issued Upon Exercise/Vest of Outstanding Options, Awards Warrants and Rights	(b) Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	(c) (1) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)
Equity compensation plans approved by security holders:	1,987,390	$ 9.89	667,034
Equity compensation plans not approved by security holders	—	—	—
Total	1,987,390	$ 9.89	667,034

(1) Consists of the 2003 Stock Incentive Plan and, for purposes of column (c), the Employee Stock Purchase Plan. Since restricted stock units do not have an exercise price, they are excluded from the calculations in column (b) of the table above.

Item 13. Certain Relationshi ps and Related Transactions

The information required by this item is incorporated by reference to the section entitled “Certain Relationships and Related Party Transactions” in our Proxy Statement for the 2017 Annual Meeting of Stockholders.

Item 14. Principal Accountant Fees and Services

The information required by this item is incorporated by reference to the section entitled “Ratification of the Appointment of Our Independent Registered Public Accounting Firm” in our Proxy Statement for the 2017 Annual Meeting of Stockholders.

Part IV

Item 15. Exhibits, Financial Statement Schedules

(a) The following documents are filed as part of this Form 10-K:

1. Financial Statements:

	Form 10-K Page No.
Report of Independent Registered Public Accounting Firm	44
Consolidated Balance Sheets	46
Consolidated Statements of Operations	47
Consolidated Statements of Comprehensive Income	48
Consolidated Statements of Stockholders' Equity	49
Consolidated Statements of Cash Flows	50
Notes to Consolidated Financial Statements	51

2. Financial statement schedules not listed have been omitted because they are not applicable or required, or the information required to be set forth therein is included in the Consolidated Financial Statements or Notes thereto.

3. Exhibits

Exhibit Index

Exhibit Number	Description	Form	File No.	Filing Date	Exhibit	Filed Herewith
2.1	Purchase Agreement dated as of July 28, 2015 between Ultra Clean Holdings, Inc., Charlesmost s.r.o. and Stenen one a.s., Juves one a.s. relating to the purchase and sale of 100% of the shareholding interest of MICONEX s.r.o.	8-K	000-50646	August 3, 2015	2.1	
3.1	Amended and Restated Certificate of Incorporation of Ultra Clean Holdings, Inc.	S-1/A	333-11904	March 2, 2004	3.1	
3.2	Amended and Restated Bylaws of Ultra Clean Holdings, Inc.	10-Q	000-50646	May 2, 2016	3.1	
4.1	Specimen Stock Certificate	S-1/A	333-11904	March 8, 2004	4.1	
4.2	Ultra Clean Holdings, Inc. 2003 Amended and Restated Stock Incentive Plan (amended as of May 22, 2013)	8-K	000-50646	May 24, 2013	10.1	
4.3	Form of Stock Option Agreement	S-1/A	333-11904	March 8, 2004	10.6	
10.1	Credit Agreement, dated as of February 2, 2015, among Ultra Clean Holdings, Inc., East West Bank, City National Bank and the several lenders from time to time party thereto	8-K	000-50646	February 6, 2015	10.1	
10.2	First Amendment to the Credit Agreement, dated April 3, 2015 among Ultra Clean Holdings, Inc., East West Bank, City National Bank and the several lenders from time to time party thereto	10-Q	000-50646	May 4, 2015	10.3	
10.3	Second Amendment to Credit Agreement, dated May 1, 2015, among Ultra Clean Holdings, Inc., East West Bank, City National Bank and the several lenders from time to time party thereto					
10.5	Third Amendment to Credit Agreement, dated December 24, 2015, among Ultra Clean Holdings, Inc., East West Bank, City National Bank and the several lenders from time to time party thereto	8-K	000-50646	December 29, 2015	10.1	

Exhibit Number	Description	Form	File No.	Filing Date	Exhibit	Filed Herewith
10.6	Guarantee and Collateral Agreement in favor of East West Bank, dated as of February 2, 2015, made by Ultra Clean Holdings, Inc., Ultra Clean Technology Systems and Service, Inc., American Integration Technologies LLC, UCT Sieger Engineering LLC, Integrated Flow Systems LLC, Drake Acquisition Subsidiary, Inc. and the other Grantors referred to therein and from time to time party thereto	8-K	000-50646	February 6, 2015	10.2	
10.7†	Employee Stock Purchase Plan (Restated as of October 21, 2004)	10-Q	000-50646	November 8, 2004	10.9.1	
10.8†	Form of Indemnification Agreement between Ultra Clean Holdings, Inc. and each of its directors and executive officers	S-1/A	333-11904	March 2, 2004	10.10	
10.9†	Form of Award Agreement	S-1/A	333-11904	March 8, 2004	10.13	
10.10†	Severance Policy for Executive Officers(revised)	10-K	000-50646	March 19, 2009	10.16	
10.11†	Form of Restricted Stock Unit Award Agreement	10-K	000-50646	March 12, 2008	10.18	
10.12†	Change in Control Severance Agreement dated as of July 31, 2009 by and between Ultra Clean Holdings, Inc. and Kevin C. Eichler	10-Q	000-50646	November 6, 2009	10.1	
10.13†	Letter Agreement between the Company and Lavi Lev dated November 18, 2011	10-Q	000-50646	May 3, 2013	10.1	
10.14†	Offer Letter between the Company and James P. Scholhamer dated January 3, 2015	8-K	000-50646	January 5, 2015	99.1	
10.15†	Change in Control Severance Agreement dated as of January 19, 2015 by and between Ultra Clean Holdings, Inc. and James P. Scholhamer	10-K	000-50646	March 11, 2015	10.18	
10.16†	Promotion Letter between the Company and Sheri Brumm dated February 18, 2016	10-K	000-50646	March 9, 2016	10.18	
10.17†	Offer Letter between the Company and Sheri Brumm dated July 7, 2016	8-K	000-50646	July 12, 2016	99.1	
10.18†	Change in Control Severance Agreement between the Company and Sheri Brumm dated July 7, 2016	8-K	000-50646	July 12, 2016	99.2	
10.19†	Transition Agreement and Release of Claims between the Company and Kevin C. Eichler dated July 7, 2016	8-K	000-50646	July 12, 2016	99.3	
16.1	Letter of Deloitte & Touche LLP to the Securities and Exchange Commission, dated April 3, 2015 regarding change in registrant's certifying accountant	8-K	000-50646	April 3, 2015	16.1	

Exhibit Number	Description	Form	File No.	Filing Date	Exhibit	Filed Herewith
21.1	Subsidiaries of Ultra Clean Holdings, Inc.					X
23.1	Consent of Moss Adams LLP, Independent Registered Public Accounting Firm					X
23.2	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm					X
24.1	Power of Attorney (included on signature page)					X
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
101.INS	XBRL Instance Document					X
101.SCH	XBRL Taxonomy Extension Schema Document					X
101.CAL	XBRL Taxonomy Calculation Linkbase Document					X
101.DEF	XBRL Taxonomy Definition Linkbase Document					X
101.LAB	XBRL Taxonomy Label Linkbase Document					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document					X

† Denotes management contract or compensatory plan.

Item 16. Form 10-K Summary

None

SIGNAT URES

Pursuant to the requirements of Section 13 or 15(d) 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.

By: /S/ JAMES P. SCHOLHAMER
James P. Scholhamer
Chief Executive Officer

Date: March 15, 2017

KNOW ALL PERSONS BY THESE PRESENTS , that each person whose signature appears below constitutes and appoints James P. Scholhamer and Sheri Brumm, and each of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and re-substitution, for him or her in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission hereby ratifying and confirming that each of said attorneys-in-fact and agents, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/S/ CLARENCE L. GRANGER **Clarence L. Granger**	Chairman	March 15, 2017
/S/ JAMES P. SCHOLHAMER **James P. Scholhamer**	Chief Executive Officer and Director (Principal Executive Officer)	March 15, 2017
/S/ SHERI BRUMM **Sheri Brumm**	Chief Financial Officer and Senior Vice President of Finance (Principal Financial Officer and Principal Accounting Officer)	March 15, 2017
/S/ LEONID MEZHVINSKY **Leonid Mezhvinsky**	Director	March 15, 2017
/S/ EMILY M. LIGGETT **Emily M. Liggett**	Director	March 15, 2017
/S/ THOMAS T. EDMAN **Thomas T. Edman**	Director	March 15, 2017
/S/ BARBARA V. SCHERER **Barbara V. Scherer**	Director	March 15, 2017
/S/ DAVID T. IBNALE **David T. IbnAle**	Director	March 15, 2017
/S/ JEFF ANDRESON **Jeff Andreson**	Director	March 15, 2017

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24.1	Power of Attorney (included on signature page)					X
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31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
101.INS	XBRL Instance Document					X
101.SCH	XBRL Taxonomy Extension Schema Document					X
101.CAL	XBRL Taxonomy Calculation Linkbase Document					X
101.DEF	XBRL Taxonomy Definition Linkbase Document					X
101.LAB	XBRL Taxonomy Label Linkbase Document					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document					X

† Denotes management contract or compensatory plan.

Exhibit 21.1

Ultra Clean Holdings, Inc.
List of Subsidiaries

Ultra Clean Technology Systems and Service, Inc. (a California corporation)

Ultra Clean International Holding Company (a Cayman Islands corporation)

Ultra Clean Technology (Shanghai) Co., LTD (a Chinese corporation)

Ultra Clean Micro-Electronics Equipment (Shanghai) Co., Ltd. (a Chinese corporation)

FarEast International Holdings Ltd (a Hong Kong corporation)

Ultra Clean Asia Pacific, Pte Ltd (a Singapore corporation)

American Integration Technologies LLC (a Delaware limited liability company)

Integrated Flow Systems, LLC (a California limited liability company)

UCT Additive Manufacturing Center Pte Ltd (a Singapore corporation)

Marchi Thermal Systems, Inc. (a Delaware corporation)

MICONEX s.r.o. (Miconex) (a Czech Republic company)

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements (Form S-8 Nos. 333-188995, 333-167530, 333-165782, 333-158108, 333-151335, 333-141989, 333-135147, 333-123820, 333-114051) of our report dated March 15, 2017, relating to the consolidated financial statements of Ultra Clean Holdings, Inc., and the effectiveness of internal control over financial reporting of Ultra Clean Holdings, Inc, appearing in this Annual Report (Form 10-K) for the year ended December 30, 2016.

/s/ Moss Adams LLP

San Francisco, California
March 15, 2017

Exhibit 23.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statements Nos. 333-188995, 333-167530, 333-165782, 333-158108, 333-151335, 333-141989, 333-135147, 333-123820 and 333-114051 on Form S-8 and Registration Statement No. 333-202211 on Form S-3 of our report dated March 11, 2015, relating to the consolidated financial statements of Ultra Clean Holdings, Inc. and subsidiaries (the "Company"), with respect to the related consolidated statements of operations, stockholders' equity, and cash flows for the year ended December 26, 2014, which appears in this Annual Report on Form 10-K of the Company for the year ended December 30, 2016.

/s/ Deloitte & Touche LLP

San Jose, California
March 15, 2017

EXHIBIT 31.1

CERTIFICATION

I, James P. Scholhamer, certify that:

1. I have reviewed this annual report on Form 10-K 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: March 15, 2017

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

EXHIBIT 31.2

CERTIFICATION

I, Sheri Brumm, certify that:

1. I have reviewed this annual report on Form 10-K 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: March 15, 2017

/s/ *Sheri Brumm*

Sheri Brumm
Chief Financial Officer
and Senior Vice President of Finance

EXHIBIT 32.1

ULTRA CLEAN HOLDINGS, INC.
SARBANES-OXLEY ACT SECTION 906 CERTIFICATION

The certification set forth below is being submitted in connection with the annual report on Form 10-K of Ultra Clean Holdings, Inc. for the year ended December 30, 2016 (the "Report") 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.

I, James P. Scholhamer, the Chief Executive Officer of Ultra Clean Holdings, Inc., certify that:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act; and

2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Ultra Clean Holdings, Inc.

Date: March 15, 2017

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

EXHIBIT 32.2

ULTRA CLEAN HOLDINGS, INC.
SARBANES-OXLEY ACT SECTION 906 CERTIFICATION

The certification set forth below is being submitted in connection with the annual report on Form 10-K of Ultra Clean Holdings, Inc. for the year ended December 30, 2016 (the "Report") 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.

I, Sheri Brumm, the Chief Financial Officer of Ultra Clean Holdings, Inc., certify that:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act; and

2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Ultra Clean Holdings, Inc.

Date: March 15, 2017

/s/ *Sheri Brumm*
Sheri Brumm
Chief Financial Officer and
Senior Vice President of Finance