

**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 September 27, 2019

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 001-05560

**Skyworks Solutions, Inc.**  
*(Exact name of registrant as specified in its charter)*

**Delaware**

*(State or other jurisdiction of incorporation or organization)*

**04-2302115**

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

**20 Sylvan Road, Woburn Massachusetts**

*(Address of principal executive offices)*

**01801**

*(Zip Code)*

**(781) 376-3000**

*(Registrant's telephone number, including area code)*

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value \$0.25 per share	SWKS	Nasdaq Global Select Market

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

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 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 every Interactive Data File required to be submitted 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 such files). ☒ Yes ☐ No

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 ☐

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

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

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant (based on the closing price of the registrant's common stock as reported on the Nasdaq Global Select Market on the last business day of the registrant's most recently completed second fiscal quarter March 29, 2019) was approximately \$14.2 billion. The number of outstanding shares of the registrant's common stock, par value \$0.25 per share, as of November 12, 2019, was 170,375,324.

**DOCUMENTS INCORPORATED BY REFERENCE**

Part of Form 10-K	Documents from which portions are incorporated by reference
Part III	Portions of the Registrant's Proxy Statement relating to the Registrant's 2020 Annual Meeting of Stockholders (to be filed) are incorporated by reference into Items 10, 11, 12, 13 and 14 of this Annual Report on Form 10-K.

SKYWORKS SOLUTIONS, INC.  
ANNUAL REPORT ON FORM 10-K  
FOR THE YEAR ENDED SEPTEMBER 27, 2019

TABLE OF CONTENTS

	<u>PAGE NO.</u>
<u>PART I</u>	
<u>ITEM 1: BUSINESS.</u>	<u>5</u>
<u>ITEM 1A: RISK FACTORS.</u>	<u>10</u>
<u>ITEM 1B: UNRESOLVED STAFF COMMENTS.</u>	<u>21</u>
<u>ITEM 2: PROPERTIES.</u>	<u>21</u>
<u>ITEM 3: LEGAL PROCEEDINGS.</u>	<u>22</u>
<u>ITEM 4: MINE SAFETY DISCLOSURES.</u>	<u>22</u>
<u>PART II</u>	
<u>ITEM 5: MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.</u>	<u>23</u>
<u>ITEM 6: SELECTED FINANCIAL DATA.</u>	<u>24</u>
<u>ITEM 7: MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.</u>	<u>25</u>
<u>ITEM 7A: QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.</u>	<u>30</u>
<u>ITEM 8: FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.</u>	<u>32</u>
<u>ITEM 9: CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.</u>	<u>59</u>
<u>ITEM 9A: CONTROLS AND PROCEDURES.</u>	<u>59</u>
<u>ITEM 9B: OTHER INFORMATION.</u>	<u>60</u>
<u>PART III</u>	
<u>ITEM 10: DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.</u>	<u>60</u>
<u>ITEM 11: EXECUTIVE COMPENSATION.</u>	<u>60</u>
<u>ITEM 12: SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.</u>	<u>60</u>
<u>ITEM 13: CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.</u>	<u>60</u>
<u>ITEM 14: PRINCIPAL ACCOUNTING FEES AND SERVICES.</u>	<u>60</u>
<u>PART IV</u>	
<u>ITEM 15: EXHIBITS, FINANCIAL STATEMENT SCHEDULES.</u>	<u>61</u>
<u>ITEM 16: FORM 10-K SUMMARY</u>	<u>61</u>
<u>SIGNATURES</u>	<u>64</u>

## CAUTIONARY STATEMENT

This Annual Report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities and Exchange Act of 1934, as amended (the “Exchange Act”), and is subject to the “safe harbor” created by those sections. Any statements that are not statements of historical fact should be considered to be forward-looking statements. Words such as “anticipates”, “believes”, “continue”, “could”, “estimates”, “expects”, “intends”, “may”, “plans”, “potential”, “predicts”, “projects”, “seek”, “should”, “targets”, “will”, “would”, and similar expressions or variations or negatives of such words are intended to identify forward-looking statements, but are not the exclusive means of identifying forward-looking statements in this Annual Report. Additionally, forward-looking statements include, but are not limited to:

- our plans to develop and market new products, enhancements or technologies and the timing of these development and marketing plans;
- our estimates regarding our capital requirements and our needs for additional financing;
- our estimates of our expenses, future revenues and profitability;
- our estimates of the size of the markets for our products and services;
- our expectations related to the rate and degree of market acceptance of our products; and
- our estimates of the success of other competing technologies that may become available.

Although forward-looking statements in this Annual Report reflect the good faith judgment of our management, such statements can only be based on facts and factors currently known and understood by us. Consequently, forward-looking statements involve inherent risks and uncertainties and actual financial results and outcomes may differ materially and adversely from the results and outcomes discussed in or anticipated by the forward-looking statements. A number of important factors could cause actual financial results to differ materially and adversely from those in the forward-looking statements. We urge you to consider the risks and uncertainties discussed elsewhere in this report and in the other documents filed by us with the Securities and Exchange Commission (“SEC”) in evaluating our forward-looking statements. We have no plans, and undertake no obligation, to revise or update our forward-looking statements to reflect any event or circumstance that may arise after the date of this report. We caution readers not to place undue reliance upon any such forward-looking statements, which speak only as of the date made.

This Annual Report also contains estimates made by independent parties and by us relating to market size and growth and other industry data. These estimates involve a number of assumptions and limitations and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the industries in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of important factors, including those described in “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations”. These and other factors could cause results to differ materially and adversely from those expressed in the estimates made by the independent parties and by us.

In this document, the words “we”, “our”, “ours”, “us”, “Skyworks”, and “the Company” refer only to Skyworks Solutions, Inc., and its consolidated subsidiaries and not any other person or entity. In addition, the following is a list of industry standards that may be referenced throughout the document:

- 5G (Fifth Generation): next-generation cellular network technology
- ASoC (Analog System on Chip): combines the required electronic circuits of various computer components into a single, integrated chip.
- BAW (Bulk Acoustic Wave): electrical input signal is converted to an acoustic wave for filtering and converted back into an electrical signal by a metal-piezo-metal vertical structure
- BiFET (Bipolar Field Effect Transistor): integrates indium gallium phosphide based heterojunction bipolar transistors with field effect transistors on the same gallium arsenide substrate
- DC (Direct Current): unidirectional flow of an electrical charge
- CMOS (Complementary Metal Oxide Semiconductor): a technology of constructing integrated circuits
- GaAs (Gallium Arsenide): a compound of the elements gallium and arsenic that is used in the production of semiconductors
- HBT (Heterojunction Bipolar Transistor): a type of bipolar junction transistor which uses differing semiconductor materials for the emitter and base regions, creating a heterojunction

- IoT (Internet of Things): is the interconnection of uniquely identifiable embedded computing devices within the existing internet infrastructure
- LED (Light Emitting Diode): a two-lead semiconductor light source
- LTE (Long Term Evolution): 4th generation (“4G”) radio technologies designed to increase the capacity and speed of mobile telephone networks
- MIMO (Multiple In, Multiple Out): a method for multiplying the capacity of a radio link using multiple transmission and receiving antennas to exploit multipath propagation; more commonly, it refers to LTE, 5G, and Wi-Fi techniques to send more than one data signal (also known as data layers) with encoded information to increase capacity in modern telecommunications systems
- pHEMT (Pseudomorphic High Electron Mobility Transistor): a type of field effect transistor incorporating a junction between two materials with different band gaps
- RF (Radio Frequency): electromagnetic wave frequencies that lie in the range extending from around 3 kHz to 300 GHz
- SAW (Surface Acoustic Wave): electrical input signal is converted to an acoustic wave for filtering and converted back into an electrical signal by interdigitated transducers on a piezoelectric substrate.
- SOI (Silicon On Insulator): technology refers to the use of layered silicon-insulator-silicon substrate in place of conventional silicon substrates in semiconductor manufacturing
- TC-SAW (Temperature Compensated Surface Acoustic Wave): SAW filters that have been designed to reduce shift in frequency over temperature.

Skyworks and the Skyworks symbol are trademarks or registered trademarks of Skyworks Solutions, Inc. or its subsidiaries in the United States and other countries. Third-party brands and names are for identification purposes only, and are the property of their respective owners.

## PART I

### ITEM 1. BUSINESS.

Skyworks Solutions, Inc., together with its consolidated subsidiaries (“Skyworks” or the “Company”), is empowering the wireless networking revolution. The Company’s highly innovative analog semiconductors are connecting people, places, and things, spanning a number of new and previously unimagined applications within the aerospace, automotive, broadband, cellular infrastructure, connected home, industrial, medical, military, smartphone, tablet and wearable markets.

Our key customers include Amazon, Apple, Arris, Bose, Cisco, DJI, Ericsson, Foxconn, Garmin, Gemalto (a Thales company), General Electric, Google, Honeywell, HTC, Huawei, Itron, Lenovo, LG Electronics, Microsoft, Motorola, Netgear, Northrop Grumman, OPPO, Rockwell Collins, Samsung, Sierra Wireless, Sonos, Technicolor, VIVO, Xiaomi and ZTE. Our competitors include Analog Devices, Broadcom, Cirrus Logic, Maxim Integrated Products, Murata Manufacturing, NXP Semiconductors, Qorvo and Qualcomm.

We are a Delaware corporation that was formed in 1962. We changed our corporate name from Alpha Industries, Inc. to Skyworks Solutions, Inc. on June 25, 2002, following a business combination. We operate worldwide with engineering, manufacturing, sales, and service facilities throughout Asia, Europe, and North America. Our Internet address is [www.skyworksinc.com](http://www.skyworksinc.com). We make available free of charge on our website our Annual Report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports as soon as practicable after we electronically submit such material to the SEC. The information contained on our website is not incorporated by reference in this Annual Report. Our SEC filings are also available to the public at [www.sec.gov](http://www.sec.gov).

In August 2018, we acquired Avnera Corporation (“Avnera”) and expanded our leadership in wireless connectivity by adding ultra-low power analog circuits to enable smart interfaces via acoustic signal processing, sensors, and integrated software. The acquisition of Avnera enables us to capitalize on the rapid proliferation of audio functionality and its convergence with our advanced connectivity solutions. With our global sales channels, strong customer relationships and operational scale, we are leveraging Avnera’s innovative product portfolio and systems expertise to increase our footprint in automotive, industrial, home automation, enterprise and high-end consumer markets.

### INDUSTRY BACKGROUND

Wireless connectivity is exploding on a global basis. 5G is dramatically altering the world, creating an ecosystem where everyone is connected to everything, all the time—changing how individuals live, work, play, and learn. More importantly, 5G goes well beyond simply making the mobile communications experience better by increasing reliability, adding new features, and enhancing data rates. It is creating a market for diverse and transformative applications driven by the ability to deliver greater speeds, bandwidth and capacity, significantly lower latency, and more secure connectivity.

In fact, 5G connections will approach ten to 100 times faster than 4G speeds. To put this in perspective, downloading a full-length HD movie in 3G took one day; in 4G, the same file took minutes. On a 5G network, this content can be downloaded in mere seconds. 5G will also enable increasingly efficient and safe vehicle communication, paving the way for autonomous vehicles as well as networks that could make wireless healthcare a reality.

At the same time, connectivity is expanding into an adjacent set of IoT markets. From smart homes to the smart grid and from industrial to wearables, the number of connected devices is rapidly proliferating. IHS Markit Ltd. projects the IoT market to grow from an installed base of 15 billion units in 2015 to more than 75 billion units by 2025. Skyworks is enabling these opportunities with highly customized system solutions supporting a broad set of wireless protocols including cellular LTE, Wi-Fi, Bluetooth®, LoRa®, Thread, and Zigbee®.

Looking forward, we see a market that presents a significant growth opportunity for our industry and for Skyworks. The key catalysts for Skyworks will continue to be the insatiable demand for data and the profitable usage model, as each connection becomes more valuable and the world embraces 5G. According to a June 2019 Ericsson “Mobility Report,” there are expected to be 1.9 billion mobile 5G subscriptions globally by the end of 2024 driven by “rapid early momentum and enthusiasm” in the global market. 5G technology will also support the tens of billions of connected devices, smart objects, and embedded sensors expected to come online as the IoT becomes mainstream.

### Solving Connectivity Challenges

We expect that highly integrated semiconductor solutions will play an increasingly pivotal role in the deployment of this next generation standard by resolving the daunting analog and RF complexities that are challenging the capabilities of existing hardware and the supporting network infrastructure. Meeting these design challenges requires broad competencies including signal transmission and conditioning, the ability to ensure seamless hand-offs between multiple standards, power management, voltage regulation, battery charging, advanced filtering, and tuning.

Skyworks is at the forefront of this sea change in connectivity, delivering the solutions that will enable the true potential of 5G and the IoT. We have a rich heritage in analog systems design and have spent the last decade investing in key technologies and resources. Our strength is underpinned by world-class performance and scale across a broad array of capabilities that include advanced TC-SAW and BAW filters, an expanded family of MIMO, ultra-high band, and diversity receive modules and expanding into emerging technologies including millimeter wave. From our breakthrough SKY5® unifying platform to our 5G small cell solutions, Skyworks' approach across both infrastructure and user equipment facilitates powerful, high-speed end-to-end 5G connectivity.

## **SKYWORKS' STRATEGY**

Our ambitious vision is to connect everyone and everything, all the time. To this end, key elements of our strategy include:

### **Industry-Leading Technology**

As the industry migrates to more complex 5G architectures across a multitude of wireless applications, we are well positioned to help mobile device manufacturers handle growing levels of system complexity in the transmit and receive chain. The trend towards increasing front-end and analog design challenges in smartphones and other platforms plays directly into our core strengths and positions us to address these challenges. We believe that we offer the broadest portfolio of radio and analog solutions from the transceiver to the antenna as well as all required manufacturing process technologies. We also hold strong technology leadership positions in passive devices, advanced integration including proprietary shielding and 3-D die stacking as well as SAW, TC-SAW and BAW filters. Our product portfolio is reinforced by a library of approximately 3,500 worldwide patents and other intellectual property that we own and control. Together, our industry-leading technology enables us to deliver the highest levels of product performance and integration.

### **Customer Relationships**

Given our scale and technology leadership, we are engaged with key original equipment manufacturers ("OEMs"), smartphone providers and baseband reference design partners. Our customers value our supply chain strength, our innovative technology and our system engineering expertise, resulting in deep customer loyalty. We partner with our customers to support their long-term product road maps and are valued as a system solutions provider rather than just a point product vendor.

### **Diversification**

We are diversifying our business in three areas: our addressed markets, our customer base and our product offerings. By leveraging core analog and mixed signal technologies, we are expanding our family of solutions to a set of increasingly diverse end markets and customers. With the adoption of 5G and the opportunity to enable more applications, we are steadily growing our business beyond just mobile devices (where we support all top-tier manufacturers, including the leading smartphone suppliers and key baseband vendors) into additional high-performance analog markets, including automotive, home and factory automation, infrastructure, medical, smart energy and wireless networking. In these markets we leverage our scale, intellectual property and worldwide distribution network, which spans over 3,200 customers and over 2,500 analog components.

### **Delivering Operational Excellence**

We vertically integrate our supply chain where we can differentiate with highly specialized internal manufacturing capabilities, or enter into alliances and strategic relationships for leading-edge technologies. This hybrid manufacturing model allows us to better balance our manufacturing capacity with the demand of the marketplace. Our internal capacity utilization remains high, resulting in an increase of our gross margin and the return on invested capital on a broader range of revenue.

Additionally, we continue to drive reductions in product design and manufacturing cycle times and further improve product yields. The combination of agile, flexible capacity and world-class module manufacturing and scale advantage allows us to achieve low product costs while integrating multiple technologies into highly sophisticated multi-chip modules.

### **Maintaining a Performance-Driven Culture**

We consider our people and corporate culture to be a major competitive advantage and a key driver of our overall strategy. We create key performance indicators that align employee efforts with corporate strategy and link responsibilities with performance

measurement. Accountability is paramount and we compensate our employees through a pay-for-performance methodology. We strive to be an employer-of-choice among peer companies and have created a work environment in which turnover is below geographic and industry averages.

## **Generating Superior Operating Results and Shareholder Returns**

We seek to generate financial returns that are comparable to a highly diversified analog semiconductor company. Given our product volume and overall utilization we strive to achieve a best-in-class return on investment and operating income to reward shareholders.

## **OUR PRODUCT PORTFOLIO**

Our product portfolio consists of various solutions, including:

- Amplifiers: the modules that strengthen the signal so that it has sufficient energy to reach a base station
- Antenna Tuners: aperture and impedance tuning products that improve antenna performance across frequencies
- Attenuators: circuits that allow a known source of power to be reduced by a predetermined factor (usually expressed as decibels)
- Circulators/Isolators: ferrite-based components commonly found on the output of high-power amplifiers used to protect receivers in wireless transmission systems
- Wireless ASoC: an intelligent 2.4 GHz and 5GHz wireless radio integrated circuit that includes all the analog and digital functions optimized for building wireless audio headsets, headphones, and wireless speaker systems
- DC/DC Converters: an electronic circuit which converts a source of direct current from one voltage level to another
- Demodulators: a device or an RF block used in receivers to extract the information that has been modulated onto a carrier or from the carrier itself
- Detectors: devices used to measure and control RF power in wireless systems
- Diodes: semiconductor devices that pass current in one direction only
- Directional Couplers: transmission coupling devices for separately sampling the forward or backward wave in a transmission line
- Diversity Receive Modules: devices used to improve receiver sensitivity in high data rate applications
- Filters: devices for recovering and separating mixed and modulated data in RF stages
- Front-end Modules: two or more functions co-packaged to optimize the performance, cost and application suitability in products, including intermediate or radio frequency signal paths
- Hybrid: a type of directional coupler used in radio and telecommunications
- LED Drivers: devices which regulate the current through a light emitting diode or string of diodes for the purpose of creating light
- Low Noise Amplifiers: devices used to reduce system noise figure in the receive chain
- Mixers: devices that enable signals to be converted to a higher or lower frequency signal and thereby allowing the signals to be processed more effectively
- Modulators: devices that take a baseband input signal and output a radio frequency modulated signal
- Optocouplers/Optoisolators: semiconductor devices that allow signals to be transferred between circuits or systems while ensuring that the circuits or systems are electrically isolated from each other
- Phase Locked Loops: closed-loop feedback control system that maintains a generated signal in a fixed phase relationship to a reference signal
- Phase Shifters: designed for use in power amplifier distortion compensation circuits in base station applications
- Power Dividers/Combiners: utilized to equally split signals into in-phase signals as often found in balanced signal chains and local oscillator distribution networks
- Receivers: electronic devices that change a radio signal from a transmitter into useful information
- Switches: components that perform the change between the transmit and receive function, as well as the band function for cellular handsets
- Synthesizers: devices that provide ultra-fine frequency resolution, fast switching speed, and low phase-noise performance
- Technical Ceramics: polycrystalline oxide materials used for a wide variety of electrical, mechanical, thermal and magnetic applications
- Voltage Controlled Oscillators/Synthesizers: fully integrated, high performance signal source for high dynamic range transceivers
- Voltage Regulators: generate a fixed level which ideally remains constant over varying input voltage or load conditions

We believe we possess broad technology capabilities and one of the most complete wireless communications product portfolios in the industry.

## MARKETING AND DISTRIBUTION

Our products are sold globally through a direct sales force, electronic component distributors and independent sales representatives. Certain distributors have agreements with us which allow for certain sales returns, stock rotations and price protection on certain inventory if we lower the price of those products (see “[Critical Accounting Estimates](#)” in Part II, Item 7 - Management’s Discussion and Analysis of Financial Condition and Results of Operations and [Note 2](#) to Item 8 of this Annual Report on Form 10-K for further detail on revenue reserves). As is customary in the semiconductor industry, our distributors may also market other products that compete with ours.

Our sales engagement begins at the earliest stages of the design of an existing or potential customer’s product. We collaborate technically with our customers and reference design partners at the inception of new programs. These relationships allow our team to facilitate customer-driven solutions, which leverage the unique strength of our intellectual property and product portfolio while providing high value and greatly reducing time-to-market.

We believe the technical and complex nature of our products and markets demand an extraordinary commitment to maintain close ongoing relationships with our customers. As such, we strive to expand the scope of our customer relationship to include design, engineering, manufacturing, procurement, logistics and project management. We also employ a collaborative approach in developing these relationships by combining the support of our design teams, applications engineers, manufacturing personnel, sales and marketing staff and senior management. Lastly, we leverage our customer relationships with cross-selling opportunities across product lines in order to maximize revenue.

We believe that maintaining frequent and interactive contact with our customers is paramount to our continuous efforts to provide world-class sales and service support. By listening and responding to feedback, we are able to mobilize resources to raise our level of customer satisfaction, improve our ability to anticipate future product needs, and enhance our understanding of key market dynamics. We are confident that diligently following this path positions us to participate in numerous opportunities for growth in the future.

## CUSTOMER CONCENTRATION

A small number of OEMs historically has accounted for a significant portion of our net revenue. In the fiscal years ended September 27, 2019 (“fiscal 2019”), and September 28, 2018 (“fiscal 2018”), Apple Inc. (“Apple”), through sales to multiple distributors, contract manufacturers and direct sales for multiple applications including smartphones, tablets, desktop and notebook computers, watches, and other devices) constituted more than ten percent of our net revenue. In the fiscal year ended September 29, 2017 (“fiscal 2017”), three customers—Apple, Samsung Electronics (“Samsung”), and Huawei Technology Co., Ltd. (“Huawei”)—each constituted ten percent or more of our net revenue. For further information regarding customer concentrations see [Note 15](#) to Item 8 of this Annual Report on Form 10-K.

## INTELLECTUAL PROPERTY AND PROPRIETARY RIGHTS

We own or have a license to use numerous United States and foreign patents and patent applications related to our products and our manufacturing operations and processes. In addition, we own a number of trademarks and service marks applicable to certain of our products and services. We believe that our intellectual property, including patents, patent applications, trade secrets and trademarks, is of material importance to our business. We rely on patent, copyright, trademark, trade secret and other intellectual property laws, as well as non-disclosure and confidentiality agreements and other methods, to protect our confidential and proprietary technologies, designs, devices, algorithms, processes and other intellectual property. Our efforts may not meaningfully protect our intellectual property, or others may independently develop substantially equivalent or superior proprietary technologies, designs, devices, algorithms, processes or other intellectual property. In addition, the laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the United States, and effective copyright, patent, trademark and trade secret protection may not be available in those jurisdictions. In addition to protecting our intellectual property, we strive to strengthen our intellectual property portfolio to enhance our ability to obtain cross-licenses of intellectual property from others, to obtain access to intellectual property we do not possess and to more favorably resolve potential intellectual property claims against us. Due to rapid technological changes in the industry, we believe establishing and maintaining a technological leadership position depends primarily on our ability to develop new, innovative products through the technical competence of our engineering personnel.

## COMPETITIVE CONDITIONS

The competitive environment in the semiconductor industry is in a constant state of flux, with new products continually emerging and existing products approaching technological obsolescence. We compete on the basis of time-to-market, new product innovation, quality, performance, price, compliance with industry standards, strategic relationships with customers and baseband vendors,



personnel and protection of our intellectual property. We participate in highly competitive markets against numerous competitors that may be able to adapt more quickly than we can to new or emerging technologies and changes in customer requirements, or may be able to devote greater resources to the development, promotion and sale of their products than we can.

Erosion of average selling prices of established products is typical of the semiconductor industry. Consistent with trends in the industry, we anticipate that average selling prices for our established products will continue to decline over time. We mitigate the gross margin impact of declining average selling prices with efforts to increase unit volumes, reduce material costs and lower manufacturing costs of existing products and by introducing new and higher value-added products.

## **RESEARCH AND DEVELOPMENT**

Our products and markets demand rapid technological advancements requiring a continuous effort to enhance existing products and develop new products and technologies. Accordingly, we maintain a high level of research and development activity. We invested \$424.1 million, \$404.5 million and \$355.2 million in research and development during fiscal 2019, fiscal 2018 and fiscal 2017, respectively. The growth in research and development expenses were the result of increases in our internal product designs and product development activity for our target markets in each of these fiscal years. Our research and development expenses include new product development and innovations in integrated circuit design, investment in advanced semiconductor manufacturing processes, development of new packaging and test capabilities and research on next generation technologies and product opportunities. We maintain close collaborative relationships with many of our customers to help identify market demands and target our development efforts to meet those demands.

## **RAW MATERIALS**

Raw materials for our products and manufacturing processes are generally available from several sources. It is our intent not to depend on a sole source of supply unless market or other conditions dictate otherwise. However, there are limited situations where we procure certain components and services for our products from single or limited sources, and we are currently dependent on a limited number of sole source suppliers. We purchase materials and services primarily pursuant to individual purchase orders. However, we have entered into certain supply agreements for the purchase of raw materials or other manufacturing related services that specify minimum prices and purchase quantity based on our anticipated future requirements. Such amounts are reviewed and included in our contractual obligations and commitments as required. Certain of our suppliers consign raw materials to us at our manufacturing facilities to which we take title as needed in our manufacturing process. We believe we have adequate sources for the supply of raw materials and components for our manufacturing needs with suppliers located around the world.

## **BACKLOG AND INVENTORY**

Our sales are primarily from the sale of semiconductor products under individual customer purchase orders, some of which have underlying master sales agreements that specify terms governing the product sales. In the absence of a sales agreement, the Company's standard terms and conditions apply. We also maintain Skyworks-owned finished goods inventory at certain customer "hub" locations. We do not recognize revenue until these customers consume the Skyworks-owned inventory from these hub locations. Due to industry practice, which allows customers to cancel orders with limited advance notice to us prior to shipment, and with little or no penalty, we believe that backlog as of any particular date may not be a reliable indicator of our future revenue levels. The cancellation or deferral of product orders, the return of previously sold products, or overproduction due to a change in anticipated order volume could result in a reduction in revenue and us holding excess or obsolete inventory, which could result in inventory write-downs and, in turn, could have a material adverse effect on our financial condition.

## **ENVIRONMENTAL REGULATIONS**

Federal, state and local requirements relating to the discharge of substances into the environment, the disposal of hazardous wastes, and other activities affecting the environment have had, and will continue to have, an impact on our manufacturing operations. Most of our customers have mandated that our products comply with various local, regional and national "green" initiatives initiated by such customers or the locations in which they operate. We believe that our current expenditures for environmental capital investment and remediation necessary to comply with present regulations governing environmental protection, and other expenditures for the resolution of environmental claims, will not have a material adverse effect on our liquidity and capital resources, competitive position or financial condition. Environmental regulations are subject to change in the future, and accordingly we are unable to assess the possible effect of compliance with future requirements.

## **SEASONALITY**

Sales of our products are subject to seasonal fluctuation and periods of increased demand in end-user consumer applications, such as smartphones and tablet computing devices. The highest demand for our products generally occurs in our first fiscal quarter ending

in December and the fourth fiscal quarter ending in September. The lowest demand for our handset products generally occurs in our second fiscal quarter ending in March and the third fiscal quarter ending in June.

## EMPLOYEES

As of September 27, 2019, we employed approximately 9,000 employees world-wide. Approximately 2,850 of our employees in Mexico, 315 employees in Singapore, and 320 employees in Japan are covered by collective bargaining and other union agreements.

## ITEM 1A. RISK FACTORS.

You should carefully consider the risks described below in addition to the other information contained in this report before making an investment decision with respect to any of our securities. Our business, financial condition or results of operations could be materially impacted by any of these risks. The risks and uncertainties described below are not the only ones we face. Additional risks not currently known to us or other factors not perceived by us to present significant risks to our business at this time may impair our business operations, financial condition, or results of operations.

### ***We operate in the highly cyclical semiconductor industry, which is subject to significant downturns.***

We operate in the semiconductor industry, which is cyclical and subject to rapid declines in demand for end-user products in both the consumer and enterprise markets. Uncertain worldwide economic and political conditions, together with other factors such as the volatility of the financial markets, continue to make it difficult for our customers and for us to accurately forecast and plan future business activities. Uncertainty and economic weakness could result in a market contraction and, as a result, our business, financial condition and results of operations would likely be materially and adversely affected. Such periods of industry downturn are characterized by diminished product demand and revenue, manufacturing overcapacity, excess inventory levels, accelerated erosion of average selling prices, bad debt, inventory charges, restructuring charges, and asset impairment charges. Furthermore, downturns in the semiconductor industry may be prolonged, and any extended delay or failure of the market to recover from an economic downturn would materially and adversely affect our business, financial condition, and results of operations beyond our current fiscal year.

### ***Our operating results may be adversely affected by quarterly and annual fluctuations and market downturns.***

Our revenues, earnings, and other operating results may fluctuate significantly on a quarterly and annual basis. These fluctuations are typically the result of a number of factors, many of which are beyond our control.

These factors include, among others:

- changes in end-user demand for the products manufactured and sold by our customers,
- the effects of competitive pricing pressures, including decreases in average selling prices of our products,
- production capacity levels and fluctuations in manufacturing yields,
- availability and cost of materials and services from our suppliers,
- the gain or loss of significant customers,
- our ability to develop, introduce and market new products and technologies on a timely basis,
- new product and technology introductions by competitors,
- delays in the adoption of standards by standard-setting bodies and delays in the commercial deployment of certain technologies (including, but not limited to, 5G),
- actions by government regulators to restrict or delay the availability of sufficient spectrum for wireless technologies, including technologies that utilize unlicensed spectrum and/or shared spectrum,
- changes in consumers' rates of replacement of smartphones and other devices that utilize our products,
- increasing industry consolidation among our competitors,
- changes in the mix of products produced and sold,
- market acceptance of our products and our customer's products (including, but not limited to, market acceptance of 5G products), and
- intellectual property disputes, including those concerning payments associated with the licensing and/or sale of intellectual property, and related remedies (e.g., monetary damages, injunctions, or exclusion orders affecting our or our customers' products).

We employ certain methods, assumptions, estimates, and other subjective judgments in order to apply our accounting policies and to project future performance, projections which may be publicly disclosed from time to time. Changes to such methods, assumptions, estimates, and judgments, combined with other factors that are difficult to forecast, including the factors listed above, could materially and adversely affect our quarterly or annual operating results and could produce actual operating results that differ significantly from

previous estimates and projections. If our operating results fail to meet the expectations of analysts or investors, it could materially and adversely affect the price of our common stock.

***Our reliance on a small number of customers for a large portion of our sales could have a material adverse effect on the results of our operations.***

Significant portions of our sales are concentrated among a limited number of customers. If we lost one or more of these major customers, or if one or more major customers significantly decreased its orders for our products, our business could be materially and adversely affected. In each of fiscal 2019 and fiscal 2018, one customer accounted for greater than ten percent of our net revenue. In fiscal 2017, three customers each accounted for ten percent or greater of our net revenue. For further discussion see [Note 15](#) to Item 8 of this Annual Report on Form 10-K.

***Our stock price has been volatile and may fluctuate in the future.***

The trading price of our common stock has and may continue to fluctuate significantly. Such fluctuations may be influenced by many factors, including:

- the volatility of the financial markets,
- uncertainty regarding the prospects of the domestic and foreign economies,
- instability in global credit and financial markets,
- our performance and prospects,
- the performance and prospects of our major customers and competitors,
- our revenue concentrations with relatively few customers,
- the depth and liquidity of the market for our common stock,
- investor perception of us and the industry in which we operate,
- changes in earnings estimates, price targets, or buy/sell recommendations by analysts,
- domestic and international political conditions,
- domestic and international tax, fiscal, and trade policy decisions, and
- our ability to successfully identify, acquire, and integrate acquisition candidates.

Public stock markets have experienced price and trading volume volatility. This volatility has affected, and could significantly and negatively affect, the market prices of securities of many technology companies, particularly the market price of our common stock. Such volatility could materially and adversely affect the market price of our common stock in future periods.

In addition, fluctuations in our stock price, volume of shares traded, and changes in our trading multiples may make our stock attractive to momentum, hedge, day-trading, or activist investors who often shift funds into and out of stocks rapidly, exacerbating price fluctuations in either direction. Our company has been, and in the future may be, the subject of commentary by financial news media. Such commentary may contribute to volatility in our stock price. If our operating results do not meet the expectations of securities analysts, the financial news media, or investors, our stock price may decline, possibly substantially over a short period of time.

***The wireless communications and analog semiconductor markets are characterized by significant competition which may cause pricing pressures, decreased gross margins and rapid loss of market share and may materially and adversely affect our business, financial condition, and results of operations.***

The wireless communications semiconductor industry, in general, and the other analog markets in which we compete are very competitive. We compete with international and United States semiconductor manufacturers of all sizes in terms of resources and market share, including, but not limited to, Analog Devices, Broadcom, Cirrus Logic, Maxim Integrated Products, Murata Manufacturing, NXP Semiconductors, Qorvo, and Qualcomm.

We currently face significant competition in our markets and expect that intense price and product competition will continue. This competition has resulted in, and is expected to continue to result in, declining average selling prices for many of our products and increased challenges in maintaining or increasing revenue, gross margin, and market share. Furthermore, additional competitors may enter our markets as a result of growth opportunities in communications electronics, the trend toward global expansion by foreign and domestic competitors and technological and public policy changes (including national or regional policies intended to develop and support localized competitors). We believe that the principal competitive factors for semiconductor suppliers in our markets include, among others:

- rapid time-to-market and product ramps (including, but not limited to, high-volume product ramps),
- timely new product innovation,
- ability to capture design wins in new growth markets, such as 5G,
- product quality, reliability, and performance,

- ability of certain products, including “high reliability” solutions, to perform under stringent operating conditions,
- product cost and selling price,
- features available in products,
- alignment with customer performance specifications,
- compliance with industry standards,
- strategic relationships with customers,
- access to, and the protection and enforcement of, intellectual property,
- ability to partner with or participate in reference designs of baseband vendors, and
- maintaining access to manufacturing capacity, raw materials, supplies, and services at a competitive cost.

We might not be able to successfully address these factors. Many of our competitors benefit from:

- long presence in key markets,
- brand recognition,
- high levels of customer satisfaction,
- vertical integration,
- strong baseband partnership/participation in reference designs,
- a broad product portfolio allowing them to bundle product offerings,
- ownership or control of key technology or intellectual property, and
- strong financial, sales and marketing, manufacturing, distribution, technical, or other resources.

As a result, certain competitors may be able to adapt more quickly than we can to new or emerging technologies and changes in customer requirements or may be able to devote greater resources to the development, promotion, and sale of their products than we can. As a result of industry consolidation, certain competitors may be able to further exploit such benefits to strengthen their competitive position.

Our baseband reference design partners may leverage their market position by integrating additional functionality into their product offerings that compete with our solutions. If such a product offering were competitive with our solution as to performance, price, and quality, or if the interoperability of our solution with the partner’s baseband products were to be restricted, our business could be adversely impacted.

Current and potential competitors have established, or may in the future establish, financial, or strategic relationships among themselves or with customers, resellers, or other third parties. These relationships may affect customers’ purchasing decisions. Accordingly, it is possible that new competitors or alliances among competitors could emerge and rapidly acquire significant market share. We may not be able to compete successfully against current and potential competitors. Increased competition could result in pricing pressures, decreased gross margins and loss of revenue and market share and may materially and adversely affect our business, financial condition, and results of operations.

***If Original Equipment Manufacturers, or OEMs, and Original Design Manufacturers, or ODMs, of communications electronics products do not design our products into their equipment, we will have difficulty selling those products. Moreover, a “design win” from a customer does not guarantee future sales to that customer.***

Our products are not sold directly to the end-user, but are components or subsystems of other products. As a result, we rely on OEMs and ODMs of wireless communications electronics products to select our products from among alternative offerings to be designed into their equipment. Without these “design wins,” we would have difficulty selling our products. If a manufacturer designs another supplier’s product into one of its product platforms, it is more difficult for us to achieve future design wins with that platform because changing suppliers involves significant cost, time, effort, and risk on the part of that manufacturer. Also, achieving a design win with a customer does not ensure that we will receive revenue from that customer. Even after a design win, the customer is not obligated to purchase our products and can choose at any time to reduce or cease use of our products, for example, if its own products are not commercially successful, or for any other reason. We may not continue to achieve design wins or to convert design wins into actual sales, and failure to do so could materially and adversely affect our operating results. Furthermore, as a result of our lengthy product development and sales cycle, we may incur significant research and development expenses, and selling, general, and administrative expenses, without generating the anticipated revenue associated with these products.

***We are subject to the risks of doing business internationally.***

A substantial majority of our net revenue is derived from shipments to customers located outside the United States, primarily in countries located in the Asia-Pacific region and Europe. We have suppliers located outside the United States, and third-party packaging, assembly, and test facilities and foundries located in the Asia-Pacific region. We maintain wafer fabrication facilities in Kadoma, Japan, and Osaka, Japan, as well as packaging, assembly, and test facilities in Mexicali, Mexico, and in Singapore. Our international

sales and operations are subject to a number of risks inherent in selling and operating abroad. These include, but are not limited to, risks regarding:

- currency exchange rate fluctuations, including increases or decreases in commodities prices related to such fluctuations,
- local economic and political conditions, including, but not limited to, social, economic, and political instability related to the uncertainty regarding the relationships between the United States and China, Russia, Mexico, North Korea, Middle Eastern countries, other foreign countries, and the international community at large, and related to the United Kingdom's pending withdrawal from the European Union,
- restrictive governmental actions (such as restrictions on transfer of funds and trade protection measures, including export duties, quotas, customs duties, border taxes, border closures, increased import or export controls, and tariffs), or actions by non-governmental individuals and groups (such as protests, insurgencies, and organized crime), that could negatively impact trade between, or increase the cost of operating in, the countries in which we do business,
- labor market conditions and workers' rights,
- disruptions of capital and trading markets,
- inability to collect accounts receivable,
- changes in, or non-compliance with, legal or regulatory import/export requirements, including restrictions on selling to certain customers or into certain jurisdictions,
- natural disasters, acts of terrorism, widespread illness, and war,
- misappropriation or other unauthorized transfers of our electronic information and breaches of our information systems, as well as the potential lack of adequate remedies in certain jurisdictions,
- difficulty in obtaining distribution and support,
- cultural differences in the conduct of business,
- direct or indirect government actions, subsidies or policies aimed at supporting local industry,
- the laws and policies of the United States and other countries affecting trade, foreign investment and loans, foreign travel, and import or export licensing requirements,
- withdrawal from, or renegotiation of, existing trade agreements by the United States (or other jurisdictions) potentially affecting Mexico, China, and other countries in which we do business,
- changes in current or future tax law or regulations or new interpretations thereof, by federal or state agencies or foreign governments (including changes in certain countries in Europe and elsewhere regarding corporate taxes, transfer pricing, and tax treaty provisions),
- changes in the effective tax rate as a result of our overall profitability and mix of earnings in countries with differing statutory tax rates,
- results of audits and examination of previously filed tax returns,
- the possibility of being exposed to legal proceedings and potential penalties in a foreign jurisdiction, and/or increased compliance expense, as a result of the numerous, and sometimes conflicting, legal regimes on matters as diverse as anti-corruption, anti-bribery, import/export controls, content requirements, trade restrictions, tariffs, taxation, sanctions, immigration, internal and disclosure control obligations, securities regulation, anti-competition, data privacy and protection (including, but not limited to, the European Union's General Data Protection Regulation), employment, and labor relations,
- limitations on our ability under local laws to protect or enforce our intellectual property rights in a particular foreign jurisdiction, and
- restrictions on our ability to repatriate foreign earnings and/or funds and the unfavorable tax implications related to the same.

Additionally, we are subject to risks in certain global markets in which wireless operators provide subsidies on handset sales to their customers. Increases in cellular handset prices that negatively impact handset sales can result from changes in regulatory policies or other factors, which could impact the demand for our products. Limitations or changes in policy on phone subsidies in the United States, South Korea, Japan, China, and other countries may have additional negative impacts on our revenues.

Some of the countries in which we operate and seek to expand are in emerging markets where legal systems may be less developed or familiar to us, potentially impacting our ability to obtain appropriate recourse in the event of a dispute. Other jurisdictions in which we conduct business may establish legal and regulatory regimes that differ materially from United States laws and regulations. Compliance with diverse legal requirements is costly and time-consuming and requires significant resources. Violations of one or more of these regulations in the conduct of our business could result in significant fines or monetary damages, criminal sanctions against us or our officers, prohibitions on doing business, unfavorable publicity and other reputation damage, restrictions on our ability to process information, and allegations by our clients that we have not performed our contractual obligations.

We are particularly exposed to risks of doing business in China. Although we intend to expand our business and operations in China, our success in the Chinese markets may be adversely affected by China's continuously evolving laws and regulations, including those relating to taxation, import and export tariffs, currency controls, anti-corruption, environmental regulations, indigenous innovation, and intellectual property rights and enforcement of those rights. Enforcement of existing laws or agreements may be inconsistent. In addition, changes in the political environment, governmental policies or United States-China relations could result in revisions to laws or regulations or their interpretation and enforcement, exposure of our proprietary intellectual property, increased taxation, restrictions on imports, import duties, or currency revaluations, which could have an adverse effect on our business plans and operating results. In particular, the imposition by the United States of tariffs on goods imported from China or deemed to be of Chinese origin and other government actions that restrict our ability to sell our products to Chinese customers or to manufacture or source components in China, and countermeasures imposed by China in response, could directly or indirectly adversely impact our manufacturing costs and the sales of our products in China and elsewhere. For example, in May 2019, the U.S. Bureau of Industry and Security of the U.S. Department of Commerce placed Huawei and certain of its affiliates on the Bureau's Entity List, which resulted in our temporarily suspending shipments to Huawei, and which is expected to adversely affect future demand for our products from this customer. Further, the evolving labor market and increasing labor unrest in China may have a negative impact on our customers, which would result in a negative impact on our business and results of operations. Finally, China's stated policy of reducing its dependence on foreign semiconductor manufacturers and other technology companies could result in reduced demand for our products in China and other key markets as well as reduced supply of critical materials for our products.

***Our manufacturing processes are extremely complex and specialized, and disruptions could have a material adverse effect on our business, financial condition, and results of operations.***

Our manufacturing operations are complex and subject to disruption, including due to causes beyond our control. The fabrication of integrated circuits is an extremely complex and precise process consisting of hundreds of separate steps. It requires production in a highly controlled, clean environment. Minor impurities, contamination of the clean room environment in which our products are produced, errors in any step of the fabrication process, defects in the masks used to print circuits on a wafer, defects in equipment or materials, human error, or a number of other factors can cause a substantial percentage of our products to be rejected or to malfunction. Because our operating results are highly dependent upon our ability to produce integrated circuits at acceptable manufacturing yields, these factors could have a material and adverse effect on our business.

Additionally, our operations may be affected by lengthy or recurring disruptions of operations at any of our production facilities, as well as disruptions at facilities operated by our subcontractors or customers. These disruptions may result from electrical power outages, fire, earthquake, flooding, war, acts of terrorism, health advisories or risks, or other natural or man-made disasters, as well as equipment maintenance, repairs, and/or upgrades. Disruptions of our manufacturing operations, or those of our subcontractors and customers, could cause significant delays in shipments until we are able to shift production of the impacted products from an affected facility or subcontractor to another facility or subcontractor, or until the affected customer resumes operations and accepts shipments from us. In the event of such delays, the required alternative capacity, particularly wafer production capacity, may not be available on a timely basis or at all. Even if alternative production capacity is available, we may not be able to obtain it on favorable terms, which could result in higher costs and/or a loss of customers and revenue. Likewise, lower-than-expected demand could lead to underutilized manufacturing facilities, which could negatively impact our financial results.

Due to the highly specialized nature of our manufacturing processes, in the event of a disruption in production at one or more of our facilities for any reason, alternative production capacity would not be immediately available from third-party sources. These disruptions could have a material adverse effect on our business, financial condition, and results of operations. Our key facilities include, but are not limited to, our semiconductor wafer fabrication facilities in Newbury Park, California, and Woburn, Massachusetts, our SAW, TC-SAW, and BAW filter wafer fabrication facilities in Kadoma, Japan, and Osaka, Japan, and our assembly and test facilities in Mexicali, Mexico, and in Singapore.

***We may not be able to maintain and improve manufacturing yields that contribute positively to our gross margin and profitability.***

Minor deviations or disturbances in the manufacturing process can cause substantial manufacturing yield loss, and in some cases, cause production to be suspended and impact our ability to meet customer demand on a timely basis. Manufacturing yields for new products initially tend to be lower as we complete product development and commence volume manufacturing, and typically increase as we bring the product to full production. Our forward product pricing includes this assumption of improving manufacturing yields and, as a result, material variances between projected and actual manufacturing yields will have a direct effect on our gross margin and profitability. The difficulty of accurately forecasting manufacturing yields and maintaining cost competitiveness through improving manufacturing yields will continue to be magnified by the increasing process complexity of manufacturing semiconductor products. Our manufacturing operations may also face pressures arising from the compression of product life cycles, which may require us to manufacture new products faster and for shorter periods while maintaining acceptable manufacturing yields and quality without, in many cases, reaching the longer-term, high-volume manufacturing conducive to higher manufacturing yields and declining costs.



***Remaining competitive in the semiconductor industry depends upon our ability to develop new products, reduce costs in a timely manner, transition to smaller geometry process technologies, and achieve higher levels of design integration.***

The semiconductor industry generally and, in particular, many of the markets into which we sell our products, are highly cyclical and characterized by constant and rapid technological change, continuous product evolution, price erosion, evolving technical standards, short product life cycles (including annual product refreshes in some cases), increasing demand for higher levels of integration, increased miniaturization, reduced power consumption, and wide fluctuations in product supply and demand. Our operating results depend largely on our ability to continue to cost-effectively introduce new and enhanced products on a timely basis. The successful development and commercialization of semiconductor devices and modules is highly complex and depends on numerous factors, including the ability:

- to anticipate customer and market requirements and changes in technology and industry standards,
- to obtain sufficient manufacturing capacity to meet customer demand,
- to define new products that meet customer and market requirements,
- to complete development of new products and bring products to market on a timely basis,
- to differentiate our products from offerings of our competitors,
- to achieve overall market acceptance of our products,
- to lengthen the time that a particular product is in demand, and
- to obtain adequate intellectual property protection for our new products.

Our ability to manufacture current products, and to develop new products, depends on, among other factors, the viability and flexibility of our own internal information technology systems.

We continually evaluate expenditures for planned product development and choose among alternatives based on our understanding of customer technical requirements, new industry standards, and expectations of future market growth. We may not be able to develop and introduce new or enhanced wireless communications and analog semiconductor products in a timely and cost-effective manner, and our products may not satisfy customer requirements or achieve market acceptance or we may not be able to anticipate new industry standards and technological changes. We also may not be able to respond successfully to new product announcements and introductions by competitors or to changes in the design or specifications of complementary products of third parties with which our products interface. If we fail to rapidly and cost-effectively introduce new and enhanced products in sufficient quantities that meet our customers' requirements, our business and results of operations would be materially and adversely harmed.

In addition, prices of many of our products decline, sometimes significantly, over time. Our products may become obsolete earlier than planned or may not have life cycles long enough to allow us to recoup the cost of our investment in designing such products. Accordingly, we believe that to remain competitive, we must continue to reduce the cost of producing and delivering existing products at the same time that we develop and introduce new or enhanced products. We may not be able to continue to reduce the cost of producing and delivering our products and thereby remain competitive.

In order to remain competitive, we expect to continue to transition many of our products to increasingly smaller geometries. This transition often requires us to upgrade our capital equipment, modify the manufacturing processes for our products, design new products to more stringent standards, and redesign some existing products. In the past, we have experienced some difficulties migrating to smaller geometry process technologies or new manufacturing processes, which resulted in sub-optimal manufacturing yields, delays in product deliveries, and increased expenses. We may face similar difficulties, delays, and expenses as we continue to transition our products to smaller geometry processes in the future. In some instances, we depend on our relationships with our third-party foundries to transition to smaller geometry processes successfully. Our foundries may not be able to effectively manage the transition or we may not be able to maintain our relationships with certain foundries. If our foundries or we experience significant delays in this transition or fail to efficiently implement this transition, our business, financial condition, and results of operations could be materially and adversely affected. As smaller geometry processes become more prevalent, we expect to continue to integrate greater levels of functionality, as well as customer and third-party intellectual property, into our products. However, we may not be able to achieve higher levels of design integration or deliver new integrated products on a timely basis, or at all.

***We may be subject to warranty claims, product recalls, and liability claims.***

Although we invest significant resources in the testing of our products, we may discover from time to time defects in our products after they have been shipped, and we may be required to incur additional development and remediation costs, or cash payments to settle claims pursuant to warranty and indemnification provisions in our customer contracts and purchase orders. Certain of our products, including "high reliability" solutions, may not be able to perform under stringent operating conditions. Examples of our "high reliability" solutions include applications intended for the aerospace, automotive, medical, and military markets. The potential liabilities associated with these, and similar, provisions in certain of our customer contracts are in some cases capped at significant amounts, and in other cases are uncapped. Depending on the nature of the product defects, we may not be able to recoup our losses

from our third-party suppliers. These problems may divert our technical and other resources from other product development efforts and could result in claims against us by our customers or third parties, including liability for costs associated with product recalls, indemnification claims, or other obligations under customer contracts. If any of our products contain defects, or have reliability, quality, or compatibility problems, our reputation may be damaged and we could be subject to liability claims, which could make it more difficult for us to sell our products to existing and prospective customers and could adversely affect our operating results. Furthermore, such losses would not be covered under our existing corporate insurance programs.

***We are dependent upon third parties for the manufacture, assembly, and testing of our products.***

We rely on foundries to provide silicon-based products and to supplement our gallium arsenide wafer manufacturing capacity. There are significant risks associated with reliance on third-party foundries, including:

- the lack of wafer supply, potential wafer shortages, and higher wafer prices,
- limited ability to respond to unanticipated changes in customer demand,
- limited control over delivery schedules, manufacturing yields, production costs, and quality assurance, and
- the inaccessibility of, or delays in obtaining access to, key process technologies, materials, and IP blocks.

Even in cases where we have long-term supply arrangements to obtain additional external manufacturing capacity, the third-party foundries we use for our standby manufacturing capacity may allocate their limited capacity to the production requirements of other customers and in general we have no contractual right to prevent them from making such allocations. If we choose to use a new foundry to replace either existing or backup capacity, it will typically take an extended period of time for us to complete our qualification process for that foundry, which will result in a significant passage of time before we can begin shipping products from that new foundry.

Further, the third-party foundries may experience financial difficulties or changes in control, be unable to deliver products to us in a timely manner, or suffer damage or destruction to their facilities, particularly since some of them are located in areas prone to natural disasters. If any disruption of manufacturing capacity occurs, we may not have alternative manufacturing sources immediately available. We may therefore experience difficulties or delays in securing an adequate supply of our products, which could impair our ability to meet our customers' needs and have a material adverse effect on our operating results.

Although we own and operate assembly and test facilities, we still depend on subcontractors to package, assemble, and test certain of our products at cost-competitive rates. For those assembly and test subcontractors with whom we do not have long-term agreements, we typically procure services from these suppliers on a per-order basis. If any of our subcontractors experiences capacity constraints or financial difficulties, suffers any damage to its facilities, experiences power outages or any other disruption of assembly or testing capacity, we may not be able to obtain alternative assembly and testing services in a timely manner and/or at cost-competitive rates. Due to the amount of time that it usually takes us to qualify assembly and test subcontractors, we could experience significant delays in product shipments if we are required to find alternative assembly and test subcontractors for our components. Any problems that we may encounter with the delivery, quality, or cost of our products could damage our customer relationships and materially and adversely affect our results of operations.

***If we are unable to attract and retain qualified personnel to contribute to the design, development, manufacture and sale of our products, we may not be able to effectively operate our business.***

As the source of our technological and product innovations, our key technical personnel represent a significant asset. Our success depends on our ability to continue to attract, retain, and motivate qualified personnel, including executive officers and other key management and technical personnel. The competition for management and technical personnel is intense in the semiconductor industry, and therefore we may not be able to continue to attract and retain the qualified management and other personnel necessary for the design, development, manufacture, and sale of our products. Our employees are highly sought after by our competitors and other companies. We may have particular difficulty attracting and retaining key personnel during periods of poor operating performance and/or declines in the price of our common stock, given among other factors, the use of equity-based compensation by us and our competitors. Further, existing immigration laws, together with any changes to immigration policies or regulations in the United States, make it more difficult for us to recruit and retain highly skilled foreign national graduates of universities in the United States, limiting the pool of available talent. Travel bans, difficulties obtaining visas and other restrictions on international travel make it more difficult to effectively manage our international operations, collaborate as a global company, or service our international customer base. We continue to anticipate increases in human resource needs, particularly in engineering. The loss of the services of one or more of our key employees or our inability to attract, retain, and motivate qualified personnel, could have a material adverse effect on our ability to operate our business.

***Our business would be adversely affected by the departure of existing members of our senior management team or if our senior management team is unable to effectively implement our strategy.***



Our success depends, in large part, on the continued contributions of our senior management team, none of whom is bound by a written employment contract to remain with us for a specified period. The loss of any of our senior management could harm our ability to implement our business strategy and respond to the rapidly changing market conditions in which we operate.

***Uncertainties involving the ordering and shipment of, and payment for, our products, could adversely affect our business.***

Our sales are typically made pursuant to standard purchase orders and/or specified customer contracts for delivery of products and not under long-term supply arrangements with our customers. Our customers may cancel orders before shipment. Additionally, we sell a portion of our products through third-party distributors, some of whom have rights to return products if the product is nonconforming. We may purchase and manufacture inventory based on estimates of customer demand for our products, which is difficult to predict. This difficulty may be compounded when we sell to OEMs indirectly through distributors or contract manufacturers, or both, as our forecasts of demand will then be based on estimates provided by multiple parties. In addition, our customers and/or distributors may change their inventory practices on short notice for any reason. The cancellation or deferral of product orders, the return of previously sold products, or overproduction due to a change in anticipated order volumes could result in us holding excess or obsolete inventory, which could result in inventory write-downs and, in turn, could have a material adverse effect on our financial condition. Some of our customers have implemented vendor-managed inventory, consignment, or similar inventory programs which may result in an increase in the time between manufacture of, and payment for, our products.

In addition, if a customer or distributor encounters financial difficulties of its own as a result of a change in demand or for any other reason, the customer's or distributor's ability to make timely payments against our accounts receivable could be impaired.

***We are dependent upon third parties for the supply of raw materials and components.***

Our manufacturing operations depend on obtaining adequate supplies of raw materials and components used in our manufacturing processes at a competitive cost. Although we maintain relationships with suppliers located around the world with the objective of ensuring that we have adequate sources for the supply of raw materials and components for our manufacturing needs, increases in demand from the semiconductor industry for such raw materials and components (including, but not limited to, precious and rare earth metals), as well as increased demand for commodities in general, can result in tighter supplies and higher costs. Our suppliers may not be able to meet our delivery schedules, we may lose a significant or sole supplier, a supplier may not be able to meet performance and quality specifications and we may not be able to purchase such supplies or material at a competitive cost. If a supplier were unable to meet our delivery schedules or if we lost a supplier or a supplier were unable to meet performance or quality specifications, our ability to satisfy customer obligations would be materially and adversely affected. In addition, we review our relationships with suppliers of raw materials and components for our manufacturing needs on an ongoing basis. In connection with our ongoing review, we may modify or terminate our relationship with one or more suppliers. We may also enter into sole supplier arrangements to meet certain of our raw material or component needs. While we do not typically rely on a single source of supply for our raw materials, we are currently dependent on a limited number of sole-source suppliers. If we were to lose these sole sources of supply, for any reason, a material adverse effect on our business could result until an alternate source is obtained. To the extent we enter into additional sole supplier arrangements for any of our raw materials or components, the risks associated with our supply arrangements would be exacerbated.

***Our business and operations could suffer in the event of information technology security breaches.***

Security breaches, phishing, spoofing, attempts by others to gain unauthorized access to our information technology systems, and other cyberattacks are becoming more sophisticated and persistent and are sometimes successful. These incidents, which might be related to industrial or other espionage, include covertly introducing malware and spyware to our computers and networks (or to an electronic system operated by a third party for our benefit) and impersonating authorized users, among others. We seek to detect and investigate all security incidents and to prevent their recurrence, but in some cases, we might be unaware of an incident or its magnitude and effects. The theft, unauthorized use, transfer, or publication of our intellectual property, our confidential business information, or the personal data of our employees by third parties or by our employees could harm our competitive position, reduce the value of our investment in research and development and other strategic initiatives or otherwise adversely affect our business. To the extent that any security breach or other cybersecurity incident results in inappropriate disclosure of our customers', suppliers', licensees' or employees' confidential information, we may incur liability as a result. We expect to continue devoting significant resources to the security of our information technology systems and the training of our employees. However, we cannot ensure that our efforts will be sufficient to prevent or mitigate the damage caused by a cyberattack, cybersecurity incident, or network disruption.

***If we are not successful in protecting our intellectual property rights, our ability to compete successfully may be materially and adversely affected.***

We rely on patent, copyright, trademark, trade secret, and other intellectual property rights and laws, as well as nondisclosure and confidentiality agreements and other methods, to protect our proprietary technologies, inventions, information, data, devices, algorithms, processes, and other intellectual property. In addition, we often incorporate the intellectual property of our customers, suppliers, or other third parties into our designs, and we have obligations with respect to the non-use and non-disclosure of such

third-party intellectual property. From time to time, it may be necessary to engage in litigation or like activities to enforce our intellectual property rights, to protect our trade secrets, or to determine the validity and scope of proprietary rights of others, including our customers. This could require us to expend significant resources and to divert the efforts and attention of our management and technical personnel from our business operations. Regardless of our actions:

- the steps we take to prevent misappropriation, infringement, dilution, or other violation of our intellectual property or the intellectual property of our customers, suppliers, or other third parties may not be successful, and
- any of our existing or future patents, copyrights, trademarks, trade secrets, or other intellectual property rights may be challenged, invalidated, deemed unenforceable, or circumvented.

A third party could copy, misappropriate, or otherwise obtain and use our technology without authorization, develop similar technology independently, or design around or invalidate our patents. If any of our intellectual property protection mechanisms fails to protect our technology, it would make it easier for our competitors to offer similar competitive products, potentially resulting in loss of market share and price erosion. Even if we receive a patent, the patent claims may not be broad enough to adequately cover and protect our technology. Furthermore, even if we receive patent protection in the United States, we may not seek, or may not be granted, patent protection in other relevant foreign countries. In addition, effective patent, copyright, trademark, and trade secret protection, and enforcement may be unavailable, impractical, or limited for certain technologies and in certain foreign countries.

We attempt to control access to, and distribution of, our proprietary and confidential information through operational, technological, and legal safeguards. Despite our efforts, parties, including former or current employees, may attempt to copy, disclose, transfer, or obtain access to our information without our authorization. Furthermore, attempts by computer hackers to gain unauthorized access to our systems or information could result in our confidential and/or proprietary information being compromised or our operations being interrupted. While we attempt to prevent such unauthorized access or misappropriation we may be unable to anticipate the methods used, or be unable to prevent the release of our confidential and/or proprietary information or that of a third party.

***We may be subject to claims of infringement of third-party intellectual property rights, or demands that we license third-party technology, which could result in significant expense and prevent us from using our technology.***

The semiconductor industry is characterized by vigorous protection, enforcement, and pursuit of intellectual property rights. From time to time, third parties have asserted and may in the future assert patent, copyright, trademark, and other intellectual property rights against technologies that are important to our business and have demanded and may in the future demand that we license their technology or refrain from using it.

Any litigation to determine the validity of any allegations that our products infringe or may infringe intellectual property rights of another party, including indemnification claims arising from our contractual obligations of our customers, regardless of their merit or resolution, could be costly and divert the efforts and attention of our management and technical personnel. Regardless of the merits of any specific claim, we may not prevail in litigation because of the complex technical issues and inherent uncertainties in intellectual property litigation. If litigation were to result in an adverse ruling, we could be required to:

- pay substantial damages,
- cease the manufacture, import, use, sale, or offer for sale of infringing products or processes,
- discontinue the use of infringing technology,
- expend significant resources to develop non-infringing technology, and
- license technology from the third party claiming infringement, which license may not be available on commercially reasonable terms.

Our operating results or financial condition may be materially adversely affected if we, or one of our customers, were required to take any one or more of the foregoing actions.

In addition, if another supplier to one of our customers, or a customer of ours itself, were found to be infringing upon the intellectual property rights of a third party, the supplier or customer could be ordered to cease the manufacture, import, use, sale, or offer for sale of its infringing product(s) or process(es), either of which could result, indirectly, in a decrease in demand from our customers for our products. If such a decrease in demand for our products were to occur, it could have an adverse impact on our operating results.

***Many of our products currently incorporate technology licensed or acquired from third parties and we expect our products in the future to also require technology from third parties. If the licenses to such technology that we currently hold become unavailable or the terms on which they are available become commercially unreasonable, or if we are unable to acquire or license necessary technology for our products in the future, our business could be adversely affected.***

We sell products in markets that are characterized by rapid technological changes, evolving industry standards, frequent new product introductions, short product life cycles, and increasing levels of integration. Our ability to keep pace with this market depends on our ability to obtain technology from third parties on commercially reasonable terms to allow our products to remain competitive. If licenses to such technology are not available on commercially reasonable terms and conditions or at all, and we cannot otherwise acquire or integrate such technology, our products or our customers' products could become unmarketable or obsolete, and we could lose market share. In such instances, we could also incur substantial unanticipated costs or scheduling delays to develop substitute technology to deliver competitive products.

***There can be no assurance that we will continue to declare cash dividends or repurchase our stock.***

We intend to pay quarterly cash dividends subject to capital availability and periodic determinations by our Board of Directors that cash dividends are in the best interest of our stockholders. In addition, from time to time the Board of Directors approves stock repurchase programs, pursuant to which we are authorized to repurchase shares of common stock on the open market or in privately negotiated transactions.

Future cash dividends and the amount and timing of our stock repurchases may be affected by, among other factors:

- our views on potential future capital requirements, including those related to acquisitions as well as research and development,
- our ability to generate sufficient earnings and cash flows,
- use of cash to consummate various acquisition transactions,
- capital requirements related to cash dividends and stock repurchase programs,
- changes in federal and state income tax laws or corporate laws, and
- changes to our business model.

Our cash dividend payments may change from time to time, and we cannot provide assurance that we will increase our cash dividend payment or declare cash dividends in any particular amounts or at all. A reduction in our cash dividend payments or a reduction in the level of our stock repurchases could have a negative effect on our stock price.

***Changes in tax laws and regulations worldwide could have an adverse impact on our operating results.***

We are subject to taxation in many different countries and localities worldwide. To the extent the tax laws and regulations in these various countries and localities could change, including the Base Erosion and Profit Shifting project being conducted by the Organization for Economic Co-operation and Development, our tax liability in general could increase.

The tax legislation (the "Tax Reform Act"), enacted by the United States in December 2017, included several changes to U.S. tax laws that have had, and will continue to have, a significant impact on our operations, including a reduction in the U.S. corporate tax rate, base-erosion prevention measures on earnings of our non-U.S. subsidiaries, and a one-time mandatory deemed repatriation tax on earnings of certain foreign jurisdictions. Because these changes require a number of complex calculations that previously were not required, our actual tax liability may differ materially from our income tax provisions, estimates, and accruals. Changes in our interpretations and assumptions, as well as additional guidance issued, could increase income tax liabilities and/or reduce certain tax benefits.

***We face a risk that capital needed for our business will not be available when we need it.***

To the extent that our existing cash and cash equivalents and cash generated from operations are insufficient to fund our future activities, we may need to raise additional funds through public or private equity or debt financing. If unfavorable capital market conditions exist in the event we were to seek additional financing, we may not be able to raise sufficient capital on favorable terms and on a timely basis, if at all. Failure to obtain capital when required by our business circumstances would have a material adverse effect on us.

In addition, any strategic investments and acquisitions that we may make to help us grow our business may require additional capital resources. The capital required to fund these investments and acquisitions may not be available in the future.

***To be successful we may need to make certain investments and acquisitions, integrate companies we acquire, and/or enter into strategic alliances.***

Although we have invested in the past, and intend to continue to invest, significant resources in internal research and development activities, the complexity and rapidity of technological changes and the significant expense of internal research and development make it impractical for us to pursue development of all technological solutions on our own. On an ongoing basis, we review investment, alliance, and acquisition prospects that would complement our product offerings, augment our market coverage or enhance our technological capabilities. We may not be able to identify and consummate suitable investment, alliance, or acquisition transactions in the future. Moreover, if such transactions are consummated, they could result in:

- issuances of equity securities dilutive to our stockholders,
- restructuring or other impairment write-offs,
- the incurrence of substantial debt and assumption of unknown liabilities,
- the potential loss of key employees from the acquired company,
- recognition of additional liabilities known or unknown at the time of acquisition,
- amortization expenses related to intangible assets, and
- the diversion of management's attention from other business concerns.

Moreover, integrating acquired organizations and their products and services may be difficult, expensive, time-consuming, and a strain on our resources and our relationship with employees and customers and ultimately may not be successful. Additionally, in periods following an acquisition, we will be required to evaluate goodwill and acquisition-related intangible assets for impairment. If such assets are found to be impaired, they will be written down to estimated fair value, with a charge against earnings.

***Increasingly stringent environmental laws, rules, and regulations may require us to redesign our existing products and processes, and could adversely affect our ability to cost-effectively produce our products.***

The semiconductor industry has been subject to increasing environmental regulations, particularly those environmental requirements that control and restrict the use, transportation, emission, discharge, storage, and disposal of certain chemicals, elements, and materials used or produced in the semiconductor manufacturing process. Heightened public focus on climate change, sustainability, and environmental issues has also led to increased government regulation and caused certain of our customers to impose environmental standards on us as a part of doing business with them. We expect that the trend of increasing environmental awareness will continue which will result in higher costs of operations. In addition, our commitment to environmentally sustainable practices, while undertaken in a manner designed to be as efficient and cost effective as possible, may result in increases in costs of operations for us relative to our competitors until technologies and methods are developed that will help reduce those costs or such practices become industry best practice.

A number of domestic and foreign jurisdictions restrict or may seek to restrict the use of various substances, a number of which have been or are currently used in our products or processes. For example, the European Union Restriction of Hazardous Substances in Electrical and Electronic Equipment ("RoHS") Directive requires that certain substances, which may be found in certain products we have manufactured in the past, be removed from all electronics components. Eliminating such substances from our manufacturing processes requires the expenditure of additional research and development funds to seek alternative substances for our products, as well as increased testing by third parties to ensure the quality of our products and compliance with the RoHS Directive. While we have implemented a compliance program to ensure our product offering meets these regulations, there may be instances where alternative substances will not be available or commercially feasible, or may only be available from a single source, or may be significantly more expensive than their restricted counterparts. Additionally, if we were found to be non-compliant with any such rule or regulation, we could be subject to fines, penalties and/or restrictions imposed by government agencies that could adversely affect our operating results.

Regulations in the United States require that we determine whether certain materials used in our products, referred to as conflict minerals, originated in the Democratic Republic of the Congo or adjoining countries, or were from recycled or scrap sources. The verification and reporting requirements, in addition to customer demands for conflict-free sourcing, impose additional costs on us and on our suppliers, and may limit the sources or increase the prices of materials used in our products. Further, if we are unable to certify that our products are conflict free, we may face challenges with our customers, which could place us at a competitive disadvantage, and our reputation may be harmed.

New climate change laws and regulations could require us to change our manufacturing processes or obtain substitute materials that may cost more or be less available for our manufacturing operations. Various jurisdictions in which we do business have implemented, or in the future could implement or amend, restrictions on emissions of carbon dioxide or other greenhouse gases and other climate change-based rules and regulations, which may increase our expenses and adversely affect our operating results. We expect increased worldwide regulatory activity relating to climate change in the future. Compliance with these laws and regulations has not had a material impact on our capital expenditures, earnings, financial condition or competitive position.

Furthermore, environmental regulations often require parties to fund remedial action for violations of such regulations regardless of fault. Consequently, it is often difficult to estimate the future impact of environmental matters, including potential liabilities. In addition, our customers increasingly require warranties or indemnity relating to compliance with environmental regulations. The amount of expense and capital expenditures that might be required to satisfy environmental liabilities, to complete remedial actions, and to continue to comply with applicable environmental laws may have a material adverse effect on our business, financial condition, and results of operations.

***Certain provisions in our organizational documents and Delaware law may make it difficult for someone to acquire control of us.***

We have certain anti-takeover measures that may affect our common stock. Our certificate of incorporation, our by-laws, and the Delaware General Corporation Law contain several provisions that would make more difficult an acquisition of control of us in a transaction not approved by our Board of Directors. Our certificate of incorporation and by-laws include provisions such as:

- the ability of our Board of Directors to issue shares of preferred stock in one or more series without further authorization of stockholders,
- a prohibition on stockholder action by written consent,
- 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,
- a requirement that the affirmative vote of at least 80% of our shares be obtained to amend or repeal the provisions of our certificate of incorporation relating to the election and removal of directors or the right to act by written consent,
- a requirement that the affirmative vote of at least 80% of our shares be obtained for business combinations unless approved by a majority of the members of the Board of Directors and, in the event that the other party to the business combination is the beneficial owner of 5% or more of our shares, a majority of the members of the Board of Directors in office prior to the time such other party became the beneficial owner of 5% or more of our shares,
- a fair price provision, and
- a requirement that the affirmative vote of at least 90% of our shares be obtained to amend or repeal the fair price provision.

In addition to the provisions in our certificate of incorporation and by-laws, Section 203 of the Delaware General Corporation Law generally provides that a corporation may not engage in any business combination with any interested stockholder during the three-year period following the time that such stockholder becomes an interested stockholder, unless a majority of the directors then in office approves either the business combination or the transaction that results in the stockholder becoming an interested stockholder or specified stockholder approval requirements are met.

**ITEM 1B. UNRESOLVED STAFF COMMENTS.**

*None.*

**ITEM 2. PROPERTIES.**

We have executive offices in Irvine, California, and Woburn, Massachusetts. For information regarding property, plant and equipment by geographic region for each of the last three fiscal years, see [Note 15](#) to Item 8 of this Annual Report on Form 10-K. The following table sets forth our principal facilities:

Location	Owned/Leased	Square Footage	Primary Function
Mexicali, Mexico	Owned	380,000	Manufacturing and office space
Woburn, Massachusetts	Owned	158,000	Manufacturing and office space
Adamstown, Maryland	Owned	121,200	Manufacturing and office space
Newbury Park, California	Owned	111,600	Manufacturing and office space
Osaka, Japan	Leased	405,300	Filter manufacturing
Singapore, Singapore	Leased	298,800	Filter manufacturing
Irvine, California	Leased	218,500	Design center and office space
Mexicali, Mexico	Leased	179,000	Manufacturing and office space
Newbury Park, California	Leased	115,700	Design center
Kadoma, Japan	Leased	97,300	Filter manufacturing and office space
Ottawa, Ontario	Leased	82,200	Design center
Hillsboro, Oregon	Leased	59,500	Design center and office space
San Jose, California	Leased	51,900	Design center and office space
Cedar Rapids, Iowa	Leased	42,900	Design center
Andover, Massachusetts	Leased	22,900	Design center
Seoul, Korea	Leased	22,900	Design center
Basking Ridge, New Jersey	Leased	21,800	Design center

### ITEM 3. LEGAL PROCEEDINGS.

The information set forth under [Note 11](#) of Notes to Consolidated Financial Statements in Item 8 of this Annual Report on Form 10-K is incorporated herein by reference.

### 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.

#### MARKET INFORMATION AND DIVIDENDS

Our common stock is traded on the Nasdaq Global Select Market under the symbol "SWKS".

The number of stockholders of record of our common stock as of November 12, 2019, was 11,174. On November 12, 2019, the Company announced that the Board of Directors had declared a cash dividend of \$0.44 per share of common stock, payable on December 24, 2019, to stockholders of record as of December 3, 2019. We intend to continue to pay quarterly dividends subject to capital availability and our view that cash dividends are in the best interests of our stockholders. Future cash dividends may be affected by, among other items, our views on potential future capital requirements, including those relating to research and development, creation and expansion of sales distribution channels and investments and acquisitions, legal risks, stock repurchase programs, debt issuance, changes in federal and state income tax law and changes to our business model.

#### ISSUER PURCHASES OF EQUITY SECURITIES

The following table provides information regarding repurchases of common stock made during the fiscal quarter ended September 27, 2019:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (1)	Maximum Number (or Approximate Dollar Value) of Shares that May Yet Be Purchased Under the Plans or Programs (1)
6/29/19-7/26/19	1,277(2)	\$81.69	—	\$1.77 billion
7/27/19-8/23/19	780,814(3)	\$76.72	772,437	\$1.71 billion
8/24/19-9/27/19	1,163,658(4)	\$75.00	1,160,559	\$1.63 billion
Total	1,945,749		1,932,996	

(1) The stock repurchase program approved by the Board of Directors on January 30, 2019, authorizes the repurchase of up to \$2.0 billion of our common stock from time to time on the open market or in privately negotiated transactions as permitted by securities laws and other legal requirements. The January 30, 2019, stock repurchase program replaced in its entirety the January 31, 2018, plan and is scheduled to expire on January 30, 2021.

(2) Represents shares repurchased by us at the fair market value of the common stock as of the applicable purchase date, in connection with the satisfaction of tax withholding obligations under equity award agreements.

(3) 772,437 shares were repurchased at an average price of \$76.73 per share as part of our stock repurchase program, and 8,377 shares were repurchased by us at the fair market value of the common stock as of the applicable purchase date, in connection with the satisfaction of tax withholding obligations under equity award agreements with an average price of \$76.33 per share.

(4) 1,160,559 shares were repurchased at an average price of \$75.01 per share as part of our stock repurchase program, and 3,099 shares were repurchased by us at the fair market value of the common stock as of the applicable purchase date, in connection with the satisfaction of tax withholding obligations under equity award agreements with an average price of \$74.95 per share.



## ITEM 6. SELECTED FINANCIAL DATA.

The information set forth below for the five years ended September 27, 2019, is not necessarily indicative of results of future operations, and should be read in conjunction with Part II, Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations*, and our consolidated financial statements and related notes included in Part II, Item 8 of this Annual Report on Form 10-K to fully understand factors that may affect the comparability of the information presented below. Our fiscal year ends on the Friday closest to September 30. Fiscal 2019, 2018, 2017, 2016, and 2015 each consisted of 52 weeks and ended on September 27, 2019, September 28, 2018, September 29, 2017, September 30, 2016, and October 2, 2015, respectively.

The following table represents the selected financial data (in millions, except per share data):

Statement of Operations Data:	Fiscal Years Ended				
	September 27, 2019 (1)	September 28, 2018 (2)	September 29, 2017	September 30, 2016 (3)	October 2, 2015
Net revenue	\$ 3,376.8	\$ 3,868.0	\$ 3,651.4	\$ 3,289.0	\$ 3,258.4
Operating income	\$ 952.0	\$ 1,319.3	\$ 1,253.8	\$ 1,118.7	\$ 1,023.1
Operating margin	28.2%	34.1%	34.3%	34.0%	31.4%
Net income	\$ 853.6	\$ 918.4	\$ 1,010.2	\$ 995.2	\$ 798.3
Earnings per share:					
Basic	\$ 4.92	\$ 5.06	\$ 5.48	\$ 5.27	\$ 4.21
Diluted	\$ 4.89	\$ 5.01	\$ 5.41	\$ 5.18	\$ 4.10
Cash dividends declared per share	\$ 1.58	\$ 1.34	\$ 1.16	\$ 1.06	\$ 0.65
Balance Sheet Data:	As of				
	September 27, 2019	September 28, 2018	September 29, 2017	September 30, 2016	October 2, 2015
Working capital	\$ 1,860.6	\$ 1,872.5	\$ 2,245.8	\$ 1,791.9	\$ 1,450.8
Property, plant and equipment, net	\$ 1,205.6	\$ 1,140.9	\$ 882.3	\$ 806.3	\$ 826.4
Total assets	\$ 4,839.6	\$ 4,828.9	\$ 4,573.6	\$ 3,855.4	\$ 3,719.4
Stockholders' equity	\$ 4,122.3	\$ 4,097.0	\$ 4,065.7	\$ 3,541.4	\$ 3,159.2

(1) Fiscal 2019 net revenue, net income, and earnings per share were adversely impacted as a result of the U.S. Bureau of Industry and Security of the U.S. Department of Commerce placing Huawei and certain of its affiliates on the Bureau's Entity List (the "Entity List") in May 2019.

(2) Fiscal 2018 net income and earnings per share include a one-time charge of \$224.6 million related to the mandatory deemed repatriation tax on foreign earnings and a one-time charge of \$18.3 million related to the revaluation of deferred tax assets and liabilities at the new corporate tax rate, as a result of the Tax Reform Act.

(3) Fiscal 2016 net income and earnings per share include other income of \$88.5 million related to the receipt of a merger termination fee in November 2015 in connection with the termination by PMC-Sierra, Inc. ("PMC"), of the Amended and Restated Agreement and Plan of Merger that we had entered into with PMC in October 2015.



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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes that appear elsewhere in this Annual Report on Form 10-K. In addition to historical information, the following discussion contains forward-looking statements that are subject to risks and uncertainties. Actual results may differ substantially and adversely from those referred to herein due to a number of factors, including, but not limited to, those described below and in Item 1A “[Risk Factors](#)” and elsewhere in this Annual Report on Form 10-K.

### OVERVIEW

We, together with our consolidated subsidiaries, are empowering the wireless networking revolution. Our highly innovative analog semiconductors are connecting people, places, and things spanning a number of new and previously unimagined applications within the aerospace, automotive, broadband, cellular infrastructure, connected home, industrial, medical, military, smartphone, tablet and wearable markets. Our key customers include Amazon, Apple, Arris, Bose, Cisco, DJI, Ericsson, Foxconn, Garmin, Gemalto (a Thales company), General Electric, Google, Honeywell, HTC, Huawei, Itron, Lenovo, LG Electronics, Microsoft, Motorola, Netgear, Northrop Grumman, OPPO, Rockwell Collins, Samsung, Sierra Wireless, Sonos, Technicolor, VIVO, Xiaomi and ZTE.

### RESULTS OF OPERATIONS

#### FISCAL YEARS ENDED SEPTEMBER 27, 2019, SEPTEMBER 28, 2018, AND SEPTEMBER 29, 2017.

The table below sets forth the results of our operations expressed as a percentage of net revenue. See Part II, Item 7 of our Annual Report on Form 10-K for the fiscal year ended September 28, 2018, filed with the SEC on November 15, 2018, as amended by Amendment No. 1 to such Annual Report on Form 10-K, filed with the SEC on January 25, 2019 (the “2018 10-K”), for Management’s Discussions and Analysis of Financial Condition and Results of Operations for the fiscal year ended September 29, 2017.

	September 27, 2019	September 28, 2018	September 29, 2017
Net revenue	100.0%	100.0%	100.0%
Cost of goods sold	52.5	49.6	49.6
Gross profit	47.5	50.4	50.4
Operating expenses:			
Research and development	12.5	10.4	9.7
Selling, general and administrative	5.9	5.4	5.6
Amortization of intangibles	0.7	0.5	0.8
Restructuring and other charges	0.2	—	—
Total operating expenses	19.3	16.3	16.1
Operating income	28.2	34.1	34.3
Other income (expense), net	0.3	0.3	0.1
Income before income taxes	28.5	34.4	34.4
Provision for income taxes	3.2	10.7	6.7
Net income	25.3%	23.7%	27.7%

### GENERAL

During the fiscal year ended September 27, 2019, the following key factors contributed to our overall results of operations, financial position and cash flows:

- Net revenue decreased 12.7% to \$3,376.8 million, as compared to fiscal 2018. This decrease in revenue was primarily driven by weakness in smartphone demand and Huawei being added to the Entity List, partially offset by the increasing number of IoT applications, our expanding analog product portfolio supporting new vertical markets including automotive, consumer, industrial, infrastructure, medical, and military, and our success in capturing a higher share of the increasing radio frequency and analog content per device as smartphone models continue to evolve.

- Our ending cash, cash equivalents and marketable securities balance increased 3.1% to \$1,082.2 million in fiscal 2019 from \$1,050.2 million in fiscal 2018. This increase was primarily the result of a 8.5% increase in cash from operations to \$1,367.4 million in fiscal 2019 from \$1,260.6 million in fiscal 2018, partially offset by the repurchase of 8.9 million shares of our common stock for \$657.6 million, capital expenditures of \$398.4 million, and cash dividends of \$273.9 million.

## NET REVENUE

	Fiscal Years Ended			
	September 27, 2019	Change	September 28, 2018	Change September 29, 2017
(dollars in millions)				
Net revenue	\$ 3,376.8	(12.7)%	\$ 3,868.0	5.9% \$ 3,651.4

We market and sell our products directly to OEMs of communications and electronics products, third-party original design manufacturers and contract manufacturers, and indirectly through electronic components distributors. We generally experience seasonal peaks during our fourth and first fiscal quarters (which correspond to the second half of the calendar year), primarily as a result of increased worldwide production of consumer electronics in anticipation of increased holiday sales, whereas our second and third fiscal quarters are typically lower and in line with seasonal industry trends.

The \$491.2 million decrease in net revenue in fiscal 2019, as compared to fiscal 2018, is primarily related to weakness in smartphone demand and Huawei being added to the Entity List, partially offset by the increasing number of IoT applications, our expanding analog product portfolio supporting new vertical markets including automotive, consumer, industrial, infrastructure, medical, and military, and our success in capturing a higher share of the increasing radio frequency and analog content per device as smartphone models continue to evolve.

For information regarding net revenue by geographic region and customer concentration, see [Note 15](#) to Item 8 of this Annual Report on Form 10-K.

## GROSS PROFIT

	Fiscal Years Ended			
	September 27, 2019	Change	September 28, 2018	Change September 29, 2017
(dollars in millions)				
Gross profit	\$ 1,603.8	(17.8)%	\$ 1,950.7	5.9% \$ 1,841.8
% of net revenue	47.5%		50.4%	50.4%

Gross profit represents net revenue less cost of goods sold. Our cost of goods sold consists primarily of purchased materials, labor and overhead (including depreciation and share-based compensation expense) associated with product manufacturing. Erosion of average selling prices of established products is typical of the semiconductor industry. Consistent with trends in the industry, we anticipate that average selling prices for our established products will continue to decline over time. As part of our normal course of business, we mitigate the gross margin impact of declining average selling prices with efforts to increase unit volumes, reduce material costs, improve manufacturing efficiencies, lower manufacturing costs of existing products and by introducing new and higher value-added products.

The \$346.9 million decrease in gross profit in fiscal 2019, as compared to fiscal 2018, was primarily the result of lower unit volumes and lower average selling prices with a gross profit impact of \$546.5 million. In addition, we incurred a \$66.1 million inventory-related charge due to lower expected demand as a result of Huawei being added to the Entity List. These negative impacts were partially offset by favorable product mix that positively impacted gross profit by \$265.7 million. As a result of these impacts, gross profit margin decreased to 47.5% of net revenue for fiscal 2019 as compared to 50.4% in fiscal 2018.

## RESEARCH AND DEVELOPMENT

	Fiscal Years Ended					
	September 27, 2019	Change	September 28, 2018	Change	September 29, 2017	
(dollars in millions)						
Research and development	\$ 424.1	4.8%	\$ 404.5	13.9%	\$ 355.2	
% of net revenue	12.5%		10.4%		9.7%	

Research and development expenses consist primarily of direct personnel costs including share-based compensation expense, costs for pre-production evaluation and testing of new devices, masks, engineering prototypes and design tool costs.

The increase in research and development expense in fiscal 2019, as compared to fiscal 2018, was primarily related to an increase in employee-related compensation expense and product development-related expenses. Research and development expense increased as a percentage of net revenue as a result of our increased investment in developing new technologies and products, as well as the decrease in net revenue.

## SELLING, GENERAL AND ADMINISTRATIVE

	Fiscal Years Ended					
	September 27, 2019	Change	September 28, 2018	Change	September 29, 2017	
(dollars in millions)						
Selling, general and administrative	\$ 198.3	(4.6)%	\$ 207.8	1.6%	\$ 204.6	
% of net revenue	5.9%		5.4%		5.6%	

Selling, general and administrative expenses include legal and related costs, accounting, treasury, human resources, information systems, customer service, bad debt expense, sales commissions, share-based compensation expense, advertising, marketing, costs associated with business combinations completed or contemplated during the period and other costs.

The decrease in selling, general and administrative expenses in fiscal 2019, as compared to fiscal 2018, was primarily related to a decrease in share-based compensation expense. Selling, general and administrative expenses increased as a percentage of net revenue primarily due to the decrease in net revenue.

## AMORTIZATION OF INTANGIBLES

	Fiscal Years Ended					
	September 27, 2019	Change	September 28, 2018	Change	September 29, 2017	
(dollars in millions)						
Amortization of intangibles, cost of goods sold	\$ 34.1	305.4%	\$ 8.4	100.0%	\$ —	
Amortization of intangibles, operating expense	22.6	23.5%	18.3	(33.7)%	27.6	
Total amortization of intangibles, including inventory step-up	56.7		26.7		27.6	
% of net revenue	1.7%		0.7%		0.8%	

The increase in amortization for fiscal 2019, as compared to fiscal 2018, was primarily due to amortization attributable to the Avnera acquisition completed in the fourth quarter of fiscal 2018.

## RESTRUCTURING AND OTHER CHARGES

	Fiscal Years Ended					
	September 27, 2019	Change	September 28, 2018	Change	September 29, 2017	
(dollars in millions)						
Restructuring and other charges	\$ 6.8	750.0%	\$ 0.8	33.3%	\$ 0.6	
% of net revenue	0.2%		—%		—%	

Restructuring and other charges incurred in fiscal 2019 were primarily related to employee severance and other termination benefits as well as charges on a leased facility resulting from restructuring plans initiated during the period. We do not anticipate any further significant charges associated with these restructuring activities and the remaining cash payments related to these restructuring plans are not material.

Restructuring and other charges incurred in fiscal 2018 are related to charges on a leased facility.

## PROVISION FOR INCOME TAXES

	Fiscal Years Ended					
	September 27, 2019	Change	September 28, 2018	Change	September 29, 2017	
(dollars in millions)						
Provision for income taxes	\$ 107.4	(74.0)%	\$ 413.7	67.6%	\$ 246.8	
% of net revenue	3.2%		10.7%		6.7%	

The annual effective tax rate for fiscal 2019 of 11.2% was less than the United States federal statutory rate of 21.0% primarily due to benefits of 12.0% related to foreign earnings taxed at a rate less than the United States federal rate, 4.3% related to benefits from the foreign derived intangible income ("FDII") deduction, 0.2% related to stock windfall deductions, and 2.7% related to the recognition of federal research and development tax credits, partially offset by increases in income tax rate expense impact of 5.7% related to global intangible low-taxed income ("GILTI") expense, 1.5% related to a change in our tax reserves, and 0.5% from the partial settlement of the Internal Revenue Service ("IRS") audit of our fiscal 2015 and 2016 income tax returns.

The decrease in the effective tax rate for fiscal 2019, as compared to the 31.1% effective rate for fiscal 2018, was primarily due to the enactment of the 2017 Tax Reform Act including a one-time charge related to the mandatory deemed repatriation tax on foreign earnings and a one-time charge related to the revaluation of our deferred tax assets and liabilities.

See [Note 8](#) to Item 8 of this Annual Report on Form 10-K for additional information regarding income taxes.

## LIQUIDITY AND CAPITAL RESOURCES

	Fiscal Years Ended		
	September 27, 2019	September 28, 2018	September 29, 2017
(in millions)			
Cash and cash equivalents at beginning of period	\$ 733.3	\$ 1,616.8	\$ 1,083.8
Net cash provided by operating activities	1,367.4	1,260.6	1,456.3
Net cash used in investing activities	(336.9)	(1,150.4)	(325.9)
Net cash used in financing activities	(912.5)	(993.7)	(597.4)
Cash and cash equivalents at end of period	\$ 851.3	\$ 733.3	\$ 1,616.8

### Cash provided by operating activities:

Cash provided by operating activities consists of net income for the period adjusted for certain non-cash items and changes in certain operating assets and liabilities. The \$106.8 million increase in cash provided by operating activities for fiscal 2019, as compared to fiscal 2018, was primarily related to favorable changes in working capital driven by higher cash collections and the timing of capital expenditures and vendor payments.

### Cash used in investing activities:

Cash used in investing activities consists primarily of cash paid for acquisitions net of cash acquired, capital expenditures, purchased intangibles, cash received from the sale of capital assets, and cash related to the sale or maturity of investments. The \$813.5 million decrease in cash used in investing activities for fiscal 2019, as compared to fiscal 2018, was primarily related to \$404.0 million paid for the Avnera acquisition in fiscal 2018 and a \$401.9 million difference in the net purchase and sale of marketable securities.

### Cash used in financing activities:

Cash used in financing activities consists primarily of cash transactions related to equity. The \$81.2 million decrease in cash used in financing activities for fiscal 2019, as compared to fiscal 2018, was primarily related to \$101.9 million decrease in stock repurchase activity, partially offset by an increase in dividend payments.

### Liquidity:

Cash, cash equivalents and marketable securities totaled \$1,082.2 million as of September 27, 2019, representing an increase of \$32.0 million from September 28, 2018. The increase resulted from \$1,367.4 million in cash generated from operations, which was partially offset by \$657.6 million used to repurchase 8.9 million shares of stock, \$398.4 million in capital expenditures, and \$273.9 million in cash dividend payments during fiscal 2019. Based on our historical results of operations, we expect that our cash, cash equivalents and marketable securities on hand and the cash we expect to generate from operations will be sufficient to fund our research and development, capital expenditures, potential acquisitions, working capital, quarterly cash dividend payments (if such dividends are declared by the Board of Directors), outstanding commitments and other liquidity requirements associated with existing operations for at least the next 12 months. However, we cannot be certain that our cash on hand and cash generated from operations will be available in the future to fund all of our capital and operating requirements. In addition, any future strategic investments and acquisitions may require additional cash and capital resources. If we are unable to obtain sufficient cash or capital to meet our needs on a timely basis and on favorable terms, our business and operations could be materially and adversely affected.

Our invested cash balances primarily consist of highly liquid marketable securities that are available to meet near-term cash requirements including: term deposits, certificate of deposits, money market funds, U.S. Treasury securities, agency securities, other government securities, corporate debt securities and commercial paper.

### OFF-BALANCE SHEET ARRANGEMENTS

All significant contractual obligations are recorded on our consolidated balance sheet or fully disclosed in the notes to our consolidated financial statements. We have no material off-balance sheet arrangements as defined in SEC Regulation S-K Item 303(a)(4)(ii).

### CONTRACTUAL CASH FLOWS

Set forth below is a summary of our contractual payment obligations related to our operating leases, other commitments and long-term liabilities at September 27, 2019 (in millions):

Obligation	Payments Due By Period				
	Total	Less Than 1 Year	1-3 Years	3-5 Years	Thereafter
Other long-term liabilities (1)	\$ 315.5	\$ —	\$ 38.2	\$ 38.2	\$ 239.1
Operating lease obligations	219.9	26.7	50.7	44.8	97.7
Other commitments (2)	19.3	8.6	10.7	—	—
Total	<u>\$ 554.7</u>	<u>\$ 35.3</u>	<u>\$ 99.6</u>	<u>\$ 83.0</u>	<u>\$ 336.8</u>

- (1) Other long-term liabilities primarily include our gross unrecognized tax benefits, repatriation tax payable, and executive deferred compensation. Gross unrecognized tax benefits and executive deferred compensation are both classified as beyond five years due to the uncertain nature of the liabilities.
- (2) Other commitments consist of contractual license and royalty payments and other purchase obligations. See [Note 10](#) to Item 8 of this Annual Report on Form 10-K.

### CRITICAL ACCOUNTING ESTIMATES

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with generally accepted accounting principles, or GAAP. The preparation of these financial statements requires us to make estimates and judgments in applying our most critical accounting policies that can have a significant impact on the results we report in our financial statements. The SEC has defined critical accounting policies as those that are both most important to the portrayal of our financial condition and results and which require our most difficult, complex or subjective judgments or estimates. Based on this definition, our most critical accounting policies include revenue recognition, which impacts the recording of net revenue; inventory valuation, which impacts the cost of goods sold and gross margin; assessment of goodwill and long-lived assets, which impacts the impairment of the respective assets; share-based compensation, which impacts cost of goods sold and operating expenses; loss contingencies, which impacts operating expenses; and income taxes, which impacts the income tax provision. These policies and significant judgments involved are discussed further below. We have other significant accounting policies that do not generally require subjective estimates or judgments or would not have a material impact on our results of operations. Our significant accounting policies are described in [Note 2](#) to Item 8 of this Annual Report on Form 10-K.

**Revenue Recognition.** We recognize revenue in accordance with the Financial Accounting Standards Board's ("FASB") Accounting Standards Codification ("ASC") 606 *Revenue from Contracts with Customers* net of estimated reserves. Our revenue reserves contain

uncertainties because they require management to make assumptions and to apply judgment to estimate the value of future credits to customers for product returns, price protection and stock rotation for products sold to certain electronic component distributors. We base these estimates on the expected value method considering all reasonably available information, including our historical experience and current expectations, and is reflected in the transaction price when sales are recorded.

*Inventory Valuation.* We value our inventory at the lower of cost or net realizable value. Reserves for excess and obsolete inventory are established on a quarterly basis and are based on a detailed analysis of aged material, salability of our inventory, market conditions, and product life cycles. Once reserves are established, write-downs of inventory are considered permanent adjustments to the cost basis of inventory. Our reserves contain uncertainties because the calculation requires management to make assumptions and to apply judgment regarding historical experience, market conditions and technological obsolescence. Changes in actual demand or market conditions could adversely impact our reserve calculations.

*Goodwill and Long-Lived Assets.* We evaluate goodwill and long-lived assets for impairment annually on the first day of the fourth fiscal quarter and whenever events or circumstances arise that may indicate that the carrying value of the goodwill or other intangibles may not be recoverable.

Our impairment analysis contains uncertainties because it requires management to make assumptions and to apply judgment to items such as: determination of the reporting unit and asset groupings, estimated control premiums, discount rates, future cash flows, the profitability of future business strategies and useful lives.

*Share-Based Compensation.* We have share-based compensation plans which include non-qualified stock options, restricted and performance share awards and units, as well as an employee stock purchase plan and other special share-based awards. [Note 9](#) of Item 8 of this Annual Report on Form 10-K details our current share-based compensation programs.

We determine the fair value of our share-based compensation items with pricing models as of the date of grant using a number of subjective variables and assumptions including, but not limited to: our expected stock price volatility over the term of the award, correlation coefficients, risk-free rate, the expected life of the award, dividend yield, and estimated performance against metrics. Compensation expense is recognized over the requisite service period of the underlying awards. Management periodically evaluates these assumptions and updates share-based compensation expense accordingly.

*Loss Contingencies.* We record an estimate for loss contingencies such as a legal proceeding or claims if it is probable that an asset has been impaired or a liability has been incurred and the amount of the loss or range of loss can be reasonably estimated. We disclose material loss contingencies if there is at least a reasonable possibility that a loss has been incurred.

Our loss contingency analysis contains uncertainties because it requires management to assess the degree of probability of an unfavorable outcome and to make a reasonable estimate of the amount of potential loss.

*Income Taxes.* We account for income taxes using the asset and liability method, under which deferred tax assets and liabilities are recognized for the expected future tax consequences of temporary differences between tax and financial reporting. We record a valuation allowance to reduce deferred tax assets to the amount that is believed more likely than not to be realized. Significant management judgment is required in developing our provision for income taxes, including the determination of deferred tax assets and liabilities and any valuation allowances that might be required against the deferred tax assets.

The application of tax laws and regulations to calculate our tax liabilities is subject to legal and factual interpretation, judgment, and uncertainty in a multitude of jurisdictions. Tax laws and regulations themselves are subject to change as a result of changes in fiscal policy, changes in legislation, the evolution of regulations, and court rulings. We recognize potential liabilities for anticipated tax audit issues in the United States and other tax jurisdictions based on our estimate of whether, and the extent to which, additional taxes and interest will be due. We record an amount as an estimate of probable additional income tax liability at the largest amount that we feel is more likely than not, based upon the technical merits of the position, to be sustained upon audit by the relevant tax authority.

## **OTHER MATTERS**

Inflation did not have a material impact on our results of operations during the three-year period ended September 27, 2019.

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

We are subject to overall financial market risks, such as changes in market liquidity, credit quality, investment risk, interest rate risk and foreign exchange rate risk as described below.

#### *Investment and Interest Rate Risk*

Our exposure to interest rate and general market risks relates principally to our investment portfolio, which consists of cash and cash equivalents (money market funds and marketable securities purchased with less than ninety days until maturity) that total approximately \$851.3 million and marketable securities (U.S. Treasury and government securities, corporate bonds and notes, municipal bonds, other government securities) that total approximately \$203.3 million and \$27.6 million within short-term and long-term marketable securities, respectively, as of September 27, 2019.

The main objectives of our investment activities are liquidity and preservation of capital. Our cash equivalent investments have short-term maturity periods that dampen the impact of market or interest rate risk. Our marketable securities consist of short-term and long-term maturity periods between 90 days and two years. Credit risk associated with our investments is not material because our investments are diversified across several types of securities with high credit ratings, which reduces the amount of credit exposure to any one investment.

Based on our results of operations for the fiscal year ended September 27, 2019, a hypothetical reduction in the interest rates on our cash, cash equivalents, and other investments to zero would result in an immaterial reduction of interest income with a de minimis impact on income before taxes.

Given the low interest rate environment, the objectives of our investment activities, and the relatively low interest income generated from our cash, cash equivalents, and other investments, we do not believe that investment or interest rate risks pose material exposures to our current business or results of operations.

#### *Foreign Exchange Rate Risk*

Substantially all sales to customers and arrangements with third-party manufacturers provide for pricing and payment in United States dollars, thereby reducing the impact of foreign exchange rate fluctuations on our results. A percentage of our international operational expenses are denominated in foreign currencies and exchange rate volatility could positively or negatively impact those operating costs. For the fiscal years ended September 27, 2019, September 28, 2018, and September 29, 2017, we had foreign exchange losses of \$6.2 million, \$5.5 million and \$3.1 million, respectively. Increases in the value of the United States dollar relative to other currencies could make our products more expensive, which could negatively impact our ability to compete. Conversely, decreases in the value of the United States dollar relative to other currencies could result in our suppliers raising their prices to continue doing business with us. Given the relatively small number of customers and arrangements with third-party manufacturers denominated in foreign currencies, we do not believe that foreign exchange volatility has a material impact on our current business or results of operations. However, fluctuations in currency exchange rates could have a greater effect on our business or results of operations in the future to the extent our expenses increasingly become denominated in foreign currencies.

We may enter into foreign currency forward and option contracts with financial institutions to protect against foreign exchange risks associated with certain existing assets and liabilities, certain firmly committed transactions, forecasted future cash flows and net investments in foreign subsidiaries. However, we may choose not to hedge certain foreign exchange exposures for a variety of reasons, including, but not limited to, accounting considerations and the prohibitive economic cost of hedging particular exposures. For the fiscal year ended September 27, 2019, we had no outstanding foreign currency forward or option contracts with financial institutions.

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

The following consolidated financial statements of the Company are included herewith:

(1)	<a href="#">Report of Independent Registered Public Accounting Firm</a>	Page <a href="#">33</a>
(2)	<a href="#">Consolidated Statements of Operations for the three years ended September 27, 2019</a>	Page <a href="#">35</a>
(3)	<a href="#">Consolidated Statements of Comprehensive Income for the three years ended September 27, 2019</a>	Page <a href="#">36</a>
(4)	<a href="#">Consolidated Balance Sheets at September 27, 2019, and September 28, 2018</a>	Page <a href="#">37</a>
(5)	<a href="#">Consolidated Statements of Cash Flows for the three years ended September 27, 2019</a>	Page <a href="#">38</a>
(6)	<a href="#">Consolidated Statements of Stockholders' Equity for the three years ended September 27, 2019</a>	Page <a href="#">39</a>
(7)	<a href="#">Notes to Consolidated Financial Statements</a>	Page <a href="#">40</a> through <a href="#">57</a>



## Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors

Skyworks Solutions, Inc.:

### *Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting*

We have audited the accompanying consolidated balance sheets of Skyworks Solutions, Inc. and subsidiaries (the Company) as of September 27, 2019 and September 28, 2018, the related consolidated statements of operations, comprehensive income, cash flows and stockholders' equity for each of the years in the three-year period ended September 27, 2019 and the related notes (collectively, the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of September 27, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of September 27, 2019 and September 28, 2018, and the results of its operations and its cash flows for each of the years in the three-year period ended September 27, 2019, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of September 27, 2019 based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

### *Basis for Opinions*

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying *Management's Annual Report on Internal Control over Financial Reporting*. Our responsibility is to express an opinion on the Company's consolidated financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

### *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.

#### *Critical Audit Matter*

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgment. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

As discussed in Notes 2 and 8 to the consolidated financial statements, the Company has recorded gross unrecognized tax benefits of \$103.3 million in domestic and foreign jurisdictions as of September 27, 2019. The Company records unrecognized tax benefits when there is more than a 50% likelihood that its tax positions will not be sustained upon examination by the taxing authorities. This determination requires the Company's judgement in the interpretation of domestic and international tax laws and regulations.

We identified the assessment of the gross unrecognized tax benefits as a critical audit matter because of the high degree of auditor judgement involved in evaluating the Company's interpretation of domestic and international tax laws and regulations.

The primary procedures we performed to address this critical audit matter included the following. We tested certain internal controls over the Company's unrecognized tax benefit process, including controls over the interpretation of domestic and international tax laws and regulations. We involved domestic and international tax professionals with specialized skills and knowledge, who assisted in:

- assessing the Company's ongoing compliance with applicable domestic and international tax laws and regulations,
- reading the Company's documentation that provided the basis for its tax positions and evaluating the impact of changes in the Company's tax structure, changes in domestic and international tax laws and regulations, and similar settlements with applicable taxing authorities, and
- evaluating the Company's interpretation of domestic and international tax laws and regulations by developing an independent assessment based on our understanding and interpretation of the domestic and international tax laws and regulations.

/s/ KPMG LLP

We have served as the Company's auditor since 2002.

Irvine, California  
November 14, 2019

**SKYWORKS SOLUTIONS, INC.**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
(In millions, except per share amounts)

	Fiscal Years Ended		
	September 27, 2019	September 28, 2018	September 29, 2017
Net revenue	\$ 3,376.8	\$ 3,868.0	\$ 3,651.4
Cost of goods sold	1,773.0	1,917.3	1,809.6
Gross profit	1,603.8	1,950.7	1,841.8
Operating expenses:			
Research and development	424.1	404.5	355.2
Selling, general and administrative	198.3	207.8	204.6
Amortization of intangibles	22.6	18.3	27.6
Restructuring and other charges	6.8	0.8	0.6
Total operating expenses	651.8	631.4	588.0
Operating income	952.0	1,319.3	1,253.8
Other income, net	9.0	12.8	3.2
Income before income taxes	961.0	1,332.1	1,257.0
Provision for income taxes	107.4	413.7	246.8
Net income	\$ 853.6	\$ 918.4	\$ 1,010.2
Earnings per share:			
Basic	\$ 4.92	\$ 5.06	\$ 5.48
Diluted	\$ 4.89	\$ 5.01	\$ 5.41
Weighted average shares:			
Basic	173.5	181.3	184.3
Diluted	174.5	183.2	186.7
Cash dividends declared and paid per share	\$ 1.58	\$ 1.34	\$ 1.16

See accompanying Notes to Consolidated Financial Statements.

**SKYWORKS SOLUTIONS, INC.**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**  
(In millions)

	Fiscal Years Ended		
	September 27, 2019	September 28, 2018	September 29, 2017
Net income	\$ 853.6	\$ 918.4	\$ 1,010.2
Other comprehensive income (loss), net of tax			
Fair value of investments	0.3	(0.1)	0.9
Pension adjustments	0.5	—	0.7
Foreign currency translation adjustment	—	(0.2)	0.8
Comprehensive income	<u>\$ 854.4</u>	<u>\$ 918.1</u>	<u>\$ 1,012.6</u>

See accompanying Notes to Consolidated Financial Statements.

**SKYWORKS SOLUTIONS, INC.**  
**CONSOLIDATED BALANCE SHEETS**  
(In millions, except per share amounts)

	As of	
	September 27, 2019	September 28, 2018
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 851.3	\$ 733.3
Marketable securities	203.3	294.1
Receivables, net of allowance for doubtful accounts of \$0.8 and \$0.6, respectively	465.3	655.8
Inventory	609.7	490.2
Other current assets	105.0	88.8
Total current assets	2,234.6	2,262.2
Property, plant and equipment, net	1,205.6	1,140.9
Goodwill	1,189.8	1,189.8
Intangible assets, net	107.9	143.7
Deferred tax assets, net	40.8	36.5
Marketable securities	27.6	22.8
Other assets	33.3	33.0
Total assets	<u>\$ 4,839.6</u>	<u>\$ 4,828.9</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	190.5	229.9
Accrued compensation and benefits	76.0	85.2
Other current liabilities	107.5	74.6
Total current liabilities	374.0	389.7
Long-term tax liabilities	312.4	310.5
Other long-term liabilities	30.9	31.7
Total liabilities	717.3	731.9
Commitments and contingencies ( <a href="#">Note 10</a> and <a href="#">Note 11</a> )		
Stockholders' equity:		
Preferred stock, no par value: 25.0 shares authorized, no shares issued	—	—
Common stock, \$0.25 par value: 525.0 shares authorized; 230.2 shares issued and 170.1 shares outstanding at September 27, 2019, and 228.4 shares issued and 177.4 shares outstanding at September 28, 2018	42.5	44.4
Additional paid-in capital	3,188.0	3,061.0
Treasury stock, at cost	(3,412.9)	(2,732.5)
Retained earnings	4,312.6	3,732.9
Accumulated other comprehensive loss	(7.9)	(8.8)
Total stockholders' equity	4,122.3	4,097.0
Total liabilities and stockholders' equity	<u>\$ 4,839.6</u>	<u>\$ 4,828.9</u>

See accompanying Notes to Consolidated Financial Statements.

**SKYWORKS SOLUTIONS, INC.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(In millions)

	Fiscal Years Ended		
	September 27, 2019	September 28, 2018	September 29, 2017
<b>Cash flows from operating activities:</b>			
Net income	\$ 853.6	\$ 918.4	\$ 1,010.2
Adjustments to reconcile net income to net cash provided by operating activities:			
Share-based compensation	80.1	107.8	88.5
Depreciation	314.9	272.5	227.2
Amortization of intangible assets, including inventory step-up	56.7	26.7	27.6
Deferred income taxes	(6.1)	27.3	2.2
Changes in fair value of contingent consideration	(3.1)	(11.9)	(1.3)
Other, net	16.8	(0.7)	0.3
Excess tax benefit from share-based compensation	—	—	(40.8)
Changes in assets and liabilities:			
Receivables, net	190.5	(193.8)	(37.1)
Inventory	(119.6)	11.9	(69.2)
Other current and long-term assets	(16.7)	(12.2)	3.3
Accounts payable	(33.0)	(126.0)	147.8
Other current and long-term liabilities	33.3	240.6	97.6
<b>Net cash provided by operating activities</b>	<b>1,367.4</b>	<b>1,260.6</b>	<b>1,456.3</b>
<b>Cash flows from investing activities:</b>			
Capital expenditures	(398.4)	(422.3)	(303.3)
Purchased intangibles	(25.0)	(8.6)	(12.1)
Purchases of marketable securities	(360.5)	(683.7)	—
Sales and maturities of marketable securities	447.0	368.2	3.2
Payments for acquisitions, net of cash	—	(404.0)	(13.7)
<b>Net cash used in investing activities</b>	<b>(336.9)</b>	<b>(1,150.4)</b>	<b>(325.9)</b>
<b>Cash flows from financing activities:</b>			
Repurchase of common stock - payroll tax withholdings on equity awards	(22.8)	(48.0)	(49.2)
Repurchase of common stock - stock repurchase program	(657.6)	(759.5)	(432.3)
Dividends paid	(273.9)	(243.2)	(214.6)
Net proceeds from exercise of stock options	22.1	38.8	53.8
Proceeds from employee stock purchase plan	19.7	18.2	15.0
Deferred payments for intangibles	—	—	(5.5)
Payments of contingent consideration	—	—	(5.4)
Excess tax benefit from share-based compensation	—	—	40.8
<b>Net cash used in financing activities</b>	<b>(912.5)</b>	<b>(993.7)</b>	<b>(597.4)</b>
Net increase (decrease) in cash and cash equivalents	118.0	(883.5)	533.0
Cash and cash equivalents at beginning of period	733.3	1,616.8	1,083.8
Cash and cash equivalents at end of period	<u>\$ 851.3</u>	<u>\$ 733.3</u>	<u>\$ 1,616.8</u>
<b>Supplemental cash flow disclosures:</b>			
Income taxes paid	<u>\$ 124.4</u>	<u>\$ 135.9</u>	<u>\$ 163.2</u>

See accompanying Notes to Consolidated Financial Statements.

**SKYWORKS SOLUTIONS, INC.**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**  
(In millions)

	Shares of common stock	Par value of common stock	Shares of treasury stock	Value of treasury stock	Additional paid- in capital	Retained earnings	Accumulated other comprehensive income (loss)	Total stockholders' equity
Balance at September 30, 2016	184.9	\$ 46.2	37.6	\$ (1,443.5)	\$ 2,686.0	\$ 2,263.6	\$ (10.9)	\$ 3,541.4
Net income	—	—	—	—	—	1,010.2	—	1,010.2
Exercise and settlement of share-based awards and related tax benefit, net of shares withheld for taxes	2.9	0.7	0.6	(49.2)	118.2	—	—	69.7
Share-based compensation expense	—	—	—	—	88.5	—	—	88.5
Stock repurchase program	(4.7)	(1.1)	4.7	(432.3)	1.1	—	—	(432.3)
Dividends declared	—	—	—	—	—	(214.2)	—	(214.2)
Other comprehensive income	—	—	—	—	—	—	2.4	2.4
Balance at September 29, 2017	183.1	\$ 45.8	42.9	\$ (1,925.0)	\$ 2,893.8	\$ 3,059.6	\$ (8.5)	\$ 4,065.7
Net income	—	—	—	—	—	918.4	—	918.4
Exercise and settlement of share-based awards, net of shares withheld for taxes	2.0	0.5	0.4	(48.0)	57.8	—	—	10.3
Share-based compensation expense	—	—	—	—	107.3	(1.9)	—	105.4
Stock repurchase program	(7.7)	(1.9)	7.7	(759.5)	1.9	—	—	(759.5)
Dividends declared	—	—	—	—	—	(243.2)	—	(243.2)
Pre-combination service on replacement awards	—	—	—	—	0.2	—	—	0.2
Other comprehensive loss	—	—	—	—	—	—	(0.3)	(0.3)
Balance at September 28, 2018	177.4	\$ 44.4	51.0	\$ (2,732.5)	\$ 3,061.0	\$ 3,732.9	\$ (8.8)	\$ 4,097.0
Net income	—	—	—	—	—	853.6	—	853.6
Exercise and settlement of share-based awards, net of shares withheld for taxes	1.6	0.3	0.3	(22.8)	42.2	—	—	19.8
Share-based compensation expense	—	—	—	—	82.5	—	—	82.5
Stock repurchase program	(8.9)	(2.2)	8.9	(657.6)	2.2	—	—	(657.6)
Dividends declared	—	—	—	—	—	(273.9)	—	(273.9)
Other comprehensive income	—	—	—	—	—	—	0.8	0.8
Balance at September 27, 2019	170.1	\$ 42.5	60.1	\$ (3,412.9)	\$ 3,188.0	\$ 4,312.6	\$ (7.9)	\$ 4,122.3

See accompanying Notes to Consolidated Financial Statements.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 1. DESCRIPTION OF BUSINESS AND BASIS OF PRESENTATION

Skyworks Solutions, Inc., together with its consolidated subsidiaries (“Skyworks” or the “Company”), is empowering the wireless networking revolution. The Company’s analog semiconductors are connecting people, places, and things, spanning a number of new applications within the aerospace, automotive, broadband, cellular infrastructure, connected home, industrial, medical, military, smartphone, tablet and wearable markets.

### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### PRINCIPLES OF CONSOLIDATION

All Skyworks subsidiaries are included in the Company’s consolidated financial statements and all intercompany balances are eliminated in consolidation.

#### FISCAL YEAR

The Company’s fiscal year ends on the Friday closest to September 30. Fiscal 2019, 2018, and 2017 each consisted of 52 weeks and ended on September 27, 2019, September 28, 2018, and September 29, 2017, respectively.

#### USE OF ESTIMATES

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts of assets, liabilities, revenue, expenses, comprehensive income and accumulated other comprehensive loss during the reporting period. The Company evaluates its estimates on an ongoing basis using historical experience and other factors, including the current economic environment. Significant judgment is required in determining the reserves for and fair value of items such as overall fair value assessments of assets and liabilities, inventory, intangible assets associated with business combinations, share-based compensation, loss contingencies, and income taxes. In addition, significant judgment is required in determining whether a potential indicator of impairment of long-lived assets exists and in estimating future cash flows for any necessary impairment testing. Actual results could differ significantly from these estimates.

#### CASH AND CASH EQUIVALENTS

The Company invests excess cash in time deposits, certificate of deposits, money market funds, U.S. Treasury securities, agency securities, other government securities, corporate debt securities and commercial paper. The Company considers highly liquid investments as cash equivalents including money market funds and investments with maturities of 90 days or less when purchased.

#### ALLOWANCE FOR DOUBTFUL ACCOUNTS

The Company maintains general allowances for doubtful accounts related to potential losses that could arise due to customers’ inability to make required payments. These reserves require management to apply judgment in deriving these estimates. In addition, the Company performs ongoing credit evaluations of its customers’ financial condition and if it becomes aware of any specific receivables which may be uncollectable, it performs additional analysis including, but not limited to, factors such as a customer’s credit worthiness, intent and ability to pay and overall financial position, and reserves are recorded if deemed necessary. If the data the Company uses to calculate the allowance for doubtful accounts does not reflect the future ability to collect outstanding receivables, additional provisions for doubtful accounts may be needed and results of operations could be materially affected.

#### INVESTMENTS

The Company classifies its investment in marketable debt securities as “available-for-sale.” Available-for-sale securities are carried at fair value with unrealized holding gains or losses recorded in other comprehensive income, net of tax. Gains or losses are included in earnings in the period in which they are realized. The cost of securities sold is determined based on the specific identification method.

#### FAIR VALUE

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principle or most advantageous market in an orderly transaction between market participants at the measurement date. Applicable accounting guidance provides a hierarchy for inputs used in measuring fair value that prioritize the use of observable inputs over the use of unobservable inputs, when such observable inputs are available. The three levels of inputs that may be used to measure fair value are as follows:



- Level 1 - Quoted prices in active markets for identical assets or liabilities.
- Level 2 - Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets with insufficient volume or infrequent transactions (less active markets), or model-driven valuations in which all significant inputs are observable or can be derived principally from, or corroborated with, observable market data.
- Level 3 - Fair value is derived from valuation techniques in which one or more significant inputs are unobservable, including assumptions and judgments made by the Company.

It is the Company's policy to maximize the use of observable inputs and minimize the use of unobservable inputs when developing fair value measurements. When available, the Company uses quoted market prices to measure fair value. If market prices are not available, the Company is required to make judgments about assumptions market participants would use to estimate the fair value of a financial instrument.

The Company measures certain assets and liabilities at fair value on a recurring basis in three levels, based on the market in which the assets and liabilities are traded and the reliability of the assumptions used to determine fair value. It recognizes transfers within the fair value hierarchy at the end of the fiscal quarter in which the change in circumstances that caused the transfer occurred.

The carrying value of cash and cash equivalents, accounts receivable, other current assets, accounts payable and accrued liabilities approximates fair value due to the short-term maturities of these assets and liabilities.

## **INVENTORY**

Inventory is stated at the lower of cost or net realizable value on a first-in, first-out basis. Reserves for excess and obsolete inventory are established on a quarterly basis and are based on a detailed analysis of aged material, salability of our inventory, market conditions, and product life cycles. Once reserves are established, write-downs of inventory are considered permanent adjustments to the cost basis of inventory.

## **PROPERTY, PLANT AND EQUIPMENT**

Property, plant and equipment are carried at cost less accumulated depreciation, with significant renewals and betterments being capitalized and retired equipment written off in the respective periods. Maintenance and repairs are expensed as incurred.

Depreciation is calculated using the straight-line method over the estimated useful lives, which range from five to thirty years for buildings and improvements and three to ten years for machinery and equipment. Leasehold improvements are depreciated over the lesser of the economic life or the life of the associated lease.

## **VALUATION OF LONG-LIVED ASSETS**

Definite lived intangible assets are carried at cost less accumulated amortization. Amortization is calculated based on the pattern of benefit to be recognized from the underlying asset over its estimated useful life. Carrying values for long-lived assets and definite lived intangible assets are reviewed for possible impairment as circumstances warrant. Factors considered important that could result in an impairment review include significant underperformance relative to expected, historical or projected future operating results, significant changes in the manner of use of assets or the Company's business strategy, or significant negative industry or economic trends. In addition, impairment reviews are conducted at the judgment of management whenever asset values are deemed to be unrecoverable relative to future undiscounted cash flows expected to be generated by that particular asset group. The determination of recoverability is based on an estimate of undiscounted cash flows expected to result from the use of an asset group and its eventual disposition. Such estimates require management to exercise judgment and make assumptions regarding factors such as future revenue streams, operating expenditures, cost allocation and asset utilization levels, all of which collectively impact future operating performance. The Company's estimates of undiscounted cash flows may differ from actual cash flows due to, among other things, technological changes, economic conditions, changes to its business model or changes in its operating performance. If the sum of the undiscounted cash flows is less than the carrying value of an asset group, the Company would recognize an impairment loss, measured as the amount by which the carrying value exceeds the fair value of the asset group.

## **GOODWILL AND INDEFINITE-LIVED INTANGIBLE ASSETS**

Goodwill and indefinite-lived intangible assets are not amortized but are tested at least annually as of the first day of the fourth fiscal quarter for impairment or more frequently if indicators of impairment exist during the fiscal year. The Company assesses its conclusion regarding segments and reporting units in conjunction with its annual goodwill impairment test, and has determined that it has one reporting unit for the purposes of allocating and testing goodwill.

The Company's impairment analysis compares its fair value to its net book value to determine if there is an indicator of impairment. In the Company's calculation of fair value, it considers the closing price of its common stock on the selected testing date, the number of shares of its common stock outstanding and other marketplace activity such as a related control premium. If the calculated fair value is determined to be less than the book value of the reporting unit, an impairment loss is recognized equal to that excess; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit.

## REVENUE RECOGNITION

The Company derives its revenue primarily from the sale of semiconductor products under individual customer purchase orders, some of which have underlying master sales agreements that specify terms governing the product sales. In the absence of a sales agreement, the Company's standard terms and conditions apply. Revenue is recognized when control of the promised goods or services is transferred to the Company's customers, in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. The Company applies a five-step approach as defined in Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 606, Revenue from Contracts with Customers (Topic 606), in determining the amount and timing of revenue to be recognized: (1) identifying the contract with a customer; (2) identifying the performance obligations in the contract; (3) determining the transaction price; (4) allocating the transaction price to the performance obligations in the contract; and (5) recognizing revenue when the corresponding performance obligation is satisfied.

Each distinct promise to transfer products is considered to be an identified performance obligation for which revenue is recognized at a point in time upon transfer of control of the products to the customer. Transfer of control occurs upon shipment to the distributor or direct customer or when products are pulled from consignment inventory by the customer. Point in time recognition is determined as products manufactured under non-cancellable orders create an asset with an alternative use to the Company. Returns under the Company's general assurance warranty of products have not been material, and warranty-related services are not considered a separate performance obligation. As of September 27, 2019, the amount of remaining performance obligation that has not been recognized as revenue is not material.

Pricing adjustments and estimates of returns are treated as variable consideration for purposes of determining the transaction price. Sales returns are generally accepted at the Company's discretion or from distributors with stock rotation rights. Stock rotation allows distributors limited levels of returns and is based on the distributor's prior purchases. Price protection represents price discounts granted to certain distributors and is based on negotiations on sales to end customers. Variable consideration is estimated using the expected value method considering all reasonably available information, including the Company's historical experience and its current expectations, and is reflected in the transaction price when sales are recorded. The Company records net revenue excluding taxes collected on its sales to trade customers.

Accounts receivable represents the Company's unconditional right to receive consideration from its customer. Substantially all payments are collected within the Company's standard terms, which do not include a significant financing component. To date, there have been no material impairment losses on accounts receivable. There were no material contract assets or contract liabilities recorded on the consolidated balance sheet in any of the periods presented. All incremental customer contract acquisition costs are expensed as they are incurred as the amortization period of the asset that the Company otherwise would have recognized is one year or less in duration.

## SHARE-BASED COMPENSATION

The Company recognizes compensation expense for all share-based payment awards made to employees and directors including non-qualified employee stock options, share awards and units, employee stock purchase plan and other special share-based awards based on estimated fair values.

The fair value of share-based payment awards is amortized over the requisite service period, which is defined as the period during which an employee is required to provide service in exchange for an award. The Company uses a straight-line attribution method for all grants that include only a service condition. Awards with both performance and service conditions are expensed over the service period for each separately vesting tranche.

Share-based compensation expense recognized during the period includes actual expense on vested awards and expense associated with unvested awards. Forfeitures are recorded as incurred.

The Company determines the fair value of share-based option awards based on the Company's closing stock price on the date of grant using a Black-Scholes options pricing model. Under the Black-Scholes model, a number of variables are used including, but not limited to: the expected stock price volatility over the term of the award, the risk-free rate, the expected life of the award and

dividend yield. The determination of fair value of restricted and certain performance share awards and units is based on the value of the Company's stock on the date of grant with performance awards and units adjusted for the actual outcome of the underlying performance condition.

For more complex performance awards including units with market-based performance conditions the Company employs a Monte Carlo simulation valuation method to calculate the fair value of the awards based on the most likely outcome. Under the Monte Carlo simulation, a number of subjective variables and assumptions are used including, but not limited to: the expected stock price volatility over the term of the award, a correlation coefficient, the risk-free rate, and dividend yield.

## **RESEARCH AND DEVELOPMENT COSTS**

Research and development costs are expensed as incurred.

## **LOSS CONTINGENCIES**

The Company records its best estimates of a loss contingency when it is considered probable and the amount can be reasonably estimated. When a range of loss can be reasonably estimated with no best estimate in the range, the minimum estimated liability related to the claim is recorded. As additional information becomes available, the Company assesses the potential liability related to the potential pending loss contingency and revises its estimates. Loss contingencies are disclosed if there is at least a reasonable possibility that a loss or an additional loss may have been incurred and include estimated legal costs.

## **RESTRUCTURING**

A liability for post-employment benefits is recorded when payment is probable and the amount is reasonably estimable. Contract exit costs include contract termination fees and future contractual commitments for lease payments. A liability for contract exit costs is recognized in the period in which the Company terminates the contract or on the cease-use date for leased facilities.

## **FOREIGN CURRENCIES**

The Company's functional currency is the United States dollar. Gains and losses related to foreign currency transactions and conversion of foreign denominated cash balances are included in current results.

## **INCOME TAXES**

The Company uses the asset and liability method of accounting for income taxes. Under the asset and liability method, deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis. This method also requires the recognition of future tax benefits such as net operating loss carry forwards, to the extent that realization of such benefits is more likely than not. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

The carrying value of the Company's net deferred tax assets assumes the Company will be able to generate sufficient future taxable income in certain tax jurisdictions, based on estimates and assumptions. If these estimates and related assumptions change in the future, the Company may be required to record additional valuation allowances against its deferred tax assets resulting in additional income tax expense in its Consolidated Statement of Operations. Management evaluates the realizability of the deferred tax assets and assesses the adequacy of the valuation allowance quarterly. Likewise, in the event the Company were to determine that it would be able to realize its deferred tax assets in the future in excess of their net recorded amount, an adjustment to the deferred tax assets would increase income in the period such determination was made.

The determination of recording or releasing tax valuation allowances is made, in part, pursuant to an assessment performed by management regarding the likelihood that the Company will generate future taxable income against which benefits of its deferred tax assets may or may not be realized. This assessment requires management to exercise significant judgment and make estimates with respect to its ability to generate revenues, gross profits, operating income and taxable income in future periods. Amongst other factors, management must make assumptions regarding overall business and semiconductor industry conditions, operating efficiencies, the Company's ability to develop products to its customers' specifications, technological change, the competitive environment and changes in regulatory requirements which may impact its ability to generate taxable income and, in turn, realize the value of its deferred tax assets.

The calculation of the Company's tax liabilities includes addressing uncertainties in the application of complex tax regulations and is based on the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return.

The Company recognizes liabilities for anticipated tax audit issues in the United States and other tax jurisdictions based on its recognition threshold and measurement attribute of whether it is more likely than not that the positions the Company has taken in tax filings will be sustained upon tax audit, and the extent to which, additional taxes would be due. If payment of these amounts ultimately proves to be unnecessary, the reversal of the liabilities would result in tax benefits being recognized in the period in which it is determined the liabilities are no longer necessary. If the estimate of tax liabilities proves to be less than the ultimate assessment, a further charge to expense would result. The Company recognizes any interest or penalties, if incurred, on any unrecognized tax liabilities or benefits as a component of income tax expense.

## **EARNINGS PER SHARE**

Basic earnings per share are computed using the weighted average number of common shares outstanding during the period. Diluted earnings per share incorporate the potentially dilutive incremental shares issuable upon the assumed exercise of stock options, the assumed vesting of outstanding restricted stock units, and the assumed issuance of common stock under the stock purchase plan using the treasury share method.

## **RECENTLY ADOPTED ACCOUNTING PRONOUNCEMENTS**

In May 2014, the FASB issued Accounting Standards Update (“ASU”) 2014-09, Revenue from Contracts with Customers (Topic 606), (“ASU 2014-09”), which outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers. The Company adopted ASU 2014-09 at the beginning of the first quarter of fiscal 2019 using the modified retrospective approach, with the cumulative effect of applying the new guidance recognized as an adjustment to the opening retained earnings balance. The Company determined the impact of adopting the new revenue standard on its business processes, systems, controls and consolidated financial statements during fiscal 2019 was not material, except for an increase in accounts receivable and other current liabilities in the amount of \$29.1 million to reflect customer credits as a liability.

In October 2016, the FASB issued ASU 2016-16, Income Taxes (Topic 740), Intra-entity Transfers of an Asset Other than Inventory (“ASU 2016-16”). This ASU provides guidance that changes the accounting for income tax effects of intra-entity transfers of assets other than inventory. Under the new guidance, the selling (transferring) entity is required to recognize a current tax expense or benefit upon transfer of the asset. Similarly, the purchasing (receiving) entity is required to recognize a deferred tax asset or deferred tax liability, as well as the related deferred tax benefit or expense, upon receipt of the asset. The Company adopted ASU 2016-16 during the first quarter of fiscal 2019. The adoption of this standard did not have a material impact on the Company’s consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, Measurement of Credit Losses on Financial Instruments (Topic 320), (“ASU 2016-13”). This ASU requires a financial asset (or a group of financial assets) measured on the basis of amortized cost to be presented at the net amount expected to be collected. This ASU requires that the income statement reflect the measurement of credit losses for newly recognized financial assets as well as the expected increases or decreases of expected credit losses that have taken place during the period. This ASU requires that credit losses of debt securities designated as available-for-sale be recorded through an allowance for credit losses. The ASU also limits the credit loss to the amount by which fair value is below amortized cost. The Company adopted ASU 2016-13 during the first quarter of fiscal 2019. The adoption of this standard did not have a material impact on the Company’s consolidated financial statements.

In January 2016, the FASB issued ASU 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities (Topic 320), (“ASU 2016-01”). This ASU provides guidance for the recognition, measurement, presentation, and disclosure of financial assets and liabilities. The Company adopted ASU 2016-01 during the first quarter of fiscal 2019. The adoption of this standard did not have a material impact on the Company’s consolidated financial statements.

In June 2018, the FASB issued ASU 2018-07, Compensation-Stock Compensation (Topic 718), Improvements to Nonemployee Share-based Payments (“ASU 2018-07”). This ASU expands the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from nonemployees. The Company adopted ASU 2018-07 during the second quarter of fiscal 2019. The adoption of this standard did not have a material impact on the Company’s consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, Intangibles-Goodwill and Other-Internal-Use Software (Topic 350), Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract (“ASU 2018-15”). The new guidance clarifies the accounting for implementation costs in cloud computing arrangements. The Company adopted ASU 2018-15, on a prospective basis, during the second quarter of fiscal 2019. The adoption of this standard did not have a material impact on the Company’s consolidated financial statements.

## **RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS**

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842) (“ASU 2016-02”). This ASU requires lessees to reflect leases with a term greater than one year on their balance sheet as assets and obligations. The Company plans to adopt the new guidance in the first quarter of fiscal 2020. The Company will utilize the modified retrospective method and will recognize any cumulative effect adjustment in retained earnings at the beginning of the period of adoption. The Company plans to elect the package of three practical expedients that permits the Company to maintain its historical conclusions about lease identification, lease classification and initial direct costs for leases that exist at the date of adoption. Further, upon implementation of the new guidance, the Company intends to elect the practical expedient to not separate lease and non-lease components. The Company has performed an assessment of the impact that the adoption of ASU 2016-02 will have on the consolidated financial statements and related disclosures. Based on that assessment, the Company has estimated that the adoption of ASU 2016-02 will result in the recognition of approximately \$160 million to \$180 million of right-of-use assets and lease liabilities based on the present value of future minimum lease payments for currently executed leases. The Company does not expect the adoption of this new guidance to have a significant impact on its Consolidated Statements of Operations or its Consolidated Statements of Cash Flows.

There have been no other recent accounting pronouncements or changes in accounting pronouncements that are of significance, or potential significance, to the Company.

### 3. MARKETABLE SECURITIES

The Company's portfolio of available-for-sale marketable securities consists of the following (in millions):

	Current		Noncurrent	
	September 27, 2019	September 28, 2018	September 27, 2019	September 28, 2018
<b>Available for sale:</b>				
U.S. Treasury and government	\$ 34.3	\$ 65.0	\$ 20.0	\$ —
Corporate bonds and notes	66.2	204.1	5.9	12.0
Municipal bonds	102.9	2.0	1.7	0.8
Other government	—	23.0	—	10.0
<b>Total</b>	<b>\$ 203.3</b>	<b>\$ 294.1</b>	<b>\$ 27.6</b>	<b>\$ 22.8</b>

The contractual maturities of noncurrent available-for-sale marketable securities were due within two years or less. There were gross unrealized gains of \$0.1 million on U.S. Treasury securities, \$0.1 million on corporate bonds and notes, and \$0.1 million on municipal bonds at September 27, 2019, and \$0.1 million in gross unrealized losses on corporate bonds and notes at September 28, 2018.

### 4. FAIR VALUE

#### *Assets and Liabilities Measured and Recorded at Fair Value on a Recurring Basis*

The Company measures certain assets and liabilities at fair value on a recurring basis such as its financial instruments. There have been no transfers between Level 1, 2 or 3 assets or liabilities during the fiscal year ended September 27, 2019. The decrease of \$3.1 million in Level 3 liabilities included in earnings during fiscal 2019 relates to a reversal of the fair value of the contingent consideration liability, which was included in selling, general and administrative expenses.

Assets and liabilities recorded at fair value on a recurring basis consisted of the following (in millions):

	As of September 27, 2019				As of September 28, 2018			
	Fair Value Measurements				Fair Value Measurements			
	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
<b>Assets</b>								
Cash and cash equivalents*	\$ 851.3	\$ 809.5	\$ 41.8	\$ —	\$ 733.3	\$ 683.7	\$ 49.6	\$ —
U.S. Treasury and government securities	54.2	28.4	25.8	—	65.0	15.0	50.0	—
Corporate bonds and notes	72.1	—	72.1	—	216.0	—	216.0	—
Municipal bonds	104.6	—	104.6	—	2.8	—	2.8	—
Other government securities	—	—	—	—	33.1	—	33.1	—
Total	<u>\$ 1,082.2</u>	<u>\$ 837.9</u>	<u>\$ 244.3</u>	<u>\$ —</u>	<u>\$ 1,050.2</u>	<u>\$ 698.7</u>	<u>\$ 351.5</u>	<u>\$ —</u>
<b>Liabilities</b>								
Contingent consideration	\$ —	\$ —	\$ —	\$ —	\$ 3.1	\$ —	\$ —	\$ 3.1
Total	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 3.1</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 3.1</u>

\* Cash equivalents included in Levels 1 and 2 consist of money market funds and corporate bonds and notes, foreign government bonds, commercial paper, and agency securities purchased with less than ninety days until maturity.

#### *Assets Measured and Recorded at Fair Value on a Nonrecurring Basis*

The Company's non-financial assets and liabilities, such as goodwill, intangible assets, and other long-lived assets resulting from business combinations, are measured at fair value using income approach valuation methodologies at the date of acquisition and are subsequently re-measured if there are indicators of impairment.

## 5. INVENTORY

Inventory consists of the following (in millions):

	As of	
	September 27, 2019	September 28, 2018
Raw materials	\$ 24.4	\$ 20.2
Work-in-process	336.2	340.7
Finished goods	245.7	124.8
Finished goods held on consignment by customers	3.4	4.5
Total inventory	<u>\$ 609.7</u>	<u>\$ 490.2</u>

## 6. PROPERTY, PLANT AND EQUIPMENT, NET

Property, plant and equipment, net consists of the following (in millions):

	As of	
	September 27, 2019	September 28, 2018
Land and improvements	\$ 11.7	\$ 11.6
Buildings and improvements	354.4	238.0
Furniture and fixtures	33.8	31.5
Machinery and equipment	2,311.5	2,089.6
Construction in progress	172.5	179.0
Total property, plant and equipment, gross	2,883.9	2,549.7
Accumulated depreciation	(1,678.3)	(1,408.8)
Total property, plant and equipment, net	<u>\$ 1,205.6</u>	<u>\$ 1,140.9</u>

## 7. GOODWILL AND INTANGIBLE ASSETS

The Company's goodwill balance was \$1,189.8 million as of September 27, 2019, and September 28, 2018. The Company performed an impairment test of its goodwill as of the first day of the fourth fiscal quarter in accordance with its regularly scheduled testing. The results of this test indicated that the Company's goodwill was not impaired. There were no other indicators of impairment noted during the fiscal year ended September 27, 2019.

Intangible assets consist of the following (in millions):

	Weighted average amortization period (years)	As of			As of		
		September 27, 2019			September 28, 2018		
		Gross carrying amount	Accumulated amortization	Net carrying amount	Gross carrying amount	Accumulated amortization	Net carrying amount
Customer relationships	3.8	\$ 25.6	\$ (19.5)	\$ 6.1	\$ 31.7	\$ (13.2)	\$ 18.5
Developed technology and other	4.2	94.4	(48.9)	45.5	89.9	(23.5)	66.4
Trademarks	3.0	1.6	(1.3)	0.3	1.6	(0.8)	0.8
Capitalized software	3.0	—	—	—	18.0	(6.0)	12.0
Technology licenses	2.4	24.9	(4.8)	20.1	\$ —	—	—
IPR&D		35.9	—	35.9	\$ 46.0	—	46.0
Total intangible assets		<u>\$ 182.4</u>	<u>\$ (74.5)</u>	<u>\$ 107.9</u>	<u>\$ 187.2</u>	<u>\$ (43.5)</u>	<u>\$ 143.7</u>

The decrease in the gross amount of intangible assets is primarily related to fully amortized intangible assets have been eliminated from both the gross and accumulated amortization amounts, partially offset by current period additions to technology licenses.

Annual amortization expense for the next five fiscal years related to intangible assets, excluding IPR&D, is expected to be as follows (in millions):

	2020	2021	2022	2023	2024	Thereafter
Total amortization expense	\$ 42.2	\$ 18.8	\$ 5.1	\$ 1.1	\$ 1.1	\$ 3.7

## 8. INCOME TAXES

Income before income taxes consists of the following components (in millions):

	Fiscal Years Ended		
	September 27, 2019	September 28, 2018	September 29, 2017
United States	\$ 427.2	\$ 712.2	\$ 681.2
Foreign	533.8	619.9	575.8
Income before income taxes	<u>\$ 961.0</u>	<u>\$ 1,332.1</u>	<u>\$ 1,257.0</u>

The provision for income taxes consists of the following (in millions):



	Fiscal Years Ended		
	September 27, 2019	September 28, 2018	September 29, 2017
Current tax expense (benefit):			
Federal	\$ 85.3	\$ 347.7	\$ 215.7
State	(0.1)	0.3	0.3
Foreign	23.5	31.2	24.4
	108.7	379.2	240.4
Deferred tax expense (benefit):			
Federal	(0.4)	20.3	5.0
Foreign	(0.9)	14.2	1.4
	(1.3)	34.5	6.4
Provision for income taxes	<u>\$ 107.4</u>	<u>\$ 413.7</u>	<u>\$ 246.8</u>

The actual income tax expense is different than that which would have been computed by applying the federal statutory tax rate to income before income taxes. A reconciliation of income tax expense as computed at the United States federal statutory income tax rate to the provision for income tax expense is as follows (in millions):

	Fiscal Years Ended		
	September 27, 2019	September 28, 2018	September 29, 2017
Tax expense at United States statutory rate	\$ 201.8	\$ 327.4	\$ 439.9
Foreign tax rate difference	(115.3)	(111.9)	(174.6)
Tax on deemed repatriation	8.1	224.6	—
Effect of stock compensation	(1.6)	(25.6)	—
Change of tax rate on deferred taxes	—	18.3	—
Research and development credits	(25.7)	(19.9)	(16.3)
Change in tax reserve	14.0	6.7	12.6
Domestic production activities deduction	—	(13.9)	(19.8)
Global Intangible Low-Taxed Income	54.3	—	—
Foreign Derived Intangible Income	(41.5)	—	—
Settlements with Tax Authorities	4.3	—	—
Other, net	9.0	8.0	5.0
Provision for income taxes	<u>\$ 107.4</u>	<u>\$ 413.7</u>	<u>\$ 246.8</u>

The Company operates in foreign jurisdictions with income tax rates lower than the United States tax rate for the fiscal years ended September 27, 2019, and September 28, 2018, which were 21.0% and 24.6%, respectively. The Company's tax benefits related to foreign earnings taxed at a rate less than the United States federal rate were \$115.3 million and \$111.9 million for the fiscal years ended September 27, 2019, and September 28, 2018, respectively.

The Tax Reform Act includes, among other things, a reduction of the United States corporate tax rate from 35.0% to 21.0%, a mandatory deemed repatriation tax on foreign earnings, repeal of the corporate alternative minimum tax and the domestic production activities deduction, and expensing of certain capital investments. The law makes fundamental changes to the taxation of multinational entities, including a shift from worldwide taxation with deferral to a hybrid territorial system, featuring a participation exemption regime, a minimum tax on low-taxed foreign earnings, and new measures to deter base erosion and promote export from the United States. As a result of this legislation, during fiscal 2018 the Company recognized a one-time transition tax related to the deemed repatriation of foreign earnings of \$224.6 million and a charge related to the revaluation of its deferred tax assets at the new corporate tax rate of \$18.3 million. During fiscal 2019, the Company completed its analysis of the impact of the Tax Reform Act and recorded a discrete income tax expense adjustment of \$8.1 million to the prior year provisional estimates. The \$232.7 million deemed repatriation tax is payable over the next eight years. The Company had accrued \$195.9 million and \$206.6 million of the deemed repatriation tax in long-term liabilities within the consolidated balance sheet as of September 27, 2019, and September 28, 2018, respectively.

In addition to the introduction of a modified territorial tax system, the Tax Reform Act includes new sets of provisions aimed at preventing or decreasing U.S. tax base erosion: the global intangible low-taxed income (“GILTI”) provisions, the base erosion and anti-abuse tax (“BEAT”) provisions, and the foreign derived intangible income (“FDII”) provisions. The GILTI provisions impose a tax on foreign income in excess of a deemed return on tangible assets of foreign corporations. The Company has made an accounting policy election to account for taxes due on GILTI inclusions as a component of current-period tax expense. The BEAT provisions eliminate the deduction of certain base-erosion payments made to related foreign corporations and impose a minimum tax if greater than regular tax. The FDII provisions allow a U.S. corporation an immediate deduction for a portion of its FDII. The amount of the deduction will depend in part on the Company’s U.S. taxable income. The GILTI and FDII provisions became effective for the Company in fiscal 2019 and resulted in a \$54.3 million tax expense and a \$41.5 million tax benefit, respectively. The Company has analyzed the BEAT provisions for the year ended September 27, 2019, and has determined that it is not subject to the minimum tax imposed by the BEAT provisions.

The Company’s federal income tax returns for fiscal 2015 and fiscal 2016 are currently under IRS examination. During the year ended September 27, 2019, the Company effectively settled a portion of this IRS examination. As a result, the Company accrued a tax payable of \$4.3 million, including interest.

On October 2, 2010, the Company expanded its presence in Asia by launching operations in Singapore. The Company operates under a tax holiday in Singapore, which was originally effective through September 30, 2020. The Company has obtained an extension of this tax holiday through September 30, 2030. The original tax holiday and the extension are both conditioned upon the Company’s compliance with certain employment and investment thresholds in Singapore. The impact of the tax holiday decreased Singapore’s taxes by \$32.8 million, \$38.4 million, and \$37.4 million for the fiscal years ended September 27, 2019, September 28, 2018, and September 29, 2017, respectively, which resulted in tax benefits of \$0.19, \$0.21, and \$0.20 of diluted earnings per share, respectively.

Deferred income tax assets and liabilities consist of the tax effects of temporary differences related to the following (in millions):

	Fiscal Years Ended	
	September 27, 2019	September 28, 2018
Deferred tax assets:		
Inventory	\$ 10.1	\$ 5.7
Bad debts	0.2	1.2
Accrued compensation and benefits	5.9	4.9
Product returns, allowances and warranty	0.3	4.6
Restructuring	0.6	—
Share-based and other deferred compensation	21.2	26.1
Net operating loss carry forwards	11.3	15.5
Non-United States tax credits	20.7	20.3
State tax credits	106.4	97.0
Property, plant and equipment	17.7	9.1
Other, net	5.9	3.3
Deferred tax assets	200.3	187.7
Less valuation allowance	(129.1)	(118.6)
Net deferred tax assets	71.2	69.1
Deferred tax liabilities:		
Prepaid insurance	(0.5)	(0.6)
Property, plant and equipment	(19.3)	(25.6)
Intangible assets	(17.4)	(19.3)
Other, net	(6.3)	(2.0)
Net deferred tax liabilities	(43.5)	(47.5)
Total net deferred tax assets	\$ 27.7	\$ 21.6

In accordance with GAAP, management has determined that it is more likely than not that a portion of its historic and current year income tax benefits will not be realized. As of September 27, 2019, the Company has a valuation allowance of \$129.1 million. This

valuation allowance is comprised of \$109.8 million related to United States state tax credits and \$19.3 million are related to foreign deferred tax assets. The Company does not anticipate sufficient taxable income or tax liability to utilize these state and foreign credits. If these benefits are recognized in a future period the valuation allowance on deferred tax assets will be reversed and up to a \$129.1 million income tax benefit may be recognized. The Company will need to generate \$106.4 million of future United States federal taxable income to utilize its United States deferred tax assets as of September 27, 2019. The Company believes that future reversals of taxable temporary differences, and its forecast of continued earnings in its domestic and foreign jurisdictions, support its decision to not record a valuation allowance on other deferred tax assets. The Company will continue to assess its valuation allowance in future periods. The net valuation allowance increased by \$10.5 million and \$27.7 million in fiscal 2019 and fiscal 2018, respectively, primarily related to increases for foreign and state net operating loss and tax credit carryovers.

As of September 27, 2019, the Company has United States federal net operating loss carry forwards of approximately \$18.2 million, including \$10.3 million related to the acquisition of Avnera. The utilization of these net operating losses is subject to certain annual limitations as required under Internal Revenue Code section 382 and similar state income tax provisions. The United States federal net operating loss carry forwards expire at various dates through 2035. The Company also has state income tax credit carry forwards of \$106.4 million, net of federal benefits, for which the Company has provided a valuation allowance. The state tax credits relate primarily to California research tax credits that can be carried forward indefinitely.

A reconciliation of the beginning and ending amount of gross unrecognized tax benefits is as follows (in millions):

	<b>Unrecognized tax benefits</b>
Balance at September 28, 2018	\$ 93.4
Increases based on positions related to prior years	7.1
Decreases based on positions related to prior years	(0.3)
Increases based on positions related to current year	9.6
Decreases relating to settlements with taxing authorities	(6.3)
Decreases relating to lapses of applicable statutes of limitations	(0.2)
Balance at September 27, 2019	<u>\$ 103.3</u>

Of the total unrecognized tax benefits at September 27, 2019, \$87.6 million would impact the effective tax rate, if recognized. The remaining unrecognized tax benefits would not impact the effective tax rate, if recognized, due to the Company's valuation allowance and certain positions that were required to be capitalized.

The Company anticipates reversals within the next 12 months related to items such as the lapse of the statute of limitations, audit closures, and other items that occur in the normal course of business. Due to open examinations, an estimate of anticipated reversals within the next 12 months cannot be made. During the fiscal years 2019, 2018, and 2017, the Company recognized \$6.0 million, \$4.1 million and \$2.6 million, respectively, of interest or penalties related to unrecognized tax benefits. Accrued interest and penalties of \$12.7 million and \$7.5 million related to uncertain tax positions have been included in long-term tax liabilities within the consolidated balance sheet as of September 27, 2019, and September 28, 2018, respectively.

The Company's major tax jurisdictions as of September 27, 2019, are the United States, California, Canada, Luxembourg, Mexico, Japan, and Singapore. For the United States, the Company has open tax years dating back to fiscal 2000 due to the carry forward of tax attributes. For California, the Company has open tax years dating back to fiscal 1999 due to the carry forward of tax attributes. For Canada, the Company has open tax years dating back to fiscal 2013. For Luxembourg, the Company has open tax years back to fiscal 2013. For Mexico, the Company has open tax years back to fiscal 2013. For Japan, the Company has open tax years back to fiscal 2014. For Singapore, the Company has open tax years dating back to fiscal 2013. The Company is subject to audit examinations by the respective taxing authorities on a periodic basis, of which the results could impact its financial position, results of operations or cash flows.

## 9. STOCKHOLDERS' EQUITY

### COMMON STOCK

At September 27, 2019, the Company is authorized to issue 525.0 million shares of common stock, par value \$0.25 per share, of which 230.2 million shares are issued and 170.1 million shares are outstanding.

Holders of the Company’s common stock are entitled to dividends in the event declared by the Company’s Board of Directors out of funds legally available for such purpose. Dividends may not be paid on common stock unless all accrued dividends on preferred stock, if any, have been paid or declared and set aside. In the event of the Company’s liquidation, dissolution or winding up, the holders of common stock will be entitled to share pro rata in the assets remaining after payment to creditors and after payment of the liquidation preference plus any unpaid dividends to holders of any outstanding preferred stock.

Each holder of the Company’s common stock is entitled to one vote for each such share outstanding in the holder’s name. No holder of common stock is entitled to cumulate votes in voting for directors. The Company’s restated certificate of incorporation as amended to date (the “Certificate of Incorporation”) provides that, unless otherwise determined by the Company’s Board of Directors, no holder of stock has any preemptive right to purchase or subscribe for any stock of any class which the Company may issue or sell.

## PREFERRED STOCK

The Company’s Certificate of Incorporation has authorized and permits the Company to issue up to 25.0 million shares of preferred stock without par value in one or more series and with rights and preferences that may be fixed or designated by the Company’s Board of Directors without any further action by the Company’s stockholders. The designation, powers, preferences, rights and qualifications, limitations and restrictions of the preferred stock of each series will be fixed by the certificate of designation relating to such series, which will specify the terms of the preferred stock. At September 27, 2019, the Company had no shares of preferred stock issued or outstanding.

## STOCK REPURCHASE

On January 30, 2019, the Board of Directors approved a stock repurchase program, pursuant to which the Company is authorized to repurchase up to \$2.0 billion of its common stock from time to time prior to January 30, 2021, on the open market or in privately negotiated transactions as permitted by securities laws and other legal requirements. This authorized stock repurchase program replaced in its entirety the January 31, 2018, stock repurchase program. During the fiscal year ended September 27, 2019, the Company paid approximately \$657.6 million (including commissions) in connection with the repurchase of 8.9 million shares of its common stock (paying an average price of \$74.26 per share) under the January 30, 2019, stock repurchase plan and the January 31, 2018, stock repurchase plan. As of September 27, 2019, \$1,626.4 million remained available under the January 30, 2019, stock repurchase plan.

During the fiscal year ended September 28, 2018, the Company paid approximately \$759.5 million (including commissions) in connection with the repurchase of 7.7 million shares of its common stock (paying an average price of \$98.84 per share).

## DIVIDENDS

On November 12, 2019, the Company announced that the Board of Directors had declared a cash dividend on the Company’s common stock of \$0.44 per share. This dividend is payable on December 24, 2019, to the Company’s stockholders of record as of the close of business on December 3, 2019. Future dividends are subject to declaration by the Board of Directors. The dividends charged to retained earnings in fiscal 2019 and 2018 were as follows (in millions except per share amounts):

	Fiscal Years Ended			
	September 27, 2019		September 28, 2018	
	Per Share	Total	Per Share	Total
First quarter	\$ 0.38	\$ 67.1	\$ 0.32	\$ 58.8
Second quarter	0.38	66.0	0.32	58.5
Third quarter	0.38	65.7	0.32	57.8
Fourth quarter	0.44	75.1	0.38	68.1
	<u>\$ 1.58</u>	<u>\$ 273.9</u>	<u>\$ 1.34</u>	<u>\$ 243.2</u>

## EMPLOYEE STOCK BENEFIT PLANS

As of September 27, 2019, the Company has the following equity compensation plans under which its equity securities were authorized for issuance to its employees and/or directors:

- the 2002 Employee Stock Purchase Plan

- the Non-Qualified Employee Stock Purchase Plan
- the 2005 Long-Term Incentive Plan
- the AATI 2005 Equity Incentive Plan
- the 2008 Director Long-Term Incentive Plan
- the 2015 Long-Term Incentive Plan

Except for the Non-Qualified Employee Stock Purchase Plan, each of the foregoing equity compensation plans was approved by the Company's stockholders.

As of September 27, 2019, a total of 85.3 million shares are authorized for grant under the Company's share-based compensation plans, with 1.3 million options outstanding. The number of common shares reserved for future awards to employees and directors under these plans was 12.4 million at September 27, 2019. The Company currently grants new equity awards to employees under the 2015 Long-Term Incentive Plan and to non-employee directors under the 2008 Director Long-Term Incentive Plan.

*2015 Long-Term Incentive Plan.* Under this plan, officers, employees, and certain consultants may be granted stock options, restricted stock awards and units, performance stock awards and units and other share-based awards. The plan has been approved by the stockholders. Under the plan, up to 19.4 million shares have been authorized for grant. A total of 11.7 million shares are available for new grants as of September 27, 2019. The maximum contractual term of options under the plan is seven years from the date of grant. Options granted under the plan at the determination of the compensation committee generally vest ratably over four years. Restricted stock awards and units granted under the plan at the determination of the compensation committee generally vest over four or more years. With respect to restricted stock awards, dividends are accumulated and paid when the underlying shares vest. If the underlying shares are forfeited for any reason, the rights to the dividends with respect to such shares are also forfeited. No dividends or dividend equivalents are paid or accrued with respect to restricted stock unit awards or other awards until the shares underlying such awards become vested and are issued to the award holder. Performance stock awards and units are contingently granted depending on the achievement of certain predetermined performance goals and generally vest over two or more years.

*2008 Director Long-Term Incentive Plan.* Under this plan, non-employee directors may be granted stock options, restricted stock awards, and other share-based awards. The plan has been approved by the stockholders. Under the plan a total of 1.5 million shares have been authorized for grant. A total of 0.6 million shares are available for new grants as of September 27, 2019. The maximum contractual term of options granted under the plan is ten years from the date of grant. Options granted under the plan are generally exercisable over four years. Restricted stock awards and units granted under the plan generally vest over one or more years. With respect to restricted stock awards, dividends are accumulated and paid when the underlying shares vest. If the underlying shares are forfeited for any reason, the rights to the dividends with respect to such shares are also forfeited.

*Employee Stock Purchase Plans.* The Company maintains a domestic and an international employee stock purchase plan. Under these plans, eligible employees may purchase common stock through payroll deductions of up to 10% of their compensation. The price per share is the lower of 85% of the fair market value of the common stock at the beginning or end of each offering period (six months). The plans provide for purchases by employees of up to an aggregate of 9.7 million shares. Shares of common stock purchased under these plans in the fiscal years ended September 27, 2019, September 28, 2018, and September 29, 2017, were 0.3 million, 0.2 million, and 0.2 million, respectively. At September 27, 2019, there are 0.2 million shares available for purchase. The Company recognized compensation expense of \$5.8 million, \$5.2 million and \$4.5 million for the fiscal years ended September 27, 2019, September 28, 2018, and September 29, 2017, respectively, related to the employee stock purchase plan. The unrecognized compensation expense on the employee stock purchase plan at September 27, 2019, was \$1.9 million. The weighted average period over which the cost is expected to be recognized is approximately four months.

#### *Stock Options*

The following table represents a summary of the Company's stock options:

	Shares (in millions)	Weighted average exercise price	Weighted average remaining contractual life (in years)	Aggregate intrinsic value (in millions)
Balance outstanding at September 28, 2018	1.9	\$ 57.12		
Granted	—	\$ 82.64		
Exercised	(0.6)	\$ 37.31		
Canceled/forfeited	—	\$ 82.46		
Balance outstanding at September 27, 2019	1.3	\$ 65.38	2.6	\$ 19.5
Exercisable at September 27, 2019	1.0	\$ 63.46	2.2	\$ 17.5

The weighted-average grant date fair value per share of employee stock options granted during the fiscal years ended September 27, 2019, September 28, 2018, and September 29, 2017, was \$21.74, \$68.32, and \$23.25, respectively. The increase in the weighted-average grant date fair value per share of employee stock options granted during fiscal 2018 was due to replacement awards granted as a result of the Avnera acquisition completed during the period. The total grant date fair value of the options vested during the fiscal years ended September 27, 2019, September 28, 2018, and September 29, 2017, was \$23.7 million, \$22.6 million and \$19.3 million, respectively.

#### *Restricted and Performance Awards and Units*

The following table represents a summary of the Company's restricted and performance awards and units:

	Shares (In millions)	Weighted average grant date fair value
Non-vested awards outstanding at September 28, 2018	2.7	\$ 92.37
Granted (1)	1.5	\$ 78.41
Vested	(0.8)	\$ 85.95
Canceled/forfeited	(0.5)	\$ 91.24
Non-vested awards outstanding at September 27, 2019	2.9	\$ 87.22

(1) includes performance shares granted and earned assuming maximum performance under the underlying performance metrics

The weighted average grant date fair value per share for awards granted during the fiscal years ended September 27, 2019, September 28, 2018, and September 29, 2017, was \$78.41, \$108.86, and \$72.84, respectively. The total grant date fair value of the awards vested during the fiscal years ended September 27, 2019, September 28, 2018, and September 29, 2017, was \$74.9 million, \$81.1 million and \$57.9 million, respectively.

The following table summarizes the total intrinsic value for stock options exercised and awards vested (in millions):

	Fiscal Years Ended		
	September 27, 2019	September 28, 2018	September 29, 2017
Awards	\$ 67.7	\$ 134.4	\$ 137.8
Options	\$ 26.4	\$ 75.0	\$ 116.1

#### *Valuation and Expense Information*

The following table summarizes pre-tax share-based compensation expense by financial statement line and related tax benefit (in millions):

	Fiscal Years Ended		
	September 27, 2019	September 28, 2018	September 29, 2017
Cost of goods sold	\$ 13.0	\$ 14.4	\$ 13.6
Research and development	41.6	42.6	35.3
Selling, general and administrative	25.5	50.8	39.6
Total share-based compensation expense	\$ 80.1	\$ 107.8	\$ 88.5
Share-based compensation tax benefit	\$ 1.6	\$ 25.6	\$ 25.1
Capitalized share-based compensation expense at period end	\$ 4.7	\$ 2.9	\$ 4.0

The following table summarizes total compensation costs related to unvested share-based awards not yet recognized and the weighted average period over which it is expected to be recognized at September 27, 2019:

	Unrecognized compensation cost for unvested awards (in millions)	Weighted average remaining recognition period (in years)
Awards	\$ 129.6	1.7
Options	\$ 2.6	0.7

The fair value of the restricted stock awards and units is equal to the closing market price of the Company's common stock on the date of grant.

The Company issued performance share units during fiscal 2019, fiscal 2018, and fiscal 2017 that contained market-based conditions. The fair value of these performance share units was estimated on the date of the grant using a Monte Carlo simulation with the following weighted average assumptions:

	Fiscal Year Ended		
	September 27, 2019	September 28, 2018	September 29, 2017
Volatility of common stock	32.65%	35.54%	39.60%
Average volatility of peer companies	37.07%	36.78%	39.78%
Average correlation coefficient of peer companies	0.47	0.47	0.42
Risk-free interest rate	2.98%	1.74%	0.68%
Dividend yield	1.84%	1.15%	1.44%

The fair value of each stock option is estimated on the date of the grant using the Black-Scholes option pricing model with the following weighted average assumptions:

	Fiscal Years Ended		
	September 27, 2019	September 28, 2018	September 29, 2017
Expected volatility	34.47%	35.86%	40.31%
Risk-free interest rate	2.76%	2.00%	1.60%
Dividend yield	1.84%	1.15%	1.44%
Expected option life (in years)	4.0	4.0	4.0

The Company used a historical volatility calculated by the mean reversion of the weekly-adjusted closing stock price over the expected life of the options. The risk-free interest rate assumption is based upon observed treasury bill interest rates appropriate for the expected life of the Company's employee stock options. The dividend yield was calculated based on the annualized dividend and the stock price on the date of grant.

The expected life of employee stock options represents a calculation based upon the historical exercise, cancellation and forfeiture experience for the Company across its demographic population. The Company believes that this historical data is the best estimate of the expected life of a new option and that generally all groups of the Company's employees exhibit similar behavior.



## 10. COMMITMENTS

The Company has various operating leases primarily for buildings, computers and equipment. Rent expense amounted to \$18.7 million, \$20.5 million, and \$20.6 million in the fiscal years ended September 27, 2019, September 28, 2018, and September 29, 2017, respectively. Future minimum payments under these non-cancelable leases for the next five fiscal years are as follows (in millions):

	2020	2021	2022	2023	2024	Thereafter	Total
Future minimum payments	\$ 26.7	25.9	24.8	23.3	21.5	97.7	\$ 219.9

## 11. CONTINGENCIES

### Legal Matters

From time to time, various lawsuits, claims and proceedings have been, and may in the future be, instituted or asserted against the Company, including those pertaining to patent infringement, intellectual property, environmental hazards, product liability and warranty, safety and health, employment and contractual matters.

The semiconductor industry is characterized by vigorous protection and pursuit of intellectual property rights. From time to time, third parties have asserted and may in the future assert patent, copyright, trademark and other intellectual property rights to technologies that are important to the Company's business and have demanded and may in the future demand that the Company license their technology. The outcome of any such litigation cannot be predicted with certainty and some such lawsuits, claims or proceedings may be disposed of unfavorably to the Company. Generally speaking, intellectual property disputes often have a risk of injunctive relief, which, if imposed against the Company, could materially and adversely affect the Company's financial condition, or results of operations. From time to time the Company may also be involved in legal proceedings in the ordinary course of business.

The Company monitors the status of legal proceedings and other contingencies on an ongoing basis to ensure loss contingencies are recognized and/or disclosed in its financial statements and footnotes. The Company does not believe there are any pending legal proceedings that are reasonably possible to result in a material loss. The Company is engaged in various legal actions in the normal course of business and, while there can be no assurances, the Company believes the outcome of all pending litigation involving the Company will not have, individually or in the aggregate, a material adverse effect on its business or financial statements.

## 12. GUARANTEES AND INDEMNITIES

The Company has made no significant contractual guarantees for the benefit of third parties. However, the Company generally indemnifies its customers from third-party intellectual property infringement litigation claims related to its products, and, on occasion, also provides other indemnities related to product sales. In connection with certain facility leases, the Company has indemnified its lessors for certain claims arising from the facility or the lease.

The Company indemnifies its directors and officers to the maximum extent permitted under the laws of the state of Delaware. The duration of the indemnities varies, and in many cases is indefinite. The indemnities to customers in connection with product sales generally are subject to limits based upon the amount of the related product sales and in many cases are subject to geographic and other restrictions. In certain instances, the Company's indemnities do not provide for any limitation of the maximum potential future payments the Company could be obligated to make. The Company has not recorded any liability for these indemnities in the accompanying consolidated balance sheets and does not expect that such obligations will have a material adverse impact on its financial statements.

## 13. RESTRUCTURING AND OTHER CHARGES

During fiscal 2019, the Company recorded restructuring and other charges of approximately \$6.8 million primarily related to employee severance and other termination benefits as well as charges on a leased facility resulting from restructuring plans initiated during the period. The Company does not anticipate any further significant charges associated with these restructuring activities and the remaining cash payments related to these restructuring plans are not material.

During fiscal 2018, the Company recorded restructuring and other charges of approximately \$0.8 million related to a leased facility.

During fiscal 2017, the Company implemented immaterial restructuring plans and recorded \$0.6 million related to employee severance and other costs.

#### 14. EARNINGS PER SHARE

The following table sets forth the computation of basic and diluted earnings per share (in millions, except per share amounts):

	Fiscal Years Ended		
	September 27, 2019	September 28, 2018	September 29, 2017
Net income	\$ 853.6	\$ 918.4	\$ 1,010.2
Weighted average shares outstanding – basic	173.5	181.3	184.3
Dilutive effect of equity based awards	1.0	1.9	2.4
Weighted average shares outstanding – diluted	174.5	183.2	186.7
Net income per share – basic	\$ 4.92	\$ 5.06	\$ 5.48
Net income per share – diluted	\$ 4.89	\$ 5.01	\$ 5.41
Anti-dilutive common stock equivalents	1.4	0.2	0.6

Basic earnings per share are calculated by dividing net income by the weighted average number of shares of the Company’s common stock outstanding during the period. The calculation of diluted earnings per share includes the dilutive effect of equity based awards that were outstanding during the fiscal years ended September 27, 2019, September 28, 2018, and September 29, 2017, using the treasury stock method. Certain of the Company’s outstanding share-based awards, noted in the table above, were excluded because they were anti-dilutive, but they could become dilutive in the future.

#### 15. SEGMENT INFORMATION AND CONCENTRATIONS

The Company has a single reportable operating segment which designs, develops, manufactures and markets similar proprietary semiconductor products, including intellectual property. In reaching this conclusion, management considers the definition of the chief operating decision maker (“CODM”), how the business is defined by the CODM, the nature of the information provided to the CODM and how that information is used to make operating decisions, allocate resources and assess performance. The Company’s CODM is the president and chief executive officer. The results of operations provided to and analyzed by the CODM are at the consolidated level and accordingly, key resource decisions and assessment of performance are performed at the consolidated level. The Company assesses its determination of operating segments at least annually.

#### GEOGRAPHIC INFORMATION

The Company presents net revenue by geographic area based upon the location of the OEMs’ headquarters as it believes that doing so best depicts how the nature, amount, timing, and uncertainty of revenue and cash flows are affected by economic factors. Net revenue by geographic area is as follows (in millions):

	Fiscal Years Ended		
	September 27, 2019	September 28, 2018	September 29, 2017
United States	\$ 1,860.4	\$ 1,946.2	\$ 1,615.4
China	718.7	982.8	1,018.8
South Korea	365.5	432.7	531.8
Taiwan	271.1	339.1	335.4
Europe, Middle East and Africa	134.9	144.6	117.4
Other Asia-Pacific	26.2	22.6	32.6
Total	\$ 3,376.8	\$ 3,868.0	\$ 3,651.4

The Company’s revenue from external customers is generated principally from the sale of semiconductor products that facilitate various wireless communication applications. Accordingly, the Company considers its product offerings to be similar in nature and therefore not segregated for reporting purposes.

Net property, plant and equipment balances, based on the physical locations within the indicated geographic areas are as follows (in millions):

	As of	
	September 27, 2019	September 28, 2018
Japan	\$ 491.9	\$ 328.4
Mexico	351.5	449.4
Singapore	229.9	222.7
United States	117.6	126.6
Rest of world	14.7	13.8
	<u>\$ 1,205.6</u>	<u>\$ 1,140.9</u>

## CONCENTRATIONS

Financial instruments that potentially subject the Company to concentration of credit risk consist principally of trade accounts receivable. Trade accounts receivable are primarily derived from sales to manufacturers of communications and consumer products and electronic component distributors. Ongoing credit evaluations of customers' financial condition are performed and collateral, such as letters of credit and bank guarantees, are required whenever deemed necessary.

In fiscal 2019, 2018, and 2017, Apple, through sales to multiple distributors, contract manufacturers and direct sales for multiple applications including smartphones, tablets, desktop and notebook computers, watches and other devices, in the aggregate accounted for 51%, 47%, and 39% of the Company's net revenue, respectively. In fiscal 2017, Samsung and Huawei in the aggregate accounted for 12% and 10% of the Company's net revenue, respectively.

At September 27, 2019, the Company's three largest accounts receivable balances comprised 67% of aggregate gross accounts receivable. This concentration was 66% and 53% at September 28, 2018, and September 29, 2017, respectively.

## 16. QUARTERLY FINANCIAL DATA (UNAUDITED)

The following table summarizes the quarterly and annual results (in millions, except per share data):

	First quarter	Second quarter	Third quarter	Fourth quarter	Fiscal year
<b>Fiscal 2019</b>					
Net revenue	\$ 972.0	\$ 810.4	\$ 767.0	\$ 827.4	\$ 3,376.8
Gross profit	485.1	400.2	312.5	406.0	1,603.8
Net income	284.9	214.0	144.1	210.6	853.6
Per share data (1)					
Net income, basic	\$ 1.61	\$ 1.23	\$ 0.83	\$ 1.23	\$ 4.92
Net income, diluted	\$ 1.60	\$ 1.23	\$ 0.83	\$ 1.22	\$ 4.89
<b>Fiscal 2018</b>					
Net revenue	\$ 1,051.9	\$ 913.4	\$ 894.3	\$ 1,008.4	\$ 3,868.0
Gross profit	536.8	458.7	451.6	503.6	1,950.7
Net income	70.4	276.0	286.5	285.5	918.4
Per share data (1)					
Net income, basic	\$ 0.38	\$ 1.51	\$ 1.58	\$ 1.60	\$ 5.06
Net income, diluted	\$ 0.38	\$ 1.50	\$ 1.57	\$ 1.58	\$ 5.01

(1) Earnings per share calculations for each of the quarters are based on the weighted average number of shares outstanding and included common stock equivalents in each period. Therefore, the sums of the quarters do not necessarily equal the full year earnings per share.



## **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.*

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of September 27, 2019. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, as appropriate, to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on management’s evaluation of our disclosure controls and procedures as of September 27, 2019, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

### **Management’s Annual Report on Internal Control over Financial Reporting**

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Internal control over financial reporting is defined in Rule 13a-15(f) or 15d-15(f) promulgated under the Exchange Act as a process designed by, or under the supervision of, the Company’s principal executive and principal financial officers and effected by the Company’s Board of Directors, management and other personnel, 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 and includes those policies and procedures that:

- Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- 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
- 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. 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.

The Company’s management assessed the effectiveness of the Company’s internal control over financial reporting as of September 27, 2019. In making this assessment, the Company’s management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) 2013 Internal Control-Integrated Framework.

Based on their assessment, management concluded that, as of September 27, 2019, the Company’s internal control over financial reporting is effective based on those criteria.

The Company’s independent registered public accounting firm has issued an audit report on the effectiveness of the Company’s internal control over financial reporting as stated within their report which appears herein.

*Changes in internal control over financial reporting.*

There are no changes to our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) that occurred during the fourth quarter of 2019 that have materially affected or are reasonably likely to materially affect, our internal control over financial reporting.

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

Effective as of November 19, 2019, Peter L. Gammel will retire from his position as Chief Technology Officer of the Company.

### **PART III**

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

The information under the captions “Directors and Executive Officers”, “Corporate Governance—Committees of the Board of Directors” and “Other Matters—Section 16(a) Beneficial Ownership Reporting Compliance” in our definitive proxy statement for the 2020 Annual Meeting of Stockholders is incorporated herein by reference.

We have adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, and persons performing similar functions. We make available our code of business conduct and ethics free of charge through our website, which is located at [www.skyworksinc.com](http://www.skyworksinc.com). We intend to disclose any amendments to, or waivers from, our code of business conduct and ethics that are required to be publicly disclosed pursuant to rules of the SEC and the Nasdaq Global Select Market by posting any such amendment or waivers on our website and disclosing any such waivers in a Form 8-K filed with the SEC.

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

The information to be included under the caption “Information about Executive and Director Compensation” in our definitive proxy statement for the 2020 Annual Meeting of Stockholders is incorporated herein by reference.

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

The information to be included under the captions “Security Ownership of Certain Beneficial Owners and Management” and “Equity Compensation Plan Information” in our definitive proxy statement for the 2020 Annual Meeting of Stockholders is incorporated herein by reference.

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

The information to be included under the captions “Certain Relationships and Related Transactions” and “Corporate Governance—Director Independence” in our definitive proxy statement for the 2020 Annual Meeting of Stockholders is incorporated herein by reference.

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

The information to be included under the caption “Ratification of Independent Registered Public Accounting Firm—Audit Fees” in our definitive proxy statement for the 2020 Annual Meeting of Stockholders is incorporated herein by reference.

**PART IV**

**ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES.**

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

	Page number in this report
1. Index to Financial Statements	
Report of Independent Registered Public Accounting Firm	Page <a href="#">33</a>
Consolidated Statements of Operations for the three years ended September 27, 2019	Page <a href="#">35</a>
Consolidated Statements of Comprehensive Income for the three years ended September 27, 2019	Page <a href="#">38</a>
Consolidated Balance Sheets at September 27, 2019, and September 28, 2018	Page <a href="#">37</a>
Consolidated Statements of Cash Flows for the three years ended September 27, 2019	Page <a href="#">38</a>
Consolidated Statements of Stockholders' Equity for the three years ended September 27, 2019	Page <a href="#">39</a>
Notes to Consolidated Financial Statements	Pages <a href="#">40</a> through <a href="#">57</a>

2. The schedule listed below is filed as part of this Annual Report on Form 10-K:  
All required schedule information is included in the Notes to Consolidated Financial Statements or is omitted because it is either not required or not applicable.
3. The Exhibits listed in the Exhibit Index immediately following Item 16 are filed as a part of this Annual Report on Form 10-K.

(b) Exhibits

The exhibits required by Item 601 of Regulation S-K are filed herewith and incorporated by reference herein. The response to this portion of Item 15 is submitted under Item 15 (a) (3).

**ITEM 16. FORM 10-K SUMMARY.**

None



# EXHIBIT INDEX

Exhibit Number	Exhibit Description	Form	Incorporated by Reference			Filed Herewith
			File No.	Exhibit	Filing Date	
2.1	<a href="#">Agreement and Plan of Merger dated as of August 3, 2018, by and among the Company, Avnera Corporation, AI Acquisition Corp., and Shareholder Representative Services LLC, solely in its capacity as the representative and agent of the Equityholders</a>	10-K	001-05560	2.3	11/15/2018	
3.1	<a href="#">Restated Certificate of Incorporation, as Amended</a>	10-Q	001-05560	3.1	8/3/2016	
3.2	<a href="#">Third Amended and Restated By-laws, as Amended</a>	10-Q	001-05560	3.1	2/5/2018	
4.1	<a href="#">Specimen Certificate of Common Stock</a>	S-3	333-92394	4	7/15/2002	
4.2	<a href="#">Description of Capital Stock</a>					X
10.1*	<a href="#">Skyworks Solutions, Inc. 2002 Employee Stock Purchase Plan</a>	10-Q	001-05560	10.D	1/31/2013	
10.2*	<a href="#">Skyworks Solutions, Inc. Non-Qualified Employee Stock Purchase Plan</a>	10-Q	001-05560	10.E	1/31/2013	
10.3*	<a href="#">Skyworks Solutions, Inc. Amended and Restated 2005 Long-Term Incentive Plan</a>	8-K	001-05560	10.1	5/13/2013	
10.4*	<a href="#">Form of Nonstatutory Stock Option Agreement under the Company's 2005 Long-Term Incentive Plan</a>	10-Q	001-05560	10.B	1/31/2013	
10.5*	<a href="#">Skyworks Solutions, Inc. Amended and Restated 2008 Director Long-Term Incentive Plan, as Amended</a>	10-Q	001-05560	10.1	5/4/2018	
10.6*	<a href="#">Form of Nonstatutory Stock Option Agreement under the Company's 2008 Director Long-Term Incentive Plan</a>	10-Q	001-05560	10.OO	5/7/2008	
10.7*	<a href="#">Form of Restricted Stock Unit Agreement under the Company's 2008 Director Long-Term Incentive Plan</a>	10-Q	001-05560	10.2	5/4/2016	
10.8*	<a href="#">Skyworks Solutions, Inc. 2015 Long-Term Incentive Plan, as Amended</a>	10-Q	001-05560	10.1	8/7/2019	
10.9*	<a href="#">Form of Nonstatutory Stock Option Agreement under the Company's 2015 Long-Term Incentive Plan</a>	10-Q	001-05560	10.2	8/5/2015	
10.10*	<a href="#">Form of Performance Share Agreement under the Company's 2015 Long-Term Incentive Plan</a>	10-Q	001-05560	10.3	8/5/2015	
10.11*	<a href="#">Form of Restricted Stock Unit Agreement under the Company's 2015 Long-Term Incentive Plan</a>	10-Q	001-05560	10.4	8/5/2015	
10.12*	<a href="#">Fiscal Year 2019 Executive Incentive Plan</a>	10-Q	001-05560	10.1	2/6/2019	
10.13*	<a href="#">Skyworks Solutions, Inc. Cash Compensation Plan for Directors</a>	10-Q	001-05560	10.1	7/20/2018	
10.14*	<a href="#">Second Amended and Restated Change of Control / Severance Agreement, dated May 11, 2016, between the Company and David Aldrich</a>	10-Q	001-05560	10.1	8/3/2016	
10.15*	<a href="#">Amended and Restated Change in Control / Severance Agreement, dated May 11, 2016, between the Company and Liam Griffin</a>	10-Q	001-05560	10.2	8/3/2016	
10.16*	<a href="#">Change in Control / Severance Agreement, dated December 16, 2014, between the Company and Peter Gammel</a>	10-K	001-05560	10.31	11/24/2015	

Exhibit Number	Exhibit Description	Form	Incorporated by Reference			Filed Herewith
			File No.	Exhibit	Filing Date	
10.17*	<a href="#">Change in Control / Severance Agreement, dated August 29, 2016, between the Company and Kris Sennesael</a>	10-K	001-05560	10.32	11/22/2016	
10.18*	<a href="#">Change in Control / Severance Agreement, dated November 10, 2016, between the Company and Robert J. Terry</a>	10-Q	001-05560	10.2	2/7/2017	
10.19*	<a href="#">Change in Control / Severance Agreement, dated November 9, 2016, between the Company and Carlos S. Bori</a>	10-K	001-05560	10.27	11/13/2017	
10.20*	<a href="#">International Assignment Agreement, dated September 13, 2017, between the Company and Peter L. Gammel</a>	10-K	001-05560	10.28	11/13/2017	
21	<a href="#">Subsidiaries of the Company</a>					X
23.1	<a href="#">Consent of KPMG LLP</a>					X
31.1	<a href="#">Certification of the Company's Chief Executive Officer pursuant to Securities and Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</a>					X
31.2	<a href="#">Certification of the Company's Chief Financial Officer pursuant to Securities and Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</a>					X
32.1	<a href="#">Certification of the Company's Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</a>					X
32.2	<a href="#">Certification of the Company's Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</a>					X
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.					
101.SCH	Inline XBRL Taxonomy Extension Schema Document					X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document					X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document					X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document					X
104	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101)					

\* Indicates a management contract or compensatory plan or arrangement.

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: November 14, 2019

SKYWORKS SOLUTIONS, INC.

Registrant

By: /s/ Liam K. Griffin

Liam K. Griffin

President and Chief Executive Officer

Director

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on November 14, 2019.

Signature and Title
<hr/>
/s/ Liam K. Griffin
<hr/>
Liam K. Griffin
Chief Executive Officer
President and Director
(principal executive officer)
/s/ Kris Sennesael
<hr/>
Kris Sennesael
Senior Vice President and Chief Financial Officer
(principal accounting and financial officer)

Signature and Title
<hr/>
/s/ David J. Aldrich
<hr/>
David J. Aldrich
Chairman of the Board
/s/ Alan S. Batey
<hr/>
Alan S. Batey
Director
/s/ Kevin L. Beebe
<hr/>
Kevin L. Beebe
Director
/s/ Timothy R. Furey
<hr/>
Timothy R. Furey
Director
/s/ Balakrishnan S. Iyer
<hr/>
Balakrishnan S. Iyer
Director
/s/ Christine King
<hr/>
Christine King
Director
/s/ David P. McGlade
<hr/>
David P. McGlade
Director
/s/ Robert A. Schriesheim
<hr/>
Robert A. Schriesheim
Director
/s/ Kimberly S. Stevenson
<hr/>
Kimberly S. Stevenson
Director

## DESCRIPTION OF CAPITAL STOCK

The following description of the capital stock of Skyworks Solutions, Inc. (“us,” “our,” “we” or the “Company”), is a summary and does not purport to be complete. It is subject to, and qualified in its entirety by, our Restated Certificate of Incorporation, as amended (the “Certificate of Incorporation”), and our Third Amended and Restated By-laws, as amended (the “By-laws”), each of which is incorporated by reference as an exhibit to the Annual Report on Form 10-K. We encourage you to read our Certificate of Incorporation, our By-laws, and the applicable provisions of the Delaware General Corporation Law, for additional information.

### General

Our authorized capital stock consists of 550 million shares of capital stock, of which:

- 525 million shares are designated as common stock, par value \$0.25 per share; and
- 25 million shares are designated as preferred stock, without par value.

### Common Stock

The holders of common stock are entitled to one vote per share on all matters submitted to a vote of our stockholders and do not have cumulative voting rights. Accordingly, holders of a majority of the shares of common stock entitled to vote in any election of directors may elect all of the directors standing for election. Subject to preferences that may be applicable to any preferred stock outstanding at the time, the holders of outstanding shares of common stock are entitled to receive ratably any dividends and distributions declared by our Board of Directors out of assets or funds legally available. Upon the liquidation, dissolution, or winding up of the Company, whether voluntary or involuntary, holders of our common stock are entitled to share ratably in all assets remaining after payment to creditors and the liquidation preference of any then-outstanding shares of preferred stock. Holders of common stock have no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock.

### Preferred Stock

No shares of preferred stock are outstanding. Pursuant to our Certificate of Incorporation, our Board of Directors has the authority, without further action by our stockholders, to issue preferred stock from time to time in one or more series. Our Board of Directors may designate the number of shares to be included in each such series and to fix the designation, powers, preferences and rights of the shares of each such series and the qualifications, limitations, and restrictions thereof, including dividend rights, redemption rights, sinking fund terms, liquidation preference terms, conversion rights, and voting rights. A series of our preferred stock could, depending on the terms of such series, impede the completion of a merger, tender offer or other takeover attempt.

### Description of Certain Terms in Our Charter Documents and Delaware Law That May Have Anti-Takeover Effects

Our Certificate of Incorporation and By-laws contain provisions that could have the effect of delaying, deferring, preventing, or discouraging another party from acquiring control of us.

*Issuance of Undesignated Preferred Stock.* As discussed above under “Preferred Stock,” our Board of Directors has the ability to designate and issue preferred stock with voting or other rights or preferences that could delay or deter hostile takeovers or changes in our control or management.

*Limits on Ability of Stockholders to Call a Special Meeting.* Our By-laws provide that special meetings of the stockholders may be called only by a majority of our Board of Directors or by the Company’s secretary upon written request by stockholders holding at least twenty-five percent (25%) of the outstanding shares of common stock, subject to such stockholders’ compliance with certain other requirements. This may delay or impede the ability of our stockholders to force consideration of a proposal.

*Prohibition on Stockholder Action by Written Consent.* Our Certificate of Incorporation provides that any action taken by the stockholders must be effected at an annual or special meeting of stockholders and may not be effected by any consent in writing by our stockholders.

*Requirements for Advance Notification of Stockholder Nominations and Proposals.* Our By-laws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of our Board of Directors. These advance notice procedures may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed and may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempt to obtain control of our company.

*Election of Directors.* Our Certificate of Incorporation and By-laws contain provisions that establish specific procedures for appointing and removing members of our Board of Directors. Under our Certificate of Incorporation and By-laws, vacancies and newly created directorships on our Board of Directors may be filled only by a majority of the directors then serving on the Board of Directors, and directors may only be removed from office by the affirmative vote of the holders of a majority of the shares of all classes of stock entitled to vote for the election of directors.

*No Cumulative Voting.* The Delaware General Corporation Law provides that stockholders are not entitled to the right to cumulate votes in the election of directors unless our Certificate of Incorporation provides otherwise. Our Certificate of Incorporation and By-laws do not expressly provide for cumulative voting. Without cumulative voting, a minority stockholder may not be able to gain as many seats on our Board of Directors as the stockholder would be able to gain if cumulative voting were permitted. The absence of cumulative voting makes it more difficult for a minority stockholder to gain a seat on our Board of Directors to influence our Board of Directors' decision regarding a takeover or other corporate transaction.

*Approval of Business Combinations.* Our Certificate of Incorporation requires that the affirmative vote of at least 80% of the shares of all classes of stock entitled to vote for the election of directors be obtained for a business combination unless approved by a majority of the members of the Board of Directors and, in the event that the other party to the business combination is the beneficial owner of 5% or more of our shares, a majority of the members of the Board of Directors in office prior to the time such other party became the beneficial owner of 5% or more of our shares. Our Certificate of Incorporation increases the approval threshold to 90% of the shares of all classes of stock entitled to vote for the election of directors in the case of a business combination with any "related person" (as defined in the Certificate of Incorporation). In addition to the provisions in our Certificate of Incorporation and By-laws, Section 203 of the Delaware General Corporation Law generally provides that a corporation may not engage in any business combination with any interested stockholder during the three-year period following the time that such stockholder becomes an interested stockholder, unless a majority of the directors then in office approves either the business combination or the transaction that results in the stockholder becoming an interested stockholder or specified stockholder approval requirements are met. The provisions of Delaware law and the provisions of our Certificate of Incorporation and By-laws could have the effect of discouraging others from attempting hostile takeovers or other transactions our Board of Directors does not approve in advance. These provisions might also have the effect of preventing changes in our management.

*Amendment of Certificate of Incorporation.* Our Certificate of Incorporation includes a number of supermajority voting provisions that could make it more difficult to change certain of the provisions described above. These provisions require the affirmative vote of 80% of the shares of all classes of stock entitled to vote for the election of directors to amend or repeal the provisions of our Certificate of Incorporation relating to the election and removal of directors, the right to act by written consent, or the approval of a business combination, and the affirmative vote of 90% of the shares of all classes of stock entitled to vote for the election of directors to amend or repeal the provisions of our Certificate of Incorporation relating to the approval of a business combination with any related person.

## **Transfer Agent and Registrar**

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC.

## **Exchange Listing**

Our common stock is listed on the Nasdaq Global Select Market under the symbol "SWKS".

## SUBSIDIARIES OF THE REGISTRANT

Name	Jurisdiction Of Incorporation
Skyworks Filter Solutions Japan Co., Ltd.	Japan
Skyworks Global Pte. Ltd.	Singapore
Skyworks International Investments, LLC	Delaware
Skyworks Ireland Limited	Ireland
Skyworks Luxembourg S.a r.l	Luxembourg
Skyworks Semiconductor	France
Skyworks Solutions Canada Inc.	Canada
Skyworks Solutions Commercial Co., Ltd. (Shenzhen)	Peoples Republic of China
Skyworks Solutions Commercial Co., Ltd. (Shenzhen) - Beijing Branch	Beijing
Skyworks Solutions Commercial Co., Ltd. (Shenzhen) - Shanghai Branch	Shanghai
Skyworks Solutions Co., Ltd.	Japan
Skyworks Solutions de Mexico, S de R.L. de C.V.	Mexico
Skyworks Solutions (Hong Kong) Limited	Hong Kong
Skyworks Solutions Korea Limited	Korea
Skyworks Solutions Limited	United Kingdom
Skyworks Solutions Luxembourg S.a.r.l.	Luxembourg
Skyworks Solutions Oy	Finland
Skyworks Solutions Worldwide, Inc.	Delaware
Skyworks Solutions Worldwide, Inc., Taiwan Branch	Taiwan
Skyworks Solutions Worldwide, Inc., Malaysia Branch	Malaysia
Advanced Analogic Technologies Incorporated	Delaware
Advanced Analogic Technologies (China), Inc.	Peoples Republic of China
Avnera Corporation	Delaware
Axiom Microdevices, Inc.	Delaware
ICWave, LLC	Massachusetts
Isolink, Inc.	California
Skyworks Filter Solutions Korea, Inc.	Korea
Quantance, Inc.	Delaware
SiGe Semiconductor, Inc.	Delaware
SiGe Semiconductor (U.S.), Corp.	Delaware
SiGe Semiconductor (Europe) Limited	United Kingdom
Trans-Tech, Inc.	Maryland

**Consent of Independent Registered Public Accounting Firm**

The Board of Directors  
Skyworks Solutions, Inc.:

We consent to the incorporation by reference in the registration statements (Nos. 333-91524, 333-100312, 333-100313, 333-122333, 333-131628, 333-132880, 333-134375, 333-150780, 333-150782, 333-162960, 333-176282, 333-176285, 333-176286, 333-179117, 333-191311, and 333-204310) on Form S-8 of Skyworks Solutions, Inc. of our report dated November 14, 2019, with respect to the consolidated balance sheets of Skyworks Solutions, Inc. as of September 27, 2019 and September 28, 2018, and the related consolidated statements of operations, comprehensive income, cash flows, and stockholders' equity for each of the years in the three-year period ended September 27, 2019, and the related notes (collectively, the "consolidated financial statements"), and the effectiveness of internal control over financial reporting as of September 27, 2019, which report appears in the September 27, 2019 annual report on Form 10-K of Skyworks Solutions, Inc.

/s/ KPMG LLP

Irvine, California

November 14, 2019



CERTIFICATION OF THE CEO PURSUANT TO SECURITIES EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a) AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Liam K. Griffin, certify that:

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

Date: November 14, 2019

/s/ Liam K. Griffin

---

Liam K. Griffin

President and Chief Executive Officer

CERTIFICATION OF THE CFO PURSUANT TO SECURITIES EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a) AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Kris Sennesael, certify that:

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

Date: November 14, 2019

/s/ Kris Sennesael

Kris Sennesael

Senior Vice President and Chief Financial 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 Skyworks Solutions, Inc. (the “Company”) on Form 10-K for the period ending September 27, 2019 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Liam K. Griffin, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

A signed original 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.

/s/ Liam K. Griffin

---

Liam K. Griffin  
President and Chief Executive Officer

November 14, 2019

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 Skyworks Solutions, Inc. (the “Company”) on Form 10-K for the period ending September 27, 2019 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Kris Sennesael, Senior Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

A signed original 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.

/s/ Kris Sennesael

---

Kris Sennesael  
Senior Vice President and Chief Financial Officer

November 14, 2019