

# ICHOR HOLDINGS, LTD.

## FORM 10-K (Annual Report)

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**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 001-37961

**ICHOR HOLDINGS, LTD.**

(Exact name of registrant as specified in its charter)

Cayman Islands  
(State or other jurisdiction of incorporation)

001-37961  
(Commission File Number)

Not Applicable  
(IRS Employer Identification No.)

3185 Laurelview Ct.

Fremont, California 94538

(Address of principal executive offices, including Zip Code)

(510) 897-5200

(Registrant's telephone number, including area code)

Not Applicable

(Former name or former address, if changed since last report)

Title of each class

Ordinary Shares, \$0.0001 par value

Name of exchange on which registered

The NASDAQ Stock 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 (§229.405 of this chapter) 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.

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 in Rule 12b-2 of the Act). Yes  No

The registrant completed its initial public offering of its ordinary shares on December 14, 2016. The registrant was not a public company as of the last business day of its most recently completed second fiscal quarter and therefore cannot calculate the aggregate market value of its voting and non-voting common equity held by non-affiliates as of such date.

There were 24,755,915 ordinary shares, \$0.0001 par value, outstanding as of March 21, 2017.

**DOCUMENTS INCORPORATED BY REFERENCE**

The information required by Part III of Form 10-K is incorporated herein by reference to the registrant's definitive Proxy Statement relating to its 2017 General Meeting, which will be filed with the Securities and Exchange Commission within 120 days after the end of the registrant's fiscal year.

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## **CAUTIONARY STATEMENT CONCERNING FORWARD -LOOKING STATEMENTS**

This report contains forward-looking statements within the meaning of the federal securities laws. All statements other than statements of historical fact included in this report are forward-looking statements. These statements relate to analyses and other information, which are based on forecasts of future results and estimates of amounts not yet determinable. These statements also relate to our future prospects, developments and business strategies. These forward-looking statements are identified by the use of terms and phrases such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "predict," "project," "will" and similar terms and phrases, including references to assumptions. However, these words are not the exclusive means of identifying such statements. These statements are contained in many sections of this report, including those entitled "Business" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." Although we believe that our plans, intentions and expectations reflected in or suggested by such forward-looking statements are reasonable, we cannot assure you that we will achieve those plans, intentions or expectations. All forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those that we expected.

Important factors that could cause actual results to differ materially from our expectations, or cautionary statements, are disclosed under the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this report. All written and oral forward-looking statements attributable to us, or persons acting on our behalf, are expressly qualified in their entirety by the cautionary statements contained in this report under the heading "Risk Factors," as well as other cautionary statements that are made from time to time in our other filings with the Securities and Exchange Commission and public communications. You should evaluate all forward-looking statements made in this report in the context of these risks and uncertainties.

We caution you that the important factors referenced above may not contain all of the factors that are important to you. In addition, we cannot assure you that we will realize the results or developments we expect or anticipate or, even if substantially realized, that they will result in the consequences or affect us or our operations in the way we expect. The forward-looking statements included in this report are made only as of the date hereof. We undertake no obligation to publicly update or revise any forward-looking statement as a result of new information, future events or otherwise, except as otherwise required by law.

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# PART I

## ITEM 1. BUSINESS

Unless expressly indicated or the context requires otherwise, the terms "Ichor," "Company," "we," "us," "our," and similar terms in this report refer to Ichor Holdings, Ltd. and its consolidated subsidiaries.

We use a 52 or 53 week fiscal year ending on the last Friday in December. The years ended December 30, 2016, December 25, 2015, and December 26, 2014 were 53 weeks, 52 weeks, and 52 weeks, respectively. All references to 2016, 2015, and 2014 are references to fiscal years unless explicitly stated otherwise.

### **Company Overview**

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We are a leader in the design, engineering and manufacturing of critical fluid delivery subsystems for semiconductor capital equipment. Our primary offerings include gas and chemical delivery subsystems, collectively known as fluid delivery subsystems, which are key elements of the process tools used in the manufacturing of semiconductor devices. Our gas delivery subsystems deliver, monitor and control precise quantities of the specialized gases used in semiconductor manufacturing processes such as etch and deposition. Our chemical delivery subsystems precisely blend and dispense the reactive liquid chemistries used in semiconductor manufacturing processes such as chemical-mechanical planarization, or CMP, electroplating and cleaning. We also manufacture certain components for internal use in fluid delivery systems and for direct sales to our customers. This vertically integrated portion of our business is primarily focused on metal and plastic parts that are used in gas and chemical systems, respectively.

Fluid delivery subsystems ensure accurate measurement and uniform delivery of specialty gases and chemicals at critical steps in the semiconductor manufacturing processes. Any malfunction or material degradation in fluid delivery reduces yields and increases the likelihood of manufacturing defects in these processes. Historically, semiconductor original equipment manufacturers, or OEMs, internally designed and manufactured the fluid delivery subsystems used in their process tools. Currently, most OEMs outsource the design, engineering and manufacturing of their gas delivery subsystems to a few specialized suppliers, including us. Additionally, many OEMs are also increasingly outsourcing the design, engineering and manufacturing of their chemical delivery subsystems due to the increased fluid expertise required to manufacture these subsystems. Outsourcing these subsystems has allowed OEMs to leverage the suppliers' highly specialized engineering, design and production skills while focusing their internal resources on their own value-added processes. We believe that this outsourcing trend has enabled OEMs to reduce their fixed costs and development time, as well as provided significant growth opportunities for specialized subsystems suppliers like us.

Our goal is to be the premier supplier of outsourced fluid delivery subsystems to OEMs engaged in manufacturing capital equipment to produce semiconductors and to leverage our technology into new markets. To achieve this goal, we engage with our customers early in their design and development processes and utilize our deep engineering resources and operating expertise to jointly create innovative and advanced solutions that meet the current and future needs of our customers. These collaborations frequently involve our engineers working at our customers' sites and serving as an extension of our customers' product design teams. We employ this approach with two of the largest manufacturers of semiconductor capital equipment in the world. We believe this approach enables us to design subsystems that meet the precise specifications our customers demand, allows us to often be the sole supplier of these subsystems during the initial production ramp and positions us to be the preferred supplier for the full five to ten-year lifespan of the process tool.

The broad technical expertise of our engineering team, coupled with our early customer engagement approach, enables us to offer innovative and reliable solutions to complex fluid delivery challenges. With two decades of experience developing complex fluid delivery subsystems and meeting the constantly changing production requirements of leading semiconductor OEMs, we have developed expertise in fluid delivery that we offer to our OEM customers. In addition, our capital efficient model and the integration of our business systems with those of our customers provides us the flexibility to fulfill increased demand and meet changing customer requirements with minimum additional capital outlay. With an aim to superior customer service, we have a global footprint with many facilities strategically located in close proximity to our customers. We have established long standing relationships

with top tier OEM customers, including Lam Research and Applied Materials, which were our two largest customers by sales in 2016.

We grew our sales from continuing operations by 40% to \$405.7 million in 2016 from \$290.6 million in 2015 (hereinafter, all references to “sales” relates to sales from continuing operations, unless explicitly stated otherwise). We generated net income from continuing operations of \$20.8 million in 2016 and \$12.8 in 2015. We generated adjusted net income from continuing operations of \$31.6 million in 2016 and \$20.2 million in 2015. See “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations—Non-GAAP Results” for a discussion of adjusted net income from continuing operations, an accompanying presentation of the most directly comparable financial measure calculated in accordance with generally accepted accounting principles in the United States, net income from continuing operations, and a reconciliation of the differences between adjusted net income from continuing operations and net income from continuing operations.

## **Our Competitive Strengths**

As a leader in the fluid delivery industry, we believe that our key competitive strengths include the following:

### *Deep Fluids Engineering Expertise*

We believe that our engineering team, comprised of chemical engineers, mechanical engineers and software and systems engineers, has positioned us to expand the scope of our solutions, provide innovative subsystems and strengthen our incumbent position at our OEM customers. Many of our engineers are industry veterans and have spent a significant portion of their careers at our customers, bringing first-hand expertise and a heightened understanding of our customers’ needs. Our engineering team acts as an extension of our customers’ product development teams, providing our customers with technical expertise that is outside of their core competencies.

### *Early Engagement with Customers on Product Development*

We seek to engage with our customers and potential customers very early in their process for new product development. We believe this approach enables us to collaborate on product design, qualification, manufacturing and testing in order to provide a comprehensive, customized solution. Through early engagement during the complex design stages, our engineering team gains early insight into our customers’ technology roadmaps which enables us to pioneer innovative and advanced solutions. In many cases our early engagement with our customers enables us to be the sole source supplier when the product is initially introduced.

### *Long History and Strong Relationships with Top Tier Customers*

We have established deep relationships with top tier OEMs such as Lam Research and Applied Materials, which were our two largest customers by sales in 2016. Our customers are global leaders by sales and are considered consolidators in the increasingly concentrated semiconductor capital equipment industry. Our existing relationships with our customers have enabled us to effectively compete for new fluid delivery subsystems for our customers’ next generation products in development. We leverage our deep rooted existing customer relationships with these market leaders to penetrate new business opportunities created through industry consolidation. Our close collaboration with them has contributed to our established market position and several key supplier awards.

### *Operational Excellence with Scale to Support the Largest Customers*

Over our 17 year history of designing and building gas delivery systems, we have developed deep capabilities in operations. We have strategically located our manufacturing facilities near our customers’ locations in order to provide fast and efficient responses to new product introductions, and accommodate configuration or design changes late in the manufacturing process. We have also built significant capacity in Singapore to support high volume products. In addition to providing high quality and reliable fluid delivery subsystems, one of our principal focuses is delivering short lead times to allow our customers the maximum flexibility in their production processes. We have accomplished this by investing in manufacturing systems and developing an efficient supply chain. Our focus on

operational efficiency and flexibility allows us to respond quickly to customer requests by frequently shipping products to customers less than three weeks after receiving the order.

#### *Capital Efficient and Scalable Business Model*

In general, our business is not capital intensive and we are able to grow sales with a low investment in property, plant and equipment and low levels of working capital. In 2016 and 2015, our total capital expenditures were \$4.3 million and \$1.4 million, respectively. In particular, our close supplier relationships also enable us to scale production quickly without maintaining significant inventory on hand. The semiconductor capital equipment market has historically been cyclical. We have structured our business to minimize fixed manufacturing overhead and operating expenses to enable us to grow net income at a higher rate than sales during periods of growth. Conversely, our low fixed cost approach allows us to minimize the impact of cyclical downturns on our net income, but results in a smaller increase in gross margin as a percentage of sales in times of increased demand.

The semiconductor capital equipment market has historically been cyclical. We have structured our business to minimize fixed manufacturing overhead and operating expenses to enable us to grow net income at a higher rate than sales during periods of growth. For example, from 2014 to 2016, sales grew at a compound annual growth rate, or CAGR, of 27.6% while adjusted net income from continuing operations grew at a CAGR of 64.4%. Conversely, our low fixed cost approach allows us to minimize the impact of cyclical downturns on our net income, but results in a smaller increase in gross margin as a percentage of sales in times of increased demand.

### **Our Growth Strategy**

Our objective is to enhance our position as a leader in providing fluid delivery solutions, including subsystems and tool refurbishment, to our customers by leveraging our core strengths. The key elements of our growth strategy are:

#### *Grow Our Market Share within Existing Customer Base*

We intend to grow our position with existing customers by continuing to leverage our specialized engineering talent and early collaboration approach with OEMs to foster long-term relationships. Each of our customers produces many different process tools for various process steps. At each customer, we are the outsourced supplier of fluid delivery subsystems for a subset of their entire process tool offerings. We are constantly looking to expand our relationships and to capture additional share at our existing customers. We believe that our early collaborative approach with customers positions us to deliver innovative and dynamic solutions, offer timely deployment and meet competitive cost targets, further enhancing our brand reputation. For example, due to previous successful engineering projects with a particular OEM, we were selected as the development partner on key next generation platforms. Success on these platforms, along with other operational successes, grew our sales from \$1.1 million in 2011 to \$36.2 million in 2016. Through our recent purchase of a plastic machining & fabrication company, we were able to enter the market for chemical delivery subsystems for CMP process tools where we had only limited engagement in the past. Using this and our existing engineering capability, we were awarded the design and manufacturing of the chemical delivery module for one of our two largest customers who is a market leader in this space.

#### *Grow Our Total Available Market at Existing Customers with Expanded Product Offerings*

We continue to work with our existing core customers on additional opportunities, including chemical delivery, one of our important potential growth areas. We believe that wet processes, such as CMP, clean and electro chemical deposition, or ECD, that require precise chemical delivery are currently an underpenetrated market opportunity for us. By leveraging our existing customer relationships and strong reputation in fluid mechanics, we intend to increase our chemical delivery module market share as well as to introduce additional related products. In April 2016, we acquired Ajax-United Patterns & Molds, Inc., or Ajax, and its subsidiaries, or the Ajax Acquisition, to add chemical delivery subsystem capabilities with our existing customers. The Ajax Acquisition allows us to manufacture and assemble the complex plastic and metal products required by the medical, biomedical, semiconductor and data communication equipment industries. In addition, we believe that as a larger number of leading edge tools are deployed and installed, our market opportunity for refurbishment of legacy systems grows.

#### *Expand Our Total Customer Base within Fluid Delivery Market*

We are actively in discussions with new customers that are considering outsourcing their gas and chemical delivery needs. As an example, we were recently selected as the manufacturing partner for a provider of etch process equipment that was previously not a customer of ours.

#### *Expand Into Emerging Opportunities*

We plan to leverage our existing manufacturing platform and engineering expertise to develop or acquire new products and solutions for attractive, high growth applications within new markets such as medical, research, oil and gas and energy. We believe these efforts will diversify our sales exposure while capitalizing on our current capabilities.

#### *Continue to Improve Our Manufacturing Process Efficiency*

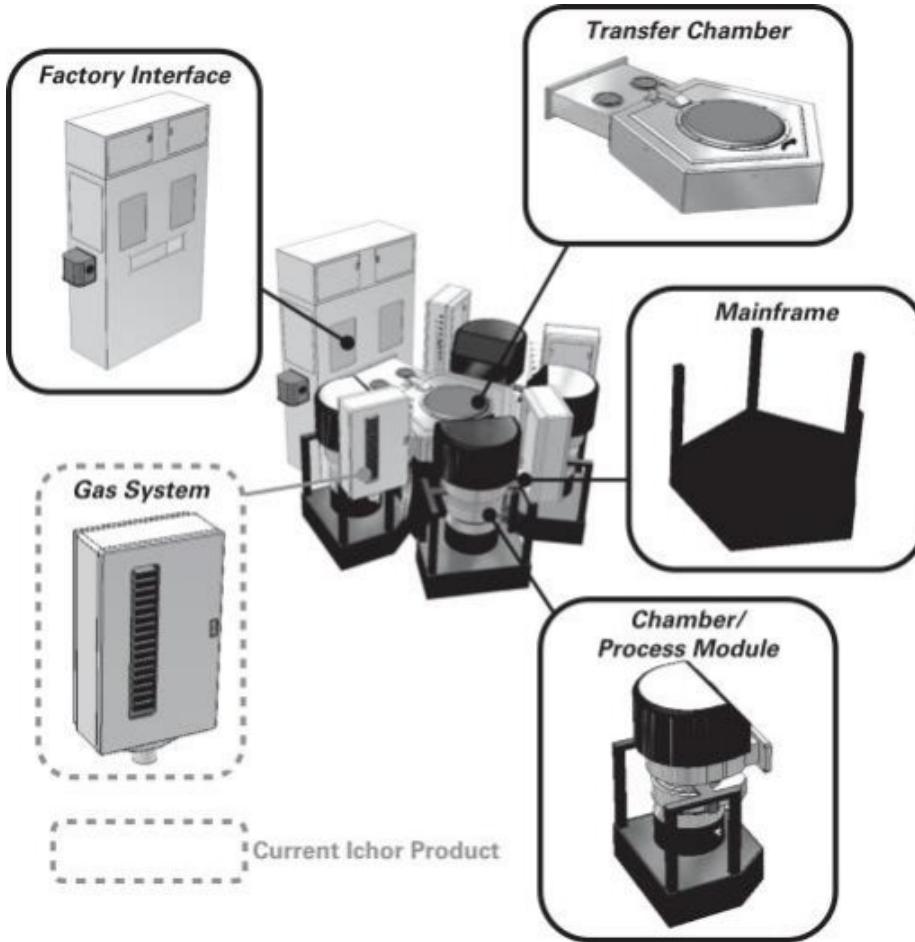
We continually strive to improve our processes to reduce our manufacturing process cycle time, improve our ability to respond to last minute design or configuration changes, reduce our manufacturing costs and reduce our inventory requirements in order to improve profitability and make our product offerings more attractive to new and existing customers.

## **Our Products and Services**

We are a leader in the design, engineering and manufacturing of critical fluid delivery subsystems. Our product and service offerings are classified in the following categories:

### *Gas Delivery Subsystems*

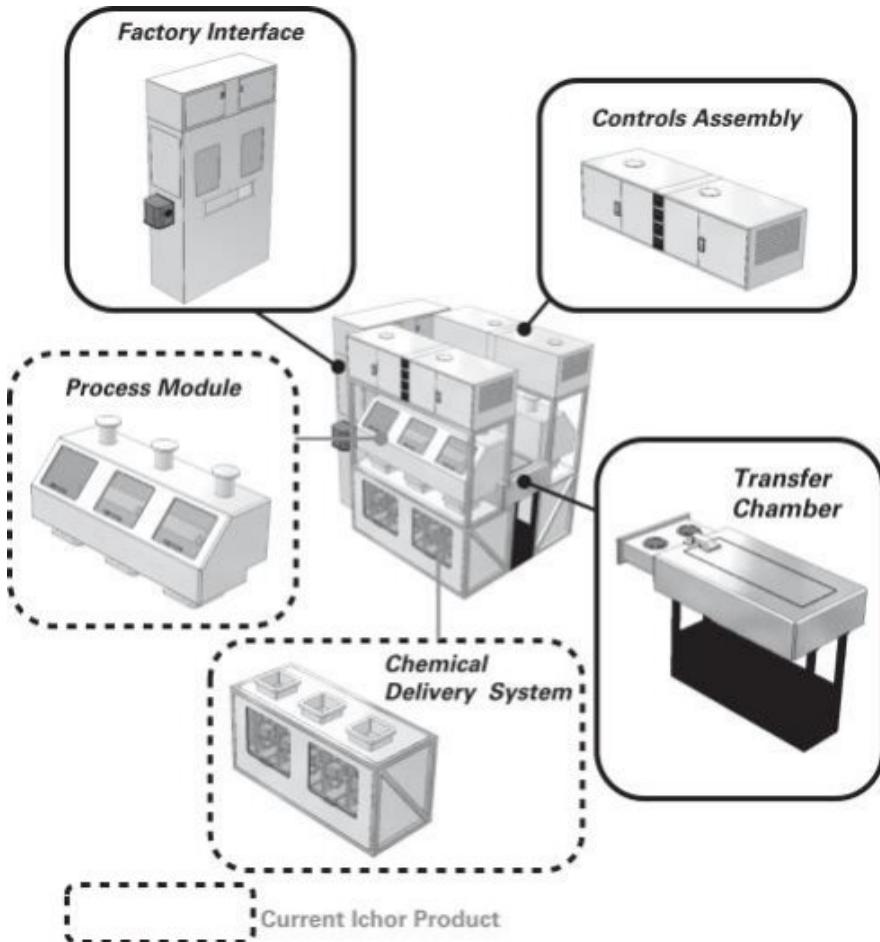
Gas delivery is among the most technologically complex functions in semiconductor capital equipment and is used to deliver, monitor and control precise quantities of the vapors and gases critical to the manufacturing process. Our gas delivery systems consist of a number of gas lines, each controlled by a series of mass flow controllers, regulators, pressure transducers and valves, and an integrated electronic control system. Our gas delivery subsystems are primarily used in equipment for “dry” manufacturing processes, such as etch, chemical vapor deposition, physical vapor deposition, epitaxy and strip.



### *Chemical Delivery Subsystems*

Our chemical delivery subsystems are used to precisely blend and dispense reactive chemistries and colloidal slurries critical to the specific “wet” front-end process, such as wet clean, ECD and CMP. In addition to the chemical delivery subsystem, we also develop the process modules that apply the various chemicals directly to the wafer in a process and application-unique manner to create the desired chemical reaction.

The image below shows a typical wet-process front end semiconductor tool, with a chemical delivery subsystem and corresponding application process module highlighted:



## History

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We were originally incorporated as Celerity, Inc. in 1999. Our business of designing and manufacturing critical systems for semiconductor capital equipment manufacturers operated as a stand-alone business until 2009 when Celerity sold the business to a private equity fund. Francisco Partners acquired the business in December 2011 and formed Ichor Holdings, Ltd., an exempt company incorporated in the Cayman Islands, in March 2012 to serve as the parent company as part of a restructuring to accommodate the expansion of our business in Singapore and Malaysia. In April 2012, we acquired Semi Scenic UK Limited to provide refurbishment services for legacy tools. In April 2016, we purchased Ajax for approximately \$17.6 million to add chemical delivery subsystem capabilities with existing customers. We intend to continue to evaluate opportunistic acquisitions to supplement our organic growth.

## **Customers, Sales and Marketing**

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We market and sell our products directly to equipment OEMs in the semiconductor equipment market. These industries are highly concentrated and, as a result, we are dependent upon a small number of key customers. For 2016, our two largest customers were Lam Research and Applied Materials, which accounted for 51% and 46% of sales, respectively. We also serve customers in the tool refurbishment market, which we believe is a growing market due to the extended lifetime of current manufacturing equipment. We do not have long-term contracts that require customers to place orders with us in fixed or minimum volumes, and we generally operate on purchase order basis with customers.

Our sales and marketing efforts focus on fostering close business relationships with our customers. As a result, we locate many of our account managers near the customer they support. Our sales process involves close collaboration between our account managers and engineering and operations teams. Account managers and engineers work together with customers and in many cases provide on-site support, including attending customers' internal meetings related to production and engineering design. Each customer project is supported by our account managers and customer support team, who ensure we are aligned with all of the customer's quality, cost and delivery expectations.

## **Operations, Manufacturing and Supply Chain Management**

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We have developed a highly flexible manufacturing model with cost-effective locations situated nearby the manufacturing facilities of our largest customers.

### *Operations*

Our product cycle engagements begin by working closely with our customers to outline the solution specifications before design and prototyping even begin. Our design and manufacturing process is highly flexible, enabling our customers to make alterations to their final requirements throughout the design, engineering and manufacturing process. This flexibility results in significantly decreased design-to-delivery cycle times for our customers. For instance, it can take as little as 20 to 30 days for us to manufacture a gas delivery system with fully evaluated performance metrics after receiving an order.

### *Manufacturing*

We are ISO 9001 qualified at each of our manufacturing locations, and our manufactured subsystems and modules adhere to strict design tolerances and specifications. We operate Class 100 and Class 10,000 clean room facilities for customer-specified testing, assembly and integration of high-purity gas and chemical delivery systems at our locations in Singapore; Tualatin, Oregon; and Austin, Texas. We also operate a facility in Malaysia for components used in our gas delivery subsystems and a facility in Union City, California for critical components used in our chemical delivery subsystems. Our facilities are located in close proximity to our largest customers to allow us to collaborate with them on a regular basis and to enable us to deliver our products on a just-in-time basis, regardless of order size or the degree of changes in the applicable configuration or specifications.

We qualify and test key components that are integrated into our subsystems, and test our fluid delivery subsystems during the design process and again prior to shipping. Our quality management system allows us to access real-time corrective action reports, non-conformance reports, customer complaints and controlled documentation. In addition, our senior management conducts quarterly reviews of our quality control system to evaluate effectiveness. Our customers also complete quarterly surveys which allow us to measure satisfaction.

### *Supply Chain Management*

We use a wide range of components and materials in the production of our gas and chemical delivery systems, including filters, mass flow controllers, regulators, pressure transducers and valves. We obtain components and materials from a large number of sources, including single source and sole source suppliers. We use consignment material and just-in-time stocking programs to better manage our component inventories and better respond to

changing customer requirements. These approaches enable us to significantly reduce our inventory levels and maintain flexibility in responding to changes in product demand.

In addition, a key part of our strategy is to identify multiple suppliers with a strong global reach that are located within close proximity to our manufacturing locations. We have centralized our procurement operations into our Austin, Texas location in order to streamline our materials spending, leverage localized purchasing support within our manufacturing locations and enable the use of regional supply chains.

## **Technology Development and Engineering**

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We have a long history of engineering innovation and development. Over time, we have transitioned from being simply an integration engineering and components company into a gas and chemical delivery subsystem leader with complete system engineering and integration expertise. Our industry continues to experience rapid technological change, requiring us to continuously invest in technology and product development and to regularly introduce new products and features that meet our customers' evolving requirements.

We have built a team of gas delivery experts, many of whom have previously worked for certain of our customers. As of December 30, 2016, our engineering team consisted of 40 engineers and designers with mechanical, electrical, chemical, systems and software expertise. Our engineers are closely connected with our customers and typically work at our customers' sites and operate as an extension of our customers' design team. We engineer within our customers' processes, design vaults, drawing standards and part numbering systems. These development efforts are designed to meet specific customer requirements in the areas of subsystem design, materials, component selection and functionality. Over 80% of our sales are generated from projects during which our engineers cooperated with our customer early in the design cycle. Through this early collaborative process, we become an integral part of our customers' design and development processes, and we are able to quickly anticipate and respond to our customers' changing requirements.

Our engineering team also works directly with our suppliers to help them identify new component technologies 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 customers with a wide range of appropriate component and design choices for their gas and chemical delivery systems and other critical subsystems. Our analytical and testing capabilities also help us anticipate technological changes and the requirements in component features for next-generation gas delivery systems and other critical subsystems.

## **Competition**

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The markets for our products are very competitive. When we compete for new business, we face competition from other suppliers of gas or chemical delivery subsystems, as well as the internal manufacturing groups of OEMs. While many OEMs have outsourced the design and manufacture of their gas and chemical delivery systems, we would face additional competition if in the future these OEMs elected to develop these systems internally.

The gas delivery subsystem market is highly concentrated and we face competition primarily from Ultra Clean Technology, with limited competition from regional or specialized suppliers. The chemical delivery subsystem industry is fragmented and we face competition from numerous suppliers. In addition, the market for tool refurbishment is fragmented and we compete with many regional competitors. The primary competitive factors we emphasize include:

- early engagement with customers;
- size and experience of engineering staff;
- design-to-delivery cycle times;
- flexible manufacturing capabilities; and
- customer relationships.

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. 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.

### **Intellectual Property**

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Our success depends, in part, upon our ability to maintain and protect our technology and products and to conduct our business without infringing the proprietary rights of others. We continue to invest in securing intellectual property protection for our technology and products and protect our technology by, among other things, filing patent applications. We also rely on a combination of trade secrets and confidentiality provisions, and to a much lesser extent, copyrights and trademarks, to protect our proprietary rights. We have historically focused our patent protection efforts in the United States and, as of December 30, 2016, we held 9 U.S. patents. We do not have any active foreign patents but may decide in the future to seek patents in foreign jurisdictions if we believe such patents would benefit our business. While we consider our patents to be valuable assets, we do not believe the success of our business or our overall operations are dependent upon any single patent or group of related patents. In addition, we do not believe that the loss or expiration of any single patent or group of related patents would materially affect our business.

Intellectual property that we develop on behalf of our customers is generally owned exclusively by those customers. In addition, we have agreed to indemnify certain of our customers against claims of infringement of the intellectual property rights of others with respect to our products. Historically, we have not paid any claims under these indemnification obligations, and we do not have any pending indemnification claims against us.

### **Employees and Labor Relations**

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As of December 30, 2016, we had approximately 587 full time employees and approximately 200 contract or temporary workers, which allow flexibility as business conditions and geographic demand change. Of our total employees, approximately 40 are engineers, 34 are engaged in sales and marketing, 659 are engaged in manufacturing, and 58 perform executive and administrative functions. None of our employees are unionized, but in various countries, local law requires our participation in works councils. We have not experienced any material work stoppages at any of our facilities. We consider our relationship with our employees to be good.

### **Environmental, Health, and Safety Regulations**

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Our operations and facilities are subject to federal, state and local regulatory requirements and foreign laws and regulations, relating to environmental, waste management and health and safety matters, including those relating to the release, use, storage, treatment, transportation, discharge, disposal and remediation of contaminants, hazardous substances and wastes, as well as practices and procedures applicable to the construction and operation of our facilities. We believe that our business is operated in substantial compliance with applicable regulations. However, in the future we could incur substantial costs, including cleanup costs, fines or civil or criminal sanctions, or third-party property damage or personal injury claims, in the event of violations or liabilities under these laws and regulations, or non-compliance with the environmental permits required at our facilities. Potentially significant expenditures could be required in order to comply with environmental laws that may be adopted or imposed in the future. We are not aware of any threatened or pending environmental investigations, lawsuits or claims involving us, our operations or our current or former facilities.

### **Available Information**

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Our internet address is [www.ichorsystems.com](http://www.ichorsystems.com). We make a variety of information available, free of charge, at our Investor Relations website, [ir.ichorsystems.com](http://ir.ichorsystems.com). This information includes our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q, our Current Reports on Form 8-K, and any amendments to those reports as soon as

reasonably practicable after we electronically file those reports with or furnish them to the SEC, as well as our Code of Business Ethics and Conduct and other governance documents.

The public may read and copy materials filed by us with the Securities and Exchange Commission, or the SEC, at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an internet site that contains reports, proxy and information statements and other information regarding issuers that file documents electronically with the SEC at [www.sec.gov](http://www.sec.gov).

The contents of these websites, or the information connected to those websites, are not incorporated into this report. References to websites in this report are provided as a convenience and do not constitute, and should not be viewed as, incorporation by reference of the information contained on, or available through, the website.

## **ITEM 1A. RISK FACTORS**

*There are many factors that affect our business and the results of operations, some of which are beyond our control. The following is a description of some important factors that may cause the actual results of operations in future periods to differ materially from those currently expected or desired.*

### **Risks Related to Our Business**

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**Our business depends significantly on expenditures by manufacturers in the semiconductor capital equipment industry, which, in turn, is dependent upon the semiconductor device industry. When that industry experiences cyclical downturns, demand for our products and services is likely to decrease, which would likely result in decreased sales. We may also be forced to reduce our prices during cyclical downturns without being able to proportionally reduce costs.**

Our business, financial condition and results of operations depend significantly on expenditures by manufacturers in the semiconductor capital equipment industry. In turn, the semiconductor capital equipment industry depends upon the current and anticipated market demand for semiconductor devices. The semiconductor device industry is subject to cyclical and volatile fluctuations in supply and demand and in the past has periodically experienced significant downturns, which often occur in connection with declines in general economic conditions, and which have resulted in significant volatility in the semiconductor capital equipment industry. The semiconductor device industry has also experienced 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 and services as a result of such fluctuations and cycles. Any downturns in the semiconductor device industry could have a material adverse effect on our business, financial condition and results of operations.

In addition, we must be able to appropriately align our cost structure with prevailing market conditions, effectively manage our supply chain and motivate and retain employees, particularly during periods of decreasing demand for our products. We may be forced to reduce our prices during periods of decreasing demand. While we operate under a low fixed cost model, we may not be able to proportionally reduce all of our costs if we are required to reduce our prices. If we are not able to timely and appropriately adapt to the changes in our business environment, our business, financial condition and results of operations will be materially adversely affected. The cyclical and volatile nature of the semiconductor device industry and the absence of long-term fixed or minimum volume contracts make any effort to project a material reduction in future sales volume difficult.

**We rely on a very small number of OEM customers for a significant portion of our sales. Any adverse change in our relationships with these customers could materially adversely affect our business, financial condition and results of operations.**

The semiconductor capital equipment industry is highly concentrated and has experienced significant consolidation in recent years. As a result, a relatively small number of OEM customers have historically accounted for a significant portion of our sales, and we expect this trend to continue for the foreseeable future. For 2016, our top two

customers accounted for approximately 51% and 46%, respectively, of sales, and we expect that our sales will continue to be concentrated among a very small number of customers. We do not have any long-term contracts that require customers to place orders with us in fixed or minimum volumes. Accordingly, the success of our business depends on the success of our customers and those customers and other OEMs continuing to outsource the manufacturing of critical subsystems and process solutions to us. Because of the small number of OEMs in the markets we serve, a number of which are already our customers, it would be difficult to replace lost sales resulting from the loss of, or the reduction, cancellation or delay in purchase orders by, any one of these customers, whether due to a reduction in the amount of outsourcing they do, their giving orders to our competitors, their acquisition by an OEM who is not a customer or with whom we do less business, or otherwise. We have in the past lost business from customers for a number of these reasons. If we are unable to replace sales from customers who reduce the volume of products and services they purchase from us or terminate their relationship with us entirely, such events could have a material adverse impact on our business, financial condition and results of operations.

Additionally, if one or more of the largest OEMs were to decide to single- or sole-source all or a significant portion of manufacturing and assembly work to a single equipment manufacturer, such a development would heighten the risks discussed above.

**Our customers exert a significant amount of negotiating leverage over us, which may require us to accept lower prices and gross margins or increased liability risk in order to retain or expand our market share with them.**

By virtue of our largest customers' size and the significant portion of our sales that is derived 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 arrangements and the conduct of our business with them. Our customers often require reduced prices or other pricing, quality or delivery commitments as a condition to their purchasing from us in any given period or increasing their purchase volume, which can, among other things, result in reduced gross margins in order to maintain or expand our market share. Our customers' negotiating leverage also can result in customer arrangements that may contain significant liability risk to us. For example, some of our customers require that we provide them indemnification against certain liabilities in our arrangements with them, including claims of losses by their customers caused by our products. Any increase in our customers' negotiating leverage may expose us to increased liability risk in our arrangements with them, which, if realized, may have a material adverse effect on our business, financial condition and results of operations. In addition, new products often carry lower gross margins than existing products for several quarters following their introduction. If we are unable to retain and expand our business with our customers on favorable terms, or if we are unable to achieve gross margins on new products that are similar to or more favorable than the gross margins we have historically achieved, our business, financial condition and results of operations may be materially adversely affected.

**The industries in which we participate are highly competitive and rapidly evolving, and if we are unable to compete effectively, our business, financial condition and results of operations could be materially adversely affected.**

We face intense competition from other suppliers of gas or chemical delivery subsystems, as well as the internal manufacturing groups of OEMs. 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 materially adversely affect our business, financial condition and results of operations. We are subject to significant pricing pressure as we attempt to maintain and increase market share with our existing customers. Our competitors may offer reduced prices or introduce new products or services for the markets currently served by our products and services. These products may have better performance, lower prices and achieve broader market acceptance than our products. OEMs also typically own the design rights to their products. Further, 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 results of operations could be materially adversely affected.

Certain of our competitors may have or may develop 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 services, and reduce prices to increase market share. In addition to organic growth by our competitors, there may be merger and acquisition activity among our competitors and potential competitors that may provide our competitors and potential competitors with an advantage over us by enabling them to expand their product offerings and service capabilities to meet a broader range of customer needs. The introduction of new technologies and new market entrants may also increase competitive pressures.

**We are exposed to risks associated with weakness in the global economy and geopolitical instability.**

Our business is dependent upon manufacturers of semiconductor capital equipment, whose businesses in turn ultimately depend largely on consumer spending on semiconductor devices. Continuing uncertainty regarding the global economy continues to pose challenges to our business. Economic uncertainty and related factors, including current unemployment levels, uncertainty in European debt markets, geopolitical instability in various parts of the world, fiscal uncertainty in the U.S. economy, market volatility and the slow rate of recovery of many countries from recent recessions, 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 adversely affect our business, financial condition and results of operations. 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 our key suppliers, which could impair their ability to deliver parts and result in delays for our products or require us to either procure products from higher-cost suppliers, or if no additional suppliers exist, to reconfigure the design and manufacture of our products, and we may be unable to fulfill some customer orders. Any of these conditions or events could have a material adverse effect on our business, financial condition and results of operations.

**If we do not keep pace with developments in the industries we serve and with technological innovation generally, our products and services 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, services and technologies obsolete. In particular, the design and manufacturing of semiconductors is constantly evolving and becoming more complex in order to achieve greater power, performance and efficiency with smaller devices. Capital equipment manufacturers need to keep pace with these changes by refining their existing products and developing new products.

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, financial condition and results of operations could be materially adversely affected.

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;

- manage our costs of product development and the costs of producing the products that we sell;
- successfully manage development production cycles; and
- respond quickly and 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, financial condition and results of operations could be materially adversely affected.

**We must design, develop and introduce new products that are accepted by OEMs in order to retain our existing customers and obtain new 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. We attempt to mitigate this risk by collaborating with our customers during their design and development processes. We cannot, however, assure you that we will be able to successfully introduce, market and cost-effectively manufacture new products, or that we will be able to develop new or enhanced products and processes that satisfy customer needs. In addition, new capital equipment typically has a lifespan of five to ten 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 often continue to be purchased for that piece of equipment on an exclusive basis for 18 to 24 months before the OEM generates enough sales volume to consider adding alternative suppliers. Accordingly, it is important that our products are designed into the new systems introduced by the OEMs. If any of the new products we develop are not launched or successful in the market, our business, financial condition and results of operations could be materially adversely affected.

**The manufacturing of our products is highly complex, and if we are not able to manage our manufacturing and procurement process effectively, our business, financial condition and results of operations may be materially adversely affected.**

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 re-configure manufacturing processes or components in response to these modifications. 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. We have from time to time experienced bottlenecks and production difficulties that have caused delivery delays and quality control problems. These risks are even greater as we seek to expand our business into new subsystems. In addition, certain of our suppliers have been, and may in the future be, forced out of business as a result of the economic environment. In such cases, we may be required to procure products from higher-cost suppliers or, if no additional suppliers exist, reconfigure the design and manufacture of our products. This could materially limit our growth, adversely impact our ability to win future business and have a material adverse effect on our business, financial condition and results of operations.

**Defects in our products could damage our reputation, decrease market acceptance of our products and result in potentially costly litigation.**

A number of factors, including design flaws, material and component failures, 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. Errors, defects or other problems with our products may:

- cause delays in product introductions and shipments;
- 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;
- 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 increased 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 may be damaged and customers may be reluctant to buy our products. We may also face a higher rate of product defects as we increase our production levels in periods of significant growth. Product defects could result in warranty and indemnification liability or 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. In addition, hazardous materials flow through and are controlled by certain of 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.

**We may incur unexpected warranty and performance guarantee claims that could materially adversely affect our business, financial condition and results of operations.**

In connection with our products and services, we provide various product warranties, performance guarantees and indemnification rights. Warranty or other performance guarantee or indemnification claims against us could cause us to incur significant expense to repair or replace defective products or indemnify the affected customer for losses. In addition, quality issues can have various other ramifications, including delays in the recognition of sales, loss of sales, loss of future sales opportunities, increased costs associated with repairing or replacing products, and a negative impact on our reputation, all of which could materially adversely affect our business, financial condition and results of operations.

**Our dependence on a limited number of suppliers may harm our production output and increase our costs, and may prevent us from delivering acceptable products on a timely basis.**

Our ability to meet our customers' demand for our products depends upon obtaining adequate supplies of quality components and other raw materials on a timely basis. In addition, our customers often specify components from particular suppliers that we must incorporate into our products. We also use consignment and just-in-time stocking programs, which means we carry very little inventory of components or other raw materials, and we rely on our suppliers to deliver necessary components and raw materials in a timely manner. However, our suppliers are under no obligation to provide us with components or other raw materials. As a result, the loss of or failure to perform by any of our key suppliers could materially adversely affect our ability to deliver products on a timely basis. In addition, 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 of supply. However, the process of qualifying new suppliers for complex components is also lengthy and could delay our production. We may also experience difficulty in obtaining sufficient supplies of components and raw materials in times of significant growth in our business. If we are unable to procure sufficient quantities of components or raw materials from suppliers, our customers may elect to delay or cancel existing orders or not place future orders, which could have a material adverse effect on our business, financial condition and results of operations.

**We are subject to order and shipment uncertainties, and any significant reductions, cancellations or delays in customer orders could have a material adverse effect on our business, financial condition and results of operations.**

Our sales are 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 manufacture and deliver products to our customers. Most of our sales for a particular quarter depend on customer orders placed during that quarter or shortly before it commences. Our contracts generally do not require our customers to commit to minimum purchase volumes. While most of our customers provide periodic rolling forecasts for product orders, those forecasts do not become binding until a formal purchase order is submitted, which generally occurs only a short time prior to shipment. As a result of the foregoing and the cyclical and volatility of the industries we serve, it is difficult to predict future orders with precision. Occasionally, we order component inventory and build products 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 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 result in unanticipated reductions or delays in sales. If we do not obtain orders as we anticipate, we could have excess components for a specific product and/or finished goods inventory 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 results of operations.

**Because our customers generally require that they qualify our engineering, documentation, manufacturing and quality control procedures, our ability to add new customers quickly is limited.**

We are generally required to qualify and maintain our status as a supplier for each of our customers. This is a time-consuming process that involves the inspection and approval by a customer of our engineering, documentation, manufacturing and quality control procedures before that customer will place orders with us. 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 in part because of these qualification requirements. Consequently, the risk that our business, financial condition and results of operations would be materially adversely affected by the loss of, or any reduction in orders by, any of our significant customers is increased. Moreover, if we lost 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 business, financial condition and results of operations.

**Restrictive covenants under our Credit Facilities may limit our current and future operations. If we fail to comply with those covenants, the lenders could cause outstanding amounts, which are currently substantial, to become immediately due and payable, and we might not have sufficient funds and assets to pay such loans.**

As of December 30, 2016, we had \$39.8 million of indebtedness outstanding under our term loan facility, or our Term Loan Facility, and no indebtedness outstanding under our \$20.0 million revolving credit facility, or our Revolving Credit Facility, and together with our Term Loan Facility, our Credit Facilities. The outstanding amount of our Term Loan Facility reflected in our consolidated financial statements included elsewhere in this report on Form 10-K is net of \$1.9 million of debt issuance costs. We may incur additional indebtedness in the future. Our Credit Facilities contain certain restrictive covenants and conditions, including limitations on our ability to, among other things:

- incur additional indebtedness or contingent obligations;
- create or incur liens, negative pledges or guarantees;
- make investments;
- make loans;
- sell or otherwise dispose of assets;
- merge, consolidate or sell substantially all of our assets;

- make certain payments on indebtedness;
- pay dividends on or make distributions in respect of capital stock or make certain other restricted payments or investments;
- enter into certain agreements that restrict distributions from restricted subsidiaries;
- enter into transactions with affiliates;
- change the nature of our business; and
- amend the terms of our organizational documents.

As a result of these covenants, we may be restricted in our ability to pursue new business opportunities or strategies or to respond quickly to changes in the industries that we serve. A violation of any of these covenants would be deemed an event of default under our Credit Facilities. In such event, upon the election of the lenders, the loan commitments under our Credit Facilities would terminate and the principal amount of the loans and accrued interest then outstanding would be due and payable immediately. A default may also result in the acceleration of any other debt to which a cross-acceleration or cross-default provision applies. In the event our lenders accelerate the repayment of our borrowings, we cannot assure you that we and our subsidiaries would have sufficient funds to repay such indebtedness or be able to obtain replacement financing on a timely basis or at all. These events could force us into bankruptcy or liquidation, which could have a material adverse effect on our business, financial condition and results of operations.

We also may need to negotiate changes to the covenants in the agreements governing our Credit Facilities in the future if there are material changes in our business, financial condition or results of operations, but we cannot assure you that we will be able to do so on terms favorable to us or at all.

**Certain of our customers require that we consult with them in connection with specified fundamental changes in our business, and address any concerns or requests such customer may have in connection with a fundamental change. While those customers do not have contractual approval or veto rights with respect to fundamental changes, our failure to consult with such customers or to satisfactorily respond to their requests in connection with any such fundamental change could constitute a breach of contract or otherwise be detrimental to our relationships with such customers.**

Certain of our key customers require that we consult with them in connection with specified fundamental changes in our business, including, among other things:

- entering into any new line of business;
- amending or modifying our organizational documents;
- selling all or substantially all of our assets, or merging or amalgamating with a third party;
- incur borrowings in excess of a specific amount;
- making senior management changes;
- entering into any joint venture arrangement; and
- effecting an initial public offering.

These customers do not have contractual approval or veto rights with respect to any fundamental changes in our business. However, our failure to consult with such customers or to satisfactorily respond to their requests in connection with any such fundamental change could constitute a breach of contract or otherwise be detrimental to our relationships with such customers, which could have a material adverse effect on our business, financial condition and results of operations.

**We may not be able to generate sufficient cash to service all of our indebtedness, including under our Credit Facilities, and may be forced to take other actions to satisfy our obligations under our indebtedness, which may not be successful.**

Our ability to make scheduled payments on or to refinance our indebtedness, including under our Credit Facilities, depends on our financial condition and results of operations, which are subject to prevailing economic and competitive conditions and other factors beyond our control. We may be unable to maintain a level of cash flows from operating activities sufficient to permit us to fund our day-to-day operations or to pay the principal, premium, if any, and interest on our indebtedness. If our cash flows and capital resources are insufficient to fund our debt service obligations, we could face substantial liquidity problems and could be forced to reduce or delay investments and capital expenditures or to sell assets or operations, seek additional capital or restructure or refinance our indebtedness. If we cannot make scheduled payments on our debt, we will be in default and, as a result, the lenders under our Credit Facilities could terminate their commitments to loan money, or foreclose against the assets securing such borrowings, and we could be forced into bankruptcy or liquidation, in each case, which would have a material adverse effect on our business, financial condition and results of operations.

**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.**

We believe that the success of our business depends in part on our proprietary technology, information, processes and know-how and on our ability to operate without infringing on the proprietary rights of third parties. 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. Accordingly, our intellectual property position is more vulnerable than it would be if it were protected primarily by patents. We cannot assure you that we have adequately protected or will be able to adequately protect our technology, that our competitors will not be able to utilize our existing technology or develop similar technology independently, that the claims allowed with respect to any patents held by us will be broad enough to protect our technology or that foreign intellectual property laws will adequately protect our intellectual property rights. If we fail to protect our proprietary rights successfully, our competitive position could suffer. Any future litigation to enforce patents issued to us, to protect trade secrets or know-how possessed by us or to defend ourselves or to indemnify others against claimed infringement of the rights of others could have a material adverse effect on our business, financial condition and results of operations.

**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 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 our management and key personnel from our business operations, any of which could have a material adverse effect on our business, financial condition 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 a customer if we are subjected to litigation for third-party claims of infringement of such customer's 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.

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

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

**The technology labor market is very competitive, and our business will suffer if we are unable to hire 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 and manufacturing personnel, most of whom are not subject to employment or non-competition agreements. Competition for qualified personnel in the technology industry is particularly intense, and we operate in geographic locations in which labor markets are competitive. Our management team has significant industry experience and deep customer relationships, and therefore would be difficult to replace. In addition, our business is dependent to a significant degree on the expertise and relationships which only a limited number of engineers possess. Many of these engineers often work at our customers' sites and serve as an extension of our customers' product design teams. The loss of any of our key executive officers or key engineers and other personnel, including our engineers working at our customers' sites, or the failure to attract additional personnel as needed, could have a material adverse effect on our business, financial condition and results of operations and could lead to higher labor costs, the use of less-qualified personnel and the loss of customers. In addition, if any of our key executive officers or other key employees were to join a competitor or form a competing company, we could lose customers, suppliers, know-how and key personnel.

We do not maintain key-man life insurance with respect to any of our employees. Our business will suffer if we are unable to attract, employ and retain highly skilled personnel.

**Future acquisitions may present integration challenges, and if the goodwill, indefinite-lived intangible assets and other long-term assets recorded in connection with such acquisitions become impaired, we would be required to record impairment charges, which may be significant.**

If we find appropriate opportunities in the future, we may acquire businesses, products or technologies that we believe are strategic. If we acquire a business, product or technology, the process of integration may produce unforeseen operating difficulties and expenditures, fail to result in expected synergies or other benefits and absorb significant attention of our management that would otherwise be available for the ongoing development of our business. In addition, in the event of any future acquisitions, we may record a portion of the assets we acquire as goodwill, other indefinite-lived intangible assets or finite-lived intangible assets. We do not amortize goodwill and indefinite-lived intangible assets, but rather review them for impairment on an annual basis or whenever events or changes in circumstances indicate that their carrying value may not be recoverable. The recoverability of goodwill and indefinite-lived intangible assets is dependent on our ability to generate sufficient future earnings and cash flows. Changes in estimates, circumstances or conditions, resulting from both internal and external factors, could have a significant impact on our fair valuation determination, which could then have a material adverse effect on our business, financial condition and results of operations.

**Our quarterly sales and operating results fluctuate significantly from period to period, and this may cause volatility in our share price.**

Our quarterly sales and operating results have fluctuated significantly in the past, and we expect them to continue to fluctuate in the future for a variety of reasons, including the following:

- 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;
- strategic decisions by our customers to terminate their outsourcing relationship with us or give market share to our competitors;
- 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 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 or other products or services;
- 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;
- one-time expenses or charges; and
- announcements by our competitors of new products, services or technological innovations, which may, among other things, render our products less competitive.

As a result of the foregoing, we believe that quarter-to-quarter comparisons of our sales and results of operations 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 results of operations in any particular quarter. Moreover, our results of operations 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 ordinary shares.

**Labor disruptions could materially adversely affect our business, financial condition and results of operations.**

As of December 30, 2016, we had approximately 587 full time employees and approximately 200 contract or temporary workers worldwide. None of our employees are unionized, but in various countries, local law requires our participation in works councils. While we have not experienced any material work stoppages at any of our facilities, any stoppage or slowdown could cause material interruptions in manufacturing, and we cannot assure you that alternate qualified capacity would be available on a timely basis, or at all. As a result, labor disruptions at any of our facilities could materially adversely affect our business, financial condition and results of operations.

**As a global company, we are subject to the risks of doing business internationally, including periodic foreign economic downturns and political instability, which may adversely affect our sales and cost of doing business in those regions of the world.**

Foreign economic downturns have adversely affected our business and results of operations in the past and could adversely affect our business and results of operations in the future. In addition, other factors relating to the operation of our business outside of the United States may have a material adverse effect on our business, financial condition and results of operations in the future, including:

- the imposition of governmental controls or changes in government regulations, including tax regulations;
- difficulties in enforcing our intellectual property rights;
- difficulties in developing relationships with local suppliers;
- difficulties in attracting new international customers;
- difficulties in complying with foreign and international laws and treaties;
- restrictions on the export of technology;
- compliance with U.S. and international laws involving international operations, including the Foreign Corrupt Practices Act, export control laws and export license requirements;
- difficulties in achieving headcount reductions due to unionized labor and works councils;
- restrictions on transfers of funds and assets between jurisdictions;
- geo-political instability; and
- trade restrictions and changes in taxes and tariffs.

In the future, we may seek to expand our presence in certain foreign markets or enter emerging markets. Evaluating or entering into an emerging market may require considerable management time, as well as start-up expenses for market development before any significant sales and earnings are generated. Operations in new foreign markets may achieve low margins or may be unprofitable, and expansion in existing markets may be affected by local political, economic and market conditions. As we continue to operate our business globally, our success will depend, in part, on our ability to anticipate and effectively manage these and the other risks noted above. The impact of any one or more of these factors could materially adversely affect our business, financial condition and results of operations.

**We are subject to fluctuations in foreign currency exchange rates which could cause operating results and reported financial results to vary significantly from period to period.**

The vast majority of our sales are denominated in U.S. Dollars. Many of the costs and expenses associated with our Singapore, Malaysian and U.K. operations are paid in Singapore Dollars, Malaysian Ringgit or British Pounds (or Euros), respectively, and we expect our exposure to these currencies to increase as we increase our operations in those countries. As a result, our risk exposure from transactions denominated in non-U.S. currencies is primarily related to the Singapore Dollar, Malaysian Ringgit, British Pound and Euro. In addition, because the majority of our sales are denominated in the U.S. Dollar, if one or more of our competitors sells to our customers in a different currency than the U.S. Dollar, we are subject to the risk that the competitors' products will be relatively less expensive than our products due to exchange rate effects. We have not historically established transaction-based hedging programs. Foreign currency exchange risks inherent in doing business in foreign countries could have a material adverse effect on our business, financial condition and results of operations.

**We are subject to numerous environmental laws and regulations, which could require us to incur environmental liabilities, increase our manufacturing and related compliance costs or otherwise adversely affect our business.**

We are subject to a variety of federal, state, local and foreign laws and regulations governing the protection of the environment. These environmental laws and regulations include those relating to the use, storage, handling, discharge, emission, disposal and reporting of toxic, volatile or otherwise hazardous materials used in our manufacturing processes. These materials may have been or could be released into the environment at properties currently or previously owned or operated by us, at other locations during the transport of materials or at properties to which we send substances for treatment or disposal. In addition, we may not be aware of all environmental laws or regulations that could subject us to liability in the United States or internationally. If we were to violate or become liable under environmental laws and regulations or become non-compliant with permits required at some of our facilities, we could be held financially responsible and incur substantial costs, including cleanup costs, fines and civil or criminal sanctions, third-party property damage or personal injury claims.

**As a result of becoming a public company upon our initial public offering in December 2016, we are obligated to develop and maintain proper and effective internal control over financial reporting in order to comply with Section 404 of the Sarbanes-Oxley Act. We may not complete our analysis of our internal control over financial reporting in a timely manner, or these internal controls may not be determined to be effective, which may adversely affect investor confidence in our company and, as a result, the value of our ordinary shares.**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. 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 in accordance with GAAP. We are in the very early stages of the costly and challenging process of compiling the system and processing documentation necessary to perform the evaluation needed to comply with Section 404 of the Sarbanes-Oxley Act. We may not be able to complete our evaluation, testing and any required remediation in a timely fashion. During the evaluation and testing process, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that our internal controls are effective. If we are unable to assert that our internal control over financial reporting is effective, we could lose investor confidence in the accuracy and completeness of our financial reports, which would cause the price of our ordinary shares to decline, and we may be subject to investigation or sanctions by the SEC.

We will be required, pursuant to Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting as of the end of the fiscal year that coincides with the filing of our second annual report to shareholders. This assessment will need to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting. We will also be required to disclose changes made in our internal control and procedures on a quarterly basis. However, our independent registered public accounting firm will not be required to report on the effectiveness of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act until the later of the year following our first annual report required to be filed with the SEC, or the date we are no longer an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, if we take advantage of the exemptions contained in the JOBS Act. At such time, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our controls are documented, designed or operating. Our remediation efforts may not enable us to avoid a material weakness in the future.

Additionally, to comply with the requirements of being a public company, we may need to undertake various costly and time-consuming actions, such as implementing new internal controls and procedures and hiring accounting or internal audit staff, which may adversely affect our business, financial condition and results of operations.

**In early 2015, we identified a material weakness in our internal control over financial reporting and may identify additional material weaknesses in the future that may cause us to fail to meet our reporting obligations or result in material misstatements of our financial statements. If our internal control over financial reporting or our disclosure controls and procedures are not effective, we may not be able to accurately report our financial results, prevent fraud or file our periodic reports in a timely manner, which may cause investors to lose confidence in our reported financial information and may lead to a decline in our share price.**

In early 2015, we identified a material weakness in our internal control over financial reporting. Specifically, we had overstated our liabilities for the goods received but not invoiced account and cost of goods sold relating to certain aged transactions, whereby accounts payable was not reduced on a timely basis. To remediate this weakness, we have initiated compensating controls regarding the reconciliation of these accounts at the end of each period, including implementing a new account reconciliation tool and a more detailed account review. Despite our efforts, we may identify additional related or unrelated material weaknesses or significant deficiencies in the future. If our internal control over financial reporting or our disclosure controls and procedures are not effective, we may not be able to accurately report our financial results, prevent fraud or file our periodic reports in a timely manner, which may cause investors to lose confidence in our reported financial information and may lead to a decline in our share price.

**There are limitations on the effectiveness of controls, and the failure of our control systems may materially and adversely impact us.**

We do not expect that disclosure controls or internal controls over financial reporting will prevent all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Failure of our control systems to prevent error or fraud could have a material adverse effect on our business, financial condition and results of operations.

**Compliance with recently adopted rules of the SEC relating to "conflict minerals" may require us and our suppliers to incur substantial expense and may result in disclosure by us that certain minerals used in products we manufacture are not "DRC conflict free."**

Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, required the SEC to promulgate rules requiring disclosure by a public company of any "conflict minerals" (tin, tungsten, tantalum and gold) necessary to the functionality or production of a product manufactured or contracted to be manufactured by such company. The SEC adopted final rules in 2012 which took effect at the end of January 2013. Because we manufacture products which may contain tin, tungsten, tantalum or gold, we will be required under these rules to determine whether those minerals are necessary to the functionality or production of our products and, if so, conduct a country of origin inquiry with respect to all such minerals. If any such minerals may have originated in the Democratic Republic of the Congo, or the DRC, or any of its adjoining countries, or the "covered countries," then we and our suppliers must conduct diligence on the source and chain of custody of the conflict minerals to determine if they did originate in one of the covered countries and, if so, whether they financed or benefited armed groups in the covered countries. Disclosures relating to the products which may contain conflict minerals, the country of origin of those minerals and whether they are "DRC conflict free" must be provided in a Form SD (and accompanying conflict minerals report if one is required to disclose the diligence undertaken by us in sourcing the minerals and our conclusions relating to such diligence). If we are required to submit a conflict minerals report, that report must be audited by an independent auditor pursuant to existing government auditing standards, unless (for the first two years) we are unable to determine whether the minerals are "DRC conflict free." Compliance with this new disclosure rule may be very time consuming for management and our supply chain personnel (as well as time consuming for our suppliers) and could involve the expenditure of significant amounts of money and resources by us and them. Disclosures by us mandated by the new rules which are perceived by the market to be "negative" may cause customers to refuse to purchase our products. We are currently unable to assess the cost of compliance with

this rule, and we cannot assure you that such cost will not have a material adverse effect on our business, financial condition and results of operations.

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

Our facilities could be subject to a catastrophic loss caused by natural disasters, including fires and earthquakes. If any of our facilities were to experience a catastrophic loss, it could disrupt our operations, delay production and shipments, reduce sales and result in large expenses to repair or replace the facility. In addition, we may experience extended power outages at our facilities. Disruption in supply resulting from natural disasters or other causalities or catastrophic events 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. 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, our business, financial condition and results of operations would be adversely affected.

**Changes in tax laws, tax rates or tax assets and liabilities could materially adversely affect our financial condition and 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 applicable tax laws, the amount and composition of pre-tax income in countries with differing tax rates or valuation of our deferred tax assets and liabilities. We have significant operations in the United States and our holding company structure includes entities organized in the Cayman Islands, Netherlands, Singapore and Scotland. As a result, changes in applicable tax laws in these jurisdictions could have a material adverse effect on our financial condition and results of operations.

We are also 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, we cannot assure you 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. We cannot assure you 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.

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**Risks Related to Ownership of Our Ordinary Shares**

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**There may not be an active trading market for our ordinary shares.**

We completed our initial public offering in December 2016. As a result, there has been a public market for our ordinary shares for only a short period of time. An active, liquid and orderly market for our ordinary shares may not be sustained, which could depress the trading price of our ordinary shares. In addition, the market price of our ordinary shares may fluctuate significantly and may be adversely affected by broad market and industry factors, regardless of our actual operating performance. An inactive market may also impair our ability to raise capital by selling our ordinary shares, and it may impair our ability to attract and motivate our employees through equity incentive awards.

### **The price of our ordinary shares may fluctuate substantially.**

You should consider an investment in our ordinary shares to be risky, and you should invest in our ordinary shares only if you can withstand a significant loss and wide fluctuations in the market value of your investment. Some factors that may cause the market price of our ordinary shares to fluctuate, in addition to the other risks mentioned in this report, are:

- our announcements or our competitors' announcements regarding new products or services, enhancements, significant contracts, acquisitions or strategic investments;
- changes in earnings estimates or recommendations by securities analysts, if any, who cover our ordinary shares;
- speculation about our business in the press or investment community;
- failures to meet external expectations or management guidance;
- fluctuations in our quarterly financial results or the quarterly financial results of companies perceived to be similar to us;
- changes in our capital structure or dividend policy, future issuances of securities, sales of large blocks of ordinary shares by our shareholders, including Francisco Partners, our incurrence of additional debt or our failure to comply with the agreements governing our Credit Facilities;
- our decision to enter new markets;
- reputational issues;
- changes in general economic and market conditions in any of the regions in which we conduct our business;
- material litigation or government investigations;
- the expiration of lock-up agreements;
- changes in industry conditions or perceptions; and
- changes in applicable laws, rules or regulations.

In addition, if the market for stocks in our industry or industries related to our industry, or the stock market in general, experiences a loss of investor confidence, the trading price of our ordinary shares could decline for reasons unrelated to our business, financial condition and results of operations. If any of the foregoing occurs, it could cause our share price to fall and may expose us to lawsuits that, even if unsuccessful, could be costly to defend and a distraction to management.

### **We are a “controlled company” and, as a result, we are exempt from obligations to comply with certain corporate governance requirements.**

As of December 30, 2016, Francisco Partners beneficially owns approximately 17.7 million ordinary shares, or approximately 74.2% of our outstanding ordinary shares. Accordingly, we are a “controlled company” for purposes of listing requirements on the NASDAQ Global Select Market, or NASDAQ. As such, we are exempt from the obligation to comply with certain corporate governance requirements, including the requirements that a majority of our board of directors consists of independent directors, and that we have nominating and compensation committees that are each composed entirely of independent directors. These exemptions do not modify the requirement for a fully independent audit committee, which is permitted to be phased-in as follows: (1) one independent committee member at the time of our initial public offering; (2) a majority of independent committee members within 90 days of our initial public offering; and (3) all independent committee members within one year of our initial public offering. Our audit committee is currently comprised of a majority of independent directors. Similarly, once we are no longer a “controlled company,” we must comply with the independent board committee requirements as they relate to the nominating and compensation committees, on the same phase-in schedule as set forth above, with the trigger date being the date we are no longer a “controlled company” as opposed to our initial public offering date.

Additionally, we will have 12 months from the date we cease to be a “controlled company” to have a majority of independent directors on our board of directors.

In addition, our amended and restated memorandum and articles of association contains a provision that provides Francisco Partners the right to designate: (i) all of the nominees for election to our board of directors for so long as Francisco Partners beneficially owns 40% or more of the total number of ordinary shares then outstanding; (ii) a number of directors (rounded up to the nearest whole number) equal to 40% of the total directors for so long as Francisco Partners beneficially owns at least 30% and less than 40% of the total number of ordinary shares then outstanding; (iii) a number of directors (rounded up to the nearest whole number) equal to 30% of the total directors for so long as Francisco Partners beneficially owns at least 20% and less than 30% of the total number of ordinary shares then outstanding; (iv) two directors for so long as Francisco Partners beneficially owns at least 10% and less than 20% of the total number of ordinary shares then outstanding; and (v) one director for so long as Francisco Partners beneficially owns at least 5% and less than 10% of the total number of ordinary shares then outstanding. This provision also provides that Francisco Partners may assign such right to an affiliate of Francisco Partners. Our amended and restated memorandum and articles of association prohibits us from increasing or decreasing the size of our board of directors without the prior written consent of Francisco Partners for so long as it has nomination rights.

**We are controlled by Francisco Partners, whose interests may conflict with yours. The concentrated ownership of our ordinary shares will prevent you and other shareholders from influencing significant decisions.**

As a result of its ownership of our ordinary shares, Francisco Partners, so long as it holds a majority of our outstanding ordinary shares, will have the ability to control the outcome of matters submitted to a vote of shareholders and, through our board of directors, the ability to control decision-making with respect to our business direction and policies. Matters over which Francisco Partners, directly or indirectly, exercises control include:

- the election of our board of directors and the appointment and removal of our officers;
- mergers and other business combination transactions, including proposed transactions that would result in our shareholders receiving a premium price for their shares;
- other acquisitions or dispositions of businesses or assets;
- incurrence of indebtedness and the issuance of equity securities;
- the repurchase of shares and payment of dividends; and
- the issuance of shares to management under our equity compensation plans.

Even if Francisco Partners’ ownership of our ordinary shares falls below a majority, it may continue to be able to strongly influence or effectively control our decisions. Under Cayman Islands Law, Francisco Partners and its affiliates do not have any obligation to present to us, and Francisco Partners and its affiliates may separately pursue, corporate opportunities of which they become aware, even if those opportunities are ones that we would have pursued if granted the opportunity.

**Future sales of our ordinary shares, or the perception in the public markets that these sales may occur, may depress our share price.**

Sales of substantial amounts of our ordinary shares in the public market, or the perception that these sales could occur, could adversely affect the price of our ordinary shares and could impair our ability to raise capital through the sale of additional shares. As of December 30, 2016, we had 23,857,381 shares outstanding. The 5,877,778 ordinary shares sold in our initial public offering are freely tradable without restriction under the Securities Act of 1933, as amended, or the Securities Act, except that any ordinary shares that may be acquired by our directors, executive officers and other affiliates, as that term is defined in the Securities Act, may be sold only in compliance with certain volume limitations and other restrictions of Rule 144 of the Securities Act.

The remaining ordinary shares, representing approximately 75.4% of our total outstanding ordinary shares as of December 30, 2016 are “restricted securities” within the meaning of Rule 144 and subject to certain restrictions on

resale. Restricted securities may be sold in the public market only if they are registered under the Securities Act or are sold pursuant to an exemption from registration such as Rule 144 or Rule 701.

We, each of our executive officers and directors and the holders of substantially all of our ordinary shares (including Francisco Partners) agreed, subject to certain exceptions, with the underwriters of our initial public offering not to dispose of or hedge any of the ordinary shares or securities convertible into or exchangeable for ordinary shares during the period from the date of the prospectus for our initial public offering continuing through the date that is 180 days after the date of such prospectus (subject to extension in certain circumstances). The representatives of the underwriters may, in their sole discretion, release any of these shares from these restrictions at any time without notice.

After the lock-up agreements expire, all shares subject to such agreements will be eligible for sale in the public market subject to the provisions of Rule 144 or Rule 701. In addition, subject to any lock-up restrictions, Francisco Partners will also have the right to require us to register the sales of their shares under the Securities Act, under the terms of an agreement between us and Francisco Partners.

In addition, we have filed a registration statement to register all shares subject to equity awards outstanding or reserved for future issuance under our equity compensation plans. If these additional shares are sold, or if it is perceived that they will be sold, in the public market, the trading price of our ordinary shares could decline.

In the future, we may also issue our securities in connection with investments or acquisitions. The number of our ordinary shares issued in connection with an investment or acquisition could constitute a material portion of our then-outstanding ordinary shares.

**We are an “emerging growth company” and may elect to comply with reduced public company reporting requirements, which could make our ordinary shares less attractive to investors.**

We are an emerging growth company, as defined in the JOBS Act. For as long as we continue to be an emerging growth company, we may choose to take advantage of exemptions from various public company reporting requirements. These exemptions include, but are not limited to, (i) not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, (ii) reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements, and (iii) exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. We could be an emerging growth company for up to five years after the first sale of our ordinary shares pursuant to an effective registration statement under the Securities Act, which fifth anniversary will occur in December 2021. However, if certain events occur prior to the end of such five-year period, including if we become a “large accelerated filer,” our annual gross revenue exceeds \$1.0 billion or we issue more than \$1.0 billion of non-convertible debt in any three-year period, we would cease to be an emerging growth company prior to the end of such five-year period. We have taken advantage of certain of the reduced disclosure obligations regarding executive compensation and may elect to take advantage of other reduced disclosure obligations in our SEC filings. As a result, the information that we provide to holders of our ordinary shares may be different than you might receive from other public reporting companies in which you hold equity interests. We cannot predict if investors will find our ordinary shares less attractive as a result of our reliance on these exemptions. If some investors find our ordinary shares less attractive as a result of any choice we make to reduce disclosure, there may be a less active trading market for our ordinary shares and the price for our ordinary shares may be more volatile.

Under the JOBS Act, emerging growth companies may also elect to delay adoption of new or revised accounting standards until such time as those standards apply to private companies. We have elected to avail ourselves of this extended transition period for complying with new or revised accounting standards and, therefore, we will be subject to the same new or revised accounting standards as private companies.

**We do not expect to pay any cash dividends for the foreseeable future.**

On August 11, 2015, our board of directors approved and we declared a one-time approximately \$22.1 million cash dividend on our outstanding preferred shares using proceeds from borrowings under our Credit Facilities and cash on hand. However, we do not anticipate that we will pay any cash dividends on our ordinary shares for the foreseeable future. Any determination to pay dividends in the future will be at the discretion of our board of directors and will depend upon our financial condition, results of operations, contractual restrictions (including those under our Credit Facilities and any potential indebtedness we may incur in the future), restrictions imposed by applicable law, tax considerations and other factors our board of directors deems relevant. There can be no assurance that we will pay a dividend in the future or continue to pay any dividend if we do commence paying dividends. Accordingly, realization of a gain on an investment in our ordinary shares will depend on the appreciation of the price of our ordinary shares, which may never occur. Investors seeking cash dividends in the foreseeable future should not purchase our ordinary shares.

**Our articles of association contain anti-takeover provisions that could adversely affect the rights of our shareholders.**

Our articles of association contain provisions to limit the ability of others to acquire control of our company or cause us to engage in change-of control transactions, including, among other things:

- provisions that authorize our board of directors, without action by our shareholders, to issue additional ordinary shares and preferred shares with preferential rights determined by our board of directors;
- provisions that permit only a majority of our board of directors or the chairman of our board of directors to call shareholder meetings and therefore do not permit shareholders to call shareholder meetings;
- provisions that impose advance notice requirements, minimum shareholding periods and ownership thresholds, and other requirements and limitations on the ability of shareholders to propose matters for consideration at shareholder meetings; provided, however, at any time when Francisco Partners beneficially owns, in the aggregate, at least 5% of our ordinary shares, such advance notice procedure will not apply to it; and
- a staggered board whereby our directors are divided into three classes, with each class subject to re-election once every three years on a rotating basis.

These provisions could have the effect of depriving our shareholders of an opportunity to sell their shares at a premium over prevailing market prices by discouraging third parties from seeking to obtain control of our company in a tender offer or similar transaction. With our staggered board of directors, at least two annual meetings of shareholders are generally required in order to effect a change in a majority of our directors. Our staggered board of directors can discourage proxy contests for the election of our directors and purchases of substantial blocks of our shares by making it more difficult for a potential acquirer to gain control of our board of directors in a relatively short period of time.

**The issuance of preferred shares could adversely affect holders of ordinary shares.**

Our board of directors is authorized to issue preferred shares without any action on the part of holders of our ordinary shares. Our board of directors also has the power, without shareholder approval, to set the terms of any such preferred shares that may be issued, including voting rights, dividend rights, and preferences over our ordinary shares with respect to dividends or if we liquidate, dissolve or wind up our business and other terms. If we issue preferred shares in the future that have preference over our ordinary shares with respect to the payment of dividends or upon our liquidation, dissolution or winding up, or if we issue preferred shares with voting rights that dilute the voting power of our ordinary shares, the rights of holders of our ordinary shares or the price of our ordinary shares could be adversely affected.

**You may face difficulties in protecting your interests as a shareholder, as Cayman Islands law provides substantially less protection when compared to the laws of the United States.**

Our corporate affairs are governed by our amended and restated memorandum and articles of association and by the Companies Law (2013 Revision) and common law of the Cayman Islands. The rights of shareholders to take legal action against our directors and us, actions by minority shareholders and the fiduciary responsibilities of our directors to us under Cayman Islands law are to a large extent governed by the common law of the Cayman Islands. The common law of the Cayman Islands is derived in part from comparatively limited judicial precedent in the Cayman Islands as well as from English common law, which has persuasive, but not binding, authority on a court in the Cayman Islands. The rights of our shareholders and the fiduciary responsibilities of our directors under Cayman Islands law are not as clearly established as they would be under statutes or judicial precedents in the United States. In particular, the Cayman Islands have a less exhaustive body of securities laws as compared to the United States. In addition, Cayman Islands companies may not have standing to initiate a shareholder derivative action before the United States federal courts.

As a result of all of the above, our shareholders may have more difficulty in protecting their interests through actions against us or our officers, directors or major shareholders than would shareholders of a corporation incorporated in a jurisdiction in the United States.

**Certain judgments obtained against us by our shareholders may not be enforceable.**

We are a Cayman Islands company and a portion of our assets are located outside of the United States. As a result, it may be difficult or impossible for you to bring an action against us in the United States in the event that you believe that your rights have been infringed under U.S. federal securities laws or otherwise. Even if you are successful in bringing an action of this kind, the laws of the Cayman Islands may render you unable to enforce a judgment against our assets. There is no statutory recognition in the Cayman Islands of judgments obtained in the United States, although the courts of the Cayman Islands will generally recognize and enforce a non-penal judgment of a foreign court of competent jurisdiction without retrial on the merits.

**There can be no assurance that we will not be a passive foreign investment company for any taxable year, which could result in adverse U.S. federal income tax consequences to U.S. Holders of our ordinary shares.**

A non-U.S. corporation will be a passive foreign investment company, or PFIC, for any taxable year if either (i) at least 75% of its gross income for such year is passive income or (ii) at least 50% of the value of its assets (based on an average of the quarterly values of the assets) during such year is attributable to assets that produce or are held for the production of passive income. Our PFIC status for any taxable year can be determined only after the close of that year.

Based on the current and anticipated value of our assets and the composition of our income and assets, we do not believe we were treated as a PFIC for U.S. federal income purposes for our taxable year ending December 30, 2016. However, the determination of PFIC status is based on an annual determination that cannot be made until the close of a taxable year, involves extensive factual investigation, including ascertaining the fair market value of all of our assets on a quarterly basis and the character of each item of income that we earn, and is subject to uncertainty in several respects. Accordingly, we cannot assure you that we were not treated as a PFIC for our taxable year ending December 30, 2016, or will not be treated as a PFIC for any future taxable year or that the IRS will not take a contrary position.

If we are a PFIC for any taxable year during which a U.S. person holds ordinary shares, certain adverse U.S. federal income tax consequences could apply to such U.S. person. You are strongly urged to consult your tax advisors as to whether or not we will be a PFIC.

**ITEM 1B. UNRESOLVED STAFF COMMENTS**

None.

## **ITEM 2. PROPERTIES**

Our principal executive office is located at 3185 Laurelview Ct., Fremont, California 94538. As of December 30, 2016, our principal manufacturing and administrative facilities, including our executive offices, comprises approximately 351,355 square feet. All of our facilities are leased, which allows for flexibility as business conditions and geographic demand change. The table below sets forth the approximate square footage of each of our facilities.

<b>Location</b>	<b>Approximate Square Footage</b>
Kingston, New York (1)	71,751
Tualatin, Oregon	52,546
Singapore	76,898
Austin, Texas	25,720
Selangor, Malaysia Building 1 (2)	6,212
Selangor, Malaysia Buildings 2 and 3 (3)	4,576
Selangor, Malaysia Building 4	12,546
Fremont, California	10,647
East Blantyre, Scotland	37,651
Union City, California	52,808

- (1) Operations ceased in Kingston as of May 27, 2016. The facility is leased through February 28, 2018.
- (2) Lease expires June 30, 2017. All operations are expected to be moved to Selangor, Malaysia Building 4 by the end of the lease.
- (3) Lease expires April 30, 2017. All operations are expected to be moved to Selangor, Malaysia Building 4 by the end of the lease.

We believe that our existing facilities and equipment are well maintained, in good operating condition and are adequate to meet our currently anticipated requirements.

## **ITEM 3. LEGAL PROCEEDINGS**

We are currently not a party to any legal proceedings. However, in the future we may be subject to various legal claims and proceedings which arise in the ordinary course of our business involving claims incidental to our business, including employment-related claims.

## **ITEM 4. MINE SAFETY DISCLOSURES**

Not applicable.

## PART II

### ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED SHAREHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

#### Market Information for Ordinary Shares

On December 9, 2016, our ordinary shares began trading on the NASDAQ under the symbol "ICHR". Prior to that time, there was no public market for our ordinary shares. Shares sold in our initial public offering were priced at \$9.00 per share on December 8, 2016. The following table sets forth the high and low sales prices per share of our ordinary shares as reported by the NASDAQ for the period indicated.

	High	Low
2016 Fourth Quarter (from December 9, 2016)	\$ 11.23	\$ 9.76

#### Holders of Record

On March 21, 2017, there were approximately 5 shareholders of record of our ordinary shares. This number does not include shareholders for whom shares are held in "nominee" or "street" name.

#### Dividends

On August 11, 2015, our board of directors approved and we declared a one-time approximately \$22.1 million cash dividend on our outstanding preferred shares using proceeds from borrowings under our Credit Facilities and cash on hand. However, we do not anticipate that we will pay any cash dividends on our ordinary shares for the foreseeable future. Any determination to pay dividends in the future will be at the discretion of our board of directors and will depend upon our financial condition, results of operations, contractual restrictions (including those under our Credit Facilities and any potential indebtedness we may incur in the future), restrictions imposed by applicable law, tax considerations and other factors our board of directors deems relevant.

#### Recent Sales of Unregistered Securities

During 2016, we made the following grants of unregistered securities:

- on February 10, 2016, we granted one of our executive officers 89,963 restricted shares; and
- on March 17, 2016 and June 27, 2016, we granted an aggregate of 92,739 stock options to certain executives and employees, which had an exercise price of \$9.42.

The grants of restricted shares and options described above were made in the ordinary course of business and did not involve any cash payments from the recipients. The grants of restricted shares and options did not involve a "sale" of securities for purposes of Section 2(3) of the Securities Act and were otherwise made in reliance upon Section 4(2) of the Securities Act and Rule 701 under the Securities Act.

#### Use of Proceeds from Registered Securities

On December 8, 2016, in connection with our initial public offering, we registered under the Securities Act (i) 6,759,445 ordinary shares, including the underwriters' over-allotment option, pursuant to a registration statement on Form S-1 (File No. 333-214588) and (ii) 146,945 ordinary shares pursuant to a registration statement on Form S-1

(File No. 333-214995). We completed our initial public offering on December 14, 2016 at a price to the public of \$9.00 per share, for gross proceeds of approximately \$52.9 million.

We received net proceeds of approximately \$47.1 million (after underwriters' discounts and commissions of \$3.7 million and additional offering related costs of approximately \$2.1 million). The joint lead bookrunners of the offering were Deutsche Bank Securities Inc. and Stifel, Nicolaus & Company, Incorporated. In January 2017, the underwriters exercised their over-allotment option to purchase an additional 881,667 ordinary shares at a price of \$9.00 per share, providing us with additional gross proceeds of approximately \$7.9 million and net proceeds of approximately \$7.4 million, after deducting underwriting discounts, commissions and other offering related costs of approximately \$0.5 million.

There was no material change in the use of proceeds from our initial public offering as described in our Prospectus. From the effective date of the registration statement through December 30, 2016, we used net proceeds from our initial public offering to repay approximately \$40.0 of borrowings under our Credit Facilities. The remainder of the net proceeds will be used for general corporate purposes, which we expect to include funding working capital, operating expenses and the selective pursuit of business development opportunities in our focus segment areas.

### Stock Performance Graph

The information included under the heading "Stock Performance Graph" is "furnished" and not "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, or otherwise subject to the liabilities of that section, nor shall it be deemed to be "soliciting material" subject to Regulation 14A or incorporated by reference in any filing under the Securities Act or the Exchange Act.

Our ordinary shares are listed for trading on the NASDAQ under the symbol "ICHR." The Stock Price Performance Graph set forth below compares the cumulative total shareholder return on our ordinary shares for the period from December 9, 2016 through December 30, 2016, with the cumulative total return of the Nasdaq Composite Index and the PHLX Semiconductor Sector Index over the same period. The comparison assumes \$100 was invested on December 9, 2016 in the ordinary shares of Ichor Holdings, Ltd., in the Nasdaq Composite Index, and in the PHLX Semiconductor Sector Index and assumes reinvestment of dividends, if any.



The stock price performance shown on the graph above is not necessarily indicative of future price performance. Information used in the graph was obtained from the Nasdaq Stock Market, a source believed to be reliable, but we are not responsible for any errors or omissions in such information.

## **ITEM 6. SELECTED FINANCIAL DATA**

The following tables present our historical selected consolidated financial data. The selected consolidated statement of operations data for the years ended December 30, 2016, December 25, 2015, and December 26, 2014, and the selected balance sheet data as of December 30, 2016 and December 25, 2015 and are derived from our audited consolidated financial statements that are included elsewhere in this report. The selected balance sheet data as of December 26, 2014 is derived from our audited consolidated balance sheet as of such date not included in this report.

Our historical results are not necessarily indicative of the results that may be expected in the future and interim results are not necessarily indicative of results to be expected for the full year. You should read the selected historical financial data below in conjunction with the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the financial statements and related notes included elsewhere in this report.

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
(in thousands, except share and per share amounts)			
<b>Consolidated Statement of Operations Data:</b>			
Net sales	\$ 405,747	\$ 290,641	\$ 249,087
Cost of sales (1)	340,352	242,087	212,747
Gross profit	65,395	48,554	36,340
Operating expenses:			
Research and development (1)	6,383	4,813	3,915
Selling, general and administrative (1)	28,126	24,729	22,465
Amortization of intangible assets	7,015	6,411	6,411
Total operating expenses	41,524	35,953	32,791
Operating income	23,871	12,601	3,549
Interest expense	4,370	3,831	3,118
Other expense (income), net	(629)	(46)	253
Income from continuing operations before income taxes	20,130	8,816	178
Income tax benefit from continuing operations (2)	(649)	(3,991)	(5,604)
Net income from continuing operations	20,779	12,807	5,782
Discontinued operations:			
Income (loss) from discontinued operations before taxes	(4,077)	(7,406)	132
Income tax expense (benefit) from discontinued operations	40	(225)	(254)
Net income (loss) from discontinued operations	(4,117)	(7,181)	386
Net income	16,662	5,626	6,168
Less: Preferred share dividend	—	(22,127)	—
Less: Undistributed earnings attributable to preferred shareholders	(15,284)	—	(6,165)
Net income (loss) attributable to ordinary shareholders	\$ 1,378	\$ (16,501)	\$ 3
Net income (loss) per share from continuing operations attributable to ordinary shareholders: (3)			
Basic	\$ 1.14	\$ (292.39)	\$ 0.36
Diluted	\$ 0.87	\$ (292.39)	\$ 0.16
Net income (loss) per share attributable to ordinary shareholders: (3)			
Basic	\$ 0.92	\$ (517.68)	\$ 0.36
Diluted	\$ 0.70	\$ (517.68)	\$ 0.16
Shares used to compute net income (loss) from continuing operations per share attributable to ordinary shareholders: (3)			
Basic	1,503,296	31,875	8,402
Diluted	1,967,926	31,875	18,422
Shares used to compute net income (loss) per share attributable to ordinary shareholders: (3)			
Basic	1,503,296	31,875	8,402
Diluted	1,967,926	31,875	18,422

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
<i>(in thousands)</i>			
<b>Consolidated Balance Sheet Data:</b>			
Cash and restricted cash	\$ 52,648	\$ 24,188	\$ 14,373
Working capital	56,020	24,860	28,117
Total assets	282,491	198,023	215,563
Total long-term debt (4)	39,830	65,000	55,750
Preferred shares	—	142,728	142,728
Total shareholders' equity	141,659	74,678	90,061

(1) Share-based compensation included in the consolidated statement of operations data above was as follows:

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
<i>(in thousands)</i>			
<b>Share-Based Compensation Expense:</b>			
Cost of sales	\$ 20	\$ 105	\$ 33
Research and development	35	46	51
Selling general and administrative	3,161	967	927
Total share-based compensation expense	<u>\$ 3,216</u>	<u>\$ 1,118</u>	<u>\$ 1,011</u>

- (2) Income tax expense (benefit) consists primarily of the impact of foreign operations, including withholding taxes, offset in part by a discrete tax benefit of approximately \$2.3 million that was recorded as a result of the purchase accounting from the Ajax acquisition (see Note 2–Ajax-United Patterns & Molds, Inc. Acquisition). Our historical income tax benefit resulted from losses recorded in the U.S., which were being fully benefited through the third quarter of 2015 as a result of an overall deferred tax liability position in the U.S., offset in part by the impact of foreign operations, including withholding taxes. Starting in the fourth quarter of 2015 we are no longer benefiting the losses generated in the U.S.
- (3) Please see Note 14– *Earnings per Share* of our consolidated financial statements included elsewhere in this report for an explanation of the calculations of our actual basic and diluted net income per share and our pro forma unaudited basic and diluted net income per share.
- (4) Does not include debt issuance costs of \$1,886, \$2,412, and \$615 as of December 30, 2016, December 25, 2015, and December 26, 2014, respectively.

## **ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

*You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our consolidated financial statements and related notes included elsewhere in this report. The following discussion contains forward-looking statements based upon our current plans, expectations and beliefs that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this report, particularly in "Risk Factors".*

### **Overview**

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We are a leader in the design, engineering and manufacturing of critical fluid delivery subsystems for semiconductor capital equipment. Our primary offerings include gas and chemical delivery subsystems, collectively known as fluid delivery subsystems, which are key elements of the process tools used in the manufacturing of semiconductor devices. Our gas delivery subsystems deliver, monitor and control precise quantities of the specialized gases used in semiconductor manufacturing processes such as etch and deposition. Our chemical delivery subsystems precisely blend and dispense the reactive liquid chemistries used in semiconductor manufacturing processes such as electroplating and cleaning. We also manufacture certain components for internal use in fluid delivery systems and for direct sales to our customers. This vertically integrated portion of our business is primarily focused on metal and plastic parts that are used in gas and chemical systems, respectively.

Fluid delivery subsystems ensure accurate measurement and uniform delivery of specialty gases and chemicals at critical steps in the semiconductor manufacturing process. Any malfunction or material degradation in fluid delivery reduces yields and increases the likelihood of manufacturing defects in these processes. Historically, semiconductor OEMs internally designed and manufactured the fluid delivery subsystems used in their process tools. Currently, most OEMs outsource the design, engineering and manufacturing of their gas delivery subsystems to a few specialized suppliers, including us. Additionally, many OEMs are also increasingly outsourcing the design, engineering and manufacturing of their chemical delivery subsystems due to the increased fluid expertise required to manufacture these subsystems. Outsourcing these subsystems has allowed OEMs to leverage the suppliers' highly specialized engineering, design and production skills while focusing their internal resources on their own value-added processes. We believe that this outsourcing trend has enabled OEMs to reduce their fixed costs and development time, as well as provided significant growth opportunities for specialized subsystems suppliers like us.

We have a global footprint with volume production facilities in Malaysia, Singapore and Union City, California. In 2016, 2015, and 2014, our two largest customers by sales were Lam Research and Applied Materials. During 2016, 2015, and 2014, respectively, we generated sales of \$405.7 million, \$290.6 million, and \$249.1 million, gross profit of \$65.4 million, \$48.6 million, and \$36.3 million, net income from continuing operations of \$20.8 million, \$12.8 million, and \$5.8 million, and adjusted net income from continuing operations of \$31.6 million, \$20.2 million, and \$11.7 million. Adjusted net income from continuing operations is a financial measure that is not calculated in accordance with GAAP. See "Non-GAAP Results" for a discussion of adjusted net income from continuing operations, an accompanying presentation of the most directly comparable financial measure calculated in accordance with generally accepted accounting principles in the United States, net income from continuing operations, and a reconciliation of the differences between adjusted net income from continuing operations and net income from continuing operations.

### **Key Factors Affecting Our Business**

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#### *Investment in Semiconductor Manufacturing Equipment*

The design and manufacturing of semiconductor devices is constantly evolving and becoming more complex in order to achieve greater performance and efficiency. To keep pace with these changes, OEMs need to refine their existing products and invest in developing new products. In addition, semiconductor device manufacturers will continue to invest in new wafer fabrication equipment to expand their production capacity and to support new manufacturing processes.

#### *Outsourcing of Subsystems by Semiconductor OEMs*

Faced with increasing manufacturing complexities, more complex subsystems, shorter product lead times, shorter industry spend cycles, and significant capital requirements, outsourcing of subsystems and components by OEMs has continued to grow. In the past two decades, OEMs have outsourced most of their gas delivery systems to suppliers such as us. OEMs have also started to outsource their chemical delivery systems in recent years. Our results will be affected by the degree to which outsourcing of these fluid delivery systems by OEMs continues to grow.

#### *Cyclical of Semiconductor Device Industry*

Our business is indirectly subject to the cyclical of the semiconductor device industry. In 2016, we derived approximately 97% of our sales from the semiconductor device industry. Demand for semiconductor devices can fluctuate significantly based on changes in general economic conditions, including consumer spending, demand for the products that include these devices and other factors. These fluctuations have in the past resulted in significant variations in our results of operations. The cyclical of the semiconductor device industries will continue to impact our results of operations in the future.

#### *Customer Concentration*

The number of capital equipment manufacturers for the semiconductor device industry has undergone significant consolidation in recent years, resulting in a small number of large manufacturers. Our customers have led much of this consolidation, resulting in our sales being concentrated in a few customers. In 2016, our two largest customers were Lam Research and Applied Materials, which accounted for approximately 51% and 46% of sales, respectively. The sales we generated from these customers in 2016 were spread across 14 different product lines utilized in 10 unique manufacturing process steps. We believe the diversity of products that we provide to these customers, combined with the fact that our customers use our products on numerous types of process equipment, lessens the impact of the inherent concentration in the industry. Our customers often require reduced prices or other pricing, quality or delivery commitments as a condition to their purchasing from us in any given period or increasing their purchase volume, which can, among other things, result in reduced gross margins in order to maintain or expand our market share. Although we do not have any long-term contracts that require customers to place orders with us, Lam Research and Applied Materials have been our customers for over 10 years.

#### *Discontinued Operations*

Discontinued operations consist of the results of operations for our systems integration business. The primary purpose of this business was to build modules and tools (metal organic chemical vapor deposition or ion implant) for Veeco Instruments, Inc. In January 2016, our management and the board of directors decided to discontinue this business because it consumed a significant amount of resources while generating low gross margins and contributing only a small amount to our net income. We completed our final builds of these products at the end of May 2016.

### **Components of Our Results of Operations**

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The following discussion sets forth certain components of our statements of operations as well as significant factors that impact those items.

#### *Sales*

We generate sales primarily from the design, manufacture and sale of subsystems for semiconductor capital equipment and the sale of refurbished tools. Sales are recognized when persuasive evidence of an arrangement exists, transfer of title has occurred, the fee is fixed or determinable, and collectability is reasonably assured. Our shipping terms are FOB shipping point or FOB destination, or equivalent terms, and accordingly, sales are recognized when legal title has passed to the customer upon shipment or delivery.

#### *Cost of Sales and Gross Profit*

Cost of sales consists primarily of purchased materials, direct labor, indirect labor, plant overhead cost and depreciation expense for our manufacturing facilities and equipment, as well as certain engineering costs that are related to non-recurring engineering services that we provide to, and for which we invoice, our customers in connection with their product development activities. Our business has a highly variable cost structure with a low fixed overhead structure as a percentage of cost of sales. In addition, our existing global manufacturing plant capacity is scalable and we are able to adjust to increased customer demand for our products without significant additional capital investment. We operate our business in this manner in order to avoid having excessive fixed costs during a cyclical downturn while retaining flexibility to expand our production volumes during periods of growth. However, this approach results in a smaller increase in gross margin as a percentage of sales in times of increased demand.

Since the gross margin on each of our products differs, our overall gross margin as a percentage of our sales changes based on the mix of products we sell in any period.

#### *Operating Expenses*

Our operating expenses primarily include research and development and sales, general and administrative expenses. Personnel costs are the most significant component of operating expenses and consist of salaries, benefits, bonuses, share-based compensation and, with regard to sales and marketing expense, sales commissions. Operating expenses also include overhead costs for facilities, IT and depreciation. In addition, our operating expenses include costs related to the impairment of goodwill and intangible assets, amortization of intangible assets and restructuring costs.

*Research and development*. Research and development expense consists primarily of activities related to product design and other development activities, new component testing and evaluation, and test equipment and fixture development. Research and development expense does not include engineering costs that are related to non-recurring engineering services that we provide to and for which we invoice our customers as part of sales, which are reflected as cost of sales. We expect research and development expense will increase in absolute dollars as our customers continue to increase their demand for new product designs and as we invest in our research and product development efforts to enhance our product capabilities and access new customer markets.

*Selling, general and administrative*. Selling expense consists primarily of salaries and commissions paid to our sales and sales support employees and other costs related to the sales of our products. General and administrative expense consists primarily of salaries and overhead associated with our administrative staff, professional fees and depreciation and other allocated facility related costs. We expect selling expenses to increase in absolute dollars as we continue to invest in expanding our markets and as we expand our international operations. We expect general and administrative expenses to also increase in absolute dollars due to an increase in costs related to being a public company, including higher legal, corporate insurance and accounting expenses.

*Amortization of intangibles*. Amortization of intangible assets is related to our finite-lived intangible assets and is computed using the straight-line method over the estimated economic life of the asset.

#### *Interest Expense, net*

Interest expense, net consists of interest on our outstanding debt under our Credit Facilities and any other indebtedness we may incur in the future.

#### *Other Expense (Income), Net*

The functional currency of our international subsidiaries located in the United Kingdom, Singapore and Malaysia is the U.S. dollar. Transactions denominated in currencies other than the functional currency generate foreign exchange gains and losses that are included in other expense, net on the accompanying consolidated statements of operations. Substantially all of our sales and agreements with third party suppliers provide for pricing and payments in U.S. dollars and, therefore, are not subject to material exchange rate fluctuations.

### Income Tax Expense (Benefit)

Income tax expense (benefit) consists primarily of the impact of foreign operations, including withholding taxes, offset in part by a discrete tax benefit of approximately \$2.3 million that was recorded as a result of the purchase accounting from the Ajax acquisition (see Note 2—*Ajax-United Patterns & Molds, Inc. Acquisition*). Our historical income tax benefit resulted from losses recorded in the U.S., which were being fully benefited through the third quarter of 2015 as a result of an overall deferred tax liability position in the U.S., offset in part by the impact of foreign operations, including withholding taxes. Starting in the fourth quarter of 2015 we are no longer benefiting the losses generated in the U.S.

### Results of Operations

The following table sets forth our results of operations for the periods presented. The period-to-period comparison of results is not necessarily indicative of results for future periods.

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
	(in thousands)		
<b>Consolidated Statements of Operations Data:</b>			
Sales	\$ 405,747	\$ 290,641	\$ 249,087
Cost of sales	340,352	242,087	212,747
Gross profit	65,395	48,554	36,340
Operating expenses:			
Research and development	6,383	4,813	3,915
Selling, general and administrative	28,126	24,729	22,465
Amortization of intangible assets	7,015	6,411	6,411
Total operating expenses	41,524	35,953	32,791
Operating income	23,871	12,601	3,549
Interest expense	4,370	3,831	3,118
Other expense (income), net	(629)	(46)	253
Income from continuing operations before income taxes	20,130	8,816	178
Income tax benefit from continuing operations	(649)	(3,991)	(5,604)
Net income from continuing operations	20,779	12,807	5,782
Discontinued operations:			
Income (loss) from discontinued operations before taxes	(4,077)	(7,406)	132
Income tax expense (benefit) from discontinued operations	40	(225)	(254)
Net income (loss) from discontinued operations	(4,117)	(7,181)	386
Net income	<u>\$ 16,662</u>	<u>\$ 5,626</u>	<u>\$ 6,168</u>

The following table sets forth our results of operations as a percentage of our total sales for the periods presented.

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
	(as a percentage of sales)		
<b>Consolidated Statements of Operations Data:</b>			
Sales	100.0	100.0	100.0
Cost of sales	83.9	83.3	85.4
Gross profit	16.1	16.7	14.6
Operating expenses:			
Research and development	1.6	1.7	1.6
Selling, general and administrative	6.9	8.5	9.0
Amortization of intangible assets	1.7	2.2	2.6
Total operating expenses	10.2	12.4	13.2
Operating income	5.9	4.3	1.4
Interest expense	1.1	1.3	1.3
Other expense (income), net	(0.2)	0.0	0.1
Income from continuing operations before income taxes	5.0	3.0	0.1
Income tax benefit from continuing operations	(0.2)	(1.4)	(2.2)
Net income from continuing operations	5.1	4.4	2.3
Discontinued operations:			
Income (loss) from discontinued operations before taxes	(1.0)	(2.5)	0.1
Income tax expense (benefit) from discontinued operations	0.0	(0.1)	(0.1)
Net income (loss) from discontinued operations	(1.0)	(2.5)	0.2
Net income	4.1	1.9	2.5

#### Comparison of the Years Ended December 30, 2016 and December 25, 2015

##### *Sales*

	Year Ended		Change	
	December 30, 2016	December 25, 2015	Amount	%
	(dollars in thousands)			
Sales	\$ 405,747	\$ 290,641	\$ 115,106	39.6%

The increase in sales from 2015 to 2016 was primarily related to an increase in sales volume. The sales volume increase was due to an approximate 7%, or approximately \$48.1 million, increase in our market share at our two largest customers, and an approximately \$47.0 million increase in the volume of purchases by our two largest customers driven by overall industry growth. We refer to the volume of purchases from us by a customer of ours relative to its other suppliers as our market share of that customer. Ajax contributed \$20.0 million to our sales during 2016. On a geographic basis, sales in the United States increased by \$58.9 million in 2016 to \$216.6 million. Foreign sales increased by \$56.2 million in 2016 to \$189.1 million.

### *Cost of Sales and Gross Margin*

	Year Ended		Change	
	December 30, 2016	December 25, 2015	Amount	%
	(dollars in thousands)			
Cost of sales	\$ 340,352	\$ 242,087	\$ 98,265	40.6%
Gross profit	\$ 65,395	\$ 48,554	\$ 16,841	34.7%
Gross margin		16.1%	16.7%	

The increase in cost of sales from 2015 to 2016 was primarily due to the increase in sales.

The increase in absolute dollars of gross profit from 2015 to 2016 was driven primarily by an increase in sales volume.

The decline in gross margin percentage from 2015 to 2016 was primarily due to a decline in margin at individual customers and a shift in customer mix during 2016.

### *Research and Development*

	Year Ended		Change	
	December 30, 2016	December 25, 2015	Amount	%
	(dollars in thousands)			
Research and development	\$ 6,383	\$ 4,813	\$ 1,570	32.6%

The increase in research and development expenses from 2015 to 2016 was due to an increase in headcount and consulting expense to support additional projects.

### *Selling, General and Administrative*

	Year Ended		Change	
	December 30, 2016	December 25, 2015	Amount	%
	(dollars in thousands)			
Selling, general, and administrative	\$ 28,126	\$ 24,729	\$ 3,397	13.7%

The increase in selling, general, and administrative expenses from 2015 to 2016 was due to a \$2.1 million increase in share-based compensation expenses, \$1.5 million in incremental operating expenses from Ajax, and \$1.3 million in acquisition-related transaction costs, partially offset by a \$1.4 million decrease in initial public offering expenses. Initial public offering expenses incurred in 2015 were expensed, while those costs incurred in 2016 in relation to our December IPO were offset against proceeds.

### *Interest Expense, Net*

	Year Ended		Change	
	December 30, 2016	December 25, 2015	Amount	%
	(dollars in thousands)			
Interest expense, net	\$ 4,370	\$ 3,831	\$ 539	14.1%

The increase in interest expense, net from 2015 to 2016 was due to a \$12.9 million increase in the average amount borrowed in 2016 as a result of additional borrowings used to fund the Ajax acquisition. Prevailing interest rates were comparable during those periods.

We paid down \$40.0 million of borrowings in December 2016 using proceeds from our IPO. Total borrowings outstanding at December 25, 2015, net of debt issuance costs, was \$62.6 million, compared to \$37.9 million at December 30, 2016.

#### *Other Expense (Income), Net*

	Year Ended		Change	
	December 30, 2016	December 25, 2015	Amount	%
	(dollars in thousands)			
Other expense (income), net	\$ (629)	\$ (46)	\$ (583)	N/M

The change in other expense (income), net from 2015 to 2016 was due to exchange rate fluctuations on transactions denominated in the local currencies of our foreign operations, principally the Singapore Dollar, Malaysian Ringgit, and British Pound. Additionally, we recorded \$0.2 million in investment income in 2016 related to our equity method investment.

#### *Income Tax Benefit from Continuing Operations*

	Year Ended		Change	
	December 30, 2016	December 25, 2015	Amount	%
	(dollars in thousands)			
Income tax benefit from continuing operations	\$ (649)	\$ (3,991)	\$ 3,342	-83.7%

The decrease in the income tax benefit from continuing operations from 2015 to 2016 was primarily due to the valuation allowance against substantially all U.S. federal and state net deferred tax assets which was originally recorded during the fourth quarter of 2015. During the fourth quarter of 2015, we determined that it is more likely than not that our U.S. entities will not generate sufficient taxable income to offset reversing deductible temporary differences and to fully utilize tax attribute carryforwards. As a result, we recorded a valuation allowance to reduce our U.S. federal and state deferred tax assets to the amount that is more likely than not to be realized.

#### **Comparison of the Years Ended December 25, 2015 and December 26, 2014**

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##### *Sales*

	Year Ended		Change	
	December 25, 2015	December 26, 2014	Amount	%
	(dollars in thousands)			
Sales	\$ 290,641	\$ 249,087	\$ 41,554	16.7%

The increase in sales from 2014 to 2015 was primarily related to an increase in sales volume due to an approximate 7%, or approximately \$30 million, increase in our market share at our two largest customers, and an approximate \$8.0 million increase in the volume of purchases by our two largest customers driven by overall industry growth. We refer to the volume of purchases from us by a customer of ours relative to its other suppliers as our market share of that customer. The remaining sales increase was driven by our refurbishment business, where we added additional services. On a geographic basis, sales in the United States decreased by \$3.1 million in 2015 to \$157.7 million. Foreign sales increased by \$44.7 million in 2015 to \$132.9 million.

### *Cost of Sales and Gross Margin*

	Year Ended		Change	
	December 25, 2015	December 26, 2014	Amount	%
	(dollars in thousands)			
Cost of sales	\$ 242,087	\$ 212,747	\$ 29,340	13.8%
Gross profit	\$ 48,554	\$ 36,340	\$ 12,214	33.6%
Gross margin		16.7%	14.6%	

The increase in cost of sales from 2014 to 2015 was primarily due to the increase in sales.

The increase in gross profit from 2014 to 2015 was driven primarily by an increase in sales volume of \$6.1 million, improved margins at our two largest customers of \$4.6 million, and a shift in customer mix of \$1.5 million.

The 210 basis point increase in gross margin from 2014 to 2015 was primarily due to 160 basis point improvement with individual customers and a 50 basis point improvement due to customer mix.

### *Research and Development*

	Year Ended		Change	
	December 25, 2015	December 26, 2014	Amount	%
	(dollars in thousands)			
Research and development	\$ 4,813	\$ 3,915	\$ 898	22.9%

The increase in research and development expense from 2014 to 2015 was due to an increase in headcount costs of \$0.4 million and outside engineering services of \$0.4 million to support new product introductions and additional product design activity.

### *Selling, General and Administrative*

	Year Ended		Change	
	December 25, 2015	December 26, 2014	Amount	%
	(dollars in thousands)			
Selling, general and administrative	\$ 24,729	\$ 22,465	\$ 2,264	10.1%

The increase in selling, general, and administrative expenses from 2014 to 2015 was due to cash bonuses awarded to holders of employee equity awards in connection with our 2015 Dividend of \$1.8 million and an increase in third-party accounting fees of \$0.5 million.

### *Amortization of Intangible Assets*

	Year Ended		Change	
	December 25, 2015	December 26, 2014	Amount	%
	(dollars in thousands)			
Amortization of intangibles assets	\$ 6,411	\$ 6,411	\$ —	0.0%

Amortization of intangible assets was the same in 2015 and 2014.

*Interest Expense, Net*

	<b>Year Ended</b>		<b>Change</b>	
	<b>December 25, 2015</b>	<b>December 26, 2014</b>	<b>Amount</b>	<b>%</b>
	(dollars in thousands)			
Interest expense, net	\$ 3,831	\$ 3,118	\$ 713	22.9%

The increase in interest expense, net from 2014 to 2015 was due primarily to the refinancing of our Credit Facilities in August 2015, which resulted in a \$0.5 million write-off of debt issuance costs. In addition, the average amount borrowed increased by \$3.1 million in 2015. Prevailing interest rates were comparable during those periods.

*Other Expense (Income), Net*

	<b>Year Ended</b>		<b>Change</b>	
	<b>December 25, 2015</b>	<b>December 26, 2014</b>	<b>Amount</b>	<b>%</b>
	(dollars in thousands)			
Other expense (income), net	\$ (46)	\$ 253	\$ (299)	N/M

The change in other expense (income), net from 2014 to 2015 was due to exchange rate fluctuations on transactions denominated in the local currencies of our foreign operations, principally the Singapore Dollar, Malaysian Ringgit and British Pound.

*Income Tax Benefit from Continuing Operations*

	<b>Year Ended</b>		<b>Change</b>	
	<b>December 25, 2015</b>	<b>December 26, 2014</b>	<b>Amount</b>	<b>%</b>
	(dollars in thousands)			
Income tax benefit from continuing operations	\$ (3,991)	\$ (5,604)	\$ 1,613	-28.8%

The decrease in the income tax benefit from continuing operations from 2014 to 2015 was primarily due to an increase in tax expense in certain foreign jurisdictions, including withholding taxes, in which we conduct business and the impact of recording the valuation allowance against substantially all U.S. federal and state net deferred tax assets during the fourth quarter of 2015. During the fourth quarter of 2015, we determined that it is more likely than not that our U.S. entities will not generate sufficient taxable income to offset reversing deductible temporary differences and to fully utilize tax attribute carryforwards. As a result, we recorded a valuation allowance to reduce our U.S. federal and state deferred tax assets to the amount that is more likely than not to be realized.

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**Non-GAAP Results**

Management uses non-GAAP adjusted net income from continuing operations to evaluate Ichor's operating and financial results. Ichor believes the presentation of non-GAAP results is useful to investors for analyzing business trends and comparing performance to prior periods, along with enhancing investors' ability to view Ichor's results from management's perspective. Non-GAAP adjusted net income from continuing operations is defined as: net income from continuing operations; excluding amortization of intangible assets, share-based compensation expense, and other non-recurring expenses; tax adjustments related to those non-GAAP adjustments; and the tax benefit associated with the acquisition of Ajax. Non-GAAP adjusted diluted EPS is defined as non-GAAP adjusted net income from continuing operations divided by adjusted diluted ordinary shares, which assumes the IPO shares sold, conversion of preferred shares into ordinary shares, and vesting of restricted shares and options that vested at the IPO occurred at the beginning of the measurement period.

The following table presents our non-GAAP adjusted net income from continuing operations and a reconciliation from net income from continuing operations, the most comparable GAAP measure, for the periods indicated:

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
	(in thousands)		
<b>Non-GAAP Data:</b>			
Net income from continuing operations	\$ 20,779	\$ 12,807	\$ 5,782
Non-GAAP adjustments:			
Amortization of intangible assets	7,015	6,411	6,411
Share-based compensation	3,216	1,118	1,011
Other non-recurring expenses <sup>(1)</sup>	2,988	4,154	1,905
Tax adjustments related to non-GAAP adjustments <sup>(2)</sup>	(131)	(4,241)	(3,421)
Tax benefit related to Ajax acquisition	(2,271)	—	—
Non-GAAP adjusted net income from continuing operations	<u>\$ 31,596</u>	<u>\$ 20,249</u>	<u>\$ 11,688</u>
Non-GAAP adjusted diluted EPS <sup>(3)</sup>	\$ 1.31	\$ 0.85	\$ 0.49
Diluted shares used to compute non-GAAP adjusted diluted EPS <sup>(4)</sup>	24,188,881	23,779,908	23,737,007

- (1) Other non-recurring expenses include (i) expenses incurred in connection with preparation for an initial public offering contemplated in 2014 and 2015, (ii) consulting fees paid to Francisco Partners Consulting, LLC, an entity which is owned and controlled by individual operations executives who are associated with our principal shareholders but in which such shareholders hold no interest, (iii) the bonuses paid to members of our management in connection with the cash dividend paid by us in August 2015 and (iv) acquisition-related charges.
- (2) The difference between (i) the adjustments to our tax provision (benefit) made in connection with the other non-GAAP adjustments made to determine adjusted net income and (ii) the GAAP tax provision (benefit) for 2016, 2015, and 2014 is (\$518), \$250, and (\$2,183), respectively.
- (3) Calculated by dividing non-GAAP adjusted net income from continuing operations by non-GAAP diluted shares outstanding.
- (4) Assumes the IPO shares sold, conversion of preferred shares into ordinary shares, and vesting of restricted shares and options that vested at the IPO occurred at the beginning of the measurement period, for comparability between current and prior periods.

Non-GAAP adjusted net income from continuing operations has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for net income or any of our other operating results reported under GAAP. Other companies may calculate adjusted net income differently or may use other measures to evaluate their performance, both of which could reduce the usefulness of our adjusted net income as a tool for comparison.

Because of these limitations, you should consider non-GAAP adjusted net income from continuing operations alongside other financial performance measures, including net income from continuing operations and other financial results presented in accordance with GAAP. In addition, in evaluating non-GAAP adjusted net income, you should be aware that in the future we will incur expenses such as those that are the subject of adjustments in deriving adjusted net income and you should not infer from our presentation of adjusted net income that our future results will not be affected by these expenses or any unusual or non-recurring items.

#### **Unaudited Quarterly Financial Results**

The following table set 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.

	Three Months Ended							
	December 30, 2016	September 23, 2016	June 24, 2016	March 25, 2016	December 25, 2015	September 25, 2015	June 26, 2015	March 27, 2015
(in thousands, except share and per share amounts)								
Sales	\$ 131,408	\$ 105,687	\$ 95,365	\$ 73,287	\$ 64,359	\$ 75,466	\$ 73,293	\$ 77,523
Cost of sales	110,003	88,802	80,185	61,362	53,890	62,812	61,224	64,161
Gross profit	21,405	16,885	15,180	11,925	10,469	12,654	12,069	13,362
Operating expenses:								
Research and development	2,154	1,564	1,290	1,375	1,344	1,397	1,081	991
Selling, general and administrative	7,797	6,782	7,183	6,364	6,645	7,036	6,042	5,006
Amortization of intangible assets	1,805	1,804	1,803	1,603	1,603	1,602	1,603	1,603
Total operating expenses	11,756	10,150	10,276	9,342	9,592	10,035	8,726	7,600
Operating income	9,649	6,735	4,904	2,583	877	2,619	3,343	5,762
Interest expense	1,125	1,183	1,160	902	933	1,415	726	757
Other expense (income), net	(245)	(241)	244	(387)	(4)	(40)	28	(30)
Income (loss) from continuing operations before income taxes	8,769	5,793	3,500	2,068	(52)	1,244	2,589	5,035
Income tax expense (benefit) from continuing operations	778	(1,888)	225	236	(67)	(2,159)	(930)	(835)
Net income from continuing operations	7,991	7,681	3,275	1,832	15	3,403	3,519	5,870
Discontinued operations:								
Income (loss) from discontinued operations before taxes	(64)	16	(2,305)	(1,724)	(6,688)	(721)	338	(335)
Income tax expense (benefit) from discontinued operations	14	23	2	1	100	(333)	133	(125)
Net income (loss) from discontinued operations	(78)	(7)	(2,307)	(1,725)	(6,788)	(388)	205	(210)
Net income (loss)	7,913	7,674	968	107	(6,773)	3,015	3,724	5,660
Less: Preferred share dividend	-	-	-	-	-	(22,127)	-	-
Less: Undistributed earnings attributable to preferred shareholders	(5,666)	(7,628)	(963)	(107)	-	-	(3,719)	(5,653)
Net income (loss) attributable to ordinary shareholders	\$ 2,247	\$ 46	\$ 5	\$ -	\$ (6,773)	\$ (19,112)	\$ 5	\$ 7
Diluted net income (loss) per share from continuing operations attributable to ordinary shareholders: (1)	\$ 0.39	\$ 0.08	\$ 0.06	\$ 0.03	\$ -	\$ (595.53)	\$ 0.10	\$ 0.17
Diluted net income (loss) per share attributable to ordinary shareholders: (1)	\$ 0.38	\$ 0.08	\$ 0.02	\$ -	\$ (120.25)	\$ (607.87)	\$ 0.10	\$ 0.17
Shares used to compute diluted net income (loss) per share from continuing operations attributable to ordinary shareholders:	5,870,331	542,949	277,554	249,889	56,322	31,441	49,523	40,942
Shares used to compute diluted net income (loss) per share attributable to ordinary shareholders:	5,870,331	542,949	277,554	65,673	56,322	31,441	49,523	40,942

(1) Diluted net income per share attributable to ordinary shareholders is presented in conformity with the two-class method required for participating securities. Ichor considers its convertible preferred shares to be a participating security, as the convertible preferred shares participate in dividends with ordinary shareholders.

when and if declared by the board of directors. In the event a dividend is paid on ordinary shares, the holders of preferred shares are entitled to a proportionate share of any such dividend as if they were holders of ordinary shares (on an as-if converted basis). The convertible preferred shares do not participate in losses incurred by Ichor. In accordance with the two-class method, earnings allocated to these participating securities and the related number of outstanding shares of the participating securities, which include contractual participation rights in undistributed earnings, have been excluded from the computation of basic and diluted net income per share attributable to ordinary shareholders.

The following table sets forth our unaudited quarterly consolidated statement of operations data as a percentage of sales for each of the last eight quarters in the period ended December 30, 2016.

	Three Months Ended							
	December 30, 2016	September 23, 2016	June 24, 2016	March 25, 2016	December 25, 2015	September 25, 2015	June 26, 2015	March 27, 2015
(as a percentage of sales)								
Sales	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cost of sales	83.7	84.0	84.1	83.7	83.7	83.2	83.5	82.8
Gross profit	16.3	16.0	15.9	16.3	16.3	16.8	16.5	17.2
Operating expenses:								
Research and development	1.6	1.5	1.4	1.9	2.1	1.9	1.5	1.3
Selling, general and administrative	5.9	6.4	7.5	8.7	10.3	9.3	8.2	6.5
Amortization of intangible assets	1.4	1.7	1.9	2.2	2.5	2.1	2.2	2.1
Total operating expenses	8.9	9.6	10.8	12.7	14.9	13.3	11.9	9.8
Operating income	7.3	6.4	5.1	3.5	1.4	3.5	4.6	7.4
Interest expense	0.9	1.1	1.2	1.2	1.4	1.9	1.0	1.0
Other expense (income), net	(0.2)	(0.2)	0.3	(0.5)	0.0	(0.1)	0.0	0.0
Income (loss) from continuing operations before income taxes	6.7	5.5	3.7	2.8	(0.1)	1.6	3.5	6.5
Income tax expense (benefit) from continuing operations	0.6	(1.8)	0.2	0.3	(0.1)	(2.9)	(1.3)	(1.1)
Net income from continuing operations	6.1	7.3	3.4	2.5	0.0	4.5	4.8	7.6
Discontinued operations:								
Income (loss) from discontinued operations before taxes	0.0	0.0	(2.4)	(2.4)	(10.4)	(1.0)	0.5	(0.4)
Income tax expense (benefit) from discontinued operations	0.0	0.0	0.0	0.0	0.2	(0.4)	0.2	(0.2)
Net income (loss) from discontinued operations	(0.1)	0.0	(2.4)	(2.4)	(10.5)	(0.5)	0.3	(0.3)
Net income (loss)	<u>6.0</u>	<u>7.3</u>	<u>1.0</u>	<u>0.1</u>	<u>(10.5)</u>	<u>4.0</u>	<u>5.1</u>	<u>7.3</u>

## Seasonality

We have not historically experienced meaningful seasonality with respect to our business or results of operations.

## Liquidity and Capital Resources

We had cash and restricted cash of \$52.6 million as of December 30, 2016. Our principal uses of liquidity are to fund our working capital needs, satisfy our debt obligations, and purchase new capital equipment. The increase in cash and reduction in long-term debt is primarily due to net proceeds from our initial public offering, or IPO, completed in December 2016 of \$47.1 million, cash flows from operating activities of \$27.7 million, partially offset by net payments of debt of \$25.2 million, cash paid for the acquisition of Ajax of \$17.4 million in April 2016, and capital expenditures of \$4.3 million.

We believe that our cash, the amounts available under our Credit Facilities and our cash flows from operations, together with the net proceeds from our IPO, will be sufficient to meet our anticipated cash needs for working capital and capital expenditures for at least the next 12 months.

### Cash Flow Analysis

The following table sets forth a summary of operating, investing, and financing activities for the periods presented:

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
(in thousands)			
Cash provided by operating activities	\$ 27,730	\$ 26,690	\$ 8,091
Cash used in investing activities	(21,202)	(1,367)	(3,468)
Cash provided by (used in) financing activities	21,932	(15,508)	(3,231)
Net increase in cash and restricted cash	<u>\$ 28,460</u>	<u>\$ 9,815</u>	<u>\$ 1,392</u>

### Operating Activities

We generated \$27.7 million of cash from operating activities during 2016 due to net income of \$16.7 million, non-cash charges of \$10.8 million, and a net decrease of \$0.2 million in our net operating assets and liabilities. Non-cash charges primarily related to \$9.5 million in depreciation and amortization, \$3.2 million in share-based compensation, and \$0.5 million in amortization of debt issuance cost, offset in part by \$2.4 million in deferred tax benefit. The decrease in net operating assets and liabilities was primarily due to an increase in accounts payable of \$36.8 million resulting from increased materials purchased to support higher sales volumes. The decrease in our net operating assets and liabilities was partially offset by an increase of \$9.0 million in accounts receivable due to increased sales and timing of customer payments, an increase in inventory of \$23.7 million due to anticipated sales in the first quarter of 2017, and a decrease in customer deposits of \$4.2 million arising from a reduction in customer orders associated with discontinued operations.

We generated \$26.7 million of cash from operating activities during 2015 due to net income of \$5.6 million and non-cash charges of \$10.1 million, and a net increase of \$10.9 million in our net operating assets and liabilities. Non-cash charges primarily related to \$9.9 million in depreciation and amortization, \$1.1 million in share-based compensation, \$3.2 million related to the impairment of intangible and fixed assets and \$0.5 million write-off of debt issuance costs, partially offset by \$4.9 million in deferred tax benefit. The net change in our operating assets and liabilities was primarily the result of a \$9.1 million decrease in inventory due to our initiative to reduce our inventory in the fourth quarter of 2015, a decrease in accounts receivable of \$6.3 million due to the timing of customer payments, partially offset by the decrease in customer deposit of \$3.5 million and accounts payable of \$1.7 million.

We generated \$8.1 million of cash from operating activities during 2014 due to net income of \$6.2 million and non-cash charges of \$4.8 million, offset in part by a net increase of \$2.8 million in our net operating assets and liabilities. Non-cash charges primarily related to \$9.6 million in depreciation and amortization and \$1.0 million in share-based compensation offset in part by \$6.2 million in deferred tax benefit. The net change in our operating assets and liabilities was primarily the result of a \$12.1 million increase in inventory due to materials purchases in the fourth quarter of 2014 in anticipation of sales increases in the first quarter of 2015. The increase in net operating assets and

liabilities was partially offset by an \$8.7 million increase in accounts payable resulting from increased materials purchases in anticipation of sale increases in the first quarter of 2015 and a \$1.0 million decrease in accounts receivable based on timing of customer payments.

#### *Investing Activities*

Cash used in investing activities during 2016 was \$21.2 million. We used \$17.4 million, net of cash acquired, to acquire Ajax and \$4.3 million from capital expenditures to purchase test fixtures and leasehold improvements primarily related to our plant expansions in the United States and Malaysia, partially offset by proceeds from sales of certain intangible and fixed assets totaling \$0.5 million.

Cash used in investing activities during 2015 was \$1.4 million from capital expenditures for the purchase of property and equipment relating to our manufacturing footprint in our Oregon, Texas and corporate facilities.

Cash used in investing activities during 2014 was \$3.5 million from capital expenditures for the purchase of property and equipment relating to our plant expansion in Scotland, our manufacturing footprint in our Oregon, Texas and Malaysia facilities and ERP hardware upgrade.

#### *Financing Activities*

We generated \$21.9 million of cash from financing during 2016, which consisted of net proceeds from our IPO of \$47.1 million and \$27.0 million of proceeds from borrowings under our Credit Facilities, partially offset by \$52.2 million used to partially repay amounts owed under our Credit Facilities.

We used \$15.5 million of cash in financing activities during 2015, which consisted of \$69.8 million for the repayment of bank borrowings offset in part by \$79.0 million in proceeds from new bank borrowings. We also paid cash dividends to our shareholders of \$22.1 million and \$2.6 million in fees related to the refinancing of our indebtedness, including the entry into our Credit Facilities.

We used \$3.2 million of cash in financing activities during 2014, which consisted of \$12.2 million for the repayment of bank borrowings offset in part by \$9 million in proceeds from bank borrowings.

#### *Subsequent Events*

On January 10, 2017, the Company completed the sale of an additional 881,667 ordinary shares of the Company to the underwriters of its initial public offering at the public offering price of \$9.00 per ordinary share pursuant to the exercise of the over-allotment option granted to the underwriters. The Company received approximately \$7.4 million in net proceeds from the sale.

On February 15, 2017, the Company sold its equity method investment in Ajax Foresight Global Manufacturing Sdn. Bhd., and associated note receivable, for \$1.7 million.

On February 24, 2017, the Company sold its cost method investment in CHawk Technology International, Inc. for \$1.7 million, resulting in a gain on sale of \$0.2 million. The Company received cash of \$0.7 million and a promissory note for \$1.0 million. The promissory note will be repaid in five quarterly installments of \$0.2 million, commencing in the second quarter of 2017.

#### *Credit Facilities*

For a description of our Credit Facilities, please review the information provided in Note 9—*Credit Facilities* of our consolidated financial statements included in Part IV, Item 15 of this report on Form 10-K.

## Contractual Obligations and Commitments

The following summarizes our contractual obligations and commitments as of December 30, 2016:

	Payments Due by Period					<i>(in thousands)</i>
	Total	Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years	
Operating leases	\$ 8,577	\$ 3,813	\$ 2,666	\$ 1,445	\$ 653	
Long-term debt obligations, principal (1)	39,830	-	-	39,830	-	
Long-term debt obligations, interest (2)	7,171	1,979	3,958	1,234	-	
Purchase obligations (3)	88,326	88,326	-	-	-	
<b>Total</b>	<b>\$ 143,904</b>	<b>\$ 94,118</b>	<b>\$ 6,624</b>	<b>\$ 42,509</b>	<b>\$ 653</b>	

- (1) Represents the contractually required principal payments under our Credit Facilities in accordance with the required principal payment schedule.
- (2) Represents the contractually required interest payments under our Credit Facilities in accordance with the required interest payment schedule. Interest costs have been estimated based on interest rates in effect for such indebtedness as of December 30, 2016.
- (3) Purchase obligations consist primarily of inventory purchase obligations (both cancellable and non-cancellable) with our independent suppliers.

The table above excludes the amount of such uncertain tax positions of \$0.6 million as of December 30, 2016 due to the uncertainty of when the related tax settlements will become due.

## Critical Accounting Policies and Estimates

Our consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, sales, expenses, and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Actual results may differ from these estimates. To the extent that there are material differences between these estimates and our actual results, our future financial statements will be affected.

The critical accounting policies requiring estimates, assumptions, and judgments that we believe have the most significant impact on our consolidated financial statements are described below.

### Sales Recognition

Product sales are recognized when there is persuasive evidence of an arrangement, product delivery has occurred, the sales price is fixed or determinable, and collectability is reasonably assured. Our shipping terms are FOB shipping point or FOB destination, or equivalent terms, and accordingly, sales are recognized when legal title has passed to the customer upon shipment or delivery. Title and risk of loss generally pass to the customer at the time of delivery of the product to a common carrier. All amounts billed to a customer related to shipping and handling are classified as sales, while all costs incurred by us for shipping and handling are classified as cost of sales.

Sales are recognized when all of the following criteria are met:

- we enter into a legally binding arrangement with a customer;
- we ship the product;

- we determine the fee is fixed or determinable based on the payment terms associated with the transaction and free of contingencies or significant uncertainties; and
- collectability is reasonably assured. We assess collectability based on credit analysis and payment history. We require collateral, typically cash, in the normal course of business if customers do not meet its criteria established for offering credit.

#### *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. 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. During 2016, 2015, and 2014, we wrote down \$3.9 million, \$3.0 million, and \$1.5 million, respectively, in inventory determined to be obsolete.

#### *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. We operate as a single segment and reporting unit. 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 significant changes in the manner of our use of the acquired assets or the strategy of our overall business; significant decreases in the market price of the asset; significant negative changes in sales of specific products or services; and significant negative industry or economic trends.

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 sales 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.

At December 30, 2016, the date of our last impairment analysis, the fair value of the reporting unit was substantially in excess of its carrying value.

#### *Share-Based Compensation*

Our share-based compensation was \$3.2 million, \$1.1 million, and \$1.0 million, during 2016, 2015, and 2014, respectively. Compensation expense related to share-based transactions, including employee and non-employee stock options, is measured and recognized in the financial statements based on the fair value of the awards granted. The fair value of each option award is estimated on the grant date using the Black-Scholes option-pricing model and a single option award approach. Share-based compensation expense is recognized, net of forfeitures, over the requisite service periods of the awards, which is generally four years.

Our use of the Black-Scholes option-pricing model requires the input of subjective assumptions, including the fair value of the underlying ordinary shares, the expected term of the option, and the expected volatility of the price of

our ordinary shares, risk-free interest rates, and the expected dividend yield of our ordinary shares. The assumptions used in our option-pricing model represent management's best estimates. These estimates involve inherent uncertainties and the application of management's judgment. If factors change and different assumptions are used, our share-based compensation expense could be materially different in the future.

These assumptions and estimates are as follows:

- *Fair Value of Ordinary Shares*. Because there was no public market for our ordinary shares prior to our initial public offering, our board of directors determined the fair value of our ordinary shares by considering a number of objective and subjective factors, including valuations of comparable companies, operating and financial performance, lack of liquidity of our ordinary shares and general and industry-specific economic outlook, among other factors. In addition, we periodically obtained third party valuations to support the determination by our board of directors of the fair value of our ordinary shares.
- *Risk-Free Interest Rate*. We base the risk-free interest rate used in the Black-Scholes option-pricing model based on the U.S. Treasury rates in effect during the corresponding period of grant.
- *Expected Term*. We use the simplified method to estimate the expected term of option awards.
- *Volatility*. We determine the price volatility factor based on the historical volatilities of our publicly traded peer group as we did not have a trading history for our ordinary shares prior to our initial public offering. Industry peers consist of several public companies in the industries that are similar to us in size, stage of life cycle, and financial leverage. We intend to continue to consistently apply this process using the same or similar public companies until a sufficient amount of historical information regarding the volatility of the price of our own ordinary shares share price becomes available, or unless circumstances change such that the identified companies are no longer similar to us, in which case, more suitable companies whose share prices are publicly available would be utilized in the calculation.
- *Dividend Yield*. The expected dividend assumption is based on our current expectations about our anticipated dividend policy. Consequently, we used an expected dividend yield of zero.

Since our initial public offering, our board of directors determines the fair value of each underlying ordinary share based on the closing price of our ordinary shares as reported on the date of grant.

#### *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 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 business, 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 for 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 positions and changes to reserves that are considered appropriate, as well as the related net interest and penalties.

We file income tax returns in the U.S. federal jurisdiction, various states and various foreign jurisdictions. We are no longer subject to U.S. federal examination for tax years ending before 2013, to state examinations before 2012 or to foreign examinations before 2011. However, to the extent allowed by law, the tax authorities may have the right to examine prior periods where net operating losses or tax credits were generated and carried forward, and make adjustments up to the amount of the net operating losses or credit carryforward. We are currently enjoying a zero rate tax holiday in Singapore that is scheduled to expire at the end of 2021. This tax rate is subject to achieving

certain commitments agreed to with the Economic Development Board of Singapore including investment and employment thresholds. Our tax rate could be significantly affected if we are unable to meet these commitments or if we are unable to favorably renegotiate the commitment requirements. As of December 30, 2016, the Company was in compliance with the commitment requirements, with the exception of the headcount requirement for which the Singapore taxing authority has granted a waiver. The Company intends to be in compliance with the remaining commitment requirements by March 31, 2017.

### **Recent Accounting Pronouncements**

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From time to time, the Financial Accounting Standards Board (“FASB”) or other standards setting bodies issue new accounting pronouncements. Updates to the FASB Accounting Standards Codification are communicated through issuance of an Accounting Standards Update (“ASU”). Unless otherwise discussed, we believe that the impact of recently issued guidance, whether adopted or to be adopted in the future, is not expected to have a material impact on our Consolidated Financial Statements upon adoption.

To understand the impact of recently issued guidance, whether adopted or to be adopted, please review the information provided in Note 1—*Organization and Summary of Significant Accounting Policies* of our consolidated financial statements in Part IV, Item 15 of this report on Form 10-K.

### **Off-Balance Sheet Arrangements**

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As of December 30, 2016, we did not have any relationships with unconsolidated entities or financial partnerships, such as structured finance or special purpose entities, which were established for the purpose of facilitating off-balance sheet arrangements or other purposes.

## **ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

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

### **Foreign Currency Exchange Risk**

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Currently, substantially all of our sales and arrangements with third-party suppliers provide for pricing and payment in U.S. dollars and, therefore, are not subject to material exchange rate fluctuations. As a result, we do not expect foreign currency exchange rate fluctuations to have a material effect on our results of operations. However, 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.

While not currently significant, we do have certain operating expenses that are denominated in currencies of the countries in which our operations are located, and may be subject to fluctuations due to foreign currency exchange rates, particularly the Singapore dollar, Malaysian Ringgit, British Pound and Euro. Fluctuations in foreign currency exchange rates may cause us to recognize transaction gains and losses in our statement of operations. To date, foreign currency transaction gains and losses have not been material to our financial statements, and we have not engaged in any foreign currency hedging transactions.

### **Interest Rate Risk**

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We had total outstanding debt of \$39.8 million as of December 30, 2016, no portion of which was due within 12 months. The outstanding amount of debt reflected in our consolidated financial statements included elsewhere in this report is net of \$1.9 million of debt issuance costs as of December 30, 2016.

We do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate risk exposure. We have not been exposed to, nor do we anticipate being exposed to, material risks due to changes in interest rates. The interest rate on a significant majority of our outstanding debt is variable, which also reduces our exposure to these interest rate risks. A hypothetical 10% change in interest rates during any of the periods presented would not have had a material impact on our financial statements.

## **ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

The financial statements and supplementary financial information required to be filed under this Item 8 are presented beginning on page F-1 in Part IV, Item 15 of this annual report on Form 10-K and are incorporated herein by reference.

## **ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

None.

## **ITEM 9A. CONTROLS AND PROCEDURES**

### **Evaluation of Disclosure Controls and Procedures**

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As required by Rule 13a-15(b) under the Exchange Act, we carried out an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer, or CEO, and Chief Financial Officer, or CFO, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this report. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. Based upon their evaluation, our CEO and CFO concluded that our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the applicable rules and forms, and that it is accumulated and communicated to our management, including our CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

### **Management's Report on Internal Control Over Financial Reporting**

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This annual report on Form 10-K does not include a report of management's assessment regarding internal control over financial reporting or an attestation report of our independent registered public accounting firm due to a transition period established by the rules of the SEC for newly public companies.

### **Changes in Internal Control Over Financial Reporting**

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There has been no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended December 30, 2016 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

## **ITEM 9B. OTHER INFORMATION**

None.

## **PART III**

### **ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

The information required by this item is incorporated by reference to our Proxy Statement for our 2017 General Meeting to be filed with the SEC within 120 days after the close of the year ended December 30, 2016.

#### *Code of Conduct*

The Company has adopted a code of business ethics and conduct (the “Code of Conduct”) that applies to all employees, officers and directors, including the principal executive officer, principal financial officer and principal accounting officer. The Code of Conduct is available on the Company’s website at [www.ichorsystems.com](http://www.ichorsystems.com) under the Investor Relations tab. The Company intends to post on its website all disclosures that are required by law or NASDAQ listing rules regarding any amendment to, or a waiver of, any provision of the Code of Conduct for the principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions.

### **ITEM 11. EXECUTIVE COMPENSATION**

The information required by this item is incorporated by reference to our Proxy Statement for our 2017 General Meeting to be filed with the SEC within 120 days after the close of the year ended December 30, 2016.

### **ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS**

The information required by this item is incorporated by reference to our Proxy Statement for our 2017 General Meeting to be filed with the SEC within 120 days after the close of the year ended December 30, 2016.

### **ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**

The information required by this item is incorporated by reference to our Proxy Statement for our 2017 General Meeting to be filed with the SEC within 120 days after the close of the year ended December 30, 2016.

### **ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES**

The information required by this item is incorporated by reference to our Proxy Statement for our 2017 General Meeting to be filed with the SEC within 120 days after the close of the year ended December 30, 2016.

## PART IV

### ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- (a) The following documents are filed as a part of this report:

(1) Financial Statements.

The following Consolidated Financial Statements are filed as part of this report under Item 8 “Financial Statements and Supplementary Data.”

Report of Independent Registered Public Accounting Firm	F-1
Consolidated Balance Sheets	F-2
Consolidated Statements of Operations	F-3
Consolidated Statements of Shareholders’ Equity	F-4
Consolidated Statements of Cash Flows	F-5
Notes to Consolidated Financial Statements	F-6

- (2) Exhibits. Exhibits are listed on the Exhibit Index at the end of this report.

### ITEM 16. FORM 10-K SUMMARY

Not applicable.

**Report of Independent Registered Public Accounting Firm**

The Board of Directors and Shareholders  
Ichor Holdings, Ltd.:

We have audited the accompanying consolidated balance sheets of Ichor Holdings, Ltd. and its subsidiaries as of December 30, 2016 and December 25, 2015, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the years in the three-year period ended December 30, 2016. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements 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 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 audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Ichor Holdings, Ltd. and its subsidiaries as of December 30, 2016 and December 25, 2015, and the results of their operations and their cash flows for each of the years in the three-year period ended December 30, 2016, in conformity with U.S. generally accepted accounting principles.

/s/ KPMG LLP

Portland, Oregon

March 28, 2017

**ICHOR HOLDINGS, LTD.**  
**Consolidated Balance Sheets**  
*(in thousands, except share and per share data)*

	<b>December 30, 2016</b>	<b>December 25, 2015</b>
<b>Assets</b>		
Current assets:		
Cash	\$ 50,854	\$ 24,188
Restricted cash	1,794	-
Accounts receivable, net	26,401	12,394
Inventories	70,881	31,287
Prepaid expenses and other current assets	7,061	3,924
Current assets from discontinued operations	99	16,539
Total current assets	157,090	88,332
Property and equipment, net	12,018	7,482
Other noncurrent assets	3,574	246
Deferred tax assets	570	296
Intangible assets, net	32,146	31,131
Goodwill	77,093	70,015
Non-current assets from discontinued operations	-	521
Total assets	\$ 282,491	\$ 198,023
<b>Liabilities and Shareholders' Equity</b>		
Current liabilities:		
Accounts payable	88,531	42,027
Accrued liabilities	6,554	3,951
Current portion of long-term debt	-	4,550
Customer deposits	-	26
Other current liabilities	5,421	3,063
Current liabilities from discontinued operations	564	9,855
Total current liabilities	101,070	63,472
Long-term debt, net of current portion	37,944	58,038
Deferred tax liabilities	606	495
Other non-current liabilities	1,173	1,254
Non-current liabilities from discontinued operations	39	86
Total liabilities	\$ 140,832	\$ 123,345
Shareholders' equity		
Preferred shares (\$0.0001 par value; 20,000,000 and 150,000,000 shares authorized, respectively; zero and 17,722,808 shares issued and outstanding, respectively)	-	142,728
Ordinary shares (\$0.0001 par value; 200,000,000 and 250,000,000 shares authorized, respectively; 23,857,381 and 65,409 shares issued and outstanding, respectively)	2	-
Additional paid in capital	196,049	3,004
Accumulated deficit	(54,392)	(71,054)
Total shareholders' equity	141,659	74,678
Total liabilities and shareholders' equity	\$ 282,491	\$ 198,023

**ICHOR HOLDINGS, LTD.**  
**Consolidated Statements of Operations**  
*(in thousands, except share and per share data)*

	December 30, 2016	December 25, 2015	December 26, 2014
Net sales	\$ 405,747	\$ 290,641	\$ 249,087
Cost of sales	340,352	242,087	212,747
Gross profit	<u>65,395</u>	<u>48,554</u>	<u>36,340</u>
Operating expenses:			
Research and development	6,383	4,813	3,915
Selling, general, and administrative	28,126	24,729	22,465
Amortization of intangible assets	<u>7,015</u>	<u>6,411</u>	<u>6,411</u>
Total operating expenses	<u>41,524</u>	<u>35,953</u>	<u>32,791</u>
Operating income	23,871	12,601	3,549
Interest expense, net	4,370	3,831	3,118
Other expense (income), net	<u>(629)</u>	<u>(46)</u>	<u>253</u>
Income from continuing operations before income taxes	20,130	8,816	178
Income tax benefit from continuing operations	<u>(649)</u>	<u>(3,991)</u>	<u>(5,604)</u>
Net income from continuing operations	<u>20,779</u>	<u>12,807</u>	<u>5,782</u>
Discontinued operations:			
Income (loss) from discontinued operations before taxes	(4,077)	(7,406)	132
Income tax expense (benefit) from discontinued operations	<u>40</u>	<u>(225)</u>	<u>(254)</u>
Net income (loss) from discontinued operations	<u>(4,117)</u>	<u>(7,181)</u>	<u>386</u>
Net income	16,662	5,626	6,168
Less: Preferred share dividend	-	(22,127)	-
Less: Undistributed earnings attributable to preferred shareholders	<u>(15,284)</u>	<u>-</u>	<u>(6,165)</u>
Net income (loss) attributable to ordinary shareholders	<u>\$ 1,378</u>	<u>\$ (16,501)</u>	<u>\$ 3</u>
Net income (loss) per share from continuing operations attributable to ordinary shareholders:			
Basic	\$ 1.14	\$ (292.39)	\$ 0.36
Diluted	\$ 0.87	\$ (292.39)	\$ 0.16
Net income (loss) per share attributable to ordinary shareholders:			
Basic	\$ 0.92	\$ (517.68)	\$ 0.36
Diluted	\$ 0.70	\$ (517.68)	\$ 0.16
Shares used to compute net income (loss) from continuing operations per share attributable to ordinary shareholders:			
Basic	1,503,296	31,875	8,402
Diluted	1,967,926	31,875	18,422
Shares used to compute net income (loss) per share attributable to ordinary shareholders:			
Basic	1,503,296	31,875	8,402
Diluted	1,967,926	31,875	18,422

**ICHOR HOLDINGS, LTD.**  
**Consolidated Statements of Shareholders' Equity**  
*(in thousands, except share data)*

	Preferred Shares		Ordinary Shares		Additional Paid-In Capital	Accumulated Deficit	Total Shareholders' Equity
	Shares	Amount	Shares	Amount			
Balance at December 27, 2013	17,722,808	\$ 142,728	-	-	\$ 856	\$ (60,721)	\$ 82,863
Capital contributions	-	-	-	-	19	-	19
Share-based compensation expense	-	-	-	-	1,011	-	1,011
Vesting of restricted shares	-	-	22,377	-	-	-	-
Net income	-	-	-	-	-	6,168	6,168
Balance at December 26, 2014	<u>17,722,808</u>	<u>142,728</u>	<u>22,377</u>	<u>-</u>	<u>1,886</u>	<u>(54,553)</u>	<u>90,061</u>
Share-based compensation expense	-	-	-	-	1,118	-	1,118
Vesting of restricted shares	-	-	43,032	-	-	-	-
Dividend to shareholders	-	-	-	-	-	(22,127)	(22,127)
Net income	-	-	-	-	-	5,626	5,626
Balance at December 25, 2015	<u>17,722,808</u>	<u>142,728</u>	<u>65,409</u>	<u>-</u>	<u>3,004</u>	<u>(71,054)</u>	<u>74,678</u>
Ordinary shares issued, net of transaction costs	-	-	5,877,778	-	47,103	-	47,103
Conversion of preferred shares to ordinary shares	(17,722,808)	(142,728)	17,722,808	2	142,726	-	-
Share-based compensation expense	-	-	-	-	3,216	-	3,216
Vesting of restricted shares	-	-	191,386	-	-	-	-
Net income	-	-	-	-	-	16,662	16,662
Balance at December 30, 2016	<u>-</u>	<u>\$ -</u>	<u>23,857,381</u>	<u>\$ 2</u>	<u>\$ 196,049</u>	<u>\$ (54,392)</u>	<u>\$ 141,659</u>

**ICHOR HOLDINGS, LTD.**  
**Consolidated Statements of Cash Flows**  
*(in thousands)*

	<b>Year Ended</b>		
	<b>December 30, 2016</b>	<b>December 25, 2015</b>	<b>December 26, 2014</b>
<b>Cash flows from operating activities:</b>			
Net income	\$ 16,662	\$ 5,626	\$ 6,168
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	9,497	9,936	9,628
Impairment of intangible assets	-	1,825	-
Impairment of property, plant, and equipment	-	1,335	-
Share-based compensation	3,216	1,118	1,011
Deferred income taxes	(2,429)	(4,927)	(6,195)
Amortization of debt issuance costs	527	834	309
Changes in operating assets and liabilities, net of assets acquired:			
Accounts receivable, net	(9,007)	6,333	959
Inventories	(23,719)	9,110	(12,125)
Prepaid expenses and other assets	(3,381)	403	(41)
Accounts payable	36,761	(1,676)	8,749
Customer deposits	(4,234)	(3,451)	(202)
Accrued liabilities	1,612	169	213
Other liabilities	2,225	55	(383)
Net cash provided by operating activities	<u>27,730</u>	<u>26,690</u>	<u>8,091</u>
<b>Cash flows from investing activities:</b>			
Capital expenditures	(4,268)	(1,367)	(3,468)
Cash paid for acquisitions, net of cash acquired	(17,407)	-	-
Proceeds from sale of intangible assets	230	-	-
Proceeds from sale of property, plant, and equipment	243	-	-
Net cash used in investing activities	<u>(21,202)</u>	<u>(1,367)</u>	<u>(3,468)</u>
<b>Cash flows from financing activities:</b>			
Issuance of ordinary shares, net of fees	47,103	-	-
Net proceeds from capital contributions	-	-	19
Dividends to shareholders	-	(22,127)	-
Deferred financing fees	-	(2,631)	-
Borrowings under revolving commitment	12,000	24,000	9,000
Repayments on revolving commitment	(22,000)	(26,000)	(9,000)
Borrowing on long-term debt	15,000	55,000	-
Repayments on long-term debt	(30,171)	(43,750)	(3,250)
Net cash provided by (used in) financing activities	<u>21,932</u>	<u>(15,508)</u>	<u>(3,231)</u>
Net increase in cash	28,460	9,815	1,392
Cash and restricted cash at beginning of year	24,188	14,373	12,981
Cash and restricted cash at end of period	<u>\$ 52,648</u>	<u>\$ 24,188</u>	<u>\$ 14,373</u>
<b>Supplemental disclosures of cash flow information:</b>			
Cash paid during the period for interest	\$ 3,686	\$ 2,632	\$ 2,663
Cash paid during the period for taxes	\$ 103	\$ 496	\$ 611
<b>Supplemental disclosures of non-cash activities:</b>			
Capital expenditures included in accounts payable	\$ 1,174	\$ 10	\$ 86

## **Note 1 – Organization and Summary of Significant Accounting Policies**

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### *Organization and Operations of the Company*

Ichor Holdings, Ltd. and Subsidiaries (the Company) designs, develops, manufactures and distributes gas and liquid delivery subsystems and complete tool solutions purchased by capital equipment manufacturers for use in the semiconductor markets. The Company is headquartered in Fremont, California and has operations in the United States, United Kingdom, Singapore, and Malaysia.

On December 30, 2011, Ichor Systems Holdings, LLC (Ichor Systems Holdings) consummated a sales transaction with Icicle Acquisition Holdings, LLC (Icicle), a Delaware limited liability company. Shortly after consummation of the sale transaction, Icicle Acquisition Holdings, LLC changed its name to Ichor Holdings, LLC (Ichor Holdings).

In March 2012, Ichor Holdings completed a reorganization of its legal structure, forming Ichor Holdings, Ltd., a Cayman Islands entity. Ichor Holdings, Ltd. is now the reporting entity and the ultimate parent company of the operating entities.

In January 2016, the Company decided to shut its Kingston, New York facility which was the primary facility for the Precision Flow Technologies, Inc. subsidiary. In May 2016, the Company ceased operations in this facility and ended the relationship with the customer it served in this location. The Company's consolidated financial statements and accompanying notes for current and prior periods have been retroactively adjusted to present the results of operations of the Precision Flow Technologies, Inc. subsidiary as discontinued operations. In addition, the assets and liabilities to be disposed of have been treated and classified as discontinued operations. For more information on discontinued operations see Note 15—*Discontinued Operations*.

### *Basis of Presentation*

These consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States (“GAAP”). All intercompany balances and transactions have been eliminated upon consolidation. All financial figures presented in the notes to consolidated financial statements are in thousands, except share, per share, and percentage figures.

These consolidated financial statements include the following wholly owned subsidiaries of Ichor Holdings, Ltd.:

- FP-Ichor Ltd. (Cayman)
- Icicle Acquisition Holding Coöperatief U.A.
- Icicle Acquisition Holding B.V.
- Ichor Holdings Ltd (Scotland).
- Ichor Systems Ltd. (Scotland)
- Ichor Holdings, LLC
- Ichor Systems, Inc.
- Ichor Systems Malaysia Sdn Bhd
- Ichor Systems Singapore Pte. Ltd.
- Precision Flow Technologies, Inc.
- Ajax-United Patterns & Molds, Inc.

#### *Public Offering and Reverse Stock Split*

On December 14, 2016, the Company completed an initial public offering (“IPO”) of 5,877,778 ordinary shares at a price to the public of \$9.00 per share. The Company received net proceeds from the offering of \$47,103 after offering fees and expenses. The net proceeds were used to repay \$40,000 of the Company’s loans outstanding under the Company’s Credit Facilities.

Immediately prior to the IPO, the Company amended and restated its memorandum of association to reflect the conversion of all outstanding preferred shares to 17,722,808 ordinary shares. As part of the IPO, the Company authorized 200,000,000 ordinary shares at \$0.0001 par value per share. The Company also authorized the issuance of 20,000,000 preferred shares at \$0.0001 par value per share, with no shares outstanding.

In connection with the IPO, the Company amended its memorandum of association to effect an 8.053363 for 1 reverse stock split of its common stock. Concurrent with the reverse stock split, the Company adjusted the number of shares subject to, and the exercise price of, its outstanding stock options and restricted shares under the Company’s 2012 Amended Management Incentive Plan (the “2012 Plan”) so that the holders of the options were in the same economic position both before and after the stock split. As a result of the reverse stock split, all previously reported share and per share amounts, including options in these consolidated financial statements and accompanying notes, have been retrospectively restated to reflect the reverse stock split.

#### *Year End*

We use a 52 or 53 week fiscal year ending on the last Friday in December. The years ended December 30, 2016, December 25, 2015, and December 26, 2014 were 53 weeks, 52 weeks, and 52 weeks, respectively. All references to 2016, 2015, and 2014 are references to fiscal years unless explicitly stated otherwise.

#### *Use of Estimates*

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting periods presented. The Company bases its estimates and judgments on historical experience and on various other assumptions that it believes are reasonable under the circumstances. Actual results could differ from the estimates made by management. Significant estimates include the fair value of assets and liabilities acquired in acquisitions, estimated useful lives for long-lived assets, allowance for doubtful accounts, inventory valuation, uncertain tax positions, fair value assigned to stock options granted, and impairment analysis for both definite-lived intangible assets and goodwill.

#### *Revenue Recognition*

The Company recognizes revenue in accordance with Accounting Standards Codification (ASC) Topic 605, *Revenue Recognition*. Product sales are recognized when there is persuasive evidence of an arrangement, product delivery has occurred, the sales price is fixed or determinable, and collectability is reasonably assured. Product sales typically are recognized at the time of shipment or when the customer takes title of the goods. All amounts billed to a customer related to shipping and handling are classified as net sales, while all costs incurred by the Company for shipping and handling are classified as cost of goods sold.

#### *Concentration of Credit Risk*

Financial instruments that subject the Company to credit risk consist of accounts receivable, accounts payable and long-term debt.

The Company derived approximately 97%, 95%, and 96% of its sales from continuing operations from two customers during 2016, 2015, and 2014, respectively. At December 30, 2016 and December 25, 2015, those

customers represented, in the aggregate, approximately 83% and 79%, respectively, of the accounts receivable balance.

Accounts receivable are carried at invoice price less an estimate for doubtful accounts. Payment terms vary by customer, but generally are due within 15–60 days. The Company reviews a customer's credit history before extending credit. The Company establishes an allowance for doubtful accounts based upon the credit risk of specific customers, historical trends, and other information. Activity and balances related to the Company's allowance for doubtful accounts is as follows:

	<u>Allowance for doubtful accounts</u>
Balance at December 26, 2014	\$ 385
Charges to costs and expenses	(6)
Write-offs	<u>(256)</u>
Balance at December 25, 2015	123
Charges to costs and expenses	<u>71</u>
Balance at December 30, 2016	<u>\$ 194</u>

The Company requires collateral, typically cash, in the normal course of business if customers do not meet its criteria established for offering credit. If the financial condition of the Company's customers were to deteriorate and result in an impaired ability to make payments, additions to the allowance may be required.

Accounts receivable are written off when deemed uncollectible. Recoveries of accounts receivable previously written off are recorded to income when received.

The Company uses qualified manufacturers to supply many components and subassemblies of its products. The Company obtains the majority of its components from a limited group of suppliers. A majority of the purchased components used in the Company's products are customer specified. An interruption in the supply of a particular component would have a temporary adverse impact on the Company's operating results.

The Company maintains cash balances at both United States-based and foreign-based commercial banks. At various times during the year, cash balances in the United States will exceed amounts that are insured by the Federal Deposit Insurance Corporation (FDIC). The majority of the cash maintained in foreign-based commercial banks is insured by the government where the foreign banking institutions are based. Cash held in foreign-based commercial banks totaled \$14,658 and \$9,494 at December 30, 2016 and December 25, 2015, respectively. No losses have been incurred at December 30, 2016 and December 25, 2015 for the amounts exceeding the insured limits.

#### *Fair Value Measurements*

The Company estimates the fair value of its financial assets and liabilities based upon comparison of such assets and liabilities to the current market values for instruments of a similar nature and degree of risk. The Company utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible. The Company determines fair value based on assumptions that market participants would use in pricing an asset or liability in the principal or most advantageous market. When considering market participant assumptions in fair value measurements, the following fair value hierarchy distinguishes between observable and unobservable inputs, which are categorized in one of the following levels:

- Level 1 Inputs: Unadjusted quoted prices in active markets for identical assets or liabilities accessible to the reporting entity at the measurement date
- Level 2 Inputs: Other than quoted prices included in Level 1 inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the asset or liability
- Level 3 Inputs: Unobservable inputs for the asset or liability used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date

There were no changes to the Company's valuation techniques during 2016. The Company's financial assets and liabilities include cash, accounts receivable, accounts payable, and debt. The Company estimates that the recorded value of its financial assets and liabilities approximates fair value at December 30, 2016 and December 25, 2015.

The Company estimates the value of intangible assets on a nonrecurring basis based on an income approach utilizing discounted cash flows. Under this approach, the Company estimates the future cash flows from its asset groups and discounts the income stream to its present value to arrive at fair value. Future cash flows are based on recently prepared operating forecasts. Operating forecasts and cash flows include, among other things, revenue growth rates that are calculated based on management's forecasted sales projections. A discount rate is utilized to convert the forecasted cash flows to their present value equivalent. The discount rate applied to the future cash flows includes a subject-company risk premium, an equity market risk premium, a beta, and a risk-free rate. As this approach contains unobservable inputs, the measurement of fair value for intangible assets is classified as Level 3.

At December 30, 2016, intangible assets passed the recoverability test resulting in no impairment. At December 25, 2015, certain intangibles assets associated with our Kingston facility did not pass the recoverability test, and the Company recorded an impairment charge of \$1,825. See Note 15—*Discontinued Operations* for additional details on the closure of the Kingston, New York location.

Our goodwill assessment performed in the fourth quarter of 2016 and 2015 did not indicate impairment of goodwill.

#### *Inventories*

Inventories are stated at the lower of cost or market. The majority of inventory values are based upon standard costs that approximate average costs.

The Company analyzes its inventory levels and records a write-down for inventory that has become obsolete, inventory that has a cost basis in excess of its expected net realizable value, and inventory in excess of expected customer demand. Various factors are considered in making this determination, including recent sales history and predicted trends, industry market conditions, and general economic conditions. The Company recorded inventory write-downs of \$3,921, \$3,000, and \$1,511 during 2016, 2015, and 2014, respectively. Included in these write-downs are \$1,999, \$1,506, and \$403, related to the Kingston, New York operation during 2016, 2015, and 2014, respectively.

#### *Property and Equipment*

Property, plant and equipment are stated at cost, less accumulated depreciation. Depreciation is computed using the straight-line method over the following estimated useful lives:

	<b>Estimated useful lives of PP&amp;E</b>
Machinery	5-10 years
Leasehold improvements	Lesser of 15 years of lease term
Computer software, hardware, and equipment	3-5 years
Office furniture, fixtures, and equipment	5-7 years
Vehicles	5 years

Maintenance and repairs that neither add materially to the value of the asset nor appreciably prolong its useful life are charged to expense as incurred. Gains or losses on the disposal of property and equipment are included in selling, general and administrative expenses on the consolidated statements of operations.

### *Long-Lived Assets*

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate, in management's judgment, that the carrying amount of an asset (or asset group) may not be recoverable. In analyzing potential impairments, projections of future cash flows from the asset group are used to estimate fair value. If the sum of the expected future undiscounted cash flows is less than the carrying amount of the asset group, a loss is recognized for the difference between the estimated fair value and the carrying value of the asset group. The projections are based on assumptions, judgments and estimates of revenue growth rates for the related business, anticipated future economic, regulatory and political conditions, the assignment of discount rates relative to risk, and estimates of terminal values.

In connection with the decision to exit the Kingston, New York facility in 2016, as discussed in Note 15—*Discontinued Operations*, the Company performed long-lived asset recoverability tests and it was determined the carrying value of the Systems Integration long-lived assets exceeded the undiscounted cash flows. Accordingly, the Company recorded a write-down to its customer relationships, developed technology, and property and equipment of \$1,260, \$565, and \$1,335, respectively, during 2015, which are included in net income (loss) from discontinued operations on the statements of operations.

### *Other Non-Current Assets*

In conjunction with the acquisition of Ajax, which occurred on April 12, 2016, the Company acquired two investments and a note receivable that were recorded at fair value on the date of acquisition: a cost method investment in a private company, CHawk Technology International, Inc., of approximately \$1,490, an equity method investment in a private company, Ajax Foresight Global Manufacturing Sdn. Bhd. ("AFGM"), of \$510, and a note receivable of \$948 due from AFGM. The Company accounts for these investments on the cost and equity method, respectively, as the Company does not control either entity. The Company recorded \$240 in equity in earnings of AFGM in 2016, which is included in other expense (income), net on the statements of operations. At December 30, 2016 AFGM had a carrying value of \$750. At the end of each reporting period the Company determines whether events or circumstances have occurred that are likely to have a significant adverse effect on the fair value of these investments and note receivable. At December 30, 2016, no such circumstances have been identified.

### *Intangible Assets*

The Company accounts for its intangible assets that have a definite life and are amortized on a basis consistent with their expected cash flows over the following estimated useful lives:

	<u>Estimated useful lives of intangibles</u>
Trademarks	10 years
Customer relationships	10 years
Developed technology	7 years

### *Goodwill*

Goodwill represents the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized. The Company reviews goodwill for impairment annually and whenever events or changes in circumstances indicate the carrying value of goodwill may not be recoverable. We first make a qualitative assessment of whether it is more likely than not that a reporting unit's fair value is less than its carrying amount before applying the two-step goodwill impairment test. Under the first step, the fair value of the reporting unit is compared to its carrying value, and, if an indication of goodwill impairment exists in the reporting unit, the enterprise must perform step two of the impairment test (measurement). Under step two, an impairment loss is recognized for any excess of the carrying amount of the reporting unit's goodwill as determined by allocating the fair value of the reporting unit in a manner similar to a purchase price allocation. The residual fair value after this allocation is the implied fair value of the reporting unit goodwill. If the fair value of the reporting unit exceeds its carrying value, step two does not need to be performed. The implied fair value of goodwill is

determined by allocating the fair value of the reporting unit in a manner similar to a purchase price allocation and the residual fair value after this allocation is the implied fair value of the reporting unit goodwill. Fair value of the reporting unit is determined using a discounted cash flow analysis. If the fair value of the reporting unit exceeds its carrying value, step two does not need to be performed. For purposes of testing goodwill for impairment, the Company has concluded it operates in one reporting unit.

The Company performed a qualitative goodwill assessment in the fourth quarter of 2016 and 2015. Our goodwill assessment performed in 2016 and 2015 indicated that it was more likely than not the fair value of goodwill exceeded the carrying value.

#### *Research and Development Costs*

Research and development costs are expensed as incurred.

#### *Warranty Costs*

The Company's product warranties vary by customer, but generally extend for a period of one to two years from the date of sale. Provisions for warranties are determined primarily based on historical warranty cost as a percentage of sales, adjusted for specific problems that may arise. Historical product warranty expense has not been significant.

#### *Advertising Costs*

The Company charges advertising costs to operations as incurred. Advertising costs were not significant and are included in selling, general and administrative expenses in the accompanying consolidated statements of operations.

#### *Self-Insurance*

The Company sponsors a self-insured medical plan for employees and their dependents. A third party is engaged to assist in estimating the loss exposure related to the self-retained portion of the risk associated with this insurance.

#### *Special Bonus*

On August 11, 2015, the Board of Directors instituted a special bonus to certain members of management totaling \$3,110, of which \$1,761, \$205, and \$132 was earned and recorded as a component of selling, general, and administrative, research and development, and cost of sales, respectively, in 2015. The remaining \$1,012 could be earned by certain members of management through the fourth quarter of 2018 based on their continued employment. In December 2016 the Board of Directors approved that all remaining special bonus was earned and to be paid in December 2016. During 2016, the Company expensed \$621 related to the special bonus, including the amount earned in the fourth quarter of 2016. The remaining amount of the bonus was forfeited due to employee terminations. Management does not expect to pay bonuses of this nature in future periods.

#### *Share-Based Payments*

The Company uses the Black-Scholes option-pricing model to value the awards on the date of grant. The Company uses the simplified method to estimate the expected term of its share-based awards for all periods, as the Company did not have sufficient history to estimate the weighted average expected term. The risk-free interest rate is based on the U.S. Treasury rates in effect during the corresponding period of grant. Estimated volatility for 2016, 2015, and 2014 is based on historical volatility of similar entities whose share prices are publicly traded.

#### *Income Taxes*

The Company recognizes deferred income taxes using the asset and liability method of accounting for income taxes. Under the asset and liability method, deferred income taxes are recognized for differences between the financial reporting and tax bases of assets and liabilities at enacted statutory tax rates in effect for the years in which the

differences are expected to reverse. The effect on deferred taxes of a change in tax rates is recognized in income in the period that includes the enactment date. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. Income tax expense for the current year differs from the statutory rate primarily as a result of an increase in the valuation allowance in the U.S. and the impact of foreign operations, including withholding taxes, as well as a discrete tax benefit of approximately \$2,271 that was recorded in association with certain tax attributes from the Ajax acquisition (see Note 2 – *Ajax-United Patterns & Molds, Inc. Acquisition* ).

The Company files federal income tax returns, foreign income tax returns, as well as multiple state and local tax returns. The Company is no longer subject to US Federal examination for tax years ending before 2013, to state examinations before 2012, or to foreign examinations before 2011. However, to the extent allowed by law, the tax authorities may have the right to examine prior periods where net operating losses or tax credits were generated and carried forward, and make adjustments up to the amount of the net operating losses or credit carryforward.

When tax returns are filed, it is highly certain that some positions taken would be sustained upon examination by the taxing authorities, while others may be subject to uncertainty about the merits of the position taken or the amount of the position that would be ultimately sustained. The benefit of a tax position is recognized in the consolidated financial statements in the period during which, based on all available evidence, management believes it is more likely than not that the position will be sustained upon examination, including the resolution of appeals or litigation processes, if any. Tax positions taken are not offset or aggregated with other positions. Tax positions that meet the more-likely-than-not recognition threshold are measured as the largest amount of tax benefit that is more than 50% likely of being realized upon settlement with the applicable taxing authority. The portion of the benefits associated with tax positions taken that exceeds the amount measured as described above is reflected as a liability for unrecognized tax benefits in the Company's consolidated balance sheets along with any associated interest and penalties that would be payable to the taxing authorities upon examination. The Company recognizes interest and penalties as a component of income tax benefit.

#### *Foreign Operations*

The functional currency of the Company's international subsidiaries located in the United Kingdom, Singapore, and Malaysia, is the U.S. dollar. Transactions denominated in currencies other than the functional currency generate foreign exchange gains and losses that are included in other expense (income), net on the accompanying consolidated statements of operations. Substantially, all of the Company's sales and agreements with third-party suppliers provide for pricing and payments in U.S. dollars and, therefore, are not subject to material exchange rate fluctuations. Foreign operations consist of sales of \$241,669, \$173,735, and \$143,446, during 2016, 2015, and 2014, respectively. Assets of foreign operations totaled \$90,374 and \$52,852 at December 30, 2016 and December 25, 2015, respectively.

#### *Accounting Pronouncements Recently Adopted*

In June 2014, the FASB issued Accounting Standards Update ("ASU") No. 2014-12, *Compensation—Stock Compensation (Topic 718): Accounting for Share-Based Payments When the Terms of an Award Provide That a Performance Target Could Be Achieved after the Requisite Service Period* ("ASU 2014-12"). The update addresses accounting for share-based payments when the terms of an award provide that a performance target could be achieved after the requisite service period. ASU 2014-12 indicates that, in such situations, the performance target should be treated as a performance condition and, accordingly, the performance target should not be reflected in estimating the grant-date fair value of the award. Instead, compensation cost should be recognized in the period in which it becomes probable that the performance target will be achieved. ASU 2014-12 is effective for annual periods and interim periods beginning after December 15, 2015. We adopted ASU 2014-12 on December 26, 2015, which did not have an impact on previously reported amounts or significant impact on its ongoing financial reporting.

In April 2015, the FASB issued ASU No. 2015-03, *Interest—Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs* ("ASU 2015-03"). The update requires debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of the related debt liability instead of being presented as an asset. Debt disclosures will include the face amount of the debt liability and the effective interest rate. The update requires retrospective application and represents a change in

accounting principle. The update is effective for fiscal years beginning after December 15, 2015. We adopted ASU 2015-03 on December 26, 2015 and retroactively recorded debt issuance costs as a reduction to long-term debt for all periods presented.

In July 2015, the FASB issued ASU No. 2015-11, *Inventory (Topic 330): Simplifying the Measurement of Inventory* (“ASU 2015-11”), which for entities that do not measure inventory using the last-in, first-out (LIFO) or retail inventory method, changes the measurement principle for inventory from the lower of cost or market to lower of cost and net realizable value. The ASU also eliminates the requirement for these entities to consider replacement cost or net realizable value less an approximately normal profit margin when measuring inventory. ASU 2015-11 is effective for fiscal years beginning after December 15, 2016, with early adoption permitted as of the beginning of an interim or annual period. The Company adopted ASU 2015-11 on December 26, 2015, which did not have an impact on previously reported amounts or significant impact on its ongoing financial reporting.

In September 2015, the FASB issued ASU 2015-16, *Business Combinations (Topic 805): Simplifying the Accounting for Measurement-Period Adjustments* (“ASU 2015-16”). Currently, an acquiring entity is required to retrospectively adjust the balance sheet amounts of the acquiree recognized at the acquisition date with a corresponding adjustment to goodwill as a result of changes made to the balance sheet amounts of the acquiree. The measurement period is the period after the acquisition date during which the acquirer may adjust the balance sheet amounts recognized for a business combination (generally up to one year from the date of acquisition). The changes eliminate the requirement to make such retrospective adjustments, and, instead require the acquiring entity to record these adjustments in the reporting period they are determined. The new standard is effective for periods beginning after December 15, 2015. We adopted ASU 2015-16 on December 26, 2015 on a prospective basis for any changes to provisional amounts after the acquisition date. In the third quarter of 2016, we recognized certain measurement period adjustments as disclosed in Note 2—*Ajax-United Patterns & Molds, Inc. Acquisition* to our consolidated financial statements.

In November 2015, the FASB issued ASU No. 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes* (“ASU 2015-17”), which requires entities with a classified balance sheet to present all deferred tax assets and liabilities as noncurrent. ASU 2015-17 is effective for fiscal years beginning after December 15, 2017, with early adoption permitted. We adopted ASU 2015-17 on a retrospective basis in the fourth quarter of 2015. Accordingly, we reclassified current deferred taxes to noncurrent on our consolidated balance sheets.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* (“ASU 2016-09”). This amendment simplifies 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. This guidance is effective for interim and annual reporting periods beginning after December 15, 2016. The Company adopted ASU 2016-09 in 2016, which did not have an impact on previously reported amounts or significant impact on its ongoing financial reporting.

#### *Accounting Pronouncements Recently Issued*

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)* (“ASU 2014-09”), which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. ASU 2014-09 outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance. The ASU is effective for reporting periods beginning after December 15, 2018 for the Company, with early adoption permitted for reporting periods beginning after December 15, 2016. The Company is currently evaluating the impact of this accounting standard.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)* (“ASU 2016-02”). This update establishes a comprehensive lease standard for all industries. The new standard requires lessees to recognize a right-of-use asset and a lease liability for virtually all leases, other than leases that meet the definition of short term leases. The standard is effective for interim and annual reporting periods beginning after December 15, 2018 (December 31, 2019 for non-public entities). The Company is currently evaluating the impact of this accounting standard.

## Note 2 – Ajax-United Patterns & Molds, Inc. Acquisition

In April 2016, the Company completed a stock purchase agreement of Ajax-United Patterns & Molds, Inc. (“Ajax”), a manufacturer of complex plastic and metal products used in the medical, biomedical, semiconductor, data communication and food processing equipment industries, for \$17,594 with an additional potential earn-out payment of \$1,500 due in March 2017 if certain financial targets are met. The Company does not believe these financial targets will be met. Pursuant to the purchase agreement, \$1,300 was placed in escrow for working capital adjustments and is reflected in the accompanying consolidated balance sheet at December 30, 2016 as restricted cash. The Company has submitted working capital claims to the Ajax sellers and believes a substantial portion of the amount in escrow will be returned to the Company.

The total preliminary purchase price of \$17,594 was allocated to the underlying assets acquired and liabilities assumed based on their fair values. The allocation of purchase price to goodwill and identifiable assets and liabilities is subject to the final determination of purchase price, as the purchase price and asset values are subject to valuation and contractual adjustments of working capital, which has not been settled.

The following table presents the preliminary allocation and measurement period adjustments of the purchase price of \$17,594 to the assets acquired and liabilities assumed based on their fair values. Measurement period adjustments are primarily related to finalization of the valuation of deferred tax liabilities and intangible assets acquired:

	Preliminary Allocation April 12, 2016	Measurement Period Adjustment	Preliminary Allocation December 30, 2016
Cash acquired	\$ 187	\$ —	\$ 187
Accounts receivable, net	1,245	5	1,250
Inventories	3,236	—	3,236
Prepaid expenses and other current assets	77	—	77
Property and equipment, net	1,545	—	1,545
Other noncurrent assets	2,948	—	2,948
Intangible assets, net	8,130	(100)	8,030
Goodwill	4,629	2,449	7,078
Accounts payable and other accrued liabilities	(4,403)	(83)	(4,486)
Deferred tax liabilities	—	(2,271)	(2,271)
Total acquisition consideration	<u>\$ 17,594</u>	<u>\$ —</u>	<u>\$ 17,594</u>

The acquisition is expected to allow us to manufacture and assemble the complex plastic and metal products required by the medical, biomedical, semiconductor and data communication equipment industries. The Company has preliminarily allocated approximately \$7,078 of the purchase price to goodwill. Goodwill was primarily attributed to assembled workforce and expected synergies resulting from the acquisition. Goodwill is not deductible for tax purposes.

As a result of the acquisition, the Company has preliminarily recorded approximately \$10,516 of net identifiable assets including \$8,030 of identifiable intangible assets and \$6,757 of identifiable liabilities. The acquired intangible assets consist primarily of \$8,000 of customer relationship and will be amortized over their useful lives of ten years.

In 2016, the Company also incurred approximately \$1,514 in acquisition-related transaction costs which are included in selling, service and administration expenses in the Consolidated Statements of Operations. The operating results of this acquisition are included in the Company’s results of operations since the date of acquisition. Since the date of acquisition, Ajax contributed \$19,976 in sales and \$575 of operating income. Pro forma financial information has not been provided for the acquisition of Ajax as it was not material to the Company’s current year operations and overall financial position.

### Note 3 – Inventory

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Inventory consists of the following:

	December 30, 2016	December 25, 2015
Raw materials	\$ 46,889	\$ 33,481
Work in process	22,649	11,958
Finished goods	9,423	4,619
Excess and obsolete adjustment	<u>(8,080)</u>	<u>(6,132)</u>
	<u><u>\$ 70,881</u></u>	<u><u>\$ 43,926</u></u>

The following table presents changes to the Company's excess and obsolete adjustment:

	<u>Excess and obsolete adjustment</u>
Balance at December 27, 2013	\$ (3,035)
Charge to cost of sales	(1,511)
Disposition of inventory	<u>479</u>
Balance at December 26, 2014	(4,067)
Charge to cost of sales	(3,000)
Disposition of inventory	<u>935</u>
Balance at December 25, 2015	(6,132)
Charge to cost of sales	(3,921)
Disposition of inventory	<u>1,973</u>
Balance at December 30, 2016	<u><u>\$ (8,080)</u></u>

### Note 4 – Property and Equipment

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Property and equipment consist of the following:

	December 30, 2016	December 25, 2015
Machinery	\$ 5,243	\$ 3,693
Leasehold improvements	11,276	8,607
Computer software, hardware and equipment	2,848	2,313
Office furniture, fixtures and equipment	220	216
Vehicles	10	8
Construction-in-process	<u>2,069</u>	<u>179</u>
	<u>21,666</u>	<u>15,016</u>
Less accumulated depreciation	(9,648)	(7,251)
Total property and equipment	<u><u>\$ 12,018</u></u>	<u><u>\$ 7,765</u></u>

Depreciation expense for 2016, 2015, and 2014 was \$2,482, \$3,050, and \$2,742, respectively.

During 2016, we sold property and equipment related to discontinued operations for proceeds of \$243.

## Note 5 – Goodwill and Intangible Assets

Definite-lived intangible assets consist of the following:

	December 30, 2016				Weighted average remaining useful life
	Gross value	Accumulated amortization	Accumulated impairment charges	Carrying amount	
Trademarks	\$ 9,690	\$ (4,845)	\$ —	\$ 4,845	5.0 years
Customer relationships	50,557	(17,150)	(11,076)	22,331	6.5 years
Developed technology	28,100	(14,975)	(8,155)	4,970	2.0 years
Backlog	30	(30)	—	—	0.0 years
Total intangible assets	<u>\$ 88,377</u>	<u>\$ (37,000)</u>	<u>\$ (19,231)</u>	<u>\$ 32,146</u>	

	December 25, 2015				Weighted average remaining useful life
	Gross value	Accumulated amortization	Accumulated impairment charges	Carrying amount	
Trademarks	\$ 9,690	\$ (3,876)	\$ —	\$ 5,814	6.0 years
Customer relationships	42,557	(13,618)	(11,076)	17,863	6.0 years
Developed technology	28,100	(12,261)	(8,155)	7,684	3.0 years
Total intangible assets	<u>\$ 80,347</u>	<u>\$ (29,755)</u>	<u>\$ (19,231)</u>	<u>\$ 31,361</u>	

Amortization expense totaled \$7,015, \$6,886, and \$6,886 during 2016, 2015, and 2014, respectively.

During 2016, we sold intangible assets related to discontinued operations for proceeds of \$230.

Future projected annual amortization expense consists of the following:

	Future amortization expense
2017	\$ 7,211
2018	7,211
2019	4,727
2020	4,727
2021	4,727
Thereafter	3,543
	<u>\$ 32,146</u>

The following tables present the changes to goodwill:

	Goodwill
Balance at December 26, 2014	\$ 70,015
Acquisitions	—
Impairment	—
Balance at December 25, 2015	70,015
Acquisitions	7,078
Impairment	—
Balance at December 30, 2016	<u>\$ 77,093</u>

## **Note 6 – Commitments and Contingencies**

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### *Operating Leases*

The Company leases offices under various operating leases expiring through 2024. The Company is responsible for utilities and its proportionate share of operating expenses under the facilities' leases. The Company recognizes escalating lease payments on a straight-line basis over the lease term. Rent expense for 2016, 2015, and 2014 was \$2,942, \$2,988, and \$3,146, respectively. Future minimum lease payments for non-cancelable operating leases as of December 30, 2016 are as follows:

	<u>Future minimum lease payments</u>
2017	\$ 3,813
2018	1,649
2019	1,017
2020	967
2021	478
Thereafter	653
	<u>\$ 8,577</u>

### *Litigation*

The Company is periodically involved in legal actions and claims that arise as a result of events that occur in the normal course of operations. The ultimate resolution of these actions is not expected to have a material adverse effect on the Company's financial position or results of operations.

### *Purchase Commitments*

At December 30, 2016, the Company has purchase orders outstanding for raw materials and component parts totaling \$88,326.

## **Note 7 – Income Taxes**

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Income from continuing operations before tax was as follows:

	<u>Year Ended</u>		
	<u>December 30, 2016</u>	<u>December 25, 2015</u>	<u>December 26, 2014</u>
United States	\$ (12,553)	\$ (15,319)	\$ (13,841)
Foreign	32,683	24,135	14,019
Income from continuing operations before tax	<u>\$ 20,130</u>	<u>\$ 8,816</u>	<u>\$ 178</u>

Significant components of income tax benefit from continuing operations consist of the following:

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
Current:			
Federal	\$ —	\$ (1,001)	\$ —
State	(73)	65	95
Foreign	1,858	1,816	786
Total current tax expense	<u>1,785</u>	<u>880</u>	<u>881</u>
Deferred:			
Federal	(2,213)	(4,296)	(5,704)
State	—	(203)	(701)
Foreign	(221)	(372)	(80)
Total deferred tax benefit	<u>(2,434)</u>	<u>(4,871)</u>	<u>(6,485)</u>
Income tax benefit from continuing operations	<u>\$ (649)</u>	<u>\$ (3,991)</u>	<u>\$ (5,604)</u>

The reconciliation of income tax computed at the U.S. federal statutory tax rates to income tax benefit from continuing operations consist of the following:

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
Effective rate reconciliation:			
U.S. federal tax expense	\$ 7,046	\$ 3,084	\$ 62
State income taxes, net	(324)	(383)	(320)
Permanent items	488	114	76
Foreign rate differential	(5,907)	(4,259)	(2,491)
Tax holiday	(5,714)	(3,872)	(2,279)
Credits	(794)	(691)	(986)
Tax contingencies	86	(835)	170
Withholding tax	1,435	925	465
Other, net	168	(71)	(301)
Valuation allowance release due to acquisition	(2,271)	—	—
Valuation allowance	<u>5,138</u>	<u>1,997</u>	<u>—</u>
Income tax benefit from continuing operations	<u>\$ (649)</u>	<u>\$ (3,991)</u>	<u>\$ (5,604)</u>

Deferred income tax assets and liabilities from continuing operations consist of the following as of:

	December 30, 2016	December 25, 2015
Deferred tax assets:		
Inventory	\$ 2,159	\$ 1,443
Share-based compensation	1,521	683
Accrued payroll	903	563
Net operating loss carryforwards	5,274	5,174
Transaction costs	191	206
Tax credits	3,600	2,838
Other assets	2,337	1,606
Deferred tax assets	<u>15,985</u>	<u>12,513</u>
Valuation allowance	<u>(4,888)</u>	<u>(1,997)</u>
Total deferred tax assets	<u>11,097</u>	<u>10,516</u>
Deferred tax liabilities:		
Intangible assets	(10,830)	(10,228)
Property, plant and equipment	—	—
Other liabilities	(303)	(487)
Total deferred tax liabilities	<u>(11,133)</u>	<u>(10,715)</u>
Net deferred tax liability	<u>\$ (36)</u>	<u>\$ (199)</u>

At December 30, 2016, the Company had federal and state net operating loss carryforwards of \$20,640 and \$13,783, respectively. The federal and state net operating loss carryforwards, if not utilized, will begin to expire in 2031 and 2026, respectively. At December 30, 2016, the Company had federal and state research and development credits of \$1,104 and \$278, respectively. The federal and state research and development credits, if not utilized, will begin to expire in 2032 and 2018, respectively. Additionally, the Company had foreign tax credits of \$537, which if not utilized, will begin to expire in 2022.

Utilization of the domestic net operating loss and credit carryforwards may be subject to a substantial annual limitation due to ownership change limitations that have occurred or that could occur in the future, as required by Section 382 of the Code, as well as similar state provisions. These ownership changes may limit the amount of NOL carryforwards that can be utilized annually to offset future taxable income and tax, respectively. In general, an “ownership change” as defined by Section 382 of the Code results from a transaction or series of transactions over a three-year period resulting in an ownership change of more than 50 percentage points of the outstanding stock of a company by certain stockholders or public groups. The Company believes utilization of its federal and state net operating loss and credit carryforwards should not be limited under the provisions of Section 382.

At December 30, 2016, the Company did not recognize a deferred tax asset on the undistributed earnings of the Company’s foreign subsidiaries that are not considered to be indefinitely reinvested, due to limitations on benefit recognition.

We have determined the amounts of our valuation allowances based on our estimates of taxable income by jurisdiction in which we operate over the periods in which the related deferred tax assets will be recoverable. We determined it is not more-likely-than-not that our U.S. entities will generate sufficient taxable income to offset reversing deductible timing differences and to fully utilize carryforward tax attributes. Accordingly, we recorded a valuation allowance against those deferred tax assets for which realization does not meet the more-likely-than-not standard. Similarly, there is a valuation allowance on our state deferred tax assets due to the same uncertainties regarding future taxable U.S. income. The Company completed the acquisition of Ajax in the second quarter. As a result of the acquisition, there was a valuation allowance release resulting in a tax benefit of \$2,271.

The Company was granted a tax holiday for its Singapore operations effective 2011 through 2021. The tax holiday is subject to certain conditions, which are required to be met by March 31, 2017. As of December 30, 2016, the Company is in compliance with certain conditions, with the exception of the headcount requirement, which the

Singapore taxing authority granted a waiver. For the remaining conditions, the Company intends to be in compliance with the conditions specified by March 31, 2017. The net impact of the tax holiday in Singapore as compared to the Singapore statutory rate was a benefit of \$5,714, \$3,872, and \$2,279, during 2016, 2015, and 2014, respectively.

As of December 30, 2016, the Company has recognized \$444 of unrecognized tax benefits in long-term liabilities and \$132 of unrecognized tax benefits in noncurrent deferred tax liabilities on the accompanying consolidated balance sheet. If recognized, \$474 of this amount would impact the Company's effective tax rate. The Company does not expect a significant decrease to the total amount of unrecognized tax benefits within the next twelve months.

The following table summarizes the activity related to the Company's unrecognized tax benefits:

	<b>Unrecognized tax benefits</b>
Balance at December 27, 2013	\$ 1,775
Increase in tax positions for current year	111
Increase in tax positions for prior period	132
Decrease in tax positions for prior period	(633)
Balance at December 26, 2014	\$ 1,385
Increase in tax positions for current year	85
Decrease in tax positions for prior period	(912)
Balance at December 25, 2015	558
Increase in tax positions for current year	118
Decrease in tax positions for prior period	(100)
Balance at December 30, 2016	<b>\$ 576</b>

The Company recognizes interest and penalties relating to unrecognized tax benefits as part of its income tax expense. The Company's three major filing jurisdictions are the United States, Singapore and Malaysia. The Company is no longer subject to US Federal examination for tax years ending before 2013, to state examinations before 2012, or to foreign examinations before 2011. However, to the extent allowed by law, the tax authorities may have the right to examine prior periods where net operating losses or tax credits were generated and carried forward, and make adjustments up to the amount of the net operating losses or credit carryforward.

#### **Note 8 – Employee Benefit Programs**

##### *401(k) Plan*

The Company sponsors a 401(k) plan available to employees of its United States-based subsidiaries. Participants may make salary deferral contributions not to exceed 50% of a participant's compensation in a plan year or the maximum amount otherwise allowed by law. Eligible employees receive a discretionary matching contribution equal to 50% of each participant's deferral, up to an annual maximum of two thousand five hundred dollars. For 2016, 2015, and 2014, matching contributions were \$332, \$370, and \$321, respectively.

##### *Medical Insurance*

The Company sponsors a self-insured group medical insurance plan for its U.S. employees and their dependents. The self-insured plan is designed to provide a specified level of coverage, with stop-loss coverage provided by a commercial insurer, in order to limit the Company's exposure. For 2016, 2015, and 2014, expense incurred related to this plan was \$2,198, \$2,829, and \$1,894, respectively.

## Note 9 – Credit Facilities

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Long-term debt consists of the following:

	December 30, 2016	December 25, 2015
<b>2015 Credit Facility</b>		
Term loan	\$ 39,830	\$ —
<b>2011 Credit Facility</b>		
Term loan A	—	55,000
Revolving commitment	—	10,000
Total principal amount of long-term debt	39,830	65,000
Less unamortized debt issuance costs	(1,886)	(2,412)
Total long-term debt	37,944	62,588
Less current portion	—	(4,550)
<b>Total long-term debt, net of current portion</b>	<b>\$ 37,944</b>	<b>\$ 58,038</b>

Maturities of long-term debt consist of the following:

	Future maturities of long-term debt
2017	\$ —
2018	—
2019	—
2020	39,830
	<b>\$ 39,830</b>

### 2015 Credit Facility

On August 11, 2015, the Company and its subsidiaries entered into a new \$55,000 term loan facility and \$20,000 revolving credit facility (collectively, the “2015 Credit Facility”) with a syndicate of lenders and repaid all outstanding indebtedness under the prior \$50,000 term loan facility and \$25,000 revolving credit facility discussed below. The 2015 Credit Facility also includes a letter of credit subfacility under the revolving credit facility.

The Company recorded \$2,631 in debt issuance costs associated with the 2015 Credit Facility and is amortizing this balance over the term of the facility to interest expense. The company wrote off previously existing debt issuance costs related to the old credit facility resulting in an extinguishment loss of \$470, which is included within interest expense in the accompanying financial statements.

In April 2016, the Company acquired Ajax-United Patterns & Molds, Inc. (see Note 2–*Ajax-United Patterns & Molds, Inc. Acquisition*). To fund the acquisition, the Company amended the 2015 Credit Facility and increased the term loan facility by \$15,000 and drew an additional \$4,000 on the revolving credit facility.

The 2015 Credit Facility is secured by all tangible and intangible assets of the Company and includes customary representations, warranties, and covenants. Additionally, the Company is required to maintain a fixed charge coverage ratio of 1.25 : 1 measured quarterly, and a consolidated leverage ratio as noted below:

<b>Four Fiscal Quarters Ending</b>	<b>Maximum consolidated leverage ratio</b>
December 30, 2016 through September 29, 2017	2.50 : 1
December 29, 2017 through September 28, 2018	2.25 : 1
December 28, 2018 through June 26, 2020	2.00 : 1

Interest is charged at either the Base Rate or the Eurodollar rate at the option of the Company, plus an applicable margin. The Base Rate is equal to the higher of i) the Prime Rate, ii) the Federal Funds Effective rate plus 0.5%, or iii) the Eurodollar Rate plus 1.00%. The applicable margin on Base Rate and Eurodollar Rate loans is 3.00% and 4.00%, per annum, respectively. Interest payments on the outstanding principal balance are due quarterly if loans are made under the Base Rate. Interest payments are due on the last day of the applicable interest period under Eurodollar Rate loans.

The Company may borrow up to \$55,000 under the new term loan facility. Principal payments are due on a quarterly basis, however, the \$25,000 payment made using proceeds from our IPO in December 2016 was treated as a pre-payment, and therefore the Company is not required to make quarterly principal payments until the maturity date in August 2020, at which point any remaining principal is due. As of December 30, 2016, the term loan facility bore interest at the Eurodollar rate option at 5.00%.

Under the revolving credit facility, the Company is able to borrow an amount equal to the lesser of i) \$5,000 and ii) the revolving credit facility under a swingline loan. The borrowing availability under the swingline loan is a sublimit to the revolving commitment. There were no borrowings outstanding under the revolving credit facility at December 30, 2016.

#### *2011 Credit Facility*

On December 30, 2011, the Company and its subsidiaries executed a \$75,000 senior secured credit facility, as amended (the “2011 Credit Facility”), with a syndicate of lenders. The 2011 Credit Facility consisted of a \$15,000 term loan (“term loan A”), a \$35,000 term loan (“term loan B”), and a \$25,000 revolving commitment with a letter of credit subfacility. The Company paid a commitment fee equal to 0.375% per annum on the unused portion of the Facility. The Company recorded \$1,332 in debt financing fees associated with the Facility, and amortized this balance over the term of the Facility to interest expense. The Facility was secured by all tangible and intangible assets of the Company.

The 2011 Credit Facility contained prepayment provisions in the event of certain actions, including but not limited to, a qualifying initial public offering, new indebtedness, and proceeds from asset sales and upon earning excess cash flows, as defined in the 2011 Credit Facility agreement. The 2011 Credit Facility contained customary representations, warranties, and covenants. The 2011 Credit Facility was replaced on August 11, 2015.

Interest was charged at either the ABR rate or the Eurodollar rate at the option of the Company, plus an applicable margin. The ABR rate is equal to the higher of i) the Prime Rate, ii) the Federal Funds Effective rate plus 0.50%, or iii) 4.00%. The applicable margin for term loan A on ABR rate loans and Eurodollar rate loans was 0.50% and 3.00%, per annum, respectively. The applicable margin for term loan B and the revolving commitment on ABR rate loans and Eurodollar rate loans was 0.50% and 3.00%, per annum, respectively. Interest payments on the outstanding principal balance are due monthly if borrowings are under the ABR rate. Interest payments are due on the last day of the applicable interest period under Eurodollar rate loans.

## **Note 10 – Shareholders’ Equity**

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### *Preferred Shares*

Prior to the IPO, the Company’s preferred shares had the following characteristics:

**Conversion** —The holders of preferred shares may convert to common stock at any time at the option of the holder, and the preferred shares will automatically convert to common stock upon a majority vote of the holders of preferred stock. The conversion price is equal to the ratio of the original issuance price divided by the conversion price.

**Liquidation preference** —In the event of any voluntary or involuntary liquidation, dissolution, or winding up of the Company, the preferred shareholders are entitled to receive an amount per share equal to the greater of (i) The original issuance price plus any dividends declared but unpaid or (ii) an amount per share that would have been payable assuming conversion to common stock immediately prior to a liquidation event. Any remaining assets of the Company after the initial liquidation preference will be made to the common stock holders on a pro rata basis. If the assets of the Company are not sufficient for the full liquidation preference, the holders will share in any distribution on a pro rata basis.

**Voting** —Preferred shareholders have voting rights based on the number of shares of common stock into which the preferred shares can convert.

**Dividends** —Preferred shareholders are entitled to receive dividends when and if declared by the Board of Directors. In August 2015, the Board of Directors approved and paid a cash dividend totaling \$22,127 to the preferred shareholders.

At the IPO, all outstanding preferred shares were converted into 17,722,808 ordinary shares.

## **Note 11 – Related Party Transactions**

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On January 10, 2011, PFT entered into a sublease agreement with Precision Flow Inc., which was majority owned by a member of the board of directors of the Company. During 2016, 2015, and 2014, PFT paid \$963, \$1,155, and \$975, respectively, in sublease rent to Precision Flow Inc. The sublease agreement between PFT and Precision Flow Inc. expires February 28, 2018. The Company has ceased operations in this facility as of May 2016 but has not completed a lease termination agreement with Precision Flow Inc. As of December 30, 2016, this board member has resigned, and therefore no related party relationship exists going forward.

The Company had purchases totaling \$137, \$841, and \$1,556 from Ceres, an entity owned by a member of the board of directors of the Company, during 2016, 2015, and 2014, respectively. Outstanding accounts payable to Ceres at December 30, 2016 and December 25, 2015 totaled \$0 and \$153, respectively. The Company had sales totaling \$215 during 2016. The Company had substantially zero sales to Ceres during 2015 and 2014. The Company had no outstanding accounts receivable from Ceres at December 30, 2016 and December 25, 2015. As of December 30, 2016, this board member has resigned, and therefore no related party relationship exists going forward.

The Company received consulting services from Francisco Partners Consulting, LLC totaling \$512, \$342, and \$580 during 2016, 2015, and 2014, respectively. Outstanding accounts payable to Francisco Partners Consulting, LLC totaled a total of \$0 and \$305 at December 30, 2016 and December 25, 2015, respectively.

The Company purchases certain parts from AFGM (see Note 1– *Organization and Summary of Significant Accounting Policies* ). Total purchases from AFGM were \$722 in 2016. Outstanding accounts payable to AFGM totaled \$344 at December 30, 2016.

The Company also received consulting and advisory services from Francisco Partners Management, L.P. pursuant to a Master Services Agreement (“MSA”). This MSA provides that the Company will reimburse Francisco Partners

Management, L.P. for reasonable out-of-pocket expenses incurred in connection with providing the Company consulting and advisory services and pay an annual advisory fee equal to \$1,500 per year. However, Francisco Partners Management, L.P. has waived payment of all such out-of-pocket fees and advisory fees for 2016, 2015, and 2014.

The Company received engineering services from Vignani. Vignani is a subsidiary of Foliage Inc. The Chairman of the Company's board of directors was on the board of directors of Foliage, Inc. until 2014. Fees incurred for the services during 2014 were \$889.

On August 26, 2014, the Company entered into a Separation and Release Agreement, or the "Separation Agreement," with the former CEO in connection with the termination of his employment with the Company. Pursuant to the terms of the Separation Agreement, (1) the former CEO's employment with the Company was terminated effective as of August 12, 2014, (2) the former CEO did not receive any severance or other benefits from the Company following his termination date, (3) all equity securities of the Company owned, directly or indirectly, by the former CEO, including vested and unvested stock options, were transferred to the Company, (4) the former CEO agreed to reimburse the Company \$1,254, (5) the former CEO agreed to a three-year noncompetition covenant and a three-year nonsolicitation covenant covering employees, contractors, customers, vendors and other business relations, (6) the former CEO agreed to continue complying with the confidentiality and intellectual property assignment agreement previously entered into in connection with his employment, (7) the former CEO agreed to a general release of claims against the Company and (8) the parties agreed to a mutual nondisparagement covenant.

In 2014, the Company paid two entities owned by the Company's former chief executive officer for various services performed at the direction of the former CEO. The Company included the amount paid of \$173, in selling, general and administrative expenses on the accompanying consolidated statements of operations, associated with these entities in 2014. No payments were made to these entities after June 30, 2014, and the Company's relationship with these entities has terminated.

Certain travel and entertainment expenses were reimbursed to our former chief executive officer in contravention of our travel reimbursement policy. We paid \$324 to the former chief executive officer in 2014. These amounts were repaid to the Company in the third quarter of 2014 as part of the reimbursement of \$1,254.

## **Note 12 – Share-Based Compensation**

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### *2016 Plan*

In December 2016, the Company adopted the 2016 Omnibus Incentive Plan ("the 2016 Plan"). Under the 2016 Plan, a maximum of 1,888,000 ordinary shares may be granted under the Plan. Awards may be in the form of options, tandem and non-tandem stock appreciation rights, restricted shares, performance awards, and other share based awards and can be issued to employees, directors, and consultants. Canceled or expired awards under the 2016 Plan are returned to the incentive plan pool for future grants.

Awards granted under the Plan have a term not to exceed 10 years, with vesting and other award provisions based on the discretion of the Board of Directors at the time of grant.

There have been no awards made under the 2016 Plan as of December 30, 2016.

### *2012 Plan*

In March 2012, the Company adopted the Ichor Holdings Ltd. 2012 Equity Incentive Plan (the "2012 Plan"). Under the 2012 Plan, the Company can grant either restricted shares or stock options to employees, directors and consultants. The Board of Directors initially authorized the issuance of 21,000,000 stock options or restricted shares under the 2012 Plan. On October 25, 2013, the Board of Directors authorized the issuance of an additional 4,000,000 stock options or restricted shares under the 2012 Plan. Canceled or expired stock options or restricted shares are returned to the incentive plan pool for future grants.

Stock options granted under the 2012 Plan have a term of seven years. Vesting generally occurs 25% on the first anniversary of the date of grant, and quarterly thereafter over the remaining three years.

#### *Stock Options*

In 2014, the Company granted 215,908 stock options to an executive that vest upon the sale of the Company or completion of an initial public offering. Due to the completion of its IPO in December, the Company recognized \$637 in share-based compensation expense in 2016 related to the vesting of these stock options.

In 2014, the Company granted 408,298 stock options to certain executives that vest ratably over a four year term. The grants include a special vesting provision that provides that 50% of unvested options vest in the event of a sale of the Company, defined as either a transaction or series of related transactions in which a person, or a group of related persons, acquires through sale, merger, joint venture or otherwise, whether effected in a single transaction or a series of related transactions, (i) more than 50 % of either (a) the voting power or (b) right to elect the directors of (1) the surviving or resulting company or (2) if the surviving or resulting company is a wholly owned subsidiary of another company immediately following such merger or consolidation, the parent company of such surviving or resulting company or (ii) all or substantially all, including via license, transfer, lease or leaseback of the business or assets of the Company. During 2016, 204,883 of the 408,298 stock options granted were forfeited. As of December 30, 2016, if a sale of the Company occurs, depending on the timing of such sale, the Company would accelerate the recognition of up to \$128 in share-based compensation expense. The December 2016 IPO did not qualify as a sale of the Company for purposes of this award.

In 2015, the Company granted 220,404 stock options to an executive that are subject to vesting in increments of 25% upon the Company achieving specific performance targets as mutually agreed between the Board and the executive. The achievement of each of the performance targets shall be determined by the Board in its sole discretion and must be completed by December 2018. The grants also include a special vesting provision that in the event of a sale of the Company, if during the Protected Period either (I) Optionee is terminated other than for cause by the Company (or its successor), or (II) Optionee resigns within thirty days of Optionee's job responsibilities being materially diminished by the Company (or its successor), the lesser of (x) 50% of the unvested options and (y) all remaining unvested options as of the date of the consummation of a sale of the Company shall immediately become vested options. For purposes of the agreement, "Protected Period" is defined as the period commencing on the date of the consummation of a sale of the Company and ending on the date that is 90 days following such sale of the Company. In January 2016, 41,325 of the 220,404 stock options granted vested based on achievement of certain of the defined performance metrics. Accordingly, \$173 of share-based compensation expense was recognized. In July 2016, the employee was terminated and the stock options were forfeited.

The table below sets forth the assumptions used on the date of grant for estimating the fair values of options 2016, 2015, and 2014:

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
Weighted average expected term	5.0	5.0	5.0
Risk-free interest rate	1.26%	1.41%	1.30%
Dividend yield	0.00%	0.00%	0.00%
Volatility	50.00%	50.00%	60.60%

The following table summarizes the Company's stock option activity during 2016:

	<u>Number of Stock Options</u>		<u>Weighted average exercise price per share</u>	<u>Weighted average remaining contractual term</u>	<u>Aggregate intrinsic value (in thousands)</u>
	<u>Time vesting</u>	<u>Performance vesting</u>			
Outstanding, December 25, 2015	2,184,119	436,312	\$ 8.94		
Granted	92,739	—	\$ 9.42		
Exercised	—	—	\$ —		
Forfeited	(328,551)	(220,404)	\$ 8.73		
Expired	—	—	\$ —		
Outstanding, December 30, 2016	<u>1,948,307</u>	<u>215,908</u>	\$ 8.87	3.5 years	\$ 5,071
Exercisable, December 30, 2016	<u>1,567,768</u>	<u>215,908</u>	\$ 8.85	3.1 years	\$ 4,331

Fair value information for options granted the intrinsic value of options exercised during 2016, 2015, and 2014 are as follows:

	<u>Year Ended</u>		
	<u>December 30, 2016</u>	<u>December 25, 2015</u>	<u>December 26, 2014</u>
Weighted average grant-date fair value of options granted	\$ 4.18	\$ 4.18	\$ 2.90
Total intrinsic value of options exercised	N/A	N/A	N/A

At December 30, 2016, total unrecognized share-based compensation expense relating to stock options was \$1,246, with a weighted average remaining service period of 2.5 years.

#### *Restricted Shares*

In 2014, the Company granted 120,252 restricted shares to two executives that vest upon sale of the Company or completion of an initial public offering. Due to the completion of its IPO in December, the Company recognized \$891 in share-based compensation expense in 2016 related to the vesting of these restricted shares.

In 2014, the Company granted 89,963 restricted shares to an executive that vest ratably over a four year term. The grant includes a special vesting provision that provides that 50% of the unvested grant vests in the event of a sale of the Company, defined as either a transaction or series of related transactions in which a person, or a group of related persons, acquires through sale, merger, joint venture or otherwise, whether effected in a single transaction or a series of related transactions, (i) more than 50 % of either (a) the voting power or (b) right to elect the directors of (1) the surviving or resulting company or (2) if the surviving or resulting company is a wholly owned subsidiary of another company immediately following such merger or consolidation, the parent company of such surviving or resulting company or (ii) all or substantially all, including via license, transfer, lease or leaseback of the business or assets of the Company. As of December 30, 2016, if a sale of the Company occurs, depending on the timing of such sale, the Company would accelerate the recognition of up to \$142 in share-based compensation costs.

In 2016, the Company granted 89,963 restricted shares to an executive that vest ratably over a two year term. In the event of a sale of the Company, any unvested shares of the award will become immediately vested. If a sale of the Company occurs, depending on the timing of such sale, the Company would accelerate the recognition of up to \$424 in share-based compensation. The December 2016 IPO did not qualify as a sale of the Company for purposes of this award.

The following table summarizes the Company's restricted share activity during 2016:

	Number of Restricted Ordinary Shares		Weighted average grant date fair value
	Time vesting	Performance vesting	
Unvested, December 25, 2015	84,226	120,252	\$ 7.25
Granted	89,963	—	\$ 9.42
Vested	(71,134)	(120,252)	\$ 7.64
Forfeited	—	—	\$ —
Unvested, December 30, 2016	<u>103,055</u>	<u>—</u>	\$ 8.39

Fair value information for restricted shares granted and vested during 2016, 2015, and 2014 is as follows:

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
Weighted average grant-date fair value of shares granted	\$ 9.42	N/A	\$ 7.40
Total fair value of shares vested	\$ 1,484	\$ 296	\$ 109

At December 30, 2016, total unrecognized share-based compensation expense relating to restricted shares was \$752, with a weighted average remaining service period of 1.3 years.

Share-based compensation expense for stock options and restricted shares across all plans totaled \$3,216, \$1,118, and \$1,011 during 2016, 2015, and 2014, respectively.

#### Note 13 – Segment Information

The Company's Chief Operating Decision Maker (CODM), the Chief Executive Officer, reviews the Company's results of operations on a consolidated level and executive staff is structured by function rather than by product category. Therefore, the Company operates in one operating segment. Key resources, decisions, and assessment of performance are also analyzed on a company-wide level.

The Company's foreign operations are conducted primarily through its wholly owned subsidiaries in Singapore and Malaysia. The Company's principal markets include North America, Asia and, to a lesser degree, Europe. Sales by geographic area represent sales to unaffiliated customers.

All information on sales by geographic area is based upon the location to which the products were shipped. The following table sets forth sales by geographic area (including sales from discontinued operations):

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
United States of America	\$ 243,237	\$ 238,470	\$ 225,891
Singapore	163,515	96,141	55,977
Europe	16,353	22,938	16,882
Other	9,218	13,840	15,383
<b>Total net sales</b>	<b>\$ 432,323</b>	<b>\$ 371,389</b>	<b>\$ 314,133</b>

The following table sets forth the Company's two major customers, which comprised 97%, 95%, and 96% of sales from continuing operations in 2016, 2015, and 2014, respectively.

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
Major Customer 1	\$ 207,230	\$ 165,133	\$ 125,175
Major Customer 2	\$ 185,465	\$ 111,661	\$ 112,745

#### Note 14 – Earnings per Share

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Basic and diluted net income per share attributable to ordinary shareholders was presented in conformity with the two-class method during 2016, 2015, and 2014, required for participating securities, as the Company had two classes of stock until its December IPO. The Company considered its convertible preferred shares to be a participating security as the convertible preferred shares participated in dividends with ordinary shareholders, when and if declared by the board of directors. In the event a dividend was paid on ordinary shares, the holders of preferred shares were entitled to a proportionate share of any such dividend as if they were holders of ordinary shares (on an as-if converted basis). The convertible preferred shares did not participate in losses incurred by the Company. In accordance with the two-class method, earnings allocated to these participating securities and the related number of outstanding shares of the participating securities, which include contractual participation rights in undistributed earnings, have been excluded from the computation of basic and diluted net income per share attributable to ordinary shareholders.

Under the two-class method, net income attributable to ordinary shareholders after deduction of preferred share dividends, if any, is determined by allocating undistributed earnings between the ordinary shares and the participating securities based on their respective rights to receive dividends. Basic net income (loss) per share attributable to ordinary shareholders is computed by dividing net income (loss) attributable to ordinary shareholders by the weighted-average number of ordinary shares outstanding during the period. All participating securities are excluded from basic weighted-average ordinary shares outstanding. Diluted net income (loss) per share attributable to ordinary shareholders is computed by dividing net income (loss) attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding, including all potentially dilutive ordinary shares, if the effect of each class of potential shares of ordinary shares is dilutive.

For purposes of calculating EPS under the two-class method, an accounting policy election has been made to treat each income statement line item (net income from continuing operations, net income (loss) from discontinued operations, and net income) as an independent calculation and only allocate earnings to participating securities for those line items for which income is reported, as the participating securities do not have a contractual obligation to participate in losses. There is therefore no allocation of losses to participating securities for those line items for which a loss is reported. Under this method, the sum of the individual EPS income statement line items will not reconcile to the total net income (loss) per share.

The following table sets forth the computation of the Company's basic and diluted net income (loss) per share attributable to ordinary shareholders and a reconciliation of the numerator and denominator used in the calculation:

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
<b>Numerator:</b>			
Net income from continuing operations	\$ 20,779	\$ 12,807	\$ 5,782
Preferred share dividend	-	(22,127)	-
Undistributed earnings attributed to preferred shareholders	(19,060)	-	(5,779)
Net income (loss) from continuing operations, attributable to ordinary shareholders	\$ 1,719	\$ (9,320)	\$ 3
Net income (loss) from discontinued operations	\$ (4,117)	\$ (7,181)	\$ 386
Undistributed earnings attributed to preferred shareholders	-	-	(386)
Net loss from discontinued operations, attributable to ordinary shareholders	\$ (4,117)	\$ (7,181)	\$ -
Net income	\$ 16,662	\$ 5,626	\$ 6,168
Preferred share dividend	-	(22,127)	-
Undistributed earnings attributed to preferred shareholders	(15,284)	-	(6,165)
Net income (loss), attributable to ordinary shareholders	\$ 1,378	\$ (16,501)	\$ 3
<b>Denominator:</b>			
Weighted average ordinary shares outstanding	1,503,296	31,875	8,402
Dilutive effect of stock options	306,871	-	-
Dilutive effect of restricted shares	157,759	-	10,020
Weighted average number of shares used in diluted per share calculation for net income (loss) continuing operations	1,967,926	31,875	18,422
Weighted average ordinary shares outstanding	1,503,296	31,875	8,402
Dilutive effect of stock options	-	-	-
Dilutive effect of restricted shares	-	-	10,020
Weighted average number of shares used in diluted per share calculation for net loss from discontinued operations	1,503,296	31,875	18,422
Weighted average ordinary shares outstanding	1,503,296	31,875	8,402
Dilutive effect of stock options	306,871	-	-
Dilutive effect of restricted shares	157,759	-	10,020
Weighted average number of shares used in diluted per share calculation for net income (loss)	1,967,926	31,875	18,422
<b>Net income (loss) per share attributable to ordinary shareholders:</b>			
Continuing operations:			
Basic	\$ 1.14	\$ (292.39)	\$ 0.36
Diluted	\$ 0.87	\$ (292.39)	\$ 0.16
Discontinued operations:			
Basic	\$ (2.74)	\$ (225.29)	\$ -
Diluted	\$ (2.74)	\$ (225.29)	\$ -
Total:			
Basic	\$ 0.92	\$ (517.68)	\$ 0.36
Diluted	\$ 0.70	\$ (517.68)	\$ 0.16

An aggregated total of 165,275, 519,576, and 2,084,658 potential ordinary shares have been excluded from the computation of diluted net income (loss) per share attributable to ordinary shareholders for 2016, 2015, and 2014, respectively, because including them would have been antidilutive.

#### Note 15 – Discontinued Operations

In January 2016, we made the decision to shut down our Kingston, New York facility as this location consumed a significant amount of resources while contributing very little income. We completed the shutdown of the operations of the New York facility in May 2016 through abandonment as a buyer for the facility and operation was not found. We recognized additional expense consisting of fixed asset and long-lived asset impairments totaling \$3,160 in the fourth quarter of 2015 related to this decision. The impairments related to fixed assets and long lived assets were based on the estimated fair value of such assets over their remaining expected lives through May 2016. No further sales are being generated from the customer that this location serviced after May 2016.

The Company ceased operations at this facility in May 2016. As this was our cease use date, the Company recorded lease abandonment and inventory charges of approximately \$612 and \$2,000, respectively, in the second quarter of 2016. At December 30, 2016 future minimum lease payments of \$360 are reflected in accrued liabilities of discontinued operations.

The carrying amounts of the major classes of assets and liabilities of the Kingston, New York facility are reflected in the following table as of December 30, 2016 and December 25, 2015:

	December 30, 2016	December 25, 2015
<b>Assets</b>		
Current assets:		
Accounts receivable, net	\$ —	\$ 3,750
Inventories	—	12,639
Prepaid expenses and other current assets	99	150
Total current assets	<u>99</u>	<u>16,539</u>
Property and equipment, net	—	283
Intangible assets, net	—	230
Other noncurrent assets	—	8
Total noncurrent assets	—	521
Total assets	<u>\$ 99</u>	<u>\$ 17,060</u>
<b>Liabilities</b>		
Current liabilities:		
Accounts payable	\$ 152	\$ 5,702
Accrued liabilities	360	590
Customer deposits	—	3,510
Other current liabilities	52	53
Total current liabilities	<u>564</u>	<u>9,855</u>
Deferred tax liabilities	30	25
Other long-term liabilities	9	61
Total noncurrent liabilities	<u>39</u>	<u>86</u>
Total liabilities	<u>\$ 603</u>	<u>\$ 9,941</u>

The results of the discontinued operation for 2016, 2015, and 2014 were as follows:

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
Net sales	\$ 26,576	\$ 80,748	\$ 65,046
Cost of sales	28,077	80,840	61,404
Operating expenses:			
Research and development	262	954	577
Selling, general, and administrative	2,315	2,765	2,507
Amortization of intangible assets	—	475	475
Total operating expenses	2,577	4,194	3,559
Operating income (loss)	(4,078)	(4,286)	83
Interest income, net	—	(16)	(3)
Other expense (income), net	(1)	3,136	(46)
Income (loss) from discontinued operations before income taxes	(4,077)	(7,406)	132
Income tax expense (benefit)	40	(225)	(254)
Income (loss) from discontinued operations	\$ (4,117)	\$ (7,181)	\$ 386

Supplemental information related to the discontinued operation is as follows for the periods presented:

	Year Ended		
	December 30, 2016	December 25, 2015	December 26, 2014
Depreciation and amortization	\$ —	\$ 1,143	\$ 1,147
Capital expenditures	\$ —	\$ 427	\$ 535
Impairment of property and equipment	\$ —	\$ 1,335	\$ —
Impairment of intangible assets	\$ —	\$ 1,825	\$ —

## **Note 16 – Subsequent Events**

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Subsequent events are events or transactions that occur after the balance sheet date but before financial statements are issued. The Company recognizes in the consolidated financial statements the effects of all subsequent events that provide additional evidence about conditions that existed at the date of the balance sheet, including the estimates inherent in the process of preparing the financial statements. The Company's consolidated financial statements do not recognize subsequent events that provide evidence about conditions that did not exist at the date of the balance sheet but arose after the balance sheet date and before financial statements are issued. In preparing these consolidated financial statements, the Company has evaluated events and transactions for potential recognition or disclosure through March 28, 2017, the date the consolidated financial statements were issued.

### *Exercise of Underwriters' Over-Allotment Option*

On January 10, 2017, the Company completed the sale of an additional 881,667 ordinary shares of the Company to the underwriters of its initial public offering at the public offering price of \$9.00 per ordinary share pursuant to the exercise of the over-allotment option granted to the underwriters. The Company received approximately \$7,400 in net proceeds from the sale.

### *Sale of Equity Method Investment*

On February 15, 2017, the Company sold its equity method investment in Ajax Foresight Global Manufacturing Sdn. Bhd., and associated note receivable, for \$1,730, resulting in a net gain on sale of \$32.

### *Sale of Cost Method Investment*

On February 24, 2017, the Company sold its cost method investment in CHawk Technology International, Inc. for \$1,700, resulting in a gain on sale of \$210. The Company received cash of \$700 and a promissory note for \$1,000. The promissory note will be repaid in five quarterly installments of \$200, commencing in the second quarter of 2017.

## SIGNATURES

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.

Dated: March 28, 2017

ICHOR HOLDINGS, LTD.

By: \_\_\_\_\_ /s/ THOMAS M. ROHRS  
Thomas M. Rohrs  
*Executive Chairman and Chief Executive Officer*

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.

<u>Signature</u>	<u>Name and Title</u>	<u>Date</u>
/s/ Thomas M. Rohrs Thomas M. Rohrs	Executive Chairman, Director and Chief Executive Officer (Principal Executive Officer)	March 28, 2017
/s/ Maurice Carson Maurice Carson	Director, President and Chief Financial Officer (Principal Accounting and Financial Officer)	March 28, 2017
/s/ John Chenault John Chenault	Director	March 28, 2017
/s/ Dipanjan Deb Dipanjan Deb	Director	March 28, 2017
/s/ Andrew Kowal Andrew Kowal	Director	March 28, 2017
/s/ Iain MacKenzie Iain MacKenzie	Director	March 28, 2017

## EXHIBIT INDEX

The following exhibits are filed with this Form 10-K or are incorporated herein by reference:

<b>Exhibit Number</b>	<b>Description of Exhibit</b>
3.1	Amended and Restated Memorandum and Articles of Association of Ichor Holdings, Ltd., effective as of December 9, 2016 (Incorporated by reference to Exhibit 3.1 to the current report on Form 8-K filed with the Securities and Exchange Commission on December 14, 2016).
10.1	Credit Agreement, dated as of August 11, 2015, by and among Ichor Holdings, LLC, Precision Flow Technologies, Inc. and Ichor Systems, Inc., as borrowers, Icicle Acquisition Holding B.V. and certain of its other subsidiaries as guarantors, Bank of America, N.A. as administrative agent, L/C issuer, and swingline lender, and the lenders from time to time party thereto, or the Credit Agreement (Incorporated by reference to Exhibit 10.1 to Ichor Holdings, Ltd's Registration Statement on Form S-1, filed with the Securities and Exchange Commission on November 14, 2016).
10.2	First Amendment to Credit Agreement, dated as of April 12, 2016, by and among Ichor Holdings, LLC, Ichor Systems, Inc. and Precision Flow Technologies, Inc., as borrowers, Bank of America, N.A., as administrative agent, and the financial institutions party thereto, as lenders (Incorporated by reference to Exhibit 10.2 to Ichor Holdings, Ltd's Registration Statement on Form S-1, filed with the Securities and Exchange Commission on November 14, 2016).
10.3	Investor Rights Agreement, dated as of March 16, 2012, by and among Ichor Holdings, Ltd. and certain of its shareholders (Incorporated by reference to Exhibit 10.3 to Ichor Holdings, Ltd's Registration Statement on Form S-1, filed with the Securities and Exchange Commission on November 14, 2016).
10.4	Members Agreement, dated as of March 16, 2012, by and among Ichor Holdings, Ltd. and certain of its shareholders (Incorporated by reference to Exhibit 10.4 to Ichor Holdings, Ltd's Registration Statement on Form S-1, filed with the Securities and Exchange Commission on November 14, 2016).
10.5	Management Services Agreement, dated as of December 30, 2011, between Icicle Acquisition Holding, LLC and Francisco Partners Management, LLC (Incorporated by reference to Exhibit 10.5 to Ichor Holdings, Ltd's Registration Statement on Form S-1, filed with the Securities and Exchange Commission on November 14, 2016).
10.6	Amended and Restated Master Consulting Services Agreement, effective as of January 1, 2015, by and between Ichor Systems, Inc. and Francisco Partners Consulting, LLC (Incorporated by reference to Exhibit 10.6 to Ichor Holdings, Ltd's Registration Statement on Form S-1, filed with the Securities and Exchange Commission on November 14, 2016).
10.7	Employment Agreement, dated as of September 19, 2014, by and among Ichor Systems, Inc., Thomas Rohrs and, with respect to Sections 1.2 and 3.4 therein only, Ichor Holdings, Ltd (Incorporated by reference to Exhibit 10.7 to Ichor Holdings, Ltd's Registration Statement on Form S-1, filed with the Securities and Exchange Commission on November 14, 2016).
10.8	Employment Agreement, dated as of September 19, 2014, by and among Ichor Systems, Inc., Maurice Carson and, with respect to Sections 1.2 and 3.3 therein only, Ichor Systems, Ltd (Incorporated by reference to Exhibit 10.8 to Ichor Holdings, Ltd's Registration Statement on Form S-1, filed with the Securities and Exchange Commission on November 14, 2016).
10.9	Ichor Holdings, Ltd. 2016 Omnibus Incentive Plan (Incorporated by reference to Exhibit 10.11 to Ichor Holdings, Ltd's Amendment No. 2 to Registration Statement on Form S-1, filed with the Securities and Exchange Commission on November 29, 2016).
10.10	Form of Incentive Stock Option Agreement (Incorporated by reference to Exhibit 10.12 to Ichor Holdings, Ltd's Amendment No. 2 to Registration Statement on Form S-1, filed with the Securities and Exchange Commission on November 29, 2016).

- 10.11 Form of Restricted Stock Agreement (Incorporated by reference to Exhibit 10.13 to Ichor Holdings, Ltd's Amendment No. 2 to Registration Statement on Form S-1, filed with the Securities and Exchange Commission on November 29, 2016).
- 10.12 Form of Nonqualified Stock Option Agreement (Incorporated by reference to Exhibit 10.14 to Ichor Holdings, Ltd's Amendment No. 2 Registration Statement on Form S-1, filed with the Securities and Exchange Commission on November 29, 2016).
- 10.13 Offer Letter, dated as of January 8, 2013, by and between Ichor Systems, Inc. and Philip Barros (Incorporated by reference to Exhibit 10.16 to Ichor Holdings, Ltd's Registration Statement on Form S-1, filed with the Securities and Exchange Commission on November 14, 2016).
- 10.14 Offer Letter, dated as of September 30, 2015, by and between Ichor Systems, Inc. and Philip Barros (Incorporated by reference to Exhibit 10.17 to Ichor Holdings, Ltd's Registration Statement on Form S-1, filed with the Securities and Exchange Commission on November 14, 2016).
- 10.15 Master Consulting Services Agreement, effective as of January 1, 2016, by and between Ichor Systems, Inc. and Francisco Partners Consulting, LLC (Incorporated by reference to Exhibit 10.18 to Ichor Holdings, Ltd's Amendment No. 3 to Registration Statement on Form S-1, filed with the Securities and Exchange Commission on December 8, 2016).
- 21.1\* List of subsidiaries
- 23.1\* Consent of KPMG LLP
- 31.1\* Certifications of Chief Executive Officer of the Company under Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 31.2\* Certifications of Chief Financial Officer of the Company under Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 32.1\* Certifications of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. This certification accompanies this report and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed for purposes of §18 of the Securities Exchange Act of 1934, as amended.

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\* Filed herewith

Name of Subsidiary	Jurisdiction of Incorporation, Organization or Formation
FP-Ichor, Ltd.	Cayman Islands
Icicle Acquisition Holding Co-op	Netherlands
Icicle Acquisition Holding, B.V.	Netherlands
Ichor Holdings, LLC	Delaware
Ichor Holdings Ltd.	Scotland
Ichor Systems Singapore, PTE Ltd.	Singapore
Ichor Systems Ltd.	Scotland
Precision Flow Technologies, Inc.	New York
Ajax-United Patterns & Molds, Inc.	California
Ichor Systems, Inc.	Delaware
Ichor Systems Malaysia Sdn Bhd	Malaysia

**Consent of Independent Registered Public Accounting Firm**

The Board of Directors  
Ichor Holdings, Ltd:

We consent to the incorporation by reference in the registration statement (No. 333-215984) on Form S-8 of Ichor Holdings, Ltd. and its subsidiaries (the "Company") of our report dated March 28, 2017, with respect to the consolidated balance sheets of Ichor Holdings, Ltd. and its subsidiaries as of December 30, 2016 and December 25, 2015, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the years in the three-year period ended December 30, 2016, which report appears in the December 30, 2016 annual report on Form 10-K of the Company.

/s/ KPMG LLP

Portland, Oregon  
March 28, 2017

## SECTION 302 CERTIFICATION

I, Thomas M. Rohrs, certify that:

1. I have reviewed this Annual Report on Form 10-K for the year ended December 30, 2016 of Ichor Holdings, Ltd. (the “ registrant ” );
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)) 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) 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
  - (c) 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.

/s/ Thomas M. Rohrs

Thomas M. Rohrs  
Chief Executive Officer

Date: March 28, 2017

## SECTION 302 CERTIFICATION

I, Maurice Carson, certify that:

1. I have reviewed this Annual Report on Form 10-K for the year ended December 30, 2016 of Ichor Holdings, Ltd. (the " registrant " );
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)) 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) 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
  - (c) 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.

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/s/ Maurice Carson  
Maurice Carson  
Chief Financial Officer

Date: March 28, 2017

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

In connection with the Annual Report of Ichor Holdings, Ltd. (the " Company " ) on Form 10-K for the year ended December 30, 2016 as filed with the Securities and Exchange Commission on the date hereof (the " Report " ), I, Thomas M. Rohrs, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ Thomas M. Rohrs

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Thomas M. Rohrs  
Chief Executive Officer

Date: March 28, 2017

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.

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

In connection with the Annual Report of Ichor Holdings, Ltd. (the “ Company ”) on Form 10-K for the year ended December 30, 2016 as filed with the Securities and Exchange Commission on the date hereof (the “ Report ”), I, Maurice Carson, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ Maurice Carson

Maurice Carson  
Chief Financial Officer

Date: March 28, 2017

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.