

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 10-K

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

For the Fiscal Year Ended March 30, 2019

**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 0-17795

CIRRUS LOGIC, INC.

(Exact name of registrant as specified in its charter)

DELAWARE

(State or other jurisdiction of incorporation or organization)

77-0024818

(I.R.S. Employer Identification No.)

800 W. 6th Street, Austin, TX 78701

(Address of principal executive offices)

Registrant's telephone number, including area code: (512) 851-4000

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

None

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common stock, \$0.001 par value	CRUS	The NASDAQ Stock Market LLC

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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company Emerging growth company

[Table of Contents](#)

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). YES NO

The aggregate market value of the registrant's voting and non-voting common equity held by non-affiliates was \$1,498,568,379 based upon the closing price reported on the NASDAQ Global Select Market as of September 29, 2018 . Stock held by directors, officers and stockholders owning 5 percent or more of the outstanding common stock were excluded as they may be deemed affiliates. This determination of affiliate status is not a conclusive determination for any other purpose.

As of May 21, 2019 , the number of outstanding shares of the registrant's common stock, \$0.001 par value, was 58,325,259 .

DOCUMENTS INCORPORATED BY REFERENCE

Certain information contained in the registrant's proxy statement for its annual meeting of stockholders to be held August 2, 2019 is incorporated by reference in Part II – Item 5 and Part III of this Annual Report on Form 10-K.

CIRRUS LOGIC, INC.

FORM 10-K

For The Fiscal Year Ended March 30, 2019

INDEX

PART I

Item 1.	Business	3
Item 1A.	Risk Factors	6
Item 1B.	Unresolved Staff Comments	18
Item 2.	Properties	18
Item 3.	Legal Proceedings	19
Item 4.	Mine Safety Disclosures	19

PART II

Item 5.	Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	19
Item 6.	Selected Financial Data	21
Item 7.	Management’s Discussion and Analysis of Financial Condition and Results of Operations	21
Item 7A.	Quantitative and Qualitative Disclosures about Market Risk	30
Item 8.	Financial Statements and Supplementary Data	31
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	63
Item 9A.	Controls and Procedures	63

PART III

Item 10.	Directors, Executive Officers and Corporate Governance	64
Item 11.	Executive Compensation	64
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	64
Item 13.	Certain Relationships and Related Transactions, and Director Independence	64
Item 14.	Principal Accounting Fees and Services	64

PART IV

Item 15.	Exhibits and Financial Statement Schedules	65
	Signatures	68

PART I

ITEM 1. *Business*

Cirrus Logic, Inc. (“Cirrus Logic,” “We,” “Us,” “Our,” or the “Company”) is a leader in high-performance, low-power integrated circuits (“ICs”) for audio, voice and other signal-processing applications. Cirrus Logic’s products span the entire audio signal chain, from capture to playback, providing innovative components for the world’s top smartphones, tablets, digital headsets, wearables and emerging smart home applications.

We were incorporated in California in 1984, became a public company in 1989 and were reincorporated in the State of Delaware in February 1999. Our primary facility housing engineering, sales and marketing, and administrative functions is located in Austin, Texas. We also have offices in various other locations in the United States, United Kingdom, Spain, Australia, the People’s Republic of China, South Korea, Japan, Singapore, and Taiwan. Our common stock, which has been publicly traded since 1989, is listed on the NASDAQ’s Global Select Market under the symbol CRUS.

We maintain a website with the address www.cirrus.com. We are not including the information contained on our website as a part of, or incorporating it by reference into, this Annual Report on Form 10-K. We make available free of charge through our website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, and amendments to these reports, as soon as reasonably practicable after we electronically file such material with, or furnish such material to, the Securities and Exchange Commission (the “SEC”). We also routinely post other important information on our website, including information specifically addressed to investors. We intend for the investor relations section of our website to be a recognized channel of distribution for disseminating information to the securities marketplace in general. To receive a free copy of this Annual Report on Form 10-K, please forward your written request to Cirrus Logic, Inc., Attn: Investor Relations, 800 W. 6th Street, Austin, Texas 78701, or via email at Investor.Relations@cirrus.com. In addition, the SEC maintains a website at www.sec.gov that contains reports, proxy and information statements filed electronically with the SEC by Cirrus Logic.

Company Strategy

Cirrus Logic targets growing markets where we can leverage our expertise in analog and mixed-signal processing to solve complex problems. Our approach has been to develop custom and general market components that embody our latest innovations, which we use to engage key players in a particular market or application. We focus on building strong engineering relationships with our customers’ product teams and work to develop highly differentiated components that address their technical and price requirements across product tiers. Many of our products include programmable aspects and are comprised of our best-in-class hardware which incorporates software algorithms from some combination of our own intellectual property (“IP”), algorithms that have been ported to our platform by an ecosystem of third-party partners, and our customers’ IP. When we have been successful with this approach, one initial design win has often expanded into additional products. This strategy gives us the opportunity to increase our content with a customer over time through the incorporation of new features, the integration of other system components into our products and the addition of new components.

Markets and Products

The following provides a detailed discussion regarding our portable and non-portable and other product lines. We have renamed our product lines from “Portable Audio Products” and “Non-Portable Audio and Other Products” to reflect the Company’s broadening portfolio of products beyond audio into other adjacent markets such as haptics.

Portable Products: High-precision analog and mixed-signal components designed for mobile devices including smartphones, tablets, digital headsets, speakers and wearables.

Non-Portable and Other Products: High-precision analog and mixed-signal components targeting the automotive, energy, and industrial markets, and non-mobile consumer markets, including the emerging smart home market.

PORTABLE PRODUCTS

We are a leading supplier of analog and mixed-signal converter, interface, amplifier and other signal-processing products in many of today’s mobile applications. We have an extensive portfolio of products that target flagship and mid-tier devices, including “codecs” - chips that integrate analog-to-digital converters (“ADCs”) and digital-to-analog converters (“DACs”) into a single IC, “smart codecs” - codecs with digital signal processing integrated, boosted amplifiers, micro-electromechanical systems (“MEMS”) microphones, haptic drivers, as well as standalone digital signal processors (“DSPs”). Additionally, the Company’s SoundClear® technology consists of a broad portfolio of tools, software and algorithms that help to differentiate our customers’ products by improving the user experience with features such as enhanced voice quality, voice capture and audio playback. Our products are designed for use in a wide array of portable applications, including smartphones, tablets, digital headsets, speakers, wearables, such as smart watches and smart bands, VR headsets and action cameras.

NON-PORTABLE AND OTHER PRODUCTS

We provide high-precision analog and mixed-signal ICs for a variety of products in the automotive, energy, industrial, and non-mobile consumer markets, including the emerging smart home market. The Company supplies a wide range of products including codecs, ADCs, DACs, digital interfaces and amplifiers. Within the consumer market our products are utilized in laptops, audio/video receivers (AVRs), home theater systems, set-top boxes, musical instruments and professional audio products. Applications for products in the automotive market include satellite radio systems, telematics and multi-speaker car-audio systems. Our products are also used in a wide array of high-precision industrial and energy-related applications including digital utility meters, power supplies, energy control, energy measurement, and energy exploration applications.

Customers, Marketing, and Sales

We offer products worldwide through both direct and indirect sales channels. Our major customers are among the world's leading electronics manufacturers. We target both large existing and emerging customers that derive value from our expertise in advanced analog and mixed-signal design processing, systems-level integrated circuit engineering and embedded software development. We derive our revenues from both domestic and international sales. Our domestic sales force includes a network of direct sales offices located primarily in California and Texas. International sales offices and staff are located in Japan, People's Republic of China, Singapore, South Korea, Taiwan, and the United Kingdom. We supplement our direct sales force with external sales representatives and distributors. We have technical support centers in China, South Korea, Taiwan and the United States. Our worldwide sales force provides geographically specific support to our customers and specialized selling of product lines with unique customer bases. See Note 16—Segment Information, of the Notes to Consolidated Financial Statements contained in Item 8 for further detail and for additional disclosure regarding sales and property, plant and equipment, net, by geographic locations.

Since the components we produce are largely proprietary and generally not available from second sources, we generally consider our end customer to be the entity specifying the use of our component in their design. These end customers may then purchase our products directly from us, through distributors or third party manufacturers contracted to produce their designs. For fiscal years 2019, 2018, and 2017, our ten largest end customers, represented approximately 91 percent, 92 percent, and 92 percent, of our sales, respectively. For fiscal years 2019, 2018, and 2017, we had one end customer, Apple, Inc., who purchased through multiple contract manufacturers and represented approximately 78 percent, 81 percent, and 79 percent, of the Company's total sales, respectively. No other customer or distributor represented more than 10 percent of net sales in fiscal years 2019, 2018, or 2017.

Manufacturing

As a fabless semiconductor company, we contract with third parties for wafer fabrication and product assembly and test. We use a variety of foundries in the production of wafers including Taiwan Semiconductor Manufacturing Company, Limited, MagnaChip Semiconductor Corporation and GLOBALFOUNDRIES. The Company's primary assembly and test houses include Advanced Semiconductor Engineering, Inc., Amkor Technology Inc., Nepes Corporation, SFA Semicon Co., Ltd., Siliconware Precision Industries Co., Ltd, and STATS ChipPAC Pte. Ltd. Our outsourced manufacturing strategy allows us to concentrate on our design strengths and minimize fixed costs and capital expenditures while giving us access to advanced manufacturing facilities. It also provides the flexibility to source multiple leading-edge technologies through strategic relationships. After wafer fabrication by the foundry, third-party assembly vendors package the wafer die. The finished products are then tested before shipment to our customers. While we do have some redundancy of fabrication processes by using multiple outside foundries, any interruption of supply by one or more of these foundries could materially impact the Company. As a result, we maintain some amount of business interruption insurance to help reduce the risk of wafer supply interruption, but we are not fully insured against such risk. Our supply chain management organization is responsible for the management of all aspects of the manufacturing, assembly, and testing of our products, including process and package development, test program development, and production testing of products in accordance with our ISO-certified quality management system.

Although our products are made from basic materials (principally silicon, metals and plastics), all of which are available from a number of suppliers, capacity at wafer foundries sometimes becomes constrained. The limited availability of certain materials may impact our suppliers' ability to meet our demand needs or impact the price we are charged. The prices of certain other basic materials, such as metals, gases and chemicals used in the production of circuits can increase as demand grows for these basic commodities. In most cases, we do not procure these materials ourselves; nevertheless, we are reliant on such materials for producing our products because our outside foundry and package and test subcontractors must procure them. To help mitigate risks associated with constrained capacity, we use multiple foundries, assembly and test sources.

Patents, Licenses and Trademarks

We rely on patent, copyright, trademark, and trade secret laws to protect our intellectual property, products, and technology. As of March 30, 2019, we held approximately 3,300 pending and issued patents worldwide, which include approximately 1,100 granted U.S. patents, 450 U.S. pending patent applications and various international patents and applications. Our U.S. patents expire in calendar years 2019 through 2039. While our patents are an important element of our success, our business as a whole is not dependent on any one patent or group of patents. We do not anticipate any material effect on our business due to any patents expiring in 2019, and we continue to obtain new patents through our ongoing research and development.

We have maintained U.S. federal trademark registrations for CIRRUS LOGIC, CIRRUS, Cirrus Logic logo designs, and SoundClear, among others. These U.S. registrations may be renewed as long as the marks continue to be used in interstate commerce. We have also filed or obtained foreign registration for these marks in other countries or jurisdictions where we conduct, or anticipate conducting, international business. To complement our own research and development efforts, we have also licensed and expect to continue to license, a variety of intellectual property and technologies important to our business from third parties.

Segments

We determine our operating segments in accordance with Financial Accounting Standards Board (“FASB”) guidelines. Our Chief Executive Officer (“CEO”) has been identified as the chief operating decision maker as defined by these guidelines.

The Company operates and tracks its results in one reportable segment, but reports revenue performance in two product lines: Portable and Non-Portable and Other. Our CEO receives and uses enterprise-wide financial information to assess financial performance and allocate resources, rather than detailed information at a product line level. Additionally, our product lines have similar characteristics and customers. They share operations support functions such as sales, public relations, supply chain management, various research and development and engineering support, in addition to the general and administrative functions of human resources, legal, finance and information technology. Therefore, there is no discrete financial information maintained for these product lines.

See Note 16 — Segment Information, of the Notes to Consolidated Financial Statements contained in Item 8 for further details including sales by product line, as well as sales and property, plant and equipment, net, by geographic locations.

Research and Development

We concentrate our research and development efforts on the design and development of new products for each of our principal markets. We also fund certain advanced-process technology development, as well as other emerging product opportunities. Our future success is highly dependent upon our ability to develop complex new products, transfer new products to volume production, introduce them into the marketplace in a timely fashion, and have them selected for design into products of systems manufacturers. Our future success may also depend on assisting our customers with integration of our components into their new products, including providing support from the concept stage through design, launch and production ramp.

Competition

Markets for our products are highly competitive and we expect that competition will continue to increase. Our ability to compete effectively and to expand our business will depend on our ability to continue to recruit key engineering talent, execute on new product developments, partner with customers to include these new products into their applications, and provide cost efficient versions of existing products. We compete with other semiconductor suppliers that offer standard semiconductors, application-specific standard products and fully customized ICs, including embedded software, chip and board-level products.

While no single company competes with us in all of our product lines, we face significant competition in all markets where our products are available. Within Portable, Cirrus Logic is a leading IC supplier with the complete end-to-end solution from capture to playback including amplifiers, codecs, DSP and MEMS microphones. We expect to face additional competition from new entrants in our markets, which may include both large domestic and international IC manufacturers and smaller, emerging companies. Our primary competitors include, but are not limited to AAC Technologies, AKM Semiconductor Inc., Analog Devices Inc., Austriamicrosystems AG, Dialog Semiconductor PLC, DSP Group, ESS Technology, Inc., GoerTek Inc., Infineon Technologies AG, Knowles Corporation, Maxim Integrated Products Inc., NXP Semiconductors N.V., Qualcomm Incorporated, Realtek Semiconductor Corporation, Skyworks Solutions Inc. (through its recent acquisition of Avnera Corp.), ST Microelectronics N.V., Synaptics Incorporated and Texas Instruments, Inc.

The principal competitive factors in our markets include: time to market; quality of hardware/software design and end-market systems expertise; price; product performance, features, quality and compatibility with standards; access to advanced process and packaging technologies at competitive prices; and sales and technical support, which includes assisting our customers with integration of our components into their new products and providing support from the concept stage through design, launch and production ramp.

Product life cycles may vary greatly by product category. For example, many portable audio devices have shorter design-in cycles; therefore, our competitors have increasingly frequent opportunities to achieve design wins in next-generation systems. Conversely, this also provides us frequent opportunities to displace competitors in products that have previously not utilized our design. The non-portable and other markets typically have longer life cycles, which provide continued revenue streams over longer periods of time.

Backlog

Sales are made primarily pursuant to short-term purchase orders for delivery of products. The quantity actually ordered by the customer, as well as the shipment schedules, are frequently revised, without significant penalty, to reflect changes in the customer's needs. The majority of our backlog is typically requested for delivery within six months. In markets where the end system life cycles are relatively short, customers typically request delivery in six to twelve weeks. We believe a backlog analysis at any given time gives little indication of our future business except on a short-term basis, principally within the next 60 days.

We utilize backlog as an indicator to assist us in production planning. However, backlog is influenced by several factors including market demand, pricing, and customer order patterns in reaction to product lead times. Quantities actually purchased by customers, as well as prices, are subject to variations between booking and delivery because of changes in customer needs or industry conditions. As a result, we believe that our backlog at any given time is an incomplete indicator of future sales.

Employees

As of March 30, 2019, we had 1,551 full-time employees. Of our full-time employees, 70 percent were engaged in research and product development activities, 25 percent in sales, marketing, general and administrative activities, and 5 percent in manufacturing-related activities. We also employ individuals on a temporary basis and use the services of contractors as necessary, particularly in our software development and test organization. Our future success depends, in part, on our ability to continue to attract, retain and motivate highly qualified technical, marketing, engineering, and administrative personnel.

We have never had a work stoppage and the majority of our employees are not represented by collective bargaining agreements. We consider our employee relations to be good.

Forward—Looking Statements

This Annual Report on Form 10-K and certain information incorporated herein by reference contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements included or incorporated by reference in this Annual Report on Form 10-K, other than statements that are purely historical, are forward-looking statements. In some cases, forward-looking statements are identified by words such as “expect,” “anticipate,” “target,” “project,” “believe,” “goals,” “estimates,” “will,” “would,” “could,” “can,” “may,” “plan,” and “intend”, and other similar types of words and expressions. Variations of these types of words and similar expressions are intended to identify these forward-looking statements. Any statements that refer to our plans, expectations, strategies or other characterizations of future events or circumstances are forward-looking statements. Readers are cautioned that these forward-looking statements are predictions based on management's expectations as of the date of this filing and are subject to risks, uncertainties, and assumptions that are difficult to predict. Therefore, actual results may differ materially and adversely from those expressed in any forward-looking statements. Factors that could cause actual results to differ materially from those indicated or implied by our forward-looking statements include, but are not limited to, those discussed in *Item 1A. Risk Factors* and elsewhere in this report, as well as in the documents filed by us with the SEC, specifically the most recent reports on Form 10-Q and 8-K, each as it may be amended from time to time.

We caution you not to place undue reliance on these forward-looking statements, which speak only as of the date of this Annual Report on Form 10-K, and we undertake no obligation, and expressly disclaim any duty, to revise or update this information, whether as a result of new information, events or circumstances after the filing of this report with the SEC, except as required by law. We urge readers to carefully review and consider the various disclosures made in this Annual Report on Form 10-K and in other documents we file from time to time with the SEC that disclose risks and uncertainties that may affect our business. All forward-looking statements, expressed or implied, included in this Annual Report on Form 10-K and attributable to Cirrus Logic are expressly qualified in their entirety by this cautionary statement. This cautionary statement should also be considered in connection with any subsequent written or oral forward-looking statements that we may make or persons acting on our behalf may issue.

ITEM 1A. Risk Factors

Our business faces significant risks. The risk factors set forth below may not be the only risks that we face and there is a risk that we may have failed to identify all possible risk factors. Additional risks that we are not aware of yet or that currently are not significant may adversely affect our business operations. You should read the following cautionary statements in

conjunction with the factors discussed elsewhere in this and other Cirrus Logic filings with the SEC. These cautionary statements are intended to highlight certain factors that may affect the financial condition and results of operations of Cirrus Logic and are not meant to be an exhaustive discussion of risks that apply to companies such as ours.

We depend on a limited number of customers and distributors for a substantial portion of our sales, and the loss of, or a significant reduction in orders from, or pricing on products sold to, any key customer or distributor could significantly reduce our sales and our profitability.

While we generate sales from a broad base of customers worldwide, the loss of any of our key customers, or a significant reduction in sales or selling prices to any key customer, or reductions in selling prices made to retain key customer relationships, would significantly reduce our revenue, margins and earnings and adversely affect our business. For the twelve-month periods ending March 30, 2019, March 31, 2018, and March 25, 2017, our ten largest end customers represented approximately 91 percent, 92 percent, and 92 percent of our sales, respectively. For the twelve-month periods ending March 30, 2019, March 31, 2018, and March 25, 2017, we had one end customer, Apple Inc., who purchased through multiple contract manufacturers and represented approximately 78 percent, 81 percent and 79 percent of the Company's total sales, respectively.

We may not be able to maintain or increase sales to certain of our key customers for a variety of reasons, including the following:

- most of our customers can stop incorporating our products into their own products with limited notice to us and suffer little or no penalty;
- our agreements with our customers typically do not require them to purchase a minimum quantity of our products;
- many of our customers have pre-existing or concurrent relationships with our current or potential competitors that may affect the customers' decisions to purchase our products;
- many of our customers have sufficient resources to internally develop technology solutions and semiconductor components that could replace the products that we currently supply in our customers' end products;
- our customers face intense competition from other manufacturers that do not use our products; and
- our customers regularly evaluate alternative sources of supply in order to diversify their supplier base, which increases their negotiating leverage with us and their ability to either obtain or dual source components from other suppliers.

In addition, our dependence on a limited number of key customers may make it easier for them to pressure us on price reductions. We have experienced pricing pressure from certain key customers and we expect that the average selling prices for certain of our products will decline from time to time, potentially reducing our revenue, our margins and our earnings.

Our key customer relationships often require us to develop new products that may involve significant technological challenges. Our customers frequently place considerable pressure on us to meet their tight development schedules. In addition, we may from time to time enter into customer agreements providing for exclusivity periods during which we may only sell specified products or technology to a specific customer. Accordingly, we may have to devote a substantial amount of resources to strategic relationships, which could detract from or delay our completion of other important development projects or the development of next generation products and technologies.

Moreover, our reliance on certain customers may continue to increase, which could heighten the risks associated with having key customers, including making us more vulnerable to significant reductions in revenue, margins and earnings, pricing pressure, and other adverse effects on our business.

Our lack of diversification in our revenue and customer base increases the risk of an investment in our company, and our consolidated financial condition, results of operations, and stock price may deteriorate if we fail to diversify.

Although we continue to investigate, invest in, and try to develop opportunities to diversify our revenue and customer base, our sales, marketing, and development efforts have historically been focused on a limited number of customers and opportunities. Larger companies have the ability to manage their risk by product, market, and customer diversification. However, we lack diversification, in terms of both the nature and scope of our business, which increases the risk of an investment in our company. If we cannot diversify our customer and revenue opportunities, our financial condition and results of operations could deteriorate.

We frequently develop our products for the specific system architecture of our customers' end products. If our customers were to change system architectures, develop competing technologies and integrated circuits, or incorporate some of the functionality of our products into other parts of the system, we risk the potential loss of revenue and reduced average selling prices.

Our customers, particularly in the portable market, could potentially transition to different audio architectures, develop their own competing technologies and integrated circuits, or integrate the functionality that our integrated circuits and software have historically provided into other components in their audio systems. In addition, some of the audio and voice functionality that we have historically provided could be performed outside of our customers' end product — for example, through the use of “cloud-based” systems to perform audio and voice processing. If our customers were to transition to these different system architectures, our results of operations could be adversely affected by the elimination of the need for our current technology and products, resulting in reduced average selling prices for our components and loss of revenue.

We have entered into joint development agreements, custom product arrangements, and strategic relationships with some of our largest customers. These arrangements subject us to a number of risks, and any failure to execute on any of these arrangements could have a material adverse effect on our business, results of operations, and financial condition.

We have entered into joint development, product collaboration and technology licensing arrangements with some of our largest customers, and we expect to enter into new strategic arrangements of these kinds from time to time in the future. Such arrangements can magnify several risks for us, including loss of control over the development and development timeline of jointly developed products, risks associated with the ownership of the intellectual property that is developed pursuant to such arrangements, and increased risk that our joint development activities may result in products that are not commercially successful or that are not available in a timely fashion. In addition, any third party with whom we enter into a joint development, product collaboration or technology licensing arrangement may fail to commit sufficient resources to the project, change its policies or priorities or abandon or fail to perform its obligations related to such arrangement. In addition, we may from time to time enter into customer product arrangements that provide for exclusivity periods during which we may only sell specified products or technologies to that particular customer. Any failure to timely develop commercially successful products through our joint development activities as a result of any of these and other challenges could have a material adverse effect on our business, results of operations, and financial condition.

Our failure to develop and ramp new products into production in a timely manner could harm our operating results.

Our success depends upon our ability to develop new products for new and existing customers, and to introduce these products in a timely and cost-effective manner. New product introductions involve significant investment of resources and potential risks. Delays in new product introductions or less-than-anticipated market acceptance of our new products are possible and would have an adverse effect on our sales and earnings. The development of new products is highly complex and, from time-to-time, we have experienced delays in developing and introducing these new products. Successful product development and introduction depend on a number of factors including, but not limited to:

- proper new product definition;
- timely completion of design and testing of new products;
- assisting our customers with integration of our components into their new products, including providing support from the concept stage through design, launch and production ramp;
- successfully developing and implementing the software necessary to integrate our products into our customers' products;
- achievement of acceptable manufacturing yields;
- availability of wafer fabrication, assembly, and test capacity; and
- market acceptance of our products and the products of our customers.

Both sales and/or margins may be materially affected if new product introductions are delayed, or if our products are not designed into successive generations of new or existing customers' products. Our failure to develop and introduce new products successfully could harm our business and operating results.

In addition, difficulties associated with adapting our technology and product design to the proprietary process technology and design rules of outside foundries can lead to reduced yields of our products. Since low yields may result from either design or process technology failures, yield problems may not be effectively determined or resolved until an actual product exists that can be analyzed and tested to identify process sensitivities relating to the design rules that are used. As a result, yield problems may not be identified until well into the production process, and resolution of yield problems may require cooperation between our manufacturer and us. This risk could be compounded by the offshore location of certain of our manufacturers, increasing the effort and time required to identify, communicate and resolve manufacturing yield problems. Manufacturing defects that we do not discover during the manufacturing or testing process may lead to costly product recalls. These risks may lead to increased costs or delayed product delivery, which would harm our profitability and customer relationships.

Our results may be affected by fluctuation in sales in the consumer electronics and smartphone markets.

Because we sell products primarily in the consumer electronics and smartphone markets, we are likely to be affected by any decrease in demand or unit volumes, seasonality in the sales of our products, and the cyclical nature of these markets. We have experienced, and expect to continue to experience, slowing growth in a maturing smartphone market, due to among other factors, market saturation in developed countries, lengthening replacement cycles, and a growing market for refurbished devices. Further, a decline in consumer confidence and consumer spending relating to economic conditions, terrorist attacks, armed conflicts, oil prices, global health conditions, natural disasters, and/or the political stability of countries in which we operate or sell products could have a material adverse effect on our business.

We continue to invest in research and development efforts for several new markets, including voice biometrics. If we are unable to commercialize these technologies, our future results and profits could be negatively affected.

Our investments into new markets subjects us to additional risks. We may have limited or no experience in these markets, and our customers may not adopt our new offerings. These new offerings may present new and difficult challenges, including risks related to technology, customers, competitors, product cycles, customer demand, terms and conditions and other industry specific issues which could negatively affect our operating results.

We continue increasing our investment in our MEMS microphone business to add manufacturing capability. We have limited experience in high volume manufacturing in this market, which leads to a number of risks, including risks related to technology, customers, competition, margins, and other industry specific issues.

We are continuing to increase our investment in our MEMS microphone business. This is a competitive market with historically lower gross margins than our existing businesses. In addition, our MEMS microphone business involves different manufacturing technologies, materials, and processes than our traditional semiconductor businesses. Therefore, our investment in new markets in which we have limited experience in high volume manufacturing in those markets increases risks related to technology, customers, competitors, and other industry specific issues. These risks are further compounded by the recent transition of our MEMS microphone supply chain to Taiwan, which we expect will enable us to meet the high unit volume and performance requirements of our target markets.

Further, there can be no assurance that we will generate the expected returns and other projected results we anticipate. For example, we may not be successful in this market or we may incur costs in excess of what we anticipate and the product line may generate lower gross margins and/or profitability than our existing businesses.

Our products are increasingly complex and could contain defects, which could result in material costs to us.

Product development in the markets we serve is becoming more focused on the integration of multiple functions on individual devices. There is a general trend towards increasingly complex products, including software or firmware developed by Cirrus Logic and/or third parties. The greater integration of functions and complexity of operations of our products increases the risk that we or our customers or end users could discover latent defects or subtle faults after volumes of product have been shipped. Quality and reliability issues could result in material costs and other adverse consequences to us, including, but not limited to:

- reduced margins;
- damage to our reputation;
- replacement costs for product warranty and support;
- payments to our customers related to recall claims, or the delivery of product replacements as part of a recall claim, as a result of various industry or business practices, contractual requirements, or in order to maintain good customer relationships;
- an adverse impact to our customer relationships by the occurrence of significant defects;
- a delay in recognition or loss of revenues, loss of market share, or failure to achieve market acceptance;
- writing off or reserving the value of inventory of such products; and
- a diversion of the attention of our engineering personnel from our product development efforts.

In addition, any defects or other problems with our products could result in financial losses or other damages to our customers who could seek damages from us for their losses. A product liability or warranty claim brought against us, even if unsuccessful, would likely be time consuming and costly to defend. In particular, the sale of systems and components that are incorporated into certain applications for the automotive industry and/or secure applications using our voice biometrics solutions involves a high degree of risk that such claims may be made.

While we believe that we are reasonably insured against some of these risks and that we have attempted to contractually limit our financial exposure with many of our customers, a warranty or product liability claim against us in excess of our available insurance coverage and established reserves, or a requirement that we participate in a customer product recall, could have material adverse effects on our business, results of operations, and financial condition.

We are subject to risks relating to product concentration.

We derive a substantial portion of our revenues from a limited number of products, and we expect these products to represent a large percentage of our revenues in the near term. Customer acceptance of these products is critical to our future success. Our business, operating results, financial condition and cash flows could therefore be adversely affected by:

- a decline in demand for any of our more significant products;
- a decline in the average selling prices of our more significant products;
- failure of our products to achieve continued market acceptance;
- competitive products;
- new technological standards or changes to existing standards that we are unable to address with our products;
- manufacturing or supply issues that prevent us from meeting our customers' demand for these products;
- a failure to release new products or enhanced versions of our existing products on a timely basis; and
- the failure of our new products to achieve market acceptance.

In general, our customers may cancel or reschedule orders on short notice without incurring significant penalties; therefore, our sales and operating results in any quarter are difficult to forecast.

In general, we rely on customers issuing purchase orders to buy our products rather than long-term supply contracts. Customers may cancel or reschedule orders on short notice without incurring significant penalties. This risk is potentially heightened for those customers with whom we have less experience regarding the reliability of their forecasts. Therefore, cancellations, reductions, or delays of orders from any significant customer could have a material adverse effect on our business, financial condition, and results of operations.

In addition, a significant portion of our sales and earnings in any quarter depends upon customer orders for our products that we receive and fulfill in that quarter. Because our expense levels are based in part on our expectations as to future revenue and to a large extent are fixed in the short term, we likely will be unable to adjust spending on a timely basis to compensate for any unexpected shortfall in sales or reductions in average selling prices. Accordingly, any significant shortfall of sales in relation to our expectations could hurt our operating results.

Strong competition in the semiconductor market may harm our business.

The IC industry is intensely competitive and is frequently characterized by rapid technological change, price erosion, technological obsolescence, and a push towards IC component integration. Because of shortened product life cycles and even shorter design-in cycles in a number of the markets that we serve, our competitors have increasingly frequent opportunities to achieve design wins in next-generation systems. In the event that competitors succeed in supplanting our products, our market share may not be sustainable and our net sales, gross margin and operating results would be adversely affected.

We compete in a number of markets. Our principal competitors in these markets include AAC Technologies, AKM Semiconductor Inc., Analog Devices Inc., ams AG, Dialog Semiconductor PLC, DSP Group, ESS Technology, Inc., GoerTek Inc., Infineon Technologies AG, Knowles Corporation, Maxim Integrated Products Inc., NXP Semiconductors N.V., Qualcomm Incorporated, Realtek Semiconductor Corporation, Skyworks Solutions Inc., (through its recent acquisition of Avnera Corp.), ST Microelectronics N.V., Synaptics Incorporated and Texas Instruments, Inc. Many of these competitors have greater financial, engineering, manufacturing, marketing, technical, distribution, and other resources; broader product lines; and broader intellectual property portfolios. We also expect intensified competition from emerging companies and from customers who develop their own IC products. In addition, some of our current and future competitors maintain their own fabrication facilities, which could benefit them in connection with cost, capacity, and technical issues.

Increased competition could adversely affect our business. We cannot provide assurances that we will be able to compete successfully in the future or that competitive pressures will not adversely affect our financial condition and results of operations. Competitive pressures could reduce market acceptance of our products and result in price reductions and increases in expenses that could adversely affect our business and our financial condition.

Our sales could be materially impacted by the failure of other component suppliers to deliver required parts needed in the final assembly of our customers' end products.

The products we supply our customers are typically a portion of the many components provided from multiple suppliers in order to complete the final assembly of an end product. If one or more of these other component suppliers are unable to deliver their required component(s) in order for the final end product to be assembled, our customers may delay, or ultimately cancel, their orders from us.

We are dependent on third-party manufacturing and supply chain relationships for the majority of our products. Our reliance on third-party foundries and suppliers involves certain risks that may result in increased costs, delays in meeting our customers' demand, and loss of revenue.

We do not own or operate a semiconductor fabrication facility and do not have the resources to manufacture the majority of our products internally. We use third parties to manufacture, assemble, package and test the vast majority of our products. As a result, we are subject to risks associated with these third parties, including:

- insufficient capacity available to meet our demand;
- inadequate manufacturing yields and excessive costs;
- inability of these third parties to obtain an adequate supply of raw materials;
- difficulties selecting and integrating new subcontractors;
- limited warranties on products supplied to us;
- potential increases in prices; and
- increased exposure to potential misappropriation of our intellectual property.

Our outside foundries and assembly and test suppliers generally manufacture our products on a purchase order basis, and we have few long-term supply arrangements with these suppliers. Therefore, our third-party manufacturers and suppliers are not obligated to supply us with products for any specific period of time, quantity, or price, except as may be provided in any particular purchase order or in relation to an existing supply agreement. A manufacturing or supply disruption experienced by one or more of our outside suppliers or a disruption of our relationship with an outside foundry could negatively impact the production of certain of our products for a substantial period of time.

In addition, difficulties associated with adapting our technology and product design to the proprietary process technology and design rules of outside foundries can lead to reduced yields of our products. Since low yields may result from either design or process technology failures, yield problems may not be effectively determined or resolved until an actual product exists that can be analyzed and tested to identify process sensitivities relating to the design rules that are used. As a result, yield problems may not be identified until well into the production process, and resolution of yield problems may require cooperation between our manufacturer and us. This risk could be compounded by the offshore location of certain of our manufacturers, increasing the effort and time required to identify, communicate and resolve manufacturing yield problems. Manufacturing defects that we do not discover during the manufacturing or testing process may lead to costly product recalls. These risks may lead to increased costs or delayed product delivery, which would harm our profitability and customer relationships.

In some cases, our requirements may represent a small portion of the total production of the third-party suppliers. As a result, we are subject to the risk that a producer will cease production of an older or lower-volume process that it uses to produce our parts. We cannot provide any assurance that our external foundries will continue to devote resources to the production of parts for our products or continue to advance the process design technologies on which the manufacturing of our products are based. Each of these events could increase our costs, lower our gross margin, and cause us to hold more inventories, or materially impact our ability to deliver our products on time.

We may experience difficulties transitioning to advanced manufacturing process technologies, which could materially adversely affect our results.

Our future success depends in part on our ability to transition our current development and production efforts to advanced manufacturing process technologies. We are currently making a significant investment to transition our products and intellectual property to next-generation circuit geometries of 28 nanometer and smaller. To the extent that we do not timely transition to smaller geometries, experience difficulties in shifting to smaller geometries, or have significant quality or reliability issues at these smaller geometries, our results could be materially adversely affected.

System security risks, data protection breaches, cyber-attacks and other related cyber security issues could disrupt our internal operations and/or supply chain, and any such disruption could increase our expenses, damage our reputation and adversely affect our stock price.

Security measures at Cirrus Logic and/or within our manufacturing and supply chain are subject to third-party security breaches, employee error, malfeasance, faulty password management, and other irregularities. We manage and store various proprietary information and sensitive or confidential data relating to our business. In addition, we manage and store a significant amount of proprietary and sensitive or confidential information from third parties, such as our customers. Experienced computer programmers and hackers may be able to penetrate our security controls and misappropriate or compromise such confidential information, create system disruptions or cause shutdowns. Computer programmers and hackers also may be able to develop and deploy viruses, worms and other malicious software programs that attack our websites, products or otherwise exploit any security vulnerabilities.

Our development and sale of security-related products, such as voice biometric solutions, may make us a particularly attractive target of cyber-attacks. Experienced computer programmers or other sophisticated individuals or entities may attempt to penetrate our networks in an effort to undermine or disclose information related to the design and security of our voice biometrics products. Any failure to prevent or mitigate security breaches and improper access to the algorithms, techniques, or authentication keys used in our voice biometrics solution could harm our business reputation, diminish our competitive position in that market, and expose us to significant expense and liability associated with a customer's implementation of our solution.

The costs to us to eliminate or alleviate cyber or other security problems, bugs, viruses, worms, malicious software programs and security vulnerabilities could be significant, and our efforts to address these problems may not be successful and could result in interruptions, delays, cessation of service and loss of existing or potential customers that may impede our sales, manufacturing, distribution or other critical functions.

Any breach of our security measures or the accidental loss, inadvertent disclosure or unapproved dissemination of proprietary information or sensitive or confidential data about us or our customers, including the potential loss or disclosure of such information or data as a result of fraud, trickery or other forms of deception, could result in litigation and potential liability for us, damage our brand and reputation or otherwise harm our business.

Potential intellectual property claims and litigation could subject us to significant liability for damages and could invalidate our proprietary rights.

The IC industry is characterized by frequent litigation regarding patent and other intellectual property rights. We may find it necessary to initiate lawsuits to assert our patent or other intellectual property rights. These legal proceedings could be expensive, take significant time, and divert management's attention. We cannot provide assurances that we will ultimately be successful in any lawsuit, nor can we provide assurances that any patent owned by us will not be invalidated, circumvented, or challenged. We cannot provide assurances that rights granted under our patents will provide competitive advantages to us, or that any of our pending or future patent applications will be issued with the scope of the claims sought by us, if at all.

As is typical in the IC industry, our customers and we have, from time to time, received and may in the future receive, communications from third parties asserting patents, mask work rights, or copyrights. In the event third parties were to make a valid intellectual property claim and a license was not available on commercially reasonable terms, our operating results could be harmed. Litigation, which could result in substantial cost to us and diversion of our management, technical and financial resources, may also be necessary to defend us against claimed infringement of the rights of others. An unfavorable outcome in any such litigation could have an adverse effect on our future operations and/or liquidity.

We have significant international sales, and risks associated with these sales could harm our operating results.

International sales represented 98 percent of our net sales in each of fiscal years 2019, 2018, and 2017. We expect international sales to continue to represent a significant portion of product sales. This reliance on international sales subjects us to the risks of conducting business internationally, including risks associated with political and economic instability, global health conditions, currency controls, exchange rate fluctuations and changes in import/export regulations, and tariff and freight rates. For example, the political or economic instability in a given region may have an adverse impact on the financial position of end users in the region, which could affect future orders and harm our results of operations. Our international sales operations involve a number of other risks including, but not limited to:

- unexpected changes in government regulatory requirements;
- sales, VAT, or other indirect tax regulations and treaties and potential changes in regulations and treaties in the United States and in and between countries in which we manufacture or sell our products;
- changes to countries' banking and credit requirements;
- changes in diplomatic and trade relationships;

- delays resulting from difficulties in obtaining export licenses for technology, particularly in China;
- any changes in U.S. trade policy, including potential adoption and expansion of trade restrictions, higher tariffs, or cross border taxation by the U.S. government involving other countries, particularly China, that might impact overall customer demand for our products or affect our ability to manufacture and/or sell our products overseas;
- tariffs and other barriers and restrictions, particularly in China;
- competition with non-U.S. companies or other domestic companies entering the non-U.S. markets in which we operate;
- longer sales and payment cycles;
- problems in collecting accounts receivable;
- changes to economic, social, or political conditions in countries such as China, where we have significant operations; and
- the burdens of complying with a variety of non-U.S. laws.

In addition, our competitive position may be affected by the exchange rate of the U.S. dollar against other currencies. While our sales are predominately denominated in U.S. dollars, increases in the value of the dollar would increase the price in local currencies of our products in non-U.S. markets and make our products relatively more expensive. We cannot provide assurances that regulatory, political and other factors will not adversely affect our operations in the future or require us to modify our current business practices.

Changes in government trade policies, including the imposition of tariffs and export restrictions, could have an adverse impact on our business operations and sales.

The United States has recently enacted changes in government trade policies that could adversely impact our ability to sell products in certain countries, particularly in China. For example, in 2018 and 2019 the U.S. government imposed tariffs on certain Chinese imports and, in return, the Chinese government has imposed or proposed tariffs on certain U.S. products. Additionally, export restrictions imposed by the U.S. government may require us to suspend our business with certain international customers if we conclude or are notified by the U.S. government that such business presents a risk of noncompliance with U.S. regulations. We cannot predict what actions may ultimately be taken with respect to tariffs or trade relations between the U.S. and other countries, what products may be subject to such actions, or what actions may be taken by other countries in response. It also may not be possible to anticipate the timing or duration of such tariffs, export restrictions, or other U.S. regulatory actions. These government trade policies may materially adversely affect our sales and operations with current customers as well as impede our ability to develop relationships with new customers.

We could be subject to changes in tax laws, the adoption of new U.S. or international tax legislation or exposure to additional tax liabilities.

We are subject to taxes in the U.S. and numerous foreign jurisdictions, including the United Kingdom, where a number of our subsidiaries are organized. Due to economic and political conditions, tax laws in various jurisdictions may be subject to significant change. Our future effective tax rates could be affected by changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities, or changes in tax laws or their interpretation, including in the U.S. and the United Kingdom. We are also subject to the examination of our tax returns and other tax matters by the Internal Revenue Service of the United States (the “IRS”) and other tax authorities and governmental bodies. We regularly assess the likelihood of an adverse outcome resulting from these examinations to determine the adequacy of our provision for taxes. There can be no assurance as to the outcome of these examinations. If our effective tax rates were to increase, particularly in the U.S. or the United Kingdom, or if the ultimate determination of taxes owed is for an amount in excess of amounts previously accrued, our operating results, cash flows, and financial condition could be adversely affected.

Significant judgment is required in the calculation of our tax provision and the resulting tax liabilities. Our estimates of future taxable income and the regional mix of this income can change as new information becomes available. Any such changes in our estimates or assumptions can significantly impact our tax provision in a given period.

Our international operations subject our business to additional political and economic risks that could have an adverse impact on our business.

In addition to international sales constituting a large portion of our net sales, we maintain international operations, sales, and technical support personnel. International expansion has required, and will continue to require, significant management attention and resources. There are risks inherent in expanding our presence into non-U.S. regions, including, but not limited to:

- difficulties in staffing and managing non-U.S. operations;

- failure in non-U.S. regions to adequately protect our intellectual property, patent, trademarks, copyrights, know-how, and other proprietary rights;
- global health conditions and potential natural disasters;
- political and economic instability in international regions;
- international currency controls and exchange rate fluctuations;
- vulnerability to terrorist groups targeting American interests abroad; and
- legal uncertainty regarding liability and compliance with non-U.S. laws and regulatory requirements.

If we are unable to successfully manage the demands of our international operations, it may have a material adverse effect on our business, financial condition, or results of operations.

On June 23, 2016, the United Kingdom (U.K.) held a referendum in which voters approved an exit from the European Union (the “E.U.”), commonly referred to as “Brexit.” Following the referendum result, the British government invoked Article 50 of the Lisbon Treaty on March 29, 2017. The date by which the U.K. is to withdraw from the E.U. has been extended to October 31, 2019. It is still unknown what the terms of the U.K.’s withdrawal will be, but it is possible that there will be greater restrictions on immigration between the U.K. and E.U. countries that make it more difficult to staff our U.K. operations, changes in tax laws that negatively impact our effective tax rate, restrictions on imports and exports between the U.K. and E.U. member states, and increased regulatory complexities. These changes may adversely affect our operations and financial results.

Because we depend on subcontractors internationally to perform key manufacturing functions for us, we are subject to political, economic, and natural disaster risks that could disrupt the fabrication, assembly, packaging, or testing of our products.

We depend on third-party subcontractors, primarily in Asia, for the fabrication, assembly, packaging, and testing of most of our products. International operations may be subject to a variety of risks, including political instability, global health conditions, currency controls, exchange rate fluctuations, changes in import/export regulations, tariff and freight rates, as well as the risks of natural disasters such as earthquakes, tsunamis, and floods. Although we seek to reduce our dependence on any one subcontractor, this concentration of subcontractors and manufacturing operations in Asia subjects us to the risks of conducting business internationally, including associated political and economic conditions. If we experience manufacturing problems at a particular location, or a supplier is unable to continue operating due to financial difficulties, natural disasters, or other reasons, we would be required to transfer manufacturing to a backup supplier. Converting or transferring manufacturing from a primary supplier to a backup facility could be expensive and time consuming. As a result, delays in our production or shipping by the parties to whom we outsource these functions could reduce our sales, damage our customer relationships, and damage our reputation in the marketplace, any of which could harm our business, results of operations, and financial condition.

Our products may be subject to average selling prices that decline over time. If we are unable to maintain average selling prices for existing products, increase our volumes, introduce new or enhanced products with higher selling prices, or reduce our costs, our business and operating results could be harmed.

Historically in the semiconductor industry, average selling prices of products have decreased over time. Moreover, our dependence on a limited number of key customers may make it easier for key customers to pressure us to reduce the prices of the products we sell to them. If the average selling price of any of our products declines and we are unable to increase our unit volumes, introduce new or enhanced products with higher margins, and/or reduce manufacturing costs to offset anticipated decreases in the prices of our existing products, our operating results may be adversely affected. In addition, because of procurement lead times, we are limited in our ability to reduce total costs quickly in response to any reductions in prices or sales shortfalls. Because of these factors, we may experience material adverse fluctuations in our future operating results on a quarterly or annual basis.

As we carry only limited insurance coverage, uninsured or under-insured losses could adversely affect our financial condition and results of operations.

Our insurance policies may not be adequate to fully offset losses from covered incidents, and we do not have coverage for certain losses. For example, there is limited coverage available with respect to the services provided by our third-party foundries and assembly and test subcontractors. Although we believe that our existing insurance coverage is consistent with common practices of companies in our industry, our insurance coverage may be inadequate to protect us against product recalls, natural disasters, cybersecurity attacks, and other unforeseen catastrophes that could adversely affect our financial condition and results of operations.

Shifts in industry-wide capacity and our practice of ordering and purchasing our products based on sales forecasts may result in significant fluctuations in inventory and our quarterly and annual operating results.

We rely on independent foundries and assembly and test houses to manufacture our products. Our reliance on these third-party suppliers involves certain risks and uncertainties. For example, shifts in industry-wide capacity from shortages to oversupply, or from oversupply to shortages, may result in significant fluctuations in our quarterly and annual operating results. In addition, we may order wafers and build inventory in advance of receiving purchase orders from our customers. Because our industry is highly cyclical and is subject to significant downturns resulting from excess capacity, overproduction, reduced demand, order cancellations, or technological obsolescence, there is a risk that we will forecast inaccurately and produce excess inventories of particular products. In addition, if we experience supply constraints or manufacturing problems at a particular supplier, we could be required to switch suppliers or qualify additional suppliers. Switching and/or qualifying additional suppliers could be an expensive process and take as long as six to twelve months to complete, which could result in material adverse fluctuations to our operating results.

We generally order our products through non-cancelable purchase orders from third-party foundries based on our sales forecasts, and our customers can generally cancel or reschedule orders they place with us without significant penalties. If we do not receive orders as anticipated by our forecasts, or our customers cancel orders that are placed, we may experience increased inventory levels.

Due to the product manufacturing cycle characteristic of IC manufacturing and the inherent imprecision in the accuracy of our customers' forecasts, product inventories may not always correspond to product demand, leading to shortages or surpluses of certain products. As a result of such inventory imbalances, future inventory write-downs and charges to gross margin may occur due to lower of cost or market accounting, excess inventory, and inventory obsolescence.

We have historically experienced fluctuations in our operating results and expect these fluctuations to continue in future periods.

Our quarterly and annual operating results are affected by a wide variety of factors that could materially and adversely affect our net sales, gross margin, and operating results. If our operating results fall below expectations of market analysts or investors, the market price of our common stock could decrease significantly. We are subject to business cycles and it is difficult to predict the timing, length, or volatility of these cycles. These business cycles may create pressure on our sales, gross margin, and/or operating results.

Factors that could cause fluctuations and materially and adversely affect our net sales, gross margin and/or operating results include, but are not limited to:

- the volume and timing of orders received;
- changes in the mix of our products sold;
- market acceptance of our products and the products of our customers;
- excess or obsolete inventory;
- pricing pressures from competitors and key customers;
- our ability to introduce new products on a timely basis;
- the timing and extent of our research and development expenses;
- the failure to anticipate changing customer product requirements;
- disruption in the supply of wafers, assembly, or test services;
- reduction of manufacturing yields;
- certain production and other risks associated with using independent manufacturers, assembly houses, and testers; and
- product obsolescence, price erosion, competitive developments, and other competitive factors.

We may be adversely impacted by global economic conditions. As a result, our financial results and the market price of our common shares may decline.

Global economic conditions could make it difficult for our customers, our suppliers, and us to accurately forecast and plan future business activities, and could cause global businesses to defer or reduce spending on our products, or increase the costs of manufacturing our products. During challenging economic times our customers and distributors may face issues gaining timely access to sufficient credit, which could impact their ability to make timely payments to us. If that were to occur, we may be required to increase our allowance for doubtful accounts and our days sales outstanding would increase.

We cannot predict the timing, strength, or duration of any economic slowdown or subsequent economic recovery. If the economy or markets in which we operate were to deteriorate, our business, financial condition, and results of operations will likely be materially and/or adversely affected.

Our foreign currency exposures may change over time as the level of activity in foreign markets grows and could have an adverse impact upon financial results.

As a global enterprise, we face exposure to adverse movements in foreign currency exchange rates. Certain of our assets, including certain bank accounts, exist in non-U.S. dollar-denominated currencies, which are sensitive to foreign currency exchange rate fluctuations. The non-U.S. dollar-denominated currencies are principally the British Pound Sterling. We also have a significant number of employees that are paid in foreign currency, the largest group being United Kingdom-based employees who are paid in British Pounds Sterling.

If the value of the U.S. dollar weakens relative to these specific currencies, the cost of doing business in terms of U.S. dollars rises. With the growth of our international business, our foreign currency exposures may grow and under certain circumstances, could harm our business.

If we do not hedge against these risks, or our attempts to hedge against these risks are not successful, our financial condition and results of operations could be adversely affected.

We may be unable to protect our intellectual property rights.

Our success depends in part on our ability to obtain patents and to preserve our other intellectual property rights covering our products. We seek patent protection for those inventions and technologies for which we believe such protection is suitable and is likely to provide a competitive advantage to us. We also rely on trade secrets, proprietary technology, non-disclosure and other contractual terms, and technical measures to protect our technology and manufacturing knowledge. We actively work to foster continuing technological innovation to maintain and protect our competitive position. We cannot provide assurances that steps taken by us to protect our intellectual property will be adequate, that our competitors will not independently develop or design around our patents, or that our intellectual property will not be misappropriated. In addition, the laws of some non-U.S. countries may not protect our intellectual property as well as the laws of the United States.

Any of these events could materially and adversely affect our business, operating results, or financial condition. Policing infringement of our technology is difficult, and litigation may be necessary in the future to enforce our intellectual property rights. Any such litigation could be expensive, take significant time, and divert management's attention.

If we fail to attract, hire and retain qualified personnel, we may not be able to develop, market, or sell our products or successfully manage our business.

Competition for highly qualified personnel in our industry is intense. The number of technology companies in the geographic areas in which we operate is greater than it has been historically and we expect competition for qualified personnel to intensify. There are only a limited number of individuals in the job market with the requisite skills. Furthermore, changes in immigration laws and regulations, or the administration or enforcement of such laws or regulations, can also impair our ability to attract and retain qualified personnel. Our Human Resources organization focuses significant efforts on attracting and retaining individuals in key technology positions. The loss of the services of key personnel or our inability to hire new personnel with the requisite skills or to assimilate talent could restrict our ability to develop new products or enhance existing products in a timely manner, sell products to our customers, or manage our business effectively.

We may acquire other companies or technologies, which may create additional risks associated with our ability to successfully integrate them into our business.

We continue to consider future acquisitions of other companies, or their technologies or products, to improve our market position, broaden our technological capabilities, and expand our product offerings. If we are able to acquire companies, products or technologies that would enhance our business, we could experience difficulties in integrating them. Integrating acquired businesses involves a number of risks, including, but not limited to:

- the potential disruption of our ongoing business;
- unexpected costs or incurring unknown liabilities;
- the diversion of management resources from other strategic and operational issues;
- the inability to retain the employees of the acquired businesses;
- difficulties relating to integrating the operations and personnel of the acquired businesses;
- adverse effects on our existing customer relationships or the existing customer relationships of acquired businesses;
- the potential incompatibility of the acquired business or their business customers;

- adverse effects associated with entering into markets and acquiring technologies in areas in which we have little experience; and
- acquired intangible assets becoming impaired as a result of technological advancements or worse-than-expected performance of the acquired business.

If we are unable to successfully address any of these risks, our business could be harmed.

Our debt obligations may be a burden on our future cash flows and cash resources.

On August 29, 2014, we entered into a credit agreement (the “Credit Agreement”), which provides for a \$250 million senior secured revolving credit facility. On July 12, 2016, we amended the Credit Agreement to increase the facility to \$300 million. As of March 30, 2019, the Company did not have an outstanding balance under the facility. The credit facility matures on July 12, 2021. To the extent the Company has an outstanding balance, our ability to repay the principal of, to pay interest on or to refinance our indebtedness, depends on our future performance, which is subject to economic, financial, competitive, regulatory and other factors, some of which are beyond our control. Our business may not generate cash flow from operations in the future sufficient to satisfy our obligations or to make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as reducing or delaying investments or capital expenditures, selling assets, or refinancing or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance any indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on the Credit Agreement.

Our Credit Agreement contains restrictions that could limit our flexibility in operating our business.

Our Credit Agreement contains various covenants that could limit our ability to engage in specified types of transactions under certain conditions. These covenants could limit our ability to, among other things:

- pay dividends on, repurchase or make distributions in respect of our capital stock or make other restricted payments;
- incur additional indebtedness or issue certain preferred shares;
- make certain investments;
- sell certain assets;
- create liens;
- consolidate, merge, sell or otherwise dispose of all or substantially all of our assets; and
- enter into certain transactions with our affiliates.

A breach of any of these covenants could result in a default under Credit Agreement. In the event of a default under the Credit Agreement, the lenders could elect to declare all amounts outstanding to be immediately due and payable. If our lenders accelerate the repayment of borrowings, we may not be able to repay our debt obligations. If we were unable to repay amounts due to the lenders under our credit facility, those lenders could proceed against the collateral granted to them to secure that indebtedness.

We are subject to the export control regulations of the U.S. Department of State and the Department of Commerce. A violation of these export control regulations could have a material adverse effect on our business or our results of operations, cash flows, or financial position.

The nature of our international business subjects us to the export control regulations of the U.S. Department of State and the Department of Commerce. Any changes regarding such regulations or U.S. trade policy more generally, including potential adoption and expansion of trade restrictions, particularly with respect to China, might impact overall customer demand for our products or affect our ability to manufacture and/or sell our products overseas. Violation of these export control regulations could result in monetary penalties and denial of export privileges. The U.S. government is very strict with respect to compliance and has served notice generally that failure to comply with these regulations may subject violators to fines and/or imprisonment. Although we are not aware of any material violation of any export control regulations, a failure to comply with any of these regulations could have a material adverse effect on our business.

Our stock price has been and is likely to continue to be volatile.

The market price of our common stock fluctuates significantly. This fluctuation has been or may be the result of numerous factors, including, but not limited to:

- actual or anticipated fluctuations in our operating results;
- announcements concerning our business or those of our competitors, customers, or suppliers;

- loss of a significant customer, or customers;
- changes in financial estimates by securities analysts or our failure to perform as anticipated by the analysts;
- news, commentary, and rumors emanating from the media relating to our customers, the industry, or us. These reports may be unrelated to the actual operating performance of the Company, and in some cases, may be potentially misleading or incorrect;
- announcements regarding technological innovations or new products by us or our competitors;
- announcements by us of significant acquisitions, strategic partnerships, joint ventures, or capital commitments;
- announcements by us of significant divestitures or sale of certain assets or intellectual property;
- litigation arising out of a wide variety of matters, including, among others, employment matters and intellectual property matters;
- departure of key personnel;
- a significant stockholder selling for any reason;
- general conditions in the IC industry; and
- general market conditions and interest rates.

We have provisions in our Certificate of Incorporation and Bylaws, and are subject to certain provisions of Delaware law, which could prevent, delay or impede a change of control of our company. These provisions could affect the market price of our stock.

Certain provisions of Delaware law and of our Certificate of Incorporation and Bylaws could make it more difficult for a third party to acquire us, even if our stockholders support the acquisition. These provisions include, but are not limited to:

- the inability of stockholders to call a special meeting of stockholders;
- a prohibition on stockholder action by written consent; and
- a requirement that stockholders provide advance notice of any stockholder nominations of directors or any proposal of new business to be considered at any meeting of stockholders.

We are also subject to the anti-takeover laws of Delaware that may prevent, delay or impede a third party from acquiring or merging with us, which may adversely affect the market price of our common stock.

We are subject to the risks of owning real property.

We currently own our U.S. headquarters and research facility in Austin, Texas. The ownership of our U.S. properties subjects us to the risks of owning real property, which may include:

- the possibility of environmental contamination and the costs associated with correcting any environmental problems;
- adverse changes in the value of these properties, due to interest rate changes, changes in the neighborhood in which the property is located, or other factors; and
- the risk of financial loss in excess of amounts covered by insurance, or uninsured risks, such as the loss caused by damage to the buildings as a result of fire, floods, or other natural disasters.

ITEM 1B. *Unresolved Staff Comments*

None.

ITEM 2. *Properties*

As of March 30, 2019, our principal facilities are located in Austin, Texas and Edinburgh, Scotland, United Kingdom. The Austin facilities, which we own, consist of approximately 155,000 square feet of office space and are primarily occupied by research and development personnel and testing equipment. In addition, our failure analysis and reliability facility occupies approximately 27,000 square feet.

Additionally, we have various leased facilities in Austin, Texas, consisting of approximately 157,000 square feet. This includes approximately 151,000 square feet of leased space that houses a mixture of administrative personnel as well as research and development personnel.

In connection with our acquisition of Wolfson Microelectronics (“*Wolfson*”) on August 21, 2014, we acquired Wolfson’s corporate headquarters located in Edinburgh, Scotland, United Kingdom. This building consisted of approximately 50,000 square feet of office space. We sold this building in the fourth quarter of fiscal year 2019 and recorded a \$4.9 million gain on

the sale. This gain is presented as a separate line item in the Consolidated Statements of Income as “*Gain on sale of assets*”. Additionally, we lease approximately 110,000 square feet of office space and 27,000 square feet of high quality lab space in Edinburgh. See further details below in Results of Operation.

Below is a detailed schedule that identifies our principal locations of occupied leased and owned property as of March 30, 2019, with various lease terms through calendar year 2028. We believe that these facilities are suitable and adequate to meet our current operating needs.

<u>Design Centers</u>	<u>Sales Support Offices – International</u>
Austin, Texas	Hong Kong, China
Mesa, Arizona	Shanghai, China
Salt Lake City, Utah	Shenzhen, China
Edinburgh, Scotland, United Kingdom	Tokyo, Japan
Newbury, England, United Kingdom	Singapore
London, England, United Kingdom	Seoul, South Korea
Melbourne, Australia	Taipei, Taiwan
Madrid, Spain	

See Note 11 — Commitments and Contingencies of the Notes to Consolidated Financial Statements contained in Item 8 for further detail.

ITEM 3. *Legal Proceedings*

From time to time, we are involved in legal proceedings concerning matters arising in connection with the conduct of our business activities. We regularly evaluate the status of legal proceedings in which we are involved to assess whether a loss is probable or there is a reasonable possibility that a loss or additional loss may have been incurred and to determine if accruals are appropriate. We further evaluate each legal proceeding to assess whether an estimate of possible loss or range of loss can be made.

Based on current knowledge, management does not believe that there are any pending matters that could potentially have a material adverse effect on our business, financial condition, results of operations or cash flows. However, we are engaged in various legal actions in the normal course of business. While there can be no assurances in light of the inherent uncertainties involved in any potential legal proceedings, some of which are beyond our control, an adverse outcome in any legal proceeding could be material to our results of operations or cash flows for any particular reporting period.

ITEM 4. *Mine Safety Disclosures*

Not applicable.

PART II

ITEM 5. *Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities*

Our common stock is traded on the NASDAQ’s Global Select Market under the symbol CRUS.

As of May 21, 2019, there were approximately 422 holders of record of our common stock.

The information under the caption “Equity Compensation Plan Information” in the proxy statement to be delivered to stockholders in connection with our Annual Meeting of Stockholders to be held on August 2, 2019 (the “Proxy Statement”) is incorporated herein by reference.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

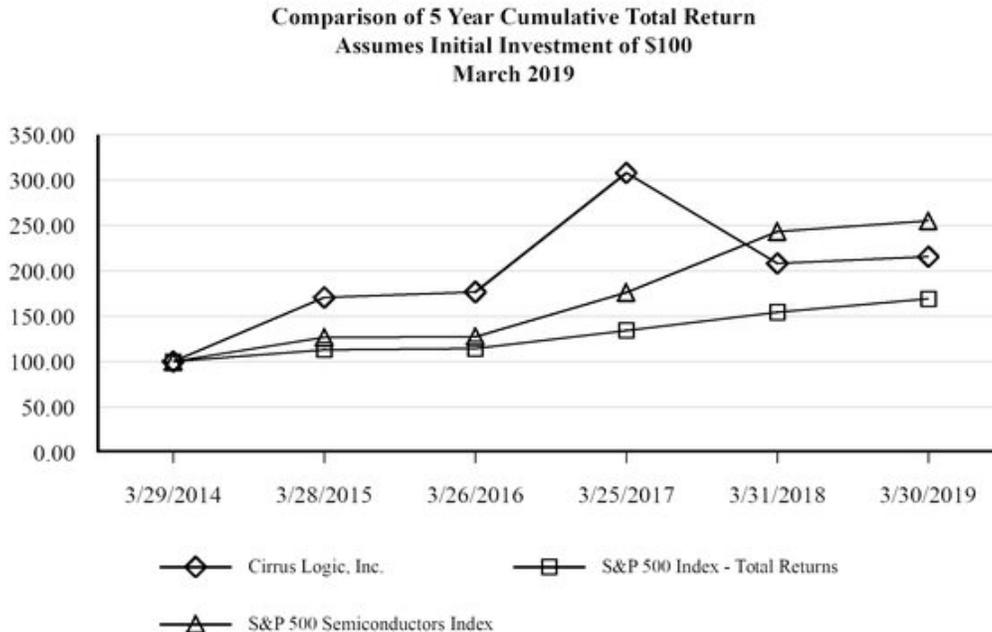
The following table provides information about purchases of equity securities that are registered by us pursuant to Section 12 of the Exchange Act during the three months ended March 30, 2019 (in thousands, except per share amounts):

Monthly Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs (1)
December 30, 2018 - January 26, 2019	—	\$ —	—	\$ —
January 27, 2019 - February 23, 2019	258	38.69	258	40,003
February 24, 2019 - March 30, 2019	—	—	—	—
Total	258	\$ 38.69	258	\$ 40,003

(1) The Company currently has two active share repurchase programs: the 2018 share repurchase program, with a remaining \$40.0 million available for repurchase as of March 30, 2019, and the \$200 million share repurchase program authorized by the Board of Directors in January 2019. The Company repurchased 0.3 million shares of its common stock for \$10.0 million during the fourth quarter of fiscal year 2019. All of these shares were repurchased in the open market and were funded from existing cash. All shares of our common stock that were repurchased were retired as of March 30, 2019. The repurchases are to be funded from existing cash and intended to be effected from time to time in accordance with applicable securities laws through the open market or in privately negotiated transactions. The timing of the repurchases and the actual amount purchased depend on a variety of factors including general market and economic conditions and other corporate considerations. The programs do not have an expiration date, do not obligate the Company to repurchase any particular amount of common stock, and may be modified or suspended at any time at the Company's discretion.

Stock Price Performance Graph

The following graph and table show a comparison of the five-year cumulative total stockholder return, calculated on a dividend reinvestment basis, for Cirrus Logic, the Standard & Poor's 500 Composite Index (the "S&P 500 Index"), and the Semiconductor Subgroup of the Standard & Poor's Electronics Index (the "S&P 500 Semiconductors Index").



	3/29/2014	3/28/2015	3/26/2016	3/25/2017	3/31/2018	3/30/2019
Cirrus Logic, Inc.	100.00	170.54	176.59	307.68	208.15	215.52
S&P 500 Index	100.00	113.23	114.28	134.41	154.48	169.15
S&P 500 Semiconductors Index	100.00	126.57	127.51	176.08	243.18	254.93

- (1) The graph assumes that \$100 was invested in our common stock and in each index at the market close on March 29, 2014, and that all dividends were reinvested. No cash dividends were declared on our common stock during the periods presented.
- (2) Stockholder returns over the indicated period should not be considered indicative of future stockholder returns.

The information in this Annual Report on Form 10-K appearing under the heading “Stock Price Performance Graph” is being “furnished” pursuant to Item 201(e) of Regulation S-K under the Securities Act of 1933, as amended, and shall not be deemed to be “soliciting material” or “filed” with the Securities and Exchange Commission or subject to Regulation 14A or 14C, other than as provided in Item 201(e) of Regulation S-K, or to the liabilities of Section 18 of the Securities Exchange Act of 1934, as amended.

ITEM 6. Selected Financial Data

The information contained below should be read along with *Item 7 – Management’s Discussion and Analysis of Financial Condition and Results of Operations* and *Item 8 – Financial Statements and Supplementary Data* (amounts in thousands, except per share amounts).

	Fiscal Years				
	2019	2018	2017	2016	2015
	(1)	(1)	(1)		
Net sales	\$ 1,185,524	\$ 1,532,186	\$ 1,538,940	\$ 1,169,251	\$ 916,568
Net income	89,991	161,995	261,209	123,630	55,178
Basic earnings per share	\$ 1.50	\$ 2.55	\$ 4.12	\$ 1.96	\$ 0.88
Diluted earnings per share	\$ 1.46	\$ 2.46	\$ 3.92	\$ 1.87	\$ 0.85
Financial position at year end:					
Cash, cash equivalents, restricted investments and marketable securities	\$ 445,323	\$ 434,500	\$ 450,979	\$ 250,006	\$ 260,719
Total assets	1,352,640	1,430,117	1,413,470	1,181,883	1,148,778
Working capital	509,443	473,465	631,853	378,005	275,335
Long-term liabilities	96,860	128,180	117,703	194,276	215,429
Total stockholders’ equity	\$ 1,140,240	\$ 1,161,728	\$ 1,151,692	\$ 859,483	\$ 756,771

- (1) Refer to the consolidated financial statements and the Notes thereto contained in Item 8 of this Form 10-K for fiscal years 2019, 2018, and 2017, for an expanded discussion of factors that materially affect the comparability of the information reflected in the selected consolidated financial data presented above.

ITEM 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations

Please read the following discussion in conjunction with our audited historical consolidated financial statements and notes thereto, which are included elsewhere in this Form 10-K. Management’s Discussion and Analysis of Financial Condition and Results of Operations contains statements that are forward-looking. These statements are based on current expectations and assumptions that are subject to risk, uncertainties and other factors. Actual results could differ materially because of the factors discussed in Part I, Item 1A. “Risk Factors” of this Form 10-K.

Critical Accounting Policies

Our discussion and analysis of the Company’s financial condition and results of operations are based upon the consolidated financial statements included in this report, which have been prepared in accordance with U. S. generally accepted accounting principles. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts. We evaluate the estimates on an on-going basis. We base these estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for

making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions and conditions.

We believe the following critical accounting policies involve significant judgments and estimates that are used in the preparation of the consolidated financial statements:

- We report income taxes under the asset and liability method. Deferred tax assets and liabilities are recognized for the expected tax consequences of temporary differences between the financial reporting basis and tax basis of assets and liabilities, which are measured using the enacted tax laws and tax rates that will be in effect when the differences are expected to reverse. We assess the likelihood that the deferred tax assets will be realized. A valuation allowance is established against deferred tax assets to the extent the Company believes that it is more likely than not that the deferred tax assets will not be realized, taking into consideration the level of historical taxable income and projections for future taxable income over the periods in which the temporary differences are deductible.

The calculation of our tax liabilities involves assessing uncertainties with respect to the application of complex tax rules. Uncertain tax positions must meet a more likely than not threshold to be recognized in the financial statements and the tax benefits recognized are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon final settlement. See Note 15 — Income Taxes of the Notes to Consolidated Financial Statements contained in Item 8 for additional details .

- We recognize revenue upon the transfer of promised goods or services to customers, in an amount that reflects the consideration the Company expects to be entitled in exchange for those goods or services. See Note 2 - Summary of Significant Accounting Policies - *Revenue Recognition* of the Notes to Consolidated Financial Statements contained in Item 8 for discussion on the identification of the Company's performance obligations and determination of transaction price, including treatment of rebates, right of returns, warranties, price protection and stock rotation.
- Inventories are recorded at the lower of cost or net realizable value, with cost being determined on a first-in, first-out basis. We write down inventories to net realizable value based on forecasted demand while taking into account product release schedules and product life cycles, which may drive management judgment. We also review and write down inventory, as appropriate, based on the age and condition of the inventory. Actual demand and market conditions may be different from those projected by management, which could have a material effect on our operating results and financial position. See Note 2 — Summary of Significant Accounting Policies of the Notes to Consolidated Financial Statements contained in Item 8.
- We evaluate the recoverability of property, plant, and equipment and intangible assets by testing for impairment losses on long-lived assets used in operations when indicators of impairment are present and the undiscounted cash flows estimated to be generated by those assets are less than the assets' carrying amounts. An impairment loss is recognized in the event the carrying value of these assets exceeds the fair value of the applicable assets. Impairment evaluations involve management estimates of asset useful lives and future cash flows. Actual useful lives and cash flows could be different from those estimated by management, which could have a material effect on our operating results and financial position. See Note 6 — Intangibles, net and Goodwill of the Notes to Consolidated Financial Statements contained in Item 8.
- The Company evaluates goodwill and other intangible assets. Goodwill is recorded at the time of an acquisition and is calculated as the difference between the total consideration paid for an acquisition and the fair value of the net tangible and intangible assets acquired. The Company tests goodwill and other intangible assets for impairment on an annual basis or more frequently if the Company believes indicators of impairment exist. Impairment evaluations involve management's assessment of qualitative factors to determine whether it is more likely than not that goodwill and other intangible assets are impaired. If management concludes from its assessment of qualitative factors that it is more likely than not that impairment exists, then a quantitative impairment test will be performed involving management estimates of asset useful lives and future cash flows. Significant management judgment is required in the forecasts of future operating results that are used in these evaluations. If our actual results, or the plans and estimates used in future impairment analyses, are lower than the original estimates used to assess the recoverability of these assets, we could incur additional impairment charges in a future period. The Company has recorded no goodwill impairments in fiscal years 2019 , 2018 , and 2017 . There were no material intangible asset impairments in fiscal years 2019 , 2018 , and 2017 .
- We are subject to the possibility of loss contingencies for various legal matters. See Note 12 — Legal Matters of the Notes to Consolidated Financial Statements contained in Item 8 . We regularly evaluate current information available to us to determine whether any accruals should be made based on the status of the case, the results of the discovery process and other factors. If we ultimately determine that an accrual should be made for a legal matter, this accrual could have a material effect on our operating results and financial position and the ultimate outcome may be materially different than our estimate.

Recently Issued Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2014-09, Revenue from Contracts with Customers (ASC Topic 606). The purpose of this ASU is to converge revenue recognition requirements per U.S. GAAP and International Financial Reporting Standards (“IFRS”). The core principle of the guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In August 2015, the FASB issued ASU 2015-14, Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date after public comment supported a proposal to delay the effective date of this ASU to annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period. The Company completed the process of reviewing our customers’ contracts in respect of performance obligation identification and satisfaction, pricing, warranties, and return rights, among other considerations, in the first quarter of fiscal year 2019. According to the standard, the Company could adopt by full retrospective method, which applies retrospectively to each prior period presented, or by modified retrospective method with the cumulative effect adjustment recognized in beginning retained earnings as of the date of adoption. The Company adopted this standard using the modified retrospective adoption method in the first quarter of fiscal year 2019 with no income statement impact, and therefore no beginning retained earnings impact. See Note 2 - Summary of Significant Accounting Policies - Revenue Recognition as well as Note 8 - Revenues for additional details.

The effects of the changes made to our balance sheet at adoption were as follows (in thousands):

	Balance at March 31, 2018	Impact from ASU 2014- 09 Adoption	Balance at April 1, 2018
<i>Financial statement line item:</i>			
Accounts receivable	\$ 100,801	\$ 5,539	\$ 106,340
Inventories	205,760	(391)	205,369
Other current assets	13,877	391	14,268
Other accrued liabilities	\$ (12,657)	\$ (5,539)	\$ (18,196)

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. The FASB issued this update to increase transparency and comparability by recognizing lease assets and lease liabilities on the balance sheet and disclosing key leasing arrangement details. Lessees would recognize operating leases on the balance sheet under this ASU - with the future lease payments recognized as a liability, measured at present value, and the right-of-use (“ROU”) asset recognized for the lease term. A single lease cost would be recognized over the lease term. For initial terms of less than twelve months, a lessee would be permitted to make an accounting policy election to recognize lease expense for such leases generally on a straight-line basis over the lease term. This ASU is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. The modified retrospective approach was previously the only allowed adoption method.

In July 2018, the FASB issued the related ASU 2018-10 - *Leases (Topic 842): Targeted Improvements*. This ASU offers a new transition adoption method, which will not require adjustments to comparative periods. The Company adopted using the latter method in the first quarter of fiscal year 2020. The new standard provides a number of optional practical expedients in transition. We elected the use-of-hindsight practical expedient and the ‘package of practical expedients’ which permits us not to reassess under the new standard our prior conclusions about lease identification, lease classification and initial direct costs. The new standard also provides practical expedients for an entity’s ongoing accounting. We elected the short-term lease recognition exemption for all leases that qualify. This means, for qualifying leases, typically those with terms of less than twelve months, we will not recognize ROU assets or lease liabilities. We also do not separate lease and non-lease components for all classes of assets. Most of our operating lease commitments were subject to the new standard and recognized as right-of-use assets and operating lease liabilities upon adoption, which will materially increase the total assets and total liabilities that we report relative to such amounts prior to adoption of this ASU.

On adoption, we recognized additional operating liabilities of approximately \$158.0 million, with corresponding ROU assets based on the present value of the remaining minimum rental payments under current leasing contracts for existing operating leases. In addition, existing capitalized initial direct costs of \$2.8 million and accrued lease payments of \$11.1 million were reclassified from prepayments and accruals to the ROU asset, resulting in a ROU asset of \$149.7 million. There was no income statement impact on adoption.

In applying the use-of-hindsight practical expedient, we re-assessed whether we were reasonably certain to exercise extension options within our lease agreements. This resulted in the lease term being extended on a number of leases. The

previously capitalized initial direct costs and lease creditor were recalculated assuming these extended lease terms had always applied, resulting in an adjustment of \$1.0 million to opening retained earnings on transition.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments — Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. This ASU requires credit losses on available-for-sale debt securities to be presented as an allowance rather than a write-down. Unlike current U.S. GAAP, the credit losses could be reversed with changes in estimates, and recognized in current year earnings. This ASU is effective for annual periods beginning after December 15, 2019, and interim periods within those annual periods. Early adoption is permitted for annual periods beginning after December 15, 2018, including interim periods. The Company is currently evaluating the impact of this ASU, but does not expect a material impact to the financial statements upon adoption.

In January 2017, the FASB issued ASU 2017-04, *Intangibles — Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*. This ASU eliminates step two of the goodwill impairment test. An impairment charge is to be recognized for the amount by which the current value exceeds the fair value. This ASU is effective for annual periods beginning after December 15, 2019, including interim periods. Early adoption is permitted, for interim or annual goodwill impairment tests performed after January 1, 2017 and should be applied prospectively. An entity is required to disclose the nature of and reason for the change in accounting principle upon transition. That disclosure should be provided in the first annual period and in the interim period within the first annual period when the entity initially adopts the amendments in this update. The Company is currently evaluating the impact of this ASU, but does not expect a material impact to the financial statements upon adoption.

In March 2017, the FASB issued ASU 2017-07, *Compensation - Retirement Benefits (Topic 715): Improving the presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. This ASU requires an employer to disaggregate the service cost component from the other components of net benefit cost. It also provides guidance on income statement presentation for service cost and other components of net benefit cost. This ASU is effective for annual periods beginning after December 15, 2017, including interim periods. The Company adopted this ASU in the first quarter of fiscal year 2019. The impact of adoption included the buy-out settlement of the defined benefit pension plan, discussed further in Note 9.

In May 2017, the FASB issued ASU 2017-09, *Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting*. This ASU applies to any company that changes the terms or conditions of a share-based award, considered a modification. Modification accounting would be applied unless certain conditions were met related to the fair value of the award, the vesting conditions and the classification of the modified award. This ASU is effective for annual periods beginning after December 15, 2017, with early adoption permitted. The standard should be applied prospectively to an award modified on or after the adoption date. The Company adopted this ASU in the first quarter of fiscal year 2019 with no financial statement impact as no awards were modified in the current period.

In February 2018, the FASB issued ASU 2018-02, *Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*. This ASU allows for the classification of stranded tax effects resulting from the Tax Cuts and Jobs Act (the “Tax Act”) from accumulated other comprehensive income to retained earnings. This ASU is effective for annual periods beginning after December 15, 2018, with early adoption permitted. The standard should be applied in the period of adoption or retrospectively to each period (or periods) in which the effect of the change in tax rate is recognized. The Company is currently evaluating the impact of this ASU, but does not expect a material impact to the financial statements upon adoption.

In June 2018, the FASB issued ASU 2018-07, *Compensation - Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting*. This ASU expands the scope of Topic 718 to include all share-based payment transactions for acquiring goods and services from nonemployees and will apply to all share-based payment transactions in which the grantor acquires goods and services to be used or consumed in its own operations by issuing share-based payment awards. This ASU is effective for fiscal years beginning after December 15, 2018, including interim periods within that fiscal year, with early adoption permitted. The Company intends to adopt this guidance in the first quarter of fiscal year 2020, but does not expect a material impact to the financial statements.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement*. This ASU adjusts current required disclosures related to fair value measurements. This ASU is effective for fiscal years beginning after December 15, 2019, including interim periods within that fiscal year, with early adoption permitted. The Company is currently evaluating the impact of this ASU, but does not expect a material impact to the financial statements.

In August 2018, the Commission adopted the final rule under SEC Release No. 33-10532, Disclosure Update and Simplification, amending certain disclosure requirements that were redundant, duplicative, overlapping, outdated or superseded. In addition, the amendments expanded the disclosure requirements on the analysis of stockholders' equity for interim financial statements. Under the amendments, an analysis of changes in each caption of stockholders' equity presented

in the balance sheet must be provided in a note or separate statement. The analysis should present a reconciliation of the beginning balance to the ending balance of each period for which a statement of comprehensive income is required to be filed. The final rule was published in the Federal Register on October 4, 2018, effective November 5, 2018. The additional disclosure is not required until the quarterly filing covering the period beginning after the effective date of the amendments, which will be the Company's first quarter fiscal year 2020 filing. The Company is evaluating the impact of this guidance on its financial statements, but does not expect a material impact to the financial statements upon adoption.

Overview

Cirrus Logic develops high-precision analog and mixed-signal ICs for a broad range of innovative customers. We track operating results in one reportable segment, but report revenue performance by product line, currently portable and non-portable and other products. In fiscal year 2019, the Company significantly increased our penetration of the Android™ market, driven by demand for our boosted amplifiers, broadened our customer base, and executed on new product development activities. The Company also made progress with our longer-term investments in MEMS microphones and voice biometrics as customer engagements increased and evaluation activity continued. With an extensive product roadmap spanning audio, voice and other adjacent markets such as haptics, we are dedicated to delivering differentiated products that we believe will enable us to capitalize on the increasing demand for complex analog and mixed-signal processing, which we expect to drive our long-term success.

Fiscal Year 2019

Fiscal year 2019 net sales of \$1.19 billion represented a decrease over fiscal year 2018 net sales of \$1.53 billion. Portable product line sales of \$1.03 billion in fiscal year 2019 decreased from fiscal year 2018 sales of \$1.36 billion, attributable primarily to reduced unit volumes of our portable products shipping in smartphones, which was partially offset by increased amplifier sales at Android customers. Non-portable and other product line sales of \$153.5 million represented an 8.8 percent decrease from fiscal year 2018 sales of \$168.3 million.

Overall, gross margin for fiscal year 2019 was 50.4 percent. The increase in gross margin for fiscal year 2019 was primarily due to more favorable product mix on certain portable products, and, to a lesser extent, supply chain efficiencies in the current fiscal year versus the prior year. The Company's number of employees decreased to 1,551 as of March 30, 2019. The Company achieved net income of \$90.0 million in fiscal year 2019, which included an income tax provision in the amount of \$3.8 million.

Fiscal Year 2018

Fiscal year 2018 net sales of \$1.53 billion represented a slight decrease over fiscal year 2017 net sales of \$1.54 billion. Portable product line sales of \$1.36 billion in fiscal year 2018 decreased slightly over fiscal year 2017 sales of \$1.37 billion, attributable primarily to lower ASP components at a key Android OEM and ASP reductions on certain other portable products, partially offset by increased smartphone sales volumes. Non-portable and other product line sales of \$168.3 million represented a 1.9 percent increase from fiscal year 2017 sales of \$165.1 million.

Overall, gross margin for fiscal year 2018 was 49.6 percent. The increase in gross margin for fiscal year 2018 was primarily due to supply chain efficiencies versus fiscal year 2017. The Company's number of employees increased to 1,596 as of March 31, 2018. The Company achieved net income of \$162.0 million in fiscal year 2018, which included an income tax provision in the amount of \$103.1 million.

Fiscal Year 2017

Fiscal year 2017 net sales of \$1.54 billion represented a 32 percent increase over fiscal year 2016 net sales of \$1.17 billion. Portable product line sales of \$1.37 billion in fiscal year 2017 represented a 39 percent increase over fiscal year 2016 sales of \$989.1 million, attributable primarily to significant increases in the sales of smart codecs and boosted amplifiers for the period, which was partially offset by a reduction in revenue generated by certain general market smart codecs as a leading Android™ customer reverted to a dual sourcing strategy on core chipsets. Non-portable and other product line sales of \$165.1 million represented an 8 percent decrease from fiscal year 2016 sales of \$180.2 million.

Overall, gross margin for fiscal year 2017 was 49.2 percent. The increase in gross margin for fiscal year 2017 was primarily due to higher volumes and supply chain efficiencies versus fiscal year 2016. The Company's number of employees increased to 1,444 as of March 25, 2017. The Company achieved net income of \$261.2 million in fiscal year 2017, which included an income tax provision in the amount of \$53.8 million.

Results of Operations

The following table summarizes the results of our operations for each of the past three fiscal years as a percentage of net sales. All percentage amounts were calculated using the underlying data, in thousands:

	Fiscal Years Ended		
	March 30, 2019	March 31, 2018	March 25, 2017
Net sales	100 %	100%	100%
Gross margin	50 %	50%	49%
Research and development	32 %	24%	20%
Selling, general and administrative	11 %	9%	8%
Gain on sale of assets	(1)%	—%	—%
Asset impairment	— %	—%	—%
Income from operations	8 %	17%	21%
Interest income	1 %	—%	—%
Interest expense	— %	—%	—%
U.K. pension settlement	(1)%	—%	—%
Other expense	— %	—%	—%
Income before income taxes	8 %	17%	21%
Provision for income taxes	— %	6%	4%
Net income	8 %	11%	17%

Net Sales

We report sales in two product categories: portable products and non-portable and other products. Our sales by product line are as follows (in thousands):

	Fiscal Years Ended		
	March 30, 2019	March 31, 2018	March 25, 2017
Portable Products	\$ 1,032,049	\$ 1,363,876	\$ 1,373,848
Non-Portable and Other Products	153,475	168,310	165,092
	<u>\$ 1,185,524</u>	<u>\$ 1,532,186</u>	<u>\$ 1,538,940</u>

Net sales for fiscal year 2019 decreased by 22.6% percent, to \$1.19 billion from \$1.53 billion in fiscal year 2018. The decrease in net sales reflects a \$331.8 million decrease in portable product sales and a \$14.8 million decrease in non-portable and other product sales. The portable product line experienced a decrease in net sales attributable to a reduction in sales of portable products shipping in smartphones, along with digital headsets and adaptors, which was partially offset by increased amplifier sales at Android customers. Non-portable and other product line sales of \$153.5 million represented a 8.8 percent decrease from fiscal year 2018 sales of \$168.3 million, which was primarily attributable to decreases in legacy product sales.

Net sales for fiscal year 2018 decreased slightly by 0.4% percent, to \$1.53 billion from \$1.54 billion in fiscal year 2017. The decrease in net sales reflects a \$10.0 million decrease in portable product sales and a \$3.2 million increase in non-portable and other product sales. Portable product line sales experienced a decrease in net sales attributable to lower ASP components at a key Android OEM and ASP reductions on certain other portable products, partially offset by increased smartphone sales volumes versus fiscal year 2017. Non-portable and other product line sales of \$168.3 million represented a 1.9 percent increase from fiscal year 2017 sales of \$165.1 million, which was primarily attributable to increases in computer-related and power meter sales, partially offset by decreases in surround codecs and software sales for the year.

Sales to non-U.S. customers, principally located in Asia, including sales to U.S.-based end customers that manufacture products through contract manufacturers or plants located overseas, were approximately \$1.2 billion in fiscal year 2019, and \$1.5 billion in fiscal years 2018 and 2017, representing 98 percent of net sales in fiscal years 2019, 2018 and 2017.

Our sales are denominated primarily in U.S. dollars. No foreign currency hedging contracts were entered into in any period presented.

Gross Margin

Overall gross margin of 50.4 percent for fiscal year 2019 reflects an increase from fiscal year 2018 gross margin of 49.6 percent . The increase was primarily attributable to more favorable product mix on certain portable products, and, to a lesser extent, supply chain efficiencies in the current fiscal year versus the prior year. Changes in excess and obsolete inventory charges, including scrapped inventory, and sales of product written down in prior periods did not have a material impact on margin in fiscal year 2019 .

Overall gross margin of 49.6 percent for fiscal year 2018 reflects an increase from fiscal year 2017 gross margin of 49.2 percent . The increase was primarily attributable to supply chain efficiencies in the prior fiscal year versus fiscal year 2017. Changes in excess and obsolete inventory charges, including scrapped inventory, and sales of product written down in prior periods did not have a material impact on margin in fiscal year 2018 .

Research and Development Expenses

Fiscal year 2019 research and development expenses of \$375.1 million reflect an increase of \$8.7 million , or 2 percent , from fiscal year 2018 . The increase was attributable to an increase in average monthly research and development headcount during fiscal year 2019 versus the prior fiscal year and the associated salary and employee-related expenses, higher facilities and infrastructure-related costs, and fiscal year 2018 adjustments to the contingent consideration, offset by decreases to product development expenses and amortization of acquisition-related intangibles.

Fiscal year 2018 research and development expenses of \$366.4 million reflect an increase of \$62.7 million, or 21 percent, from fiscal year 2017 . The increase was attributable to an 8 percent increase in research and development headcount and the associated salary and employee-related expenses, as well as higher product development expenses, including tape-outs and contract labor, increased amortization of acquisition-related intangibles, and higher facilities and infrastructure-related costs in fiscal year 2018 versus fiscal year 2017 related to the increased headcount. These increases were partially offset by a higher UK Research and Development Expenditure Credit (RDEC) in fiscal year 2018.

Selling, General and Administrative Expenses

Fiscal year 2019 selling, general and administrative expenses of \$126.5 million reflect a decrease of \$5.3 million , or 4 percent , compared to fiscal year 2018 . The decrease was primarily attributable to decreased salary and employee-related expenses in fiscal year 2019 .

Fiscal year 2018 selling, general and administrative expenses of \$131.8 million reflect an increase of \$4.5 million, or 4 percent, compared to fiscal year 2017 . The increase was primarily attributable to increased salary and employee-related expenses in fiscal year 2018 .

Westfield House

In the fourth quarter of fiscal year 2017, the Company reported an asset impairment charge of \$9.8 million related to a building owned by the Company in Edinburgh, Scotland (" *Westfield House* "). The Company determined that the undiscounted cash flows associated with the property of the asset were less than the carrying value at that time. Considering the fact that the building was no longer used as the primary office space for Edinburgh employees and that market conditions had weakened, the Company hired an independent consultant to assess the fair value of the building. The variance in the assessed valuation amount and the carrying value was recorded in fiscal year 2017 and is presented as a separate line item on the Consolidated Statements of Income under the caption "*Asset impairment.*"

Subsequently, in fiscal year 2019, market conditions improved and the Company marketed and sold Westfield House in the fourth quarter, for a gain on the sale of \$4.9 million - presented as "*Gain on sale of assets* " on the Consolidated Statements of Income.

Interest Income

Interest income in fiscal years 2019 , 2018 , and 2017 , was \$8.0 million , \$4.8 million , and \$1.7 million , respectively. The increase in interest income in fiscal year 2019 and 2018 was due to higher yields on higher average cash, cash equivalent, and marketable securities balances throughout the year versus the previous year.

Interest Expense

The Company reported interest expense of \$1.1 million , \$1.2 million and \$3.6 million for fiscal years 2019 , 2018 , and 2017 , respectively, primarily as a result of the revolving credit facility and pay down activity, described in Note 7.

U.K. Pension Settlement

The Company settled its defined benefit pension scheme in the third quarter of fiscal year 2019. A settlement loss of \$13.8 million was recognized, which was the amount of the previously recorded unamortized actuarial pension loss in AOCI.

The loss is presented as a separate line item in the Consolidated Statements of Income under the caption " *U.K. pension settlement* ". The Company will have no further contribution obligations going forward.

Other Expense

In fiscal years 2019 and 2018 , the Company reported \$0.2 million and \$1.0 million , respectively, in other expense, primarily foreign exchange costs. The corresponding amount in fiscal year 2017 was immaterial.

Provision for Income Taxes

We recorded income tax expense of \$3.8 million in fiscal year 2019 on a pre-tax income of \$93.7 million , yielding an effective tax rate of 4.0 percent . Our effective tax rate was lower than the U.S. statutory rate of 21.0 percent , primarily due to a decrease in the provisional enactment-date effects of the legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"), as well as the U.S. federal research and development tax credit and the effect of income earned in certain foreign jurisdictions that is taxed below the federal statutory rate. This overall decrease was partially offset by an increase in valuation allowance related to certain U.S. federal deferred tax assets and state tax attributes due to the likelihood that they will expire or go unutilized.

The Tax Act was enacted on December 22, 2017. The Tax Act reduces the U.S. federal corporate income tax rate from 35% to 21%, restricts the deductibility of certain business expenses, requires companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax-deferred, and creates new taxes on certain foreign sourced earnings, among other provisions. We recognized a provisional amount of \$60.1 million, which was included as a component of income tax expense from continuing operations during fiscal year 2018. Our accounting for the enactment-date effects of the Tax Act was completed during the quarter ended December 29, 2018. We recognized an \$11.1 million adjustment to the provisional amounts recorded at March 31, 2018, which was included as a component of income tax expense from continuing operations during fiscal year 2019.

We recorded income tax expense of \$103.1 million in fiscal year 2018 on a pre-tax income of \$265.1 million , yielding an effective tax provision rate of 38.9 percent . Our effective tax rate was higher than the blended U.S. statutory rate of 31.6 percent, primarily due to the impact of the Tax Act, partially offset by income earned in certain foreign jurisdictions that is taxed below the federal statutory rate and excess benefits from stock-based compensation. The reduction in the U.S. federal corporate income tax rate was effective January 1, 2018. The rate change was administratively effective at the beginning of our fiscal year 2018, resulting in a blended U.S. federal corporate income tax rate of 31.6% for the annual period. We recorded \$60.1 million of income tax expense during fiscal year 2018 as a provisional estimate of the discrete tax effects of the Tax Act.

We recorded income tax expense of \$53.8 million in fiscal year 2017 on a pre-tax income of \$315.0 million, yielding an effective tax provision rate of 17.1 percent. Our effective tax rate was lower than the then current U.S. statutory rate of 35 percent, primarily due to income earned in jurisdictions with a lower statutory tax rate, excess tax benefits from stock based compensation due to the early adoption of the ASU 2016-09 accounting standard, and research and development tax credits in the U.S.

For additional discussion about our income taxes, including the effect of the Tax Act, see Note 15 - Income Taxes.

Outlook

Looking ahead, we anticipate gross margin to be approximately 50 percent for the next fiscal year. In fiscal year 2020, we currently expect operating expense to remain relatively flat compared to fiscal year 2019 as we continue to invest in important R&D projects that we anticipate will drive future growth. Given the wide array of uncertainties surrounding the macroeconomic environment and their unknown impact on smartphone volumes, it is difficult to predict our revenue outlook for fiscal year 2020. Cirrus Logic made meaningful progress in fiscal year 2019 with numerous strategic initiatives that we believe position the Company for growth in the coming years.

Liquidity and Capital Resources

In fiscal year 2019 , cash flow from operations was \$206.7 million . Operating cash flow during fiscal year 2019 was related to the cash components of our net income, offset by a \$23.4 million unfavorable change in working capital. The unfavorable change in working capital was driven primarily by a decrease in payables and an increase in accounts receivable, partially offset by a decrease in inventories. In fiscal year 2018 , cash flow from operations was \$318.7 million . Operating cash flow during fiscal year 2018 was related to the cash components of our net income and a \$29.1 million favorable change in working capital. The favorable change in working capital was driven primarily by a decrease in accounts receivable and an increase in income taxes payable, partially offset by an increase in inventories during the period. In fiscal year 2017 , cash flow from operations was \$369.8 million . Operating cash flow during fiscal year 2017 was related to the cash components of our net

income, offset by a \$24.9 million unfavorable change in working capital. The unfavorable change in working capital was driven primarily by an increase in accounts receivable and inventories during the period.

In fiscal year 2019, the Company used \$54.7 million in cash for investing activities primarily related to \$28.0 million in net purchases of marketable securities, and capital expenditures and technology investments of \$35.8 million. In fiscal year 2018, the Company used approximately \$184.7 million in cash for investing activities principally related to \$100.2 million in net purchases of marketable securities, and capital expenditures and technology investments of \$59.3 million. In addition, the Company purchased certain tangible and intangible assets for \$25.2 million as part of a technology acquisition. In fiscal year 2017, the Company used approximately \$69.9 million in cash for investing activities primarily related to \$18.6 million in net purchases of marketable securities, and capital expenditures and technology investments of \$51.3 million.

In fiscal year 2019, the Company used \$171.5 million related to financing activities. In fiscal year 2018, the Company used \$249.6 million in financing activities. In fiscal year 2017, the Company used \$117.5 million in financing activities. Payments against revolver balances in fiscal years 2019, 2018 and 2017 were zero, \$60.0 million and \$100.4 million, respectively. See Note 7 and *Revolving Credit Facility* below for more information relating to debt agreements and terms that existed during the periods. Additionally, in fiscal years 2019, 2018, and 2017, the Company utilized approximately \$160.0 million, \$175.8 million, and \$15.4 million, respectively, in cash to repurchase and retire portions of its outstanding common stock. See Note 13 for a description of our share repurchase programs.

Our future capital requirements will depend on many factors, including the rate of sales growth, market acceptance of our products, the timing and extent of research and development projects, potential acquisitions of companies or technologies and the expansion of our sales and marketing activities. We believe our expected future cash earnings, existing cash, cash equivalents, investment balances, and available borrowings under our Credit Facility will be sufficient to meet our capital requirements both domestically and internationally, through at least the next 12 months, although we could be required, or could elect, to seek additional funding prior to that time.

Revolving Credit Facility

On July 12, 2016, Cirrus Logic entered into an amended and restated credit agreement (the “Credit Agreement”) with Wells Fargo Bank, National Association, as Administrative Agent, and the Lenders party thereto, for the purpose of refinancing an existing credit facility and providing ongoing working capital. The Credit Agreement provides for a \$300 million senior secured revolving credit facility (the “Credit Facility”). The Facility matures on July 12, 2021. Cirrus Logic must repay the outstanding principal amount of all borrowings, together with all accrued but unpaid interest thereon, on the maturity date. The Credit Facility is required to be guaranteed by all of Cirrus Logic’s material domestic subsidiaries (the “Subsidiary Guarantors”). The Credit Facility is secured by substantially all of the assets of Cirrus Logic and any Subsidiary Guarantors, except for certain excluded assets.

Borrowings under the Credit Facility may, at our election, bear interest at either (a) a base rate plus the applicable margin (“Base Rate Loans”) or (b) a LIBOR rate plus the applicable margin (“LIBOR Rate Loans”). The applicable margin ranges from 0% to 0.50% per annum for Base Rate Loans and 1.25% to 2.00% per annum for LIBOR Rate Loans based on the Leverage Ratio (as defined below). A commitment fee accrues at a rate per annum ranging from 0.20% to 0.30% (based on the Leverage Ratio) on the average daily unused portion of the commitment of the lenders. The Credit Agreement contains certain financial covenants providing that (a) the ratio of consolidated funded indebtedness to consolidated EBITDA for the prior four fiscal quarters must not be greater than 3.00 to 1.00 (the “Leverage Ratio”) and (b) the ratio of consolidated EBITDA for the prior four consecutive fiscal quarters to consolidated fixed charges (including amounts paid in cash for consolidated interest expenses, capital expenditures, scheduled principal payments of indebtedness, and income taxes) for the prior four consecutive fiscal quarters must not be less than 1.25 to 1.00 as of the end of each fiscal quarter. The Credit Agreement also contains negative covenants limiting the Company’s or any Subsidiary’s ability to, among other things, incur debt, grant liens, make investments, effect certain fundamental changes, make certain asset dispositions, and make certain restricted payments.

As of March 30, 2019, the Company had no amounts outstanding under the Credit Facility and was in compliance with all covenants under the Credit Agreement.

See also Note 7 — Revolving Credit Facility.

Off Balance Sheet Arrangements

As of March 30, 2019, the Company did not have any off-balance-sheet arrangements, as defined in Item 303(a)(4)(ii) of SEC Regulation S-K, that were reasonably likely to have a material effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

Contractual Obligations

In our business activities, we incur certain commitments to make future payments under contracts such as debt agreements, purchase orders, operating leases and other long-term contracts. Maturities under these contracts are set forth in the following table as of March 30, 2019 :

	Payment due by period (in thousands)				
	< 1 year	1-3 years	3-5 years	> 5 years	Total
Facilities leases, net	\$ 14,343	\$ 26,647	\$ 24,025	\$ 35,388	\$ 100,403
Equipment and other commitments	144	278	239	222	883
Wafer purchase commitments	62,582	—	—	—	62,582
Assembly purchase commitments	1,397	—	—	—	1,397
Outside test purchase commitments	10,121	—	—	—	10,121
Other purchase commitments	36,999	8,662	—	—	45,661
Interest on revolving line of credit (1)	455	935	—	—	1,390
Total	\$ 126,041	\$ 36,522	\$ 24,264	\$ 35,610	\$ 222,437

(1) Our debt is subject to a variable interest rate based on LIBOR. The interest included in the table above is based on forecasted commitment fees.

Certain of our operating lease obligations include escalation clauses. These escalating payment requirements are reflected in the table.

We are unable to make a reasonably reliable estimate as to when or if a cash settlement with taxing authorities will occur related to our unrecognized tax benefits. Therefore, our liability of \$39.7 million for unrecognized tax benefits is not included in the table above. See Note 15 — Income Taxes, to the Consolidated Financial Statements for additional information.

ITEM 7A. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risks associated with interest rates on drawn balances of our Revolving Credit Facility and marketable securities, and to currency movements on non-U.S. dollar denominated assets and liabilities. We assess these risks on a regular basis and have established policies that are designed to protect against the adverse effects of these and other potential exposures. All of the potential changes noted below are based on sensitivity analyses as of March 30, 2019 . Actual results may differ materially.

Interest Rate Risk

Our primary financial instruments include cash equivalents, marketable securities, accounts receivable, pension plan assets / liabilities, accounts payable, and accrued liabilities. The Company's investments are managed by outside professional managers within investment guidelines set by the Company. These guidelines include security type, credit quality, and maturity, and are intended to limit market risk by restricting the Company's investments to high quality debt instruments with relatively short-term maturities. The Company does not currently use derivative financial instruments in its investment portfolio. Due to the short-term nature of our investment portfolio and the current low interest rate environment, our downside exposure to interest rate risk is minimal.

To provide a meaningful assessment of the interest rate risk associated with our investment portfolio, the Company performed a sensitivity analysis to determine the impact a change in interest rates would have on the value of the investment portfolio assuming a 100 basis point parallel shift in the yield curve. Based on investment positions as of March 30, 2019 and March 31, 2018 , a hypothetical 100 basis point increase in interest rates across all maturities would result in a \$3.3 million and \$3.2 million decline in the fair market value of the portfolio, respectively. Such losses would only be realized if the Company sold the investments prior to maturity.

Foreign Currency Exchange Risk

Our revenue and spending is transacted primarily in U.S. dollars; however, in fiscal years 2019 , 2018 , and 2017 , we entered into routine transactions in other currencies to fund the operating needs of certain legal entities outside of the U.S. As of March 30, 2019 and March 31, 2018 , a ten percent change in the value of the related currencies would not have a material impact on our results of operations and financial position. During fiscal years 2019 , 2018 , and 2017 we did not enter into any foreign currency hedging contracts.

ITEM 8. *Financial Statements and Supplementary Data*

Index to Consolidated Financial Statements

Reports of Independent Registered Public Accounting Firm	32
Consolidated Balance Sheets as of March 30, 2019 and March 31, 2018	34
Consolidated Statements of Income for the Fiscal Years Ended March 30, 2019, March 31, 2018, and March 25, 2017	35
Consolidated Statements of Comprehensive Income for the Fiscal Years Ended March 30, 2019, March 31, 2018, and March 25, 2017	36
Consolidated Statements of Cash Flows for the Fiscal Years Ended March 30, 2019, March 31, 2018, and March 25, 2017	37
Consolidated Statements of Stockholders' Equity for the Fiscal Years Ended March 30, 2019, March 31, 2018, and March 25, 2017	38
Notes to Consolidated Financial Statements	39

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Cirrus Logic, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Cirrus Logic, Inc. (the Company) as of March 30, 2019 and March 31, 2018 , and the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the three fiscal years in the period ended March 30, 2019 , and the related notes (collectively referred to as the "financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at March 30, 2019 and March 31, 2018 , and the results of its operations and its cash flows for each of the three fiscal years in the period ended March 30, 2019 , in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of March 30, 2019 , based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated May 24, 2019 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1984.

Austin, Texas
May 24, 2019

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Cirrus Logic, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Cirrus Logic, Inc.'s internal control over financial reporting as of March 30, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Cirrus Logic, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of March 30, 2019, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of March 30, 2019 and March 31, 2018, and the related consolidated statements of income, comprehensive income, stockholders' equity and cash flows for each of the three fiscal years in the period ended March 30, 2019, and the related notes and our report dated May 24, 2019 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ Ernst & Young LLP

Austin, Texas
May 24, 2019

CIRRUS LOGIC, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands)

	March 30, 2019	March 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	\$ 216,172	\$ 235,604
Marketable securities	70,183	26,397
Accounts receivable, net	120,656	100,801
Inventories	164,733	205,760
Prepaid assets	30,794	31,235
Other current assets	22,445	13,877
Total current assets	624,983	613,674
Long-term marketable securities	158,968	172,499
Property and equipment, net	186,185	191,154
Intangibles, net	67,847	111,547
Goodwill	286,241	288,718
Deferred tax assets	8,727	14,716
Other assets	19,689	37,809
Total assets	\$ 1,352,640	\$ 1,430,117
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 48,398	\$ 69,850
Accrued salaries and benefits	29,289	35,721
Software license agreements	21,514	21,981
Other accrued liabilities	16,339	12,657
Total current liabilities	115,540	140,209
Long-term liabilities:		
Software license agreements	8,662	27,765
Non-current income taxes	78,309	92,753
Other long-term liabilities	9,889	7,662
Total long-term liabilities	96,860	128,180
Stockholders' equity:		
Preferred stock, 5.0 million shares authorized but unissued	—	—
Common stock, \$0.001 par value, 280,000 shares authorized, 58,954 shares and 61,960 shares issued and outstanding at March 30, 2019 and March 31, 2018, respectively	59	62
Additional paid-in capital	1,363,677	1,312,372
Accumulated deficit	(222,430)	(139,345)
Accumulated other comprehensive loss	(1,066)	(11,361)
Total stockholders' equity	1,140,240	1,161,728
Total liabilities and stockholders' equity	\$ 1,352,640	\$ 1,430,117

The accompanying notes are an integral part of these financial statements.

CIRRUS LOGIC, INC.
CONSOLIDATED STATEMENTS OF INCOME
(in thousands, except per share amounts)

	Fiscal Years Ended		
	March 30, 2019	March 31, 2018	March 25, 2017
Net sales	\$ 1,185,524	\$ 1,532,186	\$ 1,538,940
Cost of sales	588,027	771,470	781,125
Gross profit	597,497	760,716	757,815
Operating expenses			
Research and development	375,139	366,444	303,658
Selling, general and administrative	126,502	131,811	127,265
Gain on sale of assets	(4,913)	—	—
Asset impairment	—	—	9,842
Total operating expenses	496,728	498,255	440,765
Income from operations	100,769	262,461	317,050
Interest income	8,017	4,762	1,676
Interest expense	(1,057)	(1,153)	(3,600)
U.K. pension settlement	(13,768)	—	—
Other expense	(217)	(971)	(79)
Income before income taxes	93,744	265,099	315,047
Provision for income taxes	3,753	103,104	53,838
Net income	89,991	161,995	261,209
Basic earnings per share	\$ 1.50	\$ 2.55	\$ 4.12
Diluted earnings per share	\$ 1.46	\$ 2.46	\$ 3.92
Basic weighted average common shares outstanding	60,116	63,407	63,329
Diluted weighted average common shares outstanding	61,583	65,951	66,561

The accompanying notes are an integral part of these financial statements.

CIRRUS LOGIC, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands)

	Fiscal Years Ended		
	March 30, 2019	March 31, 2018	March 25, 2017
Net income	\$ 89,991	\$ 161,995	\$ 261,209
Other comprehensive income (loss), before tax			
Foreign currency translation gain (loss)	(3,125)	2,791	(826)
Unrealized gain (loss) on marketable securities	2,823	(2,380)	47
U.K. pension settlement	13,814	—	—
Actuarial loss on defined benefit pension plan	—	(14,729)	(79)
Reclassification of actuarial gain to net income	—	—	(89)
Benefit (provision) for income taxes	(3,217)	3,530	42
Comprehensive income	\$ 100,286	\$ 151,207	\$ 260,304

The accompanying notes are an integral part of these financial statements.

CIRRUS LOGIC, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Fiscal Years Ended		
	March 30, 2019	March 31, 2018	March 25, 2017
Cash flows from operating activities:			
Net income	\$ 89,991	\$ 161,995	\$ 261,209
Adjustments to net cash provided by operating activities:			
Depreciation and amortization	79,826	81,399	63,433
Stock-based compensation expense	49,689	48,741	39,593
Deferred income taxes	1,717	11,646	10,885
(Gain) loss on retirement or write-off of long-lived assets	(2,713)	626	10,387
Charges (payments) for defined benefit pension plan	11,189	(10,929)	116
Other non-cash charges	429	(3,864)	8,980
Net change in operating assets and liabilities:			
Accounts receivable, net	(14,316)	19,173	(31,442)
Inventories	40,636	(37,865)	(25,880)
Other assets	965	16,824	575
Accounts payable	(21,965)	143	1,772
Accrued salaries and benefits	(6,432)	(4,469)	18,951
Income taxes payable	(7,974)	22,983	10,969
Other accrued liabilities	(14,348)	12,308	203
Net cash provided by operating activities	206,694	318,711	369,751
Cash flows from investing activities:			
Maturities and sales of available-for-sale marketable securities	70,840	138,221	212,863
Purchases of available-for-sale marketable securities	(98,864)	(238,434)	(231,432)
Purchases of property, equipment and software	(31,615)	(55,180)	(41,849)
Investments in technology	(4,143)	(29,323)	(9,447)
Proceeds from the sale of assets	9,120	—	—
Net cash used in investing activities	(54,662)	(184,716)	(69,865)
Cash flows from financing activities:			
Principal payments on long-term revolver	—	(60,000)	(100,439)
Debt issuance costs	—	—	(2,152)
Payments on capital lease agreements	—	—	(699)
Issuance of common stock, net of shares withheld for taxes	1,616	4,417	16,518
Repurchase of stock to satisfy employee tax withholding obligations	(13,083)	(17,806)	(14,089)
Repurchase and retirement of common stock	(159,997)	(175,776)	(15,439)
Contingent consideration payments	—	(392)	(1,213)
Net cash used in financing activities	(171,464)	(249,557)	(117,513)
Net (decrease) increase in cash and cash equivalents	(19,432)	(115,562)	182,373
Cash and cash equivalents at beginning of period	235,604	351,166	168,793
Cash and cash equivalents at end of period	\$ 216,172	\$ 235,604	\$ 351,166
Supplemental disclosures of cash flow information			
Cash payments during the year for:			
Income taxes	\$ 20,617	\$ 34,385	\$ 8,001
Interest	612	835	2,947

The accompanying notes are an integral part of these financial statements.

CIRRUS LOGIC, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands)

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Income / (Loss)	Total
	Shares	Amount				
Balance, March 26, 2016	62,630	\$ 63	\$ 1,203,433	\$ (344,345)	\$ 332	\$ 859,483
Net income	—	—	—	261,209	—	261,209
Change in unrealized gain (loss) on marketable securities, net of tax	—	—	—	—	31	31
Change in defined benefit pension plan liability, net of tax	—	—	—	—	(110)	(110)
Change in foreign currency translation adjustments	—	—	—	—	(826)	(826)
Issuance of stock under stock option plans and other, net of shares withheld for employee taxes	2,145	2	16,516	(14,089)	—	2,429
Cumulative effect of adoption of ASU 2016-09	—	—	—	5,649	—	5,649
Repurchase and retirement of common stock	(480)	(1)	—	(15,438)	—	(15,439)
Amortization of deferred stock compensation	—	—	39,593	—	—	39,593
Excess tax benefit from employee stock awards	—	—	(327)	—	—	(327)
Balance, March 25, 2017	64,295	64	1,259,215	(107,014)	(573)	1,151,692
Net income	—	—	—	161,995	—	161,995
Change in unrealized gain (loss) on marketable securities, net of tax	—	—	—	—	(1,630)	(1,630)
Change in defined benefit pension plan liability, net of tax	—	—	—	—	(11,949)	(11,949)
Change in foreign currency translation adjustments	—	—	—	—	2,791	2,791
Issuance of stock under stock option plans and other, net of shares withheld for employee taxes	1,054	1	4,416	(17,806)	—	(13,389)
Cumulative effect of adoption of ASU 2016-16	—	—	—	(747)	—	(747)
Repurchase and retirement of common stock	(3,389)	(3)	—	(175,773)	—	(175,776)
Amortization of deferred stock compensation	—	—	48,741	—	—	48,741
Balance, March 31, 2018	61,960	62	1,312,372	(139,345)	(11,361)	1,161,728
Net income	—	—	—	89,991	—	89,991
Change in unrealized gain (loss) on marketable securities, net of tax	—	—	—	—	2,231	2,231
Change in defined benefit pension plan liability, net of tax	—	—	—	—	11,189	11,189
Change in foreign currency translation adjustments	—	—	—	—	(3,125)	(3,125)
Issuance of stock under stock option plans and other, net of shares withheld for employee taxes	964	1	1,616	(13,083)	—	(11,466)
Repurchase and retirement of common stock	(3,970)	(4)	—	(159,993)	—	(159,997)
Amortization of deferred stock compensation	—	—	49,689	—	—	49,689
Balance, March 30, 2019	58,954	\$ 59	\$ 1,363,677	\$ (222,430)	\$ (1,066)	\$ 1,140,240

The accompanying notes are an integral part of these financial statements.

CIRRUS LOGIC, INC .
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Description of Business

Description of Business

Cirrus Logic, Inc. (“Cirrus Logic,” “We,” “Us,” “Our,” or the “Company”) is a leader in high-performance, low-power integrated circuits (“ICs”) for audio, voice and other signal-processing applications. Cirrus Logic’s products span the entire audio signal chain, from capture to playback, providing innovative products for the world’s top smartphones, tablets, digital headsets, wearables and emerging smart home applications.

We were incorporated in California in 1984, became a public company in 1989, and were reincorporated in the State of Delaware in February 1999. Our primary facility housing engineering, sales and marketing, and administration functions is located in Austin, Texas. We also have offices in various other locations in the United States, United Kingdom, Spain, Australia and Asia, including the People’s Republic of China, Hong Kong, South Korea, Japan, Singapore, and Taiwan. Our common stock, which has been publicly traded since 1989, is listed on the NASDAQ’s Global Select Market under the symbol CRUS.

Basis of Presentation

We prepare financial statements on a 52- or 53-week year that ends on the last Saturday in March. Fiscal years 2017 and 2019 were 52-week years. Fiscal year 2018 was a 53-week year.

Principles of Consolidation

The accompanying consolidated financial statements have been prepared in accordance with U. S. generally accepted accounting principles (U.S. GAAP) and include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany balances and transactions have been eliminated.

Reclassifications

Certain reclassifications have been made to prior year balances in order to conform to the current year’s presentation of financial information.

Use of Estimates

The preparation of financial statements in accordance with U.S. GAAP requires the use of management estimates. These estimates are subjective in nature and involve judgments that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at fiscal year-end and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from these estimates.

2. Summary of Significant Accounting Policies

Cash and Cash Equivalents

Cash and cash equivalents consist primarily of money market funds, commercial paper, and U.S. Government Treasury and Agency instruments with original maturities of three months or less at the date of purchase.

Inventories

We use the lower of cost or net realizable value to value our inventories, with cost being determined on a first-in, first-out basis. One of the factors we consistently evaluate in the application of this method is the extent to which products are accepted into the marketplace. By policy, we evaluate market acceptance based on known business factors and conditions by comparing forecasted customer unit demand for our products over a specific future period, or demand horizon, to quantities on hand at the end of each accounting period.

On a quarterly and annual basis, we analyze inventories on a part-by-part basis. Product life cycles and the competitive nature of the industry are factors considered in the evaluation of customer unit demand at the end of each quarterly accounting period. Inventory on-hand in excess of forecasted demand is considered to have reduced market value and, therefore, the cost basis is adjusted to the lower of cost or net realizable value. Typically, market values for excess or obsolete inventories are considered to be zero. Inventory charges recorded for excess and obsolete inventory, including scrapped inventory, were \$6.2

[Table of Contents](#)

million and \$9.7 million , in fiscal year 2019 and 2018 , respectively. Inventory charges in fiscal year 2019 and 2018 related to a combination of quality issues and inventory exceeding demand.

Inventories were comprised of the following (in thousands):

	March 30, 2019	March 31, 2018
Work in process	\$ 80,100	\$ 97,138
Finished goods	84,633	108,622
	<u>\$ 164,733</u>	<u>\$ 205,760</u>

Property, Plant and Equipment, net

Property, plant and equipment is recorded at cost, net of depreciation and amortization. Depreciation and amortization is calculated on a straight-line basis over estimated economic lives, ranging from 3 to 39 years . Leasehold improvements are depreciated over the shorter of the term of the lease or the estimated useful life. Furniture, fixtures, machinery, and equipment are all depreciated over a useful life of 3 to 10 years , while buildings are depreciated over a period of up to 39 years . In general, our capitalized software is amortized over a useful life of 3 years , with capitalized enterprise resource planning software being amortized over a useful life of 10 years . Gains or losses related to retirements or dispositions of fixed assets are recognized in the period incurred. Additionally, if impairment indicators exist, the Company will assess the carrying value of the associated asset. In the fourth quarter of fiscal year 2017, the Company reassessed the carrying value of the property located in Edinburgh, Scotland, resulting in an asset impairment charge of \$9.8 million . This property was subsequently sold in the fourth quarter of fiscal year 2019 for a \$4.9 million gain presented separately in the Consolidated Statements of Income as " *Gain on sale of assets* " .

Property, plant and equipment was comprised of the following (in thousands):

	March 30, 2019	March 31, 2018
Land	\$ 23,853	\$ 26,379
Buildings	63,172	71,354
Furniture and fixtures	22,762	22,138
Leasehold improvements	45,286	35,569
Machinery and equipment	157,994	143,509
Capitalized software	25,763	25,949
Construction in progress	3,689	6,086
Total property, plant and equipment	342,519	330,984
Less: Accumulated depreciation and amortization	(156,334)	(139,830)
Property, plant and equipment, net	<u>\$ 186,185</u>	<u>\$ 191,154</u>

Depreciation and amortization expense on property, plant, and equipment for fiscal years 2019 , 2018 , and 2017 was \$32.0 million , \$27.7 million , and \$26.1 million , respectively.

Goodwill and Intangibles, net

Intangible assets include purchased technology licenses and patents that are reported at cost and are amortized on a straight-line basis over their useful lives, generally ranging from 1 to 10 years . Acquired intangibles include existing technology, core technology or patents, license agreements, in-process research & development, trademarks, tradenames, customer relationships, non-compete agreements, and backlog. These assets are amortized on a straight-line basis over lives ranging from 1 to 15 years .

Goodwill is recorded at the time of an acquisition and is calculated as the difference between the aggregate consideration paid for an acquisition and the fair value of the net tangible and intangible assets acquired. Goodwill and intangible assets deemed to have indefinite lives are not amortized but are subject to annual impairment tests. The Company tests goodwill and indefinite lived intangibles for impairment on an annual basis or more frequently if the Company believes indicators of impairment exist. Impairment evaluations involve management's assessment of qualitative factors to determine whether it is more likely than not that goodwill and other intangible assets are impaired. If management concludes from its assessment of qualitative factors that it is more likely than not that impairment exists, then a quantitative impairment test will be performed involving management estimates of asset useful lives and future cash flows. Significant management judgment is required in

the forecasts of future operating results that are used in these evaluations. If our actual results, or the plans and estimates used in future impairment analyses, are lower than the original estimates used to assess the recoverability of these assets, we could incur additional impairment charges in a future period. The Company has recorded no goodwill impairments in fiscal years 2019 , 2018 , and 2017 . There were no material intangible asset impairments in fiscal years 2019 , 2018 , or 2017 .

Long-Lived Assets

We test for impairment losses on long-lived assets and definite-lived intangibles used in operations when indicators of impairment are present and the undiscounted cash flows estimated to be generated by those assets are less than the assets' carrying amounts. We measure any impairment loss by comparing the fair value of the asset to its carrying amount. We estimate fair value based on discounted future cash flows, quoted market prices, or independent appraisals.

Foreign Currency Translation

Some of the Company's subsidiaries utilize the local currency as the functional currency. The Company's main entities, including the entities that generate the majority of sales and employ the majority of employees, are US dollar functional.

Concentration of Credit Risk

Financial instruments that potentially subject us to material concentrations of credit risk consist primarily of cash equivalents, marketable securities, long-term marketable securities, and trade accounts receivable. We are exposed to credit risk to the extent of the amounts recorded on the balance sheet. By policy, our cash equivalents, marketable securities, and long-term marketable securities are subject to certain nationally recognized credit standards, issuer concentrations, sovereign risk, and marketability or liquidity considerations.

In evaluating our trade receivables, we perform credit evaluations of our major customers' financial condition and monitor closely all of our receivables to limit our financial exposure by limiting the length of time and amount of credit extended. In certain situations, we may require payment in advance or utilize letters of credit to reduce credit risk. By policy, we establish a reserve for trade accounts receivable based on the type of business in which a customer is engaged, the length of time a trade account receivable is outstanding, and other knowledge that we may possess relating to the probability that a trade receivable is at risk for non-payment.

We had three contract manufacturers, Hongfujin Precision , Pegatron , and Foxconn who represented 22 percent, 19 percent, and 11 percent, respectively of our consolidated gross trade accounts receivable as of the end of fiscal year 2019 . Pegatron , Jabil Circuits and Hongfujin Precision represented 24 percent, 18 percent, and 11 percent , respectively of our consolidated gross trade accounts receivable as of the end of fiscal year 2018 . No other distributor or customer had receivable balances that represented more than 10 percent of consolidated gross trade accounts receivable as of the end of fiscal year 2019 and 2018 .

Since the components we produce are largely proprietary and generally not available from second sources, we consider our end customer to be the entity specifying the use of our component in their design. These end customers may then purchase our products directly from us, from a distributor, or through a third-party manufacturer contracted to produce their end product. For fiscal years 2019 , 2018 , and 2017 , our ten largest end customers represented approximately 91 percent, 92 percent, and 92 percent, of our sales, respectively. For fiscal years 2019 , 2018 , and 2017 , we had one end customer, Apple Inc., who purchased through multiple contract manufacturers and represented approximately 78 percent, 81 percent, and 79 percent, of the Company's total sales, respectively. No other customer or distributor represented more than 10 percent of net sales in fiscal years 2019 , 2018 , or 2017 .

Revenue Recognition

We recognize revenue upon the transfer of promised goods or services to customers, in an amount that reflects the consideration the Company expects to be entitled in exchange for those goods or services.

Performance Obligations

The Company's contracts with customers contain a single performance obligation, which is the delivery of promised goods to the customer. The promised goods are explicitly stated in the customer contract and are comprised of either a single type of good or a series of goods that are substantially the same, have the same pattern of transfer to the customer, and are neither capable of being distinct nor separable from the other promised goods in the contract. This performance obligation is satisfied upon transfer of control of the promised goods to the customer, as defined per the shipping terms within the customer's contract. The vast majority of the Company's contracts with customers have an original expected term of one year or less. As allowed by ASC 606, the Company has not disclosed of the value of any unsatisfied performance obligations related to these contracts.

[Table of Contents](#)

The Company's products typically include a warranty period of one to three years. These warranties qualify as assurance-type warranties, as goods can be returned for product non-conformance and defect only. As such, these warranties are accounted for under ASC 460, *Guarantees*, and are not considered a separate performance obligation.

Contract balances

Payments are typically due within 30 to 60 days of invoicing and terms do not include a significant financing component or noncash consideration. There have been no material impairment losses on accounts receivable. There are no material contract assets or contract liabilities recorded on the consolidated balance sheets.

Transaction price

The transaction price is the amount of consideration to which the Company expects to be entitled in exchange for transferring the promised goods to the customer. Fixed pricing is the consideration that is agreed upon in the customer contract. Variable pricing includes rebates, rights of return, warranties, price protection and stock rotation. Rebates are granted as a customer account credit, based on agreed-upon sales thresholds. Rights of return and warranty costs are estimated using the "most likely amount" method by reviewing historical returns to determine the most likely customer return rate and applying materiality thresholds. Price protection includes price adjustments available to certain distributors based upon established book price and a stated adjustment period. Stock rotation is also available to certain distributors based on a stated maximum of prior billings.

The Company estimates all variable consideration at the most likely amount which it expects to be entitled. The estimate is based on current and historical information available to the Company, including recent sales activity and pricing. Variable consideration is only included in the transaction price to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. The Company defers all variable consideration that does not meet the revenue recognition criteria.

Warranty Expense

We warrant our products and maintain a provision for warranty repair or replacement of shipped products. The accrual represents management's estimate of probable returns. Our estimate is based on an analysis of our overall sales volume and historical claims experience. The estimate is re-evaluated periodically for accuracy.

Shipping Costs

Our shipping and handling costs are included in cost of sales for all periods presented in the Consolidated Statements of Income.

Advertising Costs

Advertising costs are expensed as incurred. Advertising costs were \$1.0 million, \$1.4 million, and \$1.7 million, in fiscal years 2019, 2018, and 2017, respectively.

Stock-Based Compensation

Stock-based compensation is measured at the grant date based on the grant-date fair value of the awards and is recognized as an expense, on a ratable basis, over the vesting period, which is generally between 0 and 4 years. Determining the amount of stock-based compensation to be recorded requires the Company to develop estimates used in calculating the grant-date fair value of stock options and performance awards (also called market stock units). The Company calculates the grant-date fair value for stock options and market stock units using the Black-Scholes valuation model and the Monte Carlo simulation, respectively. The use of valuation models requires the Company to make estimates of assumptions such as expected volatility, expected term, risk-free interest rate, expected dividend yield, and forfeiture rates. The grant-date fair value of restricted stock units is the market value at grant date multiplied by the number of units.

Income Taxes

We are required to calculate income taxes in each of the jurisdictions in which we operate. This process involves calculating the actual current tax liability as well as assessing temporary differences in the recognition of income or loss for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included in our Consolidated Balance Sheet. We record a valuation allowance when it is more likely than not that some portion or all of the deferred tax assets will not be realized. The Company evaluates the ability to realize its deferred tax assets based on all the facts and circumstances, including projections of future taxable income and expiration dates of carryover tax attributes.

The calculation of our tax liabilities involves assessing uncertainties with respect to the application of complex tax rules and the potential for future adjustment of our uncertain tax positions by the Internal Revenue Service or other taxing

jurisdiction. We recognize liabilities for uncertain tax positions based on the required two-step process. The first step requires us to determine if the weight of available evidence indicates that the tax position has met the threshold for recognition; therefore, we must evaluate whether it is more likely than not that the position will be sustained on audit, including resolution of any related appeals or litigation processes. The second step requires us to measure the tax benefit of the tax position taken, or expected to be taken, in an income tax return as the largest amount that is more than 50 percent likely of being realized upon ultimate settlement. We reevaluate the uncertain tax positions each quarter based on factors including, but not limited to, changes in facts or circumstances, changes in tax law, expirations of statutes of limitation, effectively settled issues under audit, and new audit activity. A change in the recognition step or measurement step would result in the recognition of a tax benefit or an additional charge to the tax provision in the period.

Although we believe the measurement of our liabilities for uncertain tax positions is reasonable, we cannot assure that the final outcome of these matters will not be different than what is reflected in the historical income tax provisions and accruals. If additional taxes are assessed as a result of an audit or litigation, it could have a material effect on our income tax provision and net income in the period or periods for which that determination is made. We operate within multiple taxing jurisdictions and are subject to audit in these jurisdictions. These audits can involve complex issues which may require an extended period of time to resolve and could result in additional assessments of income tax. We believe adequate provisions for income taxes have been made for all periods.

Net Income Per Share

Basic net income per share is based on the weighted effect of common shares issued and outstanding and is calculated by dividing net income by the basic weighted average shares outstanding during the period. Diluted net income per share is calculated by dividing net income by the weighted average number of common shares used in the basic net income per share calculation, plus the equivalent number of common shares that would be issued assuming exercise or conversion of all potentially dilutive common shares outstanding. These potentially dilutive items consist primarily of outstanding stock options and restricted stock grants.

The following table details the calculation of basic and diluted earnings per share for fiscal years 2019, 2018, and 2017, (in thousands, except per share amounts):

	Fiscal Years Ended		
	March 30, 2019	March 31, 2018	March 25, 2017
Numerator:			
Net income	\$ 89,991	\$ 161,995	\$ 261,209
Denominator:			
Weighted average shares outstanding	60,116	63,407	63,329
Effect of dilutive securities	1,467	2,544	3,232
Weighted average diluted shares	61,583	65,951	66,561
Basic earnings per share	\$ 1.50	\$ 2.55	\$ 4.12
Diluted earnings per share	\$ 1.46	\$ 2.46	\$ 3.92

The weighted outstanding shares excluded from our diluted calculation for the years ended March 30, 2019, March 31, 2018, and March 25, 2017 were 872 thousand, 326 thousand, and 389 thousand, respectively, as the exercise price of certain outstanding stock options exceeded the average market price during the period.

Accumulated Other Comprehensive Loss

Our accumulated other comprehensive loss is comprised of foreign currency translation adjustments, unrealized gains and losses on investments classified as available-for-sale and actuarial gains and losses on our defined benefit pension plan assets, prior to plan settlement in fiscal year 2019. See Note 14 — Accumulated Other Comprehensive Loss for additional discussion.

Recently Issued Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2014-09, Revenue from Contracts with Customers (ASC Topic 606). The purpose of this ASU is to converge revenue recognition requirements per U.S. GAAP and International Financial Reporting Standards (“IFRS”). The core principle of the guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In August 2015, the FASB issued ASU 2015-14, Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date after public comment supported a proposal to delay the effective date of this ASU to annual reporting periods beginning

after December 15, 2017, including interim reporting periods within that reporting period. The Company completed the process of reviewing our customers' contracts in respect of performance obligation identification and satisfaction, pricing, warranties, and return rights, among other considerations, in the first quarter of fiscal year 2019. According to the standard, the Company could adopt by full retrospective method, which applies retrospectively to each prior period presented, or by modified retrospective method with the cumulative effect adjustment recognized in beginning retained earnings as of the date of adoption. The Company adopted this standard using the modified retrospective adoption method in the first quarter of fiscal year 2019 with no income statement impact, and therefore no beginning retained earnings impact. See Summary of Significant Accounting Policies - Revenue Recognition within this footnote as well as Note 8 - Revenues for additional details.

The effects of the changes made to our balance sheet at adoption were as follows (in thousands):

	Balance at March 31, 2018	Impact from ASU 2014- 09 Adoption	Balance at April 1, 2018
Financial statement line item:			
Accounts receivable	\$ 100,801	\$ 5,539	\$ 106,340
Inventories	205,760	(391)	205,369
Other current assets	13,877	391	14,268
Other accrued liabilities	\$ (12,657)	\$ (5,539)	\$ (18,196)

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. The FASB issued this update to increase transparency and comparability by recognizing lease assets and lease liabilities on the balance sheet and disclosing key leasing arrangement details. Lessees would recognize operating leases on the balance sheet under this ASU - with the future lease payments recognized as a liability, measured at present value, and the right-of-use ("ROU") asset recognized for the lease term. A single lease cost would be recognized over the lease term. For initial terms of less than twelve months, a lessee would be permitted to make an accounting policy election to recognize lease expense for such leases generally on a straight-line basis over the lease term. This ASU is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. The modified retrospective approach was previously the only allowed adoption method.

In July 2018, the FASB issued the related ASU 2018-10 - *Leases (Topic 842): Targeted Improvements*. This ASU offers a new transition adoption method, which will not require adjustments to comparative periods. The Company adopted using the latter method in the first quarter of fiscal year 2020. The new standard provides a number of optional practical expedients in transition. We elected the use-of-hindsight practical expedient and the 'package of practical expedients' which permits us not to reassess under the new standard our prior conclusions about lease identification, lease classification and initial direct costs. The new standard also provides practical expedients for an entity's ongoing accounting. We elected the short-term lease recognition exemption for all leases that qualify. This means, for qualifying leases, typically those with terms of less than twelve months, we will not recognize ROU assets or lease liabilities. We also do not separate lease and non-lease components for all classes of assets. Most of our operating lease commitments were subject to the new standard and recognized as right-of-use assets and operating lease liabilities upon adoption, which will materially increase the total assets and total liabilities that we report relative to such amounts prior to adoption of this ASU.

On adoption, we recognized additional operating liabilities of approximately \$158.0 million, with corresponding ROU assets based on the present value of the remaining minimum rental payments under current leasing contracts for existing operating leases. In addition, existing capitalized initial direct costs of \$2.8 million and accrued lease payments of \$11.1 million were reclassified from prepayments and accruals to the ROU asset, resulting in a ROU asset of \$149.7 million. There was no income statement impact on adoption.

In applying the use-of-hindsight practical expedient, we re-assessed whether we were reasonably certain to exercise extension options within our lease agreements. This resulted in the lease term being extended on a number of leases. The previously capitalized initial direct costs and lease creditor were recalculated assuming these extended lease terms had always applied, resulting in an adjustment of \$1.0 million to opening retained earnings on transition.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments — Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. This ASU requires credit losses on available-for-sale debt securities to be presented as an allowance rather than a write-down. Unlike current U.S. GAAP, the credit losses could be reversed with changes in estimates, and recognized in current year earnings. This ASU is effective for annual periods beginning after December 15, 2019, and interim periods within those annual periods. Early adoption is permitted for annual periods beginning after

December 15, 2018, including interim periods. The Company is currently evaluating the impact of this ASU, but does not expect a material impact to the financial statements upon adoption.

In January 2017, the FASB issued ASU 2017-04, *Intangibles — Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*. This ASU eliminates step two of the goodwill impairment test. An impairment charge is to be recognized for the amount by which the current value exceeds the fair value. This ASU is effective for annual periods beginning after December 15, 2019, including interim periods. Early adoption is permitted, for interim or annual goodwill impairment tests performed after January 1, 2017, and should be applied prospectively. An entity is required to disclose the nature of and reason for the change in accounting principle upon transition. That disclosure should be provided in the first annual period and in the interim period within the first annual period when the entity initially adopts the amendments in this update. The Company is currently evaluating the impact of this ASU, but does not expect a material impact to the financial statements upon adoption.

In March 2017, the FASB issued ASU 2017-07, *Compensation - Retirement Benefits (Topic 715): Improving the presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. This ASU requires an employer to disaggregate the service cost component from the other components of net benefit cost. It also provides guidance on income statement presentation for service cost and other components of net benefit cost. This ASU is effective for annual periods beginning after December 15, 2017, including interim periods. The Company adopted this ASU in the first quarter of fiscal year 2019. The impact of adoption included the buy-out settlement of the defined benefit pension plan as discussed in Note 9.

In May 2017, the FASB issued ASU 2017-09, *Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting*. This ASU applies to any company that changes the terms or conditions of a share-based award, considered a modification. Modification accounting would be applied unless certain conditions were met related to the fair value of the award, the vesting conditions and the classification of the modified award. This ASU is effective for annual periods beginning after December 15, 2017, with early adoption permitted. The standard should be applied prospectively to an award modified on or after the adoption date. The Company adopted this ASU in the first quarter of fiscal year 2019 with no financial statement impact as no awards were modified in the current period.

In February 2018, the FASB issued ASU 2018-02, *Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*. This ASU allows for the classification of stranded tax effects resulting from the Tax Cuts and Jobs Act (the “Tax Act”) from accumulated other comprehensive income to retained earnings. This ASU is effective for annual periods beginning after December 15, 2018, with early adoption permitted. The standard should be applied in the period of adoption or retrospectively to each period (or periods) in which the effect of the change in tax rate is recognized. The Company is currently evaluating the impact of this ASU, but does not expect a material impact to the financial statements upon adoption.

In June 2018, the FASB issued ASU 2018-07, *Compensation - Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting*. This ASU expands the scope of Topic 718 to include all share-based payment transactions for acquiring goods and services from nonemployees and will apply to all share-based payment transactions in which the grantor acquires goods and services to be used or consumed in its own operations by issuing share-based payment awards. This ASU is effective for fiscal years beginning after December 15, 2018, including interim periods within that fiscal year, with early adoption permitted. The Company intends to adopt this guidance in the first quarter of fiscal year 2020, but does not expect a material impact to the financial statements.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement*. This ASU adjusts current required disclosures related to fair value measurements. This ASU is effective for fiscal years beginning after December 15, 2019, including interim periods within that fiscal year, with early adoption permitted. The Company is currently evaluating the impact of this ASU, but does not expect a material impact to the financial statements.

In August 2018, the Commission adopted the final rule under SEC Release No. 33-10532, Disclosure Update and Simplification, amending certain disclosure requirements that were redundant, duplicative, overlapping, outdated or superseded. In addition, the amendments expanded the disclosure requirements on the analysis of stockholders' equity for interim financial statements. Under the amendments, an analysis of changes in each caption of stockholders' equity presented in the balance sheet must be provided in a note or separate statement. The analysis should present a reconciliation of the beginning balance to the ending balance of each period for which a statement of comprehensive income is required to be filed. The final rule was published in the Federal Register on October 4, 2018, effective November 5, 2018. The additional disclosure is not required until the quarterly filing covering the period beginning after the effective date of the amendments, which will be the Company's first quarter fiscal year 2020 filing. The Company is evaluating the impact of this guidance on its financial statements, but does not expect a material impact to the financial statements upon adoption.

3. Marketable Securities

The Company's investments have been classified as available-for-sale securities in accordance with U.S. GAAP. Marketable securities are categorized on the Consolidated Balance Sheet as "Marketable securities" within the short-term or long-term classification, as appropriate.

The following table is a summary of available-for-sale securities (in thousands):

<i>As of March 30, 2019</i>	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value (Net Carrying Amount)
Corporate debt securities	\$ 215,098	\$ 1,027	\$ (600)	\$ 215,525
Non-US government securities	13,209	8	(40)	13,177
Agency discount notes	450	—	(1)	449
Total securities	\$ 228,757	\$ 1,035	\$ (641)	\$ 229,151

The Company typically invests in highly-rated securities with original maturities generally ranging from one to three years. The Company's specifically identified gross unrealized loss of \$0.6 million related to securities with a total amortized cost of approximately \$123.1 million at March 30, 2019. Securities in a continuous unrealized loss position for more than 12 months as of March 30, 2019 had an aggregate amortized cost of \$120.3 million and an aggregate unrealized loss of \$0.6 million. The Company may sell certain of its marketable securities prior to their stated maturities for strategic reasons including, but not limited to, anticipated or actual changes in credit rating and duration management. When evaluating an investment for other-than-temporary impairment, the Company reviews factors including the length of time and extent to which fair value has been below cost basis, the financial condition of the issuer, changes in market interest rates and whether it is more likely than not the Company will be required to sell the investment before recovery of the investment's cost basis. As of March 30, 2019, the Company does not consider any of its investments to be other-than-temporarily impaired.

<i>As of March 31, 2018</i>	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value (Net Carrying Amount)
Corporate debt securities	\$ 185,636	\$ 4	\$ (2,318)	\$ 183,322
Non-US government securities	14,730	—	(111)	14,619
Certificates of deposit	500	—	—	500
Agency discount notes	459	—	(4)	455
Total securities	\$ 201,325	\$ 4	\$ (2,433)	\$ 198,896

The Company's specifically identified gross unrealized losses of \$2.4 million related to securities with a total amortized cost of approximately \$198.2 million at March 31, 2018. There were no securities that have been in a continuous unrealized loss position for more than 12 months as of March 31, 2018. The Company may sell certain of its marketable securities prior to their stated maturities for strategic reasons including, but not limited to, anticipated or actual changes in credit rating and duration management. When evaluating an investment for other-than-temporary impairment, the Company reviews factors including the length of time and extent to which fair value has been below cost basis, the financial condition of the issuer, changes in market interest rates and whether it is more likely than not the Company will be required to sell the investment before recovery of the investment's cost basis. As of March 31, 2018, the Company did not consider any of its investments to be other-than-temporarily impaired.

The cost and estimated fair value of available-for-sale investments by contractual maturity were as follows:

	March 30, 2019		March 31, 2018	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Within 1 year	\$ 70,490	\$ 70,183	\$ 26,560	\$ 26,397
After 1 year	158,267	158,968	174,765	172,499
Total	\$ 228,757	\$ 229,151	\$ 201,325	\$ 198,896

4. Fair Value of Financial Instruments

The Company has determined that the only assets and liabilities in the Company's financial statements that are required to be measured at fair value on a recurring basis are the Company's cash equivalents, investment portfolio, pension plan assets/liabilities (through the second quarter of fiscal year 2019) and contingent consideration (through the third quarter of fiscal year 2018). The Company defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Company applies the following fair value hierarchy, which prioritizes the inputs used to measure fair value into three levels and bases the categorization within the hierarchy upon the lowest level of input that is available and significant to the fair value measurement. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements).

- Level 1 — Quoted prices in active markets for identical assets or liabilities.
- Level 2 — Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The Company's cash equivalents and investment portfolio assets consist of corporate debt securities, money market funds, non-U.S government securities, securities of U.S. government-sponsored enterprises, and certificates of deposit and are reflected on our Consolidated Balance Sheet under the headings cash and cash equivalents, marketable securities, and long-term marketable securities. The Company determines the fair value of its investment portfolio assets by obtaining non-binding market prices from its third-party pricing providers on the last day of the quarter, whose sources may use quoted prices in active markets for identical assets (Level 1 inputs) or inputs other than quoted prices that are observable either directly or indirectly (Level 2 inputs) in determining fair value.

In connection with one of the Company's second quarter fiscal year 2016 acquisitions, the Company reported contingent consideration based upon achievement of certain milestones. This liability was classified as Level 3 prior to payout in the fourth quarter of fiscal year 2018 and was valued using a discounted cash flow model. The assumptions used in preparing the discounted cash flow included discount rate estimates and cash flow amounts. The final payment related to the contingent consideration was made in the fourth quarter of fiscal year 2018 and no further liability remains at March 30, 2019 .

The Company's long-term revolving facility, described in Note 7, bears interest at a base rate plus applicable margin or LIBOR plus applicable margin. As of March 30, 2019 , there are no amounts drawn under the facility and the fair value is zero .

As of March 30, 2019 and March 31, 2018 , the Company has no Level 3 assets or liabilities. There were no transfers between Level 1, Level 2, or Level 3 measurements for the years ending March 30, 2019 and March 31, 2018 .

The following summarizes the fair value of our financial instruments at March 30, 2019 (in thousands):

	Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3	Total
Assets:				
Cash equivalents				
Money market funds	\$ 216,172	\$ —	\$ —	\$ 216,172
Available-for-sale securities				
Corporate debt securities	\$ —	\$ 215,525	\$ —	\$ 215,525
Non-US government securities	—	13,177	—	13,177
Agency discount notes	—	449	—	449
	\$ —	\$ 229,151	\$ —	\$ 229,151

The following summarizes the fair value of our financial instruments, exclusive of pension plan assets detailed in Note 9, at March 31, 2018 (in thousands):

	Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3	Total
Assets:				
Cash equivalents				
Money market funds	\$ 211,891	\$ —	\$ —	\$ 211,891
Available-for-sale securities				
Corporate debt securities	\$ —	\$ 183,322	\$ —	\$ 183,322
Non-US government securities	—	14,619	—	14,619
Certificates of deposit	—	500	—	500
Agency discount notes	—	455	—	455
	\$ —	\$ 198,896	\$ —	\$ 198,896

Contingent consideration

The following summarizes the fair value of the contingent consideration at March 31, 2018 :

	Maximum Value if Milestones Achieved (in thousands)	Estimated Discount Rate (%)	Fair Value (in thousands)
Tranche B — 30 month earn out period	5,000	7.7	—

	Fiscal Year Ended March 31, 2018 (in thousands)
Beginning balance	\$ 4,695
Adjustment to estimates (research and development expense)	(4,328)
Payout of Tranche B contingent consideration	(392)
Fair value charge recognized in earnings (research and development expense)	25
Ending balance	\$ —

The valuation of contingent consideration was based on a weighted-average discounted cash flows model. The fair value was reviewed and estimated on a quarterly basis based on the probability of achieving defined milestones and interest rates. Changes in any of the unobservable inputs used in the fair value measurement of contingent consideration resulted in a lower or higher fair value. A change in projected outcomes if milestones were achieved was accompanied by a directionally similar change in fair value. A change in discount rate was accompanied by a directionally opposite change in fair value. Changes to the fair value due to changes in assumptions were reported in research and development expense in the Consolidated Statements of Income. In the first quarter of the fiscal year 2018, changes in the probability of achieving certain milestones associated with Tranche B of the earn-out were determined following a review of product shipment forecasts within the earn-out period. The revised estimates reduced the fair value of the liability prior to the pay out in the fourth quarter of fiscal year 2018.

5. Accounts Receivable, net

The following are the components of accounts receivable, net (in thousands):

	March 30, 2019	March 31, 2018
Gross accounts receivable	\$ 120,926	\$ 101,004
Allowance for doubtful accounts	(270)	(203)
Accounts receivable, net	\$ 120,656	\$ 100,801

The Company regularly evaluates the collectability of accounts receivable based on age, historical customer payment trends and ongoing customer relations. The following table summarizes the changes in the allowance for doubtful accounts (in thousands):

Balance, March 26, 2016	\$	(475)
Bad debt expense, net of recoveries		41
Balance, March 25, 2017		(434)
Bad debt expense, net of recoveries		231
Balance, March 31, 2018		(203)
Bad debt expense, net or recoveries		(67)
Balance, March 30, 2019	\$	(270)

Recoveries on bad debt were immaterial for the three years presented above.

6. Intangibles, net and Goodwill

The intangibles, net balance included on the Consolidated Balance Sheet was \$67.8 million and \$111.5 million at March 30, 2019 and March 31, 2018, respectively.

The following information details the gross carrying amount and accumulated amortization of our intangible assets (in thousands):

Intangible Category / Weighted-Average Amortization period (in years)	March 30, 2019		March 31, 2018	
	Gross Amount	Accumulated Amortization	Gross Amount	Accumulated Amortization
Core technology (a)	\$ 1,390	\$ (1,390)	\$ 1,390	\$ (1,390)
License agreement (a)	440	(440)	440	(440)
Existing technology (6.3)	117,976	(94,136)	117,976	(75,048)
In-process research & development (“IPR&D”) (7.3)	97,972	(69,794)	97,972	(49,556)
Trademarks and tradename (10.0)	3,037	(2,461)	3,037	(2,333)
Customer relationships (10.0)	15,381	(7,270)	15,381	(5,732)
Backlog (a)	220	(220)	220	(220)
Non-compete agreements (a)	470	(470)	470	(470)
Technology licenses (3.0)	28,336	(21,194)	28,063	(18,213)
Total	\$ 265,222	\$ (197,375)	\$ 264,949	\$ (153,402)

(a) Intangible assets are fully amortized.

Amortization expense for intangibles in fiscal years 2019, 2018, and 2017 was \$47.8 million, \$53.7 million, and \$37.4 million, respectively. The following table details the estimated aggregate amortization expense for all intangibles owned as of March 30, 2019, for each of the five succeeding fiscal years and in the aggregate thereafter (in thousands):

For the year ended March 28, 2020	\$	28,443
For the year ended March 27, 2021	\$	17,750
For the year ended March 26, 2022	\$	12,755
For the year ended March 25, 2023	\$	6,663
For the year ended March 30, 2024	\$	1,695
Thereafter	\$	541

The goodwill balance included on the Consolidated Balance Sheet is \$286.2 million and \$288.7 million at March 30, 2019 and March 31, 2018, respectively.

7. Revolving Credit Facility

On July 12, 2016, Cirrus Logic entered into an amended and restated credit agreement (the “Credit Agreement”) with Wells Fargo Bank, National Association, as Administrative Agent, and the Lenders party thereto, for the purpose of refinancing an existing credit facility and providing ongoing working capital. The Credit Agreement provides for a \$300 million senior secured revolving credit facility (the “Credit Facility”). The Credit Facility matures on July 12, 2021. The Credit Facility is required to be guaranteed by all of Cirrus Logic’s material domestic subsidiaries (the “Subsidiary Guarantors”). The Credit Facility is secured by substantially all of the assets of Cirrus Logic and any Subsidiary Guarantors, except for certain excluded assets.

Borrowings under the Credit Facility may, at Cirrus Logic’s election, bear interest at either (a) a base rate plus the applicable margin (“Base Rate Loans”) or (b) a LIBOR Rate plus the applicable margin (“LIBOR Rate Loans”). The applicable margin ranges from 0% to 0.50% per annum for Base Rate Loans and 1.25% to 2.00% per annum for LIBOR Rate Loans based on the Leverage Ratio (as defined below). A commitment fee accrues at a rate per annum ranging from 0.20% to 0.30% (based on the Leverage Ratio) on the average daily unused portion of the commitment of the lenders. The Credit Agreement contains certain financial covenants providing that (a) the ratio of consolidated funded indebtedness to consolidated EBITDA for the prior four consecutive quarters must not be greater than 3.00 to 1.00 (the “Leverage Ratio”) and (b) the ratio of consolidated EBITDA for the prior four consecutive fiscal quarters to consolidated fixed charges (including amounts paid in cash for consolidated interest expenses, capital expenditures, scheduled principal payments of indebtedness, and income taxes) for the prior four consecutive fiscal quarters must not be less than 1.25 to 1.00 as of the end of each fiscal quarter. The Credit Agreement also contains negative covenants limiting the Company’s or any Subsidiary’s ability to, among other things, incur debt, grant liens, make investments, effect certain fundamental changes, make certain asset dispositions, and make certain restricted payments.

As of March 30, 2019, the Company had no amounts outstanding under the Credit Facility and was in compliance with all covenants under the Credit Facility.

8. Revenues

Disaggregation of revenue

We disaggregate revenue from contracts with customers based on the ship to location of the customer. The geographic regions that are reviewed are the United States and countries outside of the United States (primarily located in Asia).

Total net sales based on the disaggregation criteria described above are as follows:

	Year Ended		
	March 30, 2019	March 31, 2018	March 25, 2017
Non-United States	\$ 1,159,342	\$ 1,498,454	\$ 1,502,916
United States	26,182	33,732	36,024
	<u>\$ 1,185,524</u>	<u>\$ 1,532,186</u>	<u>\$ 1,538,940</u>

See Note 2 - Summary of Significant Accounting Policies for additional discussion surrounding revenue recognition considerations.

9. Postretirement Benefit Plans

Defined Benefit Pension Plan

As a result of our acquisition of Wolfson in fiscal year 2015, the Company had a defined benefit pension scheme (“the Scheme”), for some individuals in the United Kingdom. Following the acquisition, the participants in the Scheme no longer accrued benefits and therefore the Company was not required to make contributions in respect of future accruals.

During fiscal year 2018, the Company authorized the termination of the Scheme under which 60 participants had accrued benefits. On March 16, 2018, the Scheme completed a buy-in transaction whereby the assets of the Scheme, together with a final contribution from the Company of \$11.0 million, were invested in a bulk purchase annuity contract that fully insures the benefits payable to the members of the Scheme at that time.

The bulk purchase annuity contract was structured to enable the Scheme to move to full buy-out (following which the insurance company became directly responsible for the pension payments). On November 30, 2018, the insurance company confirmed that the buy-out was completed and individual policies had been established for each member. Completion of the buy-out confirms full and final settlement of the Scheme, and the unamortized loss previously recorded within Accumulated Other Comprehensive Income ("AOCI") of \$13.8 million was recognized within other non-operating expense as "U.K. pension settlement" in the third quarter of fiscal year 2019, with the corresponding tax benefit of \$2.6 million being recognized within "Provision for income taxes" in the Consolidated Statements of Income. As the buy-out transaction has fully settled, there will be no further contributions to the Scheme.

The following tables set forth the benefit obligation, the fair value of plan assets, and the funded status of the Scheme (in thousands):

	March 30, 2019	March 31, 2018
Change in benefit obligation:		
Beginning balance	\$ 40,601	\$ 21,123
Interest cost	—	651
Plan settlements	(40,601)	—
Benefits paid and expenses	—	(312)
Change in foreign currency exchange rate	—	2,869
Actuarial loss	—	16,270
Total benefit obligation ending balance	—	40,601
Change in plan assets:		
Beginning balance	40,601	22,143
Actual return on plan assets	—	2,700
Employer contributions	—	12,877
Plan settlements	(40,601)	—
Change in foreign currency exchange rate	—	3,193
Benefits paid and expenses	—	(312)
Fair value of plan assets ending balance	—	40,601
Funded status of Scheme at end of year	\$ —	\$ —

The assets and obligations of the Scheme are denominated in British Pound Sterling. Following the purchase of the bulk purchase annuity contract as of March 31, 2018, the Scheme was fully insured and the net funded status is zero as reflected in the Company's Consolidated Balance Sheet under the caption "Other assets". The Company's plan assets and obligations are measured as of the fiscal year-end. As of March 31, 2018, the plan assets and obligations were measured with reference to the price of the bulk purchase annuity contract.

The components of the Company's net periodic pension expense (income) presented within "Research and development" expenses in the Consolidated Statements of Income are as follows (in thousands):

	Fiscal Years Ended		
	March 30, 2019	March 31, 2018	March 25, 2017
Expenses	\$ —	\$ —	\$ —
Interest cost	—	651	759
Expected return on plan assets	—	(1,159)	(1,126)
Settlement loss	—	—	1,063
Amortization of actuarial gain	—	—	(89)
	\$ —	\$ (508)	\$ 607

[Table of Contents](#)

The following weighted-average assumptions were used to determine net periodic benefit costs for the year ended March 30, 2019 , March 31, 2018 and March 25, 2017 :

	2019	2018	2017
Discount rate	n/a	2.70%	3.60%
Expected long-term return on plan assets	n/a	4.23%	4.93%

The table below sets forth the fair value of our plan assets as of March 31, 2018 , using the same three-level hierarchy of fair-value inputs described in Note 4 (in thousands):

	Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3	Total
Plan Assets:				
Insurance contracts	\$ —	\$ 40,601	\$ —	\$ 40,601

The Company contributed \$12.9 million to the pension plan in fiscal year 2018 . As the buy-out transaction has fully settled, there will be no further contributions to the Scheme as discussed above.

Defined Contribution Plans

We have Defined Contribution Plans (“the Plans”) covering all of our qualifying employees. Under the Plans, employees may elect to contribute any percentage of their annual compensation up to the annual regulatory limits. The Company made matching employee contributions of \$7.7 million , \$6.7 million , and \$5.5 million during fiscal years 2019 , 2018 , and 2017 , respectively.

10. Equity Compensation

The Company is currently granting equity awards from the 2018 Long Term Incentive Plan (the “Plan”), which was approved by stockholders in August 2018. The Plan provides for granting of stock options, restricted stock awards, performance awards, phantom stock awards, and bonus stock awards, or any combination of the foregoing. To date, the Company has granted stock options, restricted stock awards, phantom stock awards (also called restricted stock units), and performance awards (also called market stock units). Each stock option granted reduces the total shares available for grant under the Plan by one share. Each full value award granted (including restricted stock awards, restricted stock units and market stock units) reduces the total shares available for grant under the Plan by 1.5 shares. Stock options generally vest between zero and four years , and are exercisable for a period of ten years from the date of grant. Restricted stock units are generally subject to vesting from zero to three years , depending upon the terms of the grant. Market stock units are subject to a vesting schedule of three years .

The following table summarizes the activity in total shares available for grant (in thousands):

	Shares Available for Grant
Balance, March 26, 2016	6,287
Shares added	—
Granted	(1,719)
Forfeited	124
Balance, March 25, 2017	4,692
Shares added	—
Granted	(1,755)
Forfeited	128
Balance, March 31, 2018	3,065
Shares added	2,509
Granted	(2,371)
Forfeited	120
Balance, March 30, 2019	3,323

Stock-based Compensation Expense

The following table summarizes the effects of stock-based compensation on cost of goods sold, research and development, sales, general and administrative, pre-tax income, and net income after taxes for shares granted under the Plan (in thousands, except per share amounts):

	Fiscal Year		
	2019	2018	2017
Cost of sales	\$ 877	\$ 1,474	\$ 1,071
Research and development	29,115	26,137	21,186
Sales, general and administrative	19,697	21,130	17,336
Effect on pre-tax income	49,689	48,741	39,593
Income Tax Benefit	(5,748)	(5,953)	(12,482)
Total stock-based compensation expense (net of taxes)	43,941	42,788	27,111
Stock-based compensation effects on basic earnings per share	\$ 0.73	\$ 0.67	\$ 0.43
Stock-based compensation effects on diluted earnings per share	0.71	0.65	0.41

The total stock-based compensation expense included in the table above and which is attributable to restricted stock units and market stock units was \$45.5 million, \$44.2 million, \$35.5 million, for fiscal years 2019, 2018, and 2017, respectively. Stock-based compensation expense is presented within operating activities in the Consolidated Statement of Cash Flows.

As of March 30, 2019, there was \$88.7 million of compensation costs related to non-vested stock options, restricted stock units, and market stock units granted under the Company's equity incentive plans not yet recognized in the Company's financial statements. The unrecognized compensation cost is expected to be recognized over a weighted average period of 1.3 years for stock options, 1.64 years for restricted stock units, and 1.66 years for market stock units.

In addition to the income tax benefit of stock-based compensation expense shown in the table above, the Company recognized excess tax benefits of \$0.9 million, \$11.7 million and \$22.9 million in fiscal years 2019, 2018, and 2017 respectively, as a result of the Company's early adoption of ASU 2016-09.

Stock Options

We estimate the fair value of each stock option on the date of grant using the Black-Scholes option-pricing model using a dividend yield of zero and the following additional assumptions:

	March 30, 2019	March 31, 2018	March 25, 2017
Expected stock price volatility	38.00-38.14 %	37.36%	47.66%
Risk-free interest rate	2.57-2.94 %	1.67%	1.13%
Expected term (in years)	3.12-3.73	3.03	2.79

The Black-Scholes valuation calculation requires us to estimate key assumptions such as stock price volatility, expected term, risk-free interest rate and dividend yield. The expected stock price volatility is based upon implied volatility from traded options on our stock in the marketplace. The expected term of options granted is derived from an analysis of historical exercises and remaining contractual life of stock options, and represents the period of time that options granted are expected to be outstanding after becoming vested. The risk-free interest rate reflects the yield on zero-coupon U.S. Treasury securities for a period that is commensurate with the expected term assumption. Finally, we have never paid cash dividends, do not currently intend to pay cash dividends, and thus have assumed a zero percent dividend yield.

Using the Black-Scholes option valuation model, the weighted average estimated fair values of employee stock options granted in fiscal years 2019, 2018, and 2017, were \$16.27, \$19.87, and \$22.84, respectively.

During fiscal years 2019, 2018, and 2017, we received a net \$1.6 million, \$4.4 million, and \$16.4 million, respectively, from the exercise of 0.1 million, 0.2 million, and 1.4 million, respectively, stock options granted under the Company's Stock Plan.

The total intrinsic value of stock options exercised during fiscal year 2019, 2018, and 2017, was \$2.6 million, \$9.8 million, and \$52.2 million, respectively. Intrinsic value represents the difference between the market value of the Company's common stock at the time of exercise and the strike price of the stock option.

Additional information with respect to stock option activity is as follows (in thousands, except per share amounts):

	Outstanding Options	
	Number	Weighted Average Exercise Price
Balance, March 26, 2016	2,925	\$ 17.96
Options granted	215	54.65
Options exercised	(1,382)	11.87
Options forfeited	—	—
Options expired	—	—
Balance, March 25, 2017	1,758	\$ 27.25
Options granted	216	55.72
Options exercised	(234)	18.84
Options forfeited	—	—
Options expired	—	—
Balance, March 31, 2018	1,740	\$ 31.91
Options granted	280	40.41
Options exercised	(108)	15.03
Options forfeited	(38)	49.62
Options expired	(9)	55.01
Balance, March 30, 2019	1,865	\$ 33.68

Additional information with regards to outstanding options that are vesting, expected to vest, or exercisable as of March 30, 2019 is as follows (in thousands, except years and per share amounts):

	Number of Options	Weighted Average Exercise price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Vested and expected to vest	1,858	\$ 33.64	5.64	\$ 20,786
Exercisable	1,322	\$ 28.97	4.49	\$ 19,733

In accordance with U.S. GAAP, stock options outstanding that are expected to vest are presented net of estimated future option forfeitures, which are estimated as compensation costs are recognized. Options with a fair value of \$4.1 million, \$3.8 million, and \$3.8 million, became vested during fiscal years 2019, 2018, and 2017, respectively.

The following table summarizes information regarding outstanding and exercisable options as of March 30, 2019 (in thousands, except per share amounts):

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number	Weighted Average Remaining Contractual Life (years)	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
\$5.00 - \$16.25	345	1.83	\$ 14.32	345	\$ 14.32
\$16.28 - \$23.34	326	4.85	21.78	326	21.78
\$23.80 - \$32.29	309	6.28	31.23	255	31.22
\$33.38 - \$38.99	303	5.45	38.27	210	38.37
\$41.49 - \$54.65	387	8.23	48.21	118	54.65
\$55.72 - \$55.72	195	7.93	55.72	68	55.72
	<u>1,865</u>	5.65	\$ 33.68	<u>1,322</u>	\$ 28.97

As of March 30, 2019 and March 31, 2018, the number of options exercisable was 1.3 million and 1.2 million, respectively.

Restricted Stock Units

Commencing in fiscal year 2011, the Company began granting restricted stock units (“RSU’s”) to select employees. These awards are valued as of the grant date and amortized over the requisite vesting period. Generally, RSU’s vest 100 percent on the first to third anniversary of the grant date depending on the vesting specifications. A summary of the activity for RSU’s in fiscal year 2019, 2018, and 2017 is presented below (in thousands, except year and per share amounts):

	Shares	Weighted Average Fair Value
March 26, 2016	3,163	\$ 26.14
Granted	947	52.40
Vested	(1,032)	24.67
Forfeited	(83)	28.40
March 25, 2017	2,995	34.91
Granted	936	55.79
Vested	(1,077)	24.79
Forfeited	(85)	41.09
March 31, 2018	2,769	45.70
Granted	1,416	40.57
Vested	(1,176)	33.65
Forfeited	(175)	48.15
March 30, 2019	<u>2,834</u>	<u>\$ 47.99</u>

[Table of Contents](#)

The aggregate intrinsic value of RSU's outstanding as of March 30, 2019 was \$119.2 million . Additional information with regards to outstanding restricted stock units that are expected to vest as of March 30, 2019 , is as follows (in thousands, except year and per share amounts):

	Shares	Weighted Average Fair Value	Weighted Average Remaining Contractual Term (years)
Expected to vest	2,738	\$ 48.07	1.63

RSU's outstanding that are expected to vest are presented net of estimated future forfeitures, which are estimated as compensation costs are recognized. RSU's with a fair value of \$39.6 million and \$26.7 million became vested during fiscal years 2019 and 2018 , respectively. The majority of RSUs that vested in 2019 and 2018 were net settled such that the Company withheld a portion of the shares to satisfy tax withholding requirements. In fiscal years 2019 and 2018 , the vesting of RSU's reduced the authorized and unissued share balance by approximately 1.2 million and 1.1 million , respectively. Total shares withheld and subsequently retired out of the Plan were approximately 0.3 million and 0.3 million , and total payments for the employees' tax obligations to taxing authorities were \$13.1 million and \$17.8 million for fiscal years 2019 and 2018 , respectively.

Market Stock Units

In fiscal year 2015, the Company began granting market stock units ("MSU's") to select employees. MSU's vest based upon the relative total shareholder return ("TSR") of the Company as compared to that of the Philadelphia Semiconductor Index ("the Index"). The requisite service period for these MSU's is also the vesting period, which is three years. The fair value of each MSU granted was determined on the date of grant using the Monte Carlo simulation, which calculates the present value of the potential outcomes of future stock prices of the Company and the Index over the requisite service period. The fair value is based on the risk-free rate of return, the volatilities of the stock price of the Company and the Index, the correlation of the stock price of the Company with the Index, and the dividend yield.

The fair values estimated from the Monte Carlo simulation were calculated using a dividend yield of zero and the following additional assumptions:

	Year Ended	
	March 30, 2019	March 31, 2018
Expected stock price volatility	38.00-38.14 %	37.36%
Risk-free interest rate	2.62-3.01 %	1.74%
Expected term (in years)	3.00	3.00

Using the Monte Carlo simulation, the weighted average estimated fair value of the MSU's granted in fiscal year 2019 was \$53.13 . A summary of the activity for MSU's in fiscal year 2019 , 2018 , and 2017 is presented below (in thousands, except year and per share amounts):

	Shares	Weighted Average Fair Value
March 26, 2016	125	\$ 34.85
Granted	55	75.58
Vested	—	—
Forfeited	—	—
March 25, 2017	180	\$ 47.30
Granted	89	47.26
Vested	(70)	22.00
Forfeited	—	—
March 31, 2018	199	\$ 56.16
Granted	68	53.13
Vested	—	—
Forfeited	(101)	43.41
March 30, 2019	166	\$ 62.77

The aggregate intrinsic value of MSU's outstanding as of March 30, 2019 was \$7.0 million . Additional information with regard to outstanding MSU's that are expected to vest as of March 30, 2019 is as follows (in thousands, except year and per share amounts):

	Shares	Weighted Average Fair Value	Weighted Average Remaining Contractual Term (years)
Expected to vest	160	\$ 62.91	1.64

MSU's with a fair value of \$1.5 million became vested during fiscal year 2018 . No MSU's became vested in fiscal year 2019 and 2017 .

11. Commitments and Contingencies

Facilities and Equipment Under Operating and Capital Lease Agreements

We currently own our corporate headquarters and select surrounding properties. We lease certain of our other facilities and certain equipment under operating lease agreements, some of which have renewal options. Certain of these arrangements provide for lease payment increases based upon future fair market rates. As of March 30, 2019 , our principal facilities are located in Austin, Texas and Edinburgh, Scotland, United Kingdom.

Total rent expense under operating leases was approximately \$12.7 million , \$11.5 million , and \$8.2 million , for fiscal years 2019 , 2018 , and 2017 , respectively. Rental income was \$0.2 million , \$0.3 million , and \$0.4 million , for fiscal years 2019 , 2018 , and 2017 , respectively.

As of March 30, 2019, the aggregate minimum future rental commitments under all operating leases, net of lease income for the following fiscal years are (in thousands):

	Facilities Expense	Facilities Income	Net Facilities Commitments	Equipment and Other Commitments	Total Commitments
2020	\$ 14,583	\$ 240	\$ 14,343	\$ 144	\$ 14,487
2021	13,856	245	13,611	143	13,754
2022	13,288	252	13,036	135	13,171
2023	12,456	258	12,198	125	12,323
2024	12,092	265	11,827	114	11,941
Thereafter	35,704	316	35,388	222	35,610
Total minimum lease payment	\$ 101,979	\$ 1,576	\$ 100,403	\$ 883	\$ 101,286

Wafer, Assembly, Test and Other Purchase Commitments

We rely primarily on third-party foundries for our wafer manufacturing needs. Generally, our foundry agreements do not have volume purchase commitments and primarily provide for purchase commitments based on purchase orders. Cancellation fees or other charges may apply and are generally dependent upon whether wafers have been started or the stage of the manufacturing process at which the notice of cancellation is given. As of March 30, 2019, we had foundry commitments of \$62.6 million.

In addition to our wafer supply arrangements, we contract with third-party assembly vendors to package the wafer die into finished products. Assembly vendors provide fixed-cost-per-unit pricing, as is common in the semiconductor industry. We had non-cancelable assembly purchase orders with numerous vendors totaling \$1.4 million at March 30, 2019.

Test vendors provide fixed-cost-per-unit pricing, as is common in the semiconductor industry. Our total non-cancelable commitment for outside test services as of March 30, 2019 was \$10.1 million.

Other purchase commitments primarily relate to multi-year tool commitments, and were \$45.7 million at March 30, 2019.

12. Legal Matters

From time to time, we are involved in legal proceedings concerning matters arising in connection with the conduct of our business activities. We regularly evaluate the status of legal proceedings in which we are involved to assess whether a loss is probable or there is a reasonable possibility that a loss or additional loss may have been incurred and to determine if accruals are appropriate. We further evaluate each legal proceeding to assess whether an estimate of possible loss or range of loss can be made. Based on current knowledge, management does not believe that there are any pending matters that could potentially have a material adverse effect on our business, financial condition, results of operations or cash flows.

13. Stockholders' Equity

Share Repurchase Program

In January 2018, the Company announced that the Board of Directors authorized a share repurchase program of up to \$200 million of the Company's common stock. As of March 30, 2019, the Company had repurchased 4.0 million shares under this plan at a cost of approximately \$160.0 million, or an average cost of \$40.30 per share. Approximately \$40.0 million remains available for repurchase under this plan. All of these shares were repurchased in the open market and were funded from existing cash. All shares of our common stock that were repurchased were retired as of March 30, 2019. In January 2019, the Board of Directors authorized the repurchase of up to an additional \$200 million of the Company's common stock. No shares have been repurchased under the new plan as of March 30, 2019.

Preferred Stock

We have 5.0 million shares of Preferred Stock authorized. As of March 30, 2019, we have not issued any of the authorized shares.

14. Accumulated Other Comprehensive Loss

Our accumulated other comprehensive loss is comprised of foreign currency translation adjustments, unrealized gains and losses on investments classified as available-for-sale, and actuarial gains and losses on our defined benefit pension plan assets.

The following table summarizes the changes in the components of accumulated other comprehensive loss, net of tax (in thousands):

	Foreign Currency	Unrealized Gains (Losses) on Securities	Actuarial Gains (Losses) on Defined Benefit Pension Plan	Total
Balance, March 25, 2017	\$ (1,302)	\$ (31)	\$ 760	\$ (573)
Current period foreign exchange translation	2,791	—	—	2,791
Current period marketable securities activity	—	(2,380)	—	(2,380)
Current period actuarial gain/loss activity	—	—	(14,729)	(14,729)
Tax effect	—	750	2,780	3,530
Balance, March 31, 2018	1,489	(1,661)	(11,189)	(11,361)
Current period foreign exchange translation	(3,125)	—	—	(3,125)
Current period marketable securities activity	—	2,823	—	2,823
Current period actuarial gain/loss activity	—	—	13,814	13,814
Tax effect	—	(592)	(2,625)	(3,217)
Balance, March 30, 2019	\$ (1,636)	\$ 570	\$ —	\$ (1,066)

15. Income Taxes

Income before income taxes consisted of (in thousands):

	Fiscal Years Ended		
	March 30, 2019	March 31, 2018	March 25, 2017
U.S.	\$ 41,980	\$ 91,220	\$ 137,654
Non-U.S.	51,764	173,879	177,393
	\$ 93,744	\$ 265,099	\$ 315,047

The provision (benefit) for income taxes consists of (in thousands):

	Fiscal Years Ended		
	March 30, 2019	March 31, 2018	March 25, 2017
Current:			
U.S.	\$ (7,109)	\$ 66,082	\$ 28,940
Non-U.S.	12,428	21,812	7,234
Total current tax provision	\$ 5,319	\$ 87,894	\$ 36,174
Deferred:			
U.S.	5,441	19,309	2,576
Non-U.S.	(7,007)	(4,099)	15,088
Total deferred tax provision	(1,566)	15,210	17,664
Total tax provision	\$ 3,753	\$ 103,104	\$ 53,838

The effective income tax rates differ from the rates computed by applying the statutory federal rate to pretax income as follows (in percentages):

	Fiscal Years Ended		
	March 30, 2019	March 31, 2018	March 25, 2017
U.S. federal statutory rate	21.0	31.6	35.0
Foreign income taxed at different rates	(2.9)	(9.6)	(8.7)
Transition tax on deferred foreign income	(11.8)	20.3	—
Remeasurement of U.S. deferred tax balance	(0.1)	2.3	—
Research and development tax credits	(6.7)	(2.5)	(1.8)
Stock-based compensation	(1.0)	(4.5)	(7.3)
Foreign-derived intangible income deduction	(2.8)	—	—
Current U.S. tax on foreign earnings	2.2	0.7	0.1
Change in valuation allowance	4.4	—	—
Interest related to unrecognized tax benefits	1.6	—	—
Other	0.1	0.6	(0.2)
Effective tax rate	4.0	38.9	17.1

The Tax Cuts and Jobs Act (the "Tax Act") was enacted on December 22, 2017. The Tax Act reduced the U.S. federal corporate tax rate from 35% to 21%, restricted the deductibility of certain business expenses, required companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax-deferred, and created new taxes on certain foreign sourced earnings, among other provisions. In fiscal year 2018 and the first six months of fiscal year 2019, we recorded provisional amounts for certain enactment-date effects of the Tax Act by applying the guidance in SEC Staff Accounting Bulletin No. 118 ("SAB 118") because we had not yet completed our enactment-date accounting for these effects. In fiscal year 2018, the Company recorded provisional amounts related to the enactment-date effects of the Tax Act that included recording the one-time transition tax liability related to undistributed earnings of certain foreign subsidiaries that were not previously taxed and the revaluation of certain deferred tax assets and liabilities. In fiscal year 2019, certain discrete adjustments to the provisional amounts were recorded. Our accounting for the enactment-date effects of the Tax Act was completed during the quarter ended December 29, 2018. The changes to the fiscal year 2018 enactment-date provisional amounts decreased the effective tax rate in fiscal year 2019 by 11.9%.

We applied the guidance in SAB 118 when accounting for the enactment-date effects of the Tax Act under ASC 740, *Income Taxes*, for the following aspects: remeasurement of deferred tax assets and liabilities, one-time transition tax, and tax on global intangible low taxed income ("GILTI"). As further discussed below, during the first nine months of fiscal year 2019 we recognized adjustments of \$11.1 million that decreased the enactment-date provisional amounts recorded at March 31, 2018.

The one-time transition tax represents the tax on our total post-1986 earnings and profits, which was previously deferred from U.S. income taxes under prior U.S. law. We recorded a provisional amount for our one-time transition tax liability for each of our foreign subsidiaries, resulting in a transition tax liability of \$53.9 million at March 31, 2018. Upon further analysis of the Tax Act, subsequent Internal Revenue Service ("IRS") guidance, and regulations proposed by the U.S. Department of the Treasury and the IRS, we finalized our calculations of the transition tax liability during the third quarter of fiscal year 2019. We recognized a decrease of \$11.0 million to the transition tax provisional amount in fiscal year 2019, which is included as a component of income tax expense from continuing operations. We have elected to pay our transition tax over the eight-year period provided in the Tax Act. As of March 30, 2019, the remaining balance of our transition tax obligation is \$27.0 million, which will be paid over the next seven years.

We remeasured certain deferred tax assets and liabilities based on the rates at which they were expected to reverse in the future, which was generally 21%, by recording a provisional amount of \$6.1 million at March 31, 2018. We finalized our calculations and recognized a decrease of \$0.1 million to our provisional amount in fiscal year 2019, which is included as a component of income tax expense from continuing operations.

The Tax Act subjects a U.S. shareholder to current tax on certain earnings of foreign subsidiaries under a provision commonly known as GILTI. Under U.S. GAAP, an accounting policy election can be made to either recognize deferred taxes for temporary basis differences expected to reverse as GILTI in future years, or to provide for the tax expense related to GILTI in the year the tax is incurred as a period expense only. We have elected to account for GILTI in the year the tax is incurred.

The transition to a territorial tax system under the Tax Act means that the taxation of future dividend distributions by foreign subsidiaries is expected to be limited to withholding taxes that may apply based on the jurisdiction of the subsidiary. As of March 30, 2019, unremitted earnings from our foreign subsidiaries are not expected to be indefinitely reinvested. No taxes have been accrued for foreign withholding taxes on these earnings as these amounts are not material. We have not provided additional income taxes for any other outside basis differences inherent in these entities, as these amounts continue to be indefinitely reinvested in foreign operations. Determining the amount of unrecognized deferred tax liability related to all other outside basis differences in these entities is not practicable at this time.

Significant components of our deferred tax assets and liabilities as of March 30, 2019 and March 31, 2018 are (in thousands):

	March 30, 2019	March 31, 2018
Deferred tax assets:		
Accrued expenses and allowances	\$ 4,024	\$ 5,793
Net operating loss carryforwards	2,940	3,646
Research and development tax credit carryforwards	13,111	12,701
Stock-based compensation	14,667	14,156
Other	1,261	2,402
Total deferred tax assets	\$ 36,003	\$ 38,698
Valuation allowance for deferred tax assets	(18,588)	(14,671)
Net deferred tax assets	\$ 17,415	\$ 24,027
Deferred tax liabilities:		
Depreciation and amortization	\$ 8,913	\$ 9,184
Acquisition intangibles	8,803	13,427
Total deferred tax liabilities	\$ 17,716	\$ 22,611
Total net deferred tax assets (liabilities)	\$ (301)	\$ 1,416

Deferred tax assets and liabilities are recorded for the estimated tax impact of temporary differences between the tax basis and book basis of assets and liabilities. A valuation allowance is established against a deferred tax asset when it is more likely than not that the deferred tax asset will not be realized. Our valuation allowance increased by \$3.9 million in fiscal year 2019, which included a decrease of \$0.2 million with no effect on tax expense and a net increase of \$4.1 million which affected tax expense. The Company maintains a valuation allowance for certain deferred tax assets primarily relating to certain U.S. federal tax deductions, state net operating loss carryforwards, and state tax credit carryforwards due to the likelihood that they will expire or go unutilized. Management believes that the Company's results from future operations will generate sufficient taxable income in the appropriate jurisdictions and of the appropriate character such that it is more likely than not that the remaining deferred tax assets will be realized.

At March 30, 2019, the Company had gross federal net operating loss carryforwards of \$9.2 million, all of which related to acquired companies and are, therefore, subject to certain limitations under Section 382 of the Internal Revenue Code. The federal net operating loss carryforwards expire in fiscal years 2020 through 2031. At March 30, 2019, the Company had gross state net operating loss carryforwards of \$22.2 million. The state net operating loss carryforwards expire in fiscal years 2020 through 2029. In addition, the Company had \$13.4 million of state business tax, minimum tax, and research and development tax credit carryforwards. Certain of these state tax credits will expire in fiscal years 2021 through 2034. The remaining state tax credit carryforwards do not expire.

The following table summarizes the changes in the unrecognized tax benefits (in thousands):

	March 30, 2019	March 31, 2018
Beginning balance	\$ 55,164	\$ 30,858
Additions based on tax positions related to the current year	2,204	26,602
Reductions based on tax positions related to the prior years	(17,622)	(2,296)
Ending balance	\$ 39,746	\$ 55,164

The Company records unrecognized tax benefits for the estimated risk associated with tax positions taken on tax returns. At March 30, 2019, the Company had gross unrecognized tax benefits of \$39.7 million, all of which would impact the effective tax rate if recognized. During fiscal year 2019, the Company had gross increases of \$2.2 million related to current year

unrecognized tax positions, as well as gross decreases of \$17.6 million related to prior year unrecognized tax positions. The Company's unrecognized tax benefits are classified as "Non-current income taxes" in the Consolidated Balance Sheet.

The Company recognizes interest and penalties related to unrecognized tax benefits in the provision for income taxes. During fiscal years 2019 and 2018 we recognized interest expense, net of tax, of approximately \$1.5 million and \$0.8 million, respectively.

The Company and its subsidiaries are subject to U.S. federal income tax as well as income tax in multiple state and foreign jurisdictions. Fiscal years 2016 through 2019 remain open to examination by the major taxing jurisdictions to which the Company is subject, although carry forward attributes that were generated in tax years prior to fiscal year 2016 may be adjusted upon examination by the tax authorities if they have been, or will be, used in a future period. The Company's United Kingdom subsidiaries are currently under a limited scope tax audit for certain income tax matters related to fiscal years 2016 and 2017. The Company's fiscal year 2017 federal income tax return is under examination by the U.S. Internal Revenue Service. The Company believes it has accrued adequate reserves related to the matters under examination. The Company is not under an income tax audit in any other major taxing jurisdiction.

16. Segment Information

We determine our operating segments in accordance with Financial Accounting Standards Board ("FASB") guidelines. Our Chief Executive Officer ("CEO") has been identified as the chief operating decision maker under these guidelines.

The Company operates and tracks its results in one reportable segment, but reports revenue performance in two product lines, which currently are portable and non-portable and other. Our CEO receives and uses enterprise-wide financial information to assess financial performance and allocate resources, rather than detailed information at a product line level. Additionally, our product lines have similar characteristics and customers. They share operations support functions such as sales, public relations, supply chain management, various research and development and engineering support, in addition to the general and administrative functions of human resources, legal, finance and information technology. Therefore, there is no complete, discrete financial information maintained for these product lines. Revenue from our product lines are as follows (in thousands):

	Fiscal Years Ended		
	March 30, 2019	March 31, 2018	March 25, 2017
Portable Products	\$ 1,032,049	\$ 1,363,876	\$ 1,373,848
Non-Portable and Other Products	153,475	168,310	165,092
	<u>\$ 1,185,524</u>	<u>\$ 1,532,186</u>	<u>\$ 1,538,940</u>

Geographic Area

The following illustrates sales by ship to location of the customer (in thousands):

	Fiscal Years Ended		
	March 30, 2019	March 31, 2018	March 25, 2017
United States	\$ 26,182	\$ 33,732	\$ 36,024
EMEA	14,406	15,458	14,791
China	922,202	1,264,000	1,249,325
Hong Kong	166,460	162,652	181,283
Japan	9,210	12,131	11,819
Taiwan	17,106	13,224	14,426
Other Asia	18,439	20,044	19,747
Other non-U.S. countries	11,519	10,945	11,525
Total consolidated sales	<u>\$ 1,185,524</u>	<u>\$ 1,532,186</u>	<u>\$ 1,538,940</u>

The following illustrates property, plant and equipment, net, by geographic locations, based on physical location (in thousands):

	Fiscal Years Ended	
	March 30, 2019	March 31, 2018
United States	\$ 126,292	\$ 130,202
EMEA	39,426	44,339
China	1,682	1,489
Japan	73	115
South Korea	870	1,217
Taiwan	15,349	7,743
Other Asia	1,999	5,444
Other non-U.S. countries	494	605
Total consolidated property, plant and equipment, net	\$ 186,185	\$ 191,154

17. Quarterly Results (Unaudited)

The following quarterly results have been derived from our audited annual consolidated financial statements. In the opinion of management, this unaudited quarterly information has been prepared on the same basis as the annual consolidated financial statements and includes all adjustments, including normal recurring adjustments, necessary for a fair presentation of this quarterly information. This information should be read along with the financial statements and related notes. The operating results for any quarter are not necessarily indicative of results to be expected for any future period.

The unaudited quarterly statement of operations data for each quarter of fiscal years 2019 and 2018 were as follows (in thousands, except per share data):

	Fiscal Year 2019			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Net sales	\$ 254,483	\$ 366,305	\$ 324,295	\$ 240,441
Gross profit	124,559	185,119	163,180	124,639
Net income (loss)	(4,272)	58,173	29,933	6,157
Basic income (loss) per share	\$ (0.07)	\$ 0.96	\$ 0.50	\$ 0.10
Diluted income (loss) per share	(0.07)	0.93	0.49	0.10

	Fiscal Year 2018			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Net sales	\$ 320,735	\$ 425,537	\$ 482,741	\$ 303,173
Gross profit	161,716	211,282	235,088	152,630
Net income	42,912	73,300	33,779	12,004
Basic income per share	\$ 0.67	\$ 1.16	\$ 0.53	\$ 0.19
Diluted income per share	0.64	1.10	0.52	0.19

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

As required by Rule 13a-15(e) of the Exchange Act, we have evaluated, under the supervision and with the participation of our management, including our chief executive officer (CEO) and chief financial officer (CFO), the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(b) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Form 10-K. Our disclosure controls and procedures are designed to provide reasonable assurance that the information required to be disclosed by us in reports that we file or submit under the

Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms and (ii) accumulated and communicated to our management, including our CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure. Based upon the evaluation, our management, including our CEO and CFO, has concluded that our disclosure controls and procedures were effective as of March 30, 2019 .

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined under Rule 13a-15(f). Under the supervision and with the participation of our management, including our CEO and CFO, we assessed the effectiveness of our internal control over financial reporting as of the end of the period covered by this report based on the criteria set forth in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework).

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

Based on its assessment of internal control over financial reporting, management has concluded that our internal control over financial reporting was effective as of March 30, 2019 , to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of our financial statements for external purposes in accordance with U.S. generally accepted accounting principles. Our independent registered public accounting firm, Ernst & Young LLP, has issued an attestation report on management's assessment of our internal control over financial reporting as of March 30, 2019 , included in Item 8 of this report.

Changes in Internal Control Over Financial Reporting

There has been no change in the Company's internal control over financial reporting during the quarter ended March 30, 2019 , that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

PART III

ITEM 10. *Directors, Executive Officers and Corporate Governance*

The information set forth in the proxy statement to be delivered to stockholders in connection with our Annual Meeting of Stockholders to be held on August 2, 2019 (the "Proxy Statement") under the headings *Corporate Governance — Board Meetings and Committees, Corporate Governance — Audit Committee, Proposals to be Voted on — Proposal No. 1 — Election of Directors* is incorporated herein by reference.

ITEM 11. *Executive Compensation*

The information set forth in the Proxy Statement under the headings *Director Compensation Arrangements , Compensation Discussion and Analysis, Compensation Committee Report, and Proposals to be Voted on — Proposal No. 3 — Advisory Vote to Approve Executive Compensation* is incorporated herein by reference.

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

The information set forth in the Proxy Statement under the headings *Equity Compensation Plan Information and Security Ownership of Certain Beneficial Owners and Management* is incorporated herein by reference.

ITEM 13. *Certain Relationships and Related Transactions, and Director Independence*

The information set forth in the Proxy Statement under the headings *Certain Relationships and Related Transactions* and *Corporate Governance* is incorporated herein by reference.

ITEM 14. *Principal Accountant Fees and Services*

The information set forth in the Proxy Statement under the headings *Audit and Non-Audit Fees and Services* and *Proposal No. 2 — Ratification of Appointment of Independent Registered Public Accounting Firm* is incorporated herein by reference.

PART IV

ITEM 15. Exhibits and Financial Statement Schedules

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

1. *Consolidated Financial Statements*

- Reports of Ernst & Young LLP, Independent Registered Public Accounting Firm.
- Consolidated Balance Sheets as of March 30, 2019 and March 31, 2018 .
- Consolidated Statements of Income for the fiscal years ended March 30, 2019 , March 31, 2018 , and March 25, 2017 .
- Consolidated Statements of Comprehensive Income for the fiscal years ended March 30, 2019 , March 31, 2018 , and March 25, 2017 .
- Consolidated Statements of Cash Flows for the fiscal years ended March 30, 2019 , March 31, 2018 , and March 25, 2017 .
- Consolidated Statements of Stockholders' Equity for the fiscal years ended March 30, 2019 , March 31, 2018 , and March 25, 2017 .
- Notes to Consolidated Financial Statements.

2. *Financial Statement Schedules*

All schedules have been omitted since the required information is not present or not present in amounts sufficient to require submission of the schedule, or because the information required is included in the consolidated financial statements or notes thereto.

3. *Exhibits*

The following exhibits are files as part of or incorporated by reference into this Annual Report on Form 10-K.

<u>Number</u>	<u>Description</u>
2.1	Cooperation Agreement dated April 29, 2014 between the Company and Wolfson Microelectronics plc. (1)
3.1	Certificate of Incorporation of Registrant, filed with the Delaware Secretary of State on August 26, 1998. (2)
3.2	Amended and Restated Bylaws of Registrant. (3)
10.1+	Cirrus Logic, Inc. 2006 Stock Incentive Plan, amended and restated as of May 26, 2015. (7)
10.2+	Form of Stock Option Agreement for options granted under the Cirrus Logic, Inc. 2006 Stock Incentive Plan. (4)
10.3+	Form of Stock Option Agreement for options for U.K. Employees under the Cirrus Logic, Inc. 2006 Stock Incentive Plan. (12)
10.4+	Form of Notice of Grant of Stock Option for options granted under the Cirrus Logic, Inc. 2006 Stock Incentive Plan. (4)
10.5+	Form of Stock Option Agreement for Outside Directors under the Cirrus Logic, Inc. 2006 Stock Incentive Plan. (6)
10.6+	Form of Restricted Stock Unit Agreement for U.S. Employees under the Cirrus Logic, Inc. 2006 Stock Incentive Plan. (5)
10.7+	Form of Restricted Stock Unit Agreement for U.K. Employees under the Cirrus Logic, Inc. 2006 Stock Incentive Plan. (10)
10.8+	Form of Notice of Grant of Restricted Stock Units granted under the Cirrus Logic, Inc. 2006 Stock Incentive Plan. (5)
10.9+	Form of Performance Award Agreement for U.S. Employees under the Cirrus Logic, Inc. 2006 Stock Incentive Plan. (9)
10.10+	Form of Notice of Performance Award Agreement for U.S. Employees under the Cirrus Logic Inc. 2006 Stock Incentive Plan (10)
10.11+	Form of Performance Award Agreement for U.K. Employees under the Cirrus Logic, Inc. 2006 Stock Incentive Plan. (12)

[Table of Contents](#)

10.12+	Executive Severance and Change of Control Plan, effective as of October 1, 2007, as amended and restated on April 1, 2018. (14)
10.13+	2007 Management and Key Individual Contributor Incentive Plan, as amended on May 20, 2016. (12)
10.14+	Cirrus Logic, Inc. 2018 Long Term Incentive Plan. (15)
10.15+	Form of Restricted Stock Unit Agreement. (15)
10.16+	Form of Notice of Grant of Restricted Stock Units. (15)
10.17+	Form of Performance Award Agreement. (15)
10.18+	Form of Notice of Grant of Performance Award. (15)
10.19+	Form of Stock Option Agreement. (15)
10.20+	Form of Notice of Grant of Stock Option. (15)
10.21+	Form of Notice of Grant of Stock Award. (15)
10.22	Credit Agreement dated April 29, 2014 among the Company, Wells Fargo Bank and National Association, as Administrative Agent and Lender. (1)
10.23	Credit Agreement dated August 29, 2014 among Registrant, Wells Fargo Bank and National Association, as Administrative Agent and Initial Issuing Lender. (8)
10.24	First Amendment to Credit Agreement among Cirrus Logic, Inc., the Lenders party thereto and Wells Fargo Bank, National Association, as Lender and Administrative Agent. (11)
10.25	Amended and Restated Credit Agreement among the Company, Wells Fargo Bank, National Association, as Administrative Agent and Initial Issuing Lender, and Bank of America, N.A., as Syndication Agent. (13)
14.1	Code of Conduct, dated March 24, 2015. (10)
21.1*	List of Subsidiaries.
23.1*	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.
24.1*	Power of Attorney (see signature page).
31.1*	Certification of Chief Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Chief Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification of Chief Executive Officer, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of Chief Financial Officer, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document

+ Indicates a management contract or compensatory plan or arrangement.

* Filed with this Form 10-K.

- (1) Incorporated by reference from Registrant's Report on Form 8-K filed with the SEC on April 29, 2014 (Registration No. 000-17795).
- (2) Incorporated by reference from Registrant's Report on Form 10-K for the fiscal year ended March 31, 2001, filed with the SEC on June 22, 2001 (Registration No. 000-17795).
- (3) Incorporated by reference from Registrant's Report on Form 8-K filed with the SEC on September 20, 2013.
- (4) Incorporated by reference from Registrant's Statement on Form S-8 filed with the SEC on August 1, 2006 (Registration No. 000-17795).
- (5) Incorporated by reference from Registrant's Report on Form 8-K filed with the SEC on October 7, 2010.
- (6) Incorporated by reference from Registrant's Report on Form 8-K filed with the SEC on August 1, 2007.
- (7) Incorporated by reference to Exhibit A of the Registrant's Definitive Proxy Statement on Schedule 14A filed with the SEC on June 2, 2015.
- (8) Incorporated by reference from Registrant's Report on Form 8-K filed with the SEC on September 3, 2014.
- (9) Incorporated by reference from Registrant's Report on Form 8-K filed with the SEC on September 22, 2014.
- (10) Incorporated by reference from Registrant's Report on Form 10-K filed with the SEC on May 27, 2015 (Registration No. 000-17795).
- (11) Incorporated by reference from Registrant's Report on Form 8-K filed with the SEC on June 26, 2015.
- (12) Incorporated by reference from Registrant's Report on Form 10-K filed with the SEC on May 25, 2016 (Registration No. 000-17795).
- (13) Incorporated by reference from Registrant's Report on Form 8-K with the SEC on July 15, 2016 (Registration No. 000-17795).
- (14) Incorporated by reference from Registrant's Report on Form 10-K with the SEC on May 30, 2018 (Registration No. 000-17795).
- (15) Incorporated by reference from Registrant's Statement on Form S-8 filed with the SEC on August 3, 2018 (Registration No. 333-226578).

Significant Subsidiaries of the Registrant

The following are significant subsidiaries of Cirrus Logic, Inc. as of March 30, 2019 and the jurisdictions in which they are organized. Indentation indicates the principal parent of each subsidiary. The names of particular subsidiaries have been omitted because, considered in the aggregate as a single subsidiary, they would not constitute, as of the end of the year covered by this report, a “significant subsidiary” as that term is defined in Rule 1-02(w) of Regulation S-X under the Securities Exchange Act of 1934.

<u>Name</u>	<u>Jurisdiction of Entity</u>
Cirrus Logic UK International Holding Co., Ltd.	United Kingdom
Cirrus Logic International Semiconductor Ltd.	United Kingdom
Cirrus Logic International Holdings Ltd.	United Kingdom
Cirrus Logic International (UK) Ltd.	United Kingdom

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statements (Form S-8 Nos. 333-136219, 333-200968, and 333-208577, and 333-226578) pertaining to the Cirrus Logic, Inc. 2006 Stock Incentive Plan and the Cirrus Logic, Inc. 2018 Long Term Incentive Plan of our reports dated May 24, 2019, with respect to the consolidated financial statements of Cirrus Logic, Inc., and the effectiveness of internal control over financial reporting of Cirrus Logic, Inc., included in this Annual Report (Form 10-K) for the fiscal year ended March 30, 2019.

/s/ Ernst & Young LLP
Austin, Texas
May 24, 2019

CERTIFICATION
Pursuant to 18 U.S.C. Section 1350,
as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Jason P. Rhode, certify that:

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

Date: May 24, 2019

Signature: /s/ Jason P. Rhode

Jason P. Rhode

President and Chief Executive Officer

CERTIFICATION
Pursuant to 18 U.S.C. Section 1350,
as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Thurman K. Case, certify that:

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

Date: May 24, 2019

Signature: /s/ Thurman K. Case

Thurman K. Case

Vice President, Chief Financial Officer and Principal Accounting Officer

Certification 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 Cirrus Logic, Inc. (the "Company") on Form 10-K for the period ended March 30, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jason P. Rhode, Chief Executive Officer of the Company, hereby certify as of the date hereof, solely for purposes of Title 18, Chapter 63, Section 1350 of the United States Code, that to my knowledge:

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

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

This Certification has not been, and shall not be deemed, "filed" with the Securities and Exchange Commission.

Date: May 24, 2019

Signature: /s/ Jason P. Rhode

Jason P. Rhode

President and Chief Executive Officer

Certification 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 Cirrus Logic, Inc. (the "Company") on Form 10-K for the period ended March 30, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jason P. Rhode, Chief Executive Officer of the Company, hereby certify as of the date hereof, solely for purposes of Title 18, Chapter 63, Section 1350 of the United States Code, that to my knowledge:

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

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

This Certification has not been, and shall not be deemed, "filed" with the Securities and Exchange Commission.

Date: May 24, 2019

Signature: /s/ Thurman K. Case

Thurman K. Case

Vice President, Chief Financial Officer and Principal Accounting Officer