DIODES INC /DEL/
Form 10-K
February 21, 2019

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 December 31, 2018

or

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

Commission file number: 002-25577

DIODES INCORPORATED

(Exact name of registrant as specified in its charter)

Delaware	95-2039518
(State or other jurisdiction	(I.R.S. Employer
of incorporation or organization)	Identification No.)
4949 Hedgcoxe Road, Suite 200	
Plano, Texas	75024
(Address of principal executive offices)	(Zip Code)

Registrant’s telephone number, including area code: (972) 987-3900

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

Title of each class	Name of each exchange on which registered
Common Stock, Par Value $0.66 2/3	The NASDAQ Stock Market LLC

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

None

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

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically, 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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

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

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

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

The aggregate market value of the 36,999,783 shares of Common Stock held by non-affiliates of the registrant, based on the closing price of $34.47 per share of the Common Stock on the Nasdaq Global Select Market on June 29, 2018, the last business day of the registrant's most recently completed second fiscal quarter, was approximately $1.3 billion.

The number of shares of the registrant's Common Stock outstanding as of February 9, 2019 was 51,740,020.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant’s definitive proxy statement to be filed with the United States Securities and Exchange Commission (“SEC”) pursuant to Regulation 14A in connection with the 2019 annual meeting of stockholders are incorporated by reference into Part III of this Annual Report. The proxy statement will be filed with the SEC not later than 120 days after the registrant’s fiscal year ended December 31, 2018.

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PART I

Item 1.Business.

GENERAL

Diodes Incorporated and its subsidiaries (collectively, the “Company” or “we” or “our”) is a leading global manufacturer and supplier of high-quality application-specific standard products within the broad discrete, logic, analog and mixed-signal semiconductor markets. Diodes serves the consumer electronics, computing, communications, industrial, and automotive markets. Diodes’ products include diodes, rectifiers, transistors, Metal Oxide Semiconductor Field Effect Transistors (“MOSFET”), protection devices, function-specific arrays, logic, amplifiers and comparators, Hall-effect and temperature sensors, power management devices, including LED drivers, AC-DC converters and controllers, DC-DC switching and linear voltage regulators, and voltage references along with special function devices, such as USB power switches, load switches, voltage supervisors, and motor controllers. Diodes’ corporate headquarters and Americas’ sales office are located in Plano, Texas and Milpitas, California. Design, marketing, and engineering centers are located in Plano; Milpitas; Taipei, Taiwan; Taoyuan City, Taiwan; Zhubei City, Taiwan; Oldham, England; and Neuhaus, Germany. Diodes’ wafer fabrication facilities are located in Oldham with additional facilities located in Shanghai, China. Diodes has assembly and test facilities located in Shanghai, Jinan, Chengdu, and Yangzhou, China, as well as in Hong Kong, Neuhaus and Taipei. Additional engineering, sales, warehouse, and logistics offices are located in Taipei; Hong Kong; Oldham; Shanghai; Shenzhen, China; Seongnam-si, South Korea; Munich, Germany; and Tokyo, Japan, with support offices throughout the world. We were incorporated in 1959 in California and reincorporated in Delaware in 1968. In February 2019, we announced the proposed acquisition of Texas Instruments’ 200mm wafer fabrication facility and operations located in Greenock, Scotland (“GFAB”). Assuming the acquisition of GFAB successfully closes, this facility will not only add to Diodes’ existing global footprint, but also provide expanded wafer capacity to support our product growth, in particular for the automotive market. The acquisition of GFAB is expected to close by the end of the first quarter 2019.

We design, manufacture and market these semiconductors for diverse end-use applications. Semiconductors, which provide electronic signal amplification and switching functions, are basic building-blocks that are incorporated into almost every electronic device. We believe that our focus on application-specific standard products utilizing innovative, highly efficient packaging and cost-effective process technologies, coupled with our collaborative, customer-focused product development, gives us a meaningful competitive advantage relative to other semiconductor companies.

Our product portfolio addresses the design needs of advanced electronic equipment, including high-volume consumer electronic devices such as digital media players, smartphones, tablets, notebook computers, flat-panel displays, mobile handsets, digital cameras and set-top boxes. We believe that we have particular strength in designing innovative, highly power-efficient semiconductors in miniature packaging for applications with a critical need to minimize product size while maximizing power density and overall performance, and at a lower cost than alternative solutions. Our product line includes over 25,000 products, and we shipped approximately 46 billion units in each of 2018 and 2017, and 41 billion units in 2016. From 2013 to 2018, our net sales grew from $826.8 million to $1.2 billion, representing a compound annual growth rate of greater than 6%.

BUSINESS OUTLOOK

During 2018, we achieved $1.2 billion in annual revenue, an increase of $160 million or 15.2% from the $1.1 billion we reached in 2017. This increase in revenue for 2018 compared to 2017 exhibits progress toward our previously stated goals for 2025 of $2.5 billion in revenue with gross margin of 40%, representing gross profit of $1.0 billion. Acquisitions remain a key part of our growth strategy to reach our revenue goal. We have a solid pipeline of designs and expanded customer relationships across all regions and product lines. The success of our business depends on, among other factors, the strength of the global economy and the stability of the financial markets, our customers' demand for our products, the ability of our customers to meet their payment obligations, the likelihood of customers not canceling or deferring existing orders, and the strength of consumers' demand for items containing our products in the end-markets we serve. We believe the long-term outlook for our business remains generally favorable, despite the uncertainties in the global economy, as we continue to execute on the strategy that has proven successful for us over the years. See "Management's Discussion and Analysis of Financial Condition and Results of Operations – Business Outlook" in Part II, Item 7 and "Risk Factors – The success of our business depends on the strength of the global economy and the stability of the financial markets, and any weaknesses in these areas may have a material adverse effect on our net sales, operating results and financial condition." in Part I, Item 1A of this Annual Report for additional information.

SEGMENT INFORMATION AND ENTERPRISE-WIDE DISCLOSURES

For financial reporting purposes, we operate in a single segment, standard semiconductor products, through our various design, manufacturing and distribution facilities. We sell product primarily through our operations in Asia, North America and Europe. See Note 15 of "Notes to Consolidated Financial Statements" of this Annual Report for addition information.

OUR INDUSTRY

Semiconductors are critical components used in the manufacture of a broad range of electronic products and systems. Since the invention of the transistor in 1948, continuous improvements in semiconductor processes and design technologies have led to smaller, more complex and more reliable devices at a lower cost per function. The availability of low-cost semiconductors, together with increased customer demand for sophisticated electronic systems, has led to the proliferation of semiconductors in diverse end-use applications.

OUR COMPETITIVE STRENGTHS

We believe our competitive strengths include the following:

Flexible, scalable and cost-effective manufacturing – Our manufacturing operations are a core element of our success, and we have designed our manufacturing base to allow us to respond quickly to changes in demand trends in the end-markets we serve. For example, we have structured our assembly and test facilities to enable us to rapidly and efficiently add capacity and adjust product mix to meet shifts in customer demand and overall market trends. Our manufacturing facilities located in Shanghai and Chengdu provide us with access to a workforce at a relatively low overall cost base while enabling us to better serve our leading customers, many of which are located in Asia. See “Risk Factors – During times of difficult market conditions, our fixed costs combined with lower net sales and lower profit margins may have a negative impact on our business, operating results and financial condition.” in Part I, Item 1A of this Annual Report for additional information.

Integrated packaging expertise – Our expertise in designing and manufacturing innovative and proprietary packaging solutions enables us to package a variety of different device functions into an assortment of packages ranging from miniature chip-scale packaging to packages that integrate multiple separate discrete and/or analog chips into a single semiconductor product called an array. Our ability to design and manufacture multi-chip semiconductor solutions as well as advanced integrated devices provides our customers with products of equivalent functionality with fewer individual parts, and at lower overall cost, than alternative products. This combination of integration, functionality and miniaturization makes our products well suited for high-volume consumer electronic devices such as appliances, chargers, digital cameras, DVD and Blu-Ray players, global positioning devices, lighting, LED televisions, LCD panels, set-top boxes and consumer portables such as smartphones, tablets and notebooks.

Broad customer base and diverse end-markets – Our customers are comprised of leading direct sales customers as well as major electronic manufacturing services (“EMS”) providers. Overall, we serve over 240 direct sales customers worldwide and tens of thousands of additional customers through our 87 distributors. Our products are ultimately used in end-products in a number of markets served by our broad customer base, which we believe makes us less susceptible to market fluctuations driven by either specific customers or specific end-user applications.

Customer-focused product development – Effective collaboration with our customers and a commitment to customer service are essential elements of our business. We believe focusing on dependable delivery and support tailored to specific end-user applications has fostered deep customer relationships and created a key competitive advantage for us in the highly fragmented discrete, logic and analog and mixed-signal semiconductor marketplace. We believe our close relationships with our customers have provided us with keener insight into our customers’ product needs. This results in a stronger demand for our product designs and often provides us with insight into additional opportunities for new design wins in our customers’ products. See “Risk Factors – We are and will continue to be under continuous pressure from our customers and competitors to reduce the price of our products, which could adversely affect our growth and profit margins” in Part I, Item 1A of this Annual Report for additional information.

Management experience – The members of our executive team average over 30 years of industry experience, and the length of their service has created significant institutional insight into our markets, our customers and our operations. See “Risk Factors – We may fail to attract or retain the qualified technical, sales, marketing, finance and management/executive personnel required to operate our business successfully, which could adversely affect our business, operating results and financial condition." in Part I, Item 1A of this Annual Report for additional information.

OUR STRATEGY

Our strategy is to continue to enhance our position as a leading global designer, manufacturer and supplier of high-quality application-specific standard semiconductor products, utilizing our innovative and cost-effective assembly and test (packaging) technology and leveraging our process expertise and design excellence to achieve above-market growth in profitability.

The principal elements of our strategy include the following:

Continue to rapidly introduce innovative discrete, logic and analog and mixed-signal semiconductor products – We intend to maintain our rapid pace of new product introductions, especially for high-volume, high-growth applications with short design cycles, such as LCD and LED televisions and panels, set-top boxes, portables such as smartphones, tablets and notebooks along with other consumer electronics and computing devices, as well as added emphasis on products for the LED lighting market and the industrial and automotive markets. During 2018 and 2017, we continued to achieve many significant new design wins with our direct sales customers. Although a design win from a customer does not necessarily guarantee future sales to that customer, we believe that continued introduction of new and well-defined product solutions is critically important in maintaining and extending our market share in the highly competitive semiconductor marketplace. See "Risk Factors – Obsolete inventories as a result of changes in demand for our products and change in life cycles of our products could adversely affect our business, operating results and financial condition." in Part I, Item 1A of this Annual Report for additional information.

Expand our available market opportunities – We believe we have many paths to increasing our addressable market opportunity. From a product perspective, we intend to continue expanding our product portfolio by developing derivative and enhanced performance devices that target adjacent markets and end-equipment. We will continue to cultivate new and emerging customers within our targeted markets, further increasing our already broad customer base. As we focus on new customers, we try to expand our product portfolio penetration within these new, as well as existing, customers. As we expand our extensive range of high power efficiency and small form factor packages, we plan to introduce new and existing product functions in these new packages to allow an even greater market range.

Maintain intense customer focus – We intend to continue to strengthen and deepen our customer relationships. We believe that continued focus on customer service is important and will help to increase our net sales, operating performance and market share. To accomplish this, we intend to continue to closely collaborate with our customers to design products that meet their specific needs. A critical element of this strategy is to further reduce our design cycle time in order to quickly provide our customers with innovative products. Additionally, to support our customer-focused strategy, we continue to expand our sales force and field application engineers, particularly in Asia and Europe, during periods of growth. See "Risk Factors – We are and will continue to be under continuous pressure from our customers and competitors to reduce the price of our products, which could adversely affect our growth and profit margins." in Part I, Item 1A of this Annual Report for additional information.

Enhance cost competitiveness – A key element of our success is our overall low-cost manufacturing base. While we believe our manufacturing facilities are among the most efficient in the industry, we will continue to refine our proprietary manufacturing processes and technology to achieve additional cost efficiencies. We have continued to make capital expenditures to enhance our existing manufacturing capabilities.

Pursue selective strategic acquisitions – As part of our strategy to expand our semiconductor product offerings and to maximize our market opportunities, we may acquire technologies, product lines or companies in order to enhance our product portfolio and accelerate our new product offerings. Since 2006 we have acquired four companies that enhanced our product portfolio, including Pericom Semiconductor Corporation ("Pericom") in 2015. In February 2019, we announced the proposed acquisition of Texas Instruments' 200mm wafer fabrication facility and operations located in Greenock, Scotland ("GFAB"). Assuming the acquisition of GFAB successfully closes, this facility will not only add to Diodes' existing global footprint, but also provide expanded wafer capacity to support our product growth, in particular for the automotive market. The acquisition of GFAB is expected to close by the end of the first quarter 2019.

See "Risk Factors – Part of our growth strategy involves identifying and acquiring companies. We may be unable to identify suitable acquisition candidates or consummate desired acquisitions and, if we do make any acquisitions, we may be unable to successfully integrate any acquired companies with our operations, which could adversely affect our business, operating results and financial condition" in Part I, Item 1A and Note 19 and Note 21 of "Notes to Consolidated Financial Statements" of this Annual Report for additional information.

OUR PRODUCTS

Our product portfolio includes over 25,000 products that are designed for use in high-volume consumer electronic devices such as LCD and LED televisions and LCD panels, set-top boxes and consumer portables such as smartphones, tablets and notebooks. Our focus is on low pin count semiconductor devices with one or more active and/or passive components. We target and serve end-equipment markets that we believe have larger volumes than other end-market segments served by the overall semiconductor industry.

Our broad product line includes:

- Discrete semiconductor products, including: performance Schottky rectifiers; performance Schottky diodes; Zener diodes and performance Zener diodes, including tight tolerance and low operating current types; standard, fast, super-fast and ultra-fast recovery rectifiers; bridge rectifiers; switching diodes; small signal bipolar transistors; prebiased transistors; MOSFETs; thyristor surge protection devices; and transient voltage suppressors;
- Analog products, including: power management devices such as AC-DC and DC-DC converters, USB power switches, low dropout and linear voltage regulators; standard linear devices such as operational amplifiers and comparators, current monitors, voltage references, and reset generators; LED lighting drivers; audio amplifiers; and sensor products including Hall-effect sensors and motor drivers;
- Standard logic products including low-voltage complementary metal-oxide-semiconductor (“CMOS”) and advanced high-speed CMOS devices; ultra-low power CMOS logic; and analog switches;
- Multichip products and co-packaged discrete, analog and mixed-signal silicon in miniature packages;
- Silicon and silicon epitaxial wafers used in manufacturing these products; and
- Frequency Control Products (“FCP”) used in many of today’s advanced electronic systems. FCPs are electronic components that provide frequency references such as crystals and oscillators for computer, communication and consumer electronic products.

The following table lists the end-markets, some of the applications in which our products are used, and the percentage of net sales for each end-market for the last three years:

End-Markets *	2018	2017	2016	End product applications
Industrial	26%	23%	21%	Lighting, power supplies, DC-DC conversion, security systems, motor controls, DC fans, proximity sensors, solenoid and relay driving, solar panel, HAVC/LED lighting, retrofit bulb
Consumer Electronics	25%	26%	29%	Digital audio players and cameras, set-top boxes, LCD and LED TV’s, game consoles, portable GPS, fitness and health monitors, action cameras, smart watches
Communications	24%	25%	24%	Mobile handsets, smartphones, IP in gateways, routers, switches, hubs, fiber optics
Computing	17%	18%	19%	Notebooks, tablets, LCD monitors, printers, solid state and hard disk drive, servers, mass storage, cloud
Automotive	9%	8%	7%	Comfort controls, lighting, audio/video, GPS navigation, satellite radios, electronics

* Amounts in the table may not total 100% due to rounding

PRODUCT PACKAGING

Our device packaging technology includes a wide variety of innovative surface-mounted packages. Our focus on the development of smaller, more thermally efficient, and increasingly-integrated packaging, is a critical component of our product development. We provide a comprehensive offering of miniature high power density packaging, enabling us to fit our components into smaller and more efficient packages, while maintaining the same device functionality and power handling capabilities. Smaller packaging provides a reduction in the height, weight and board space required for our components. Our products are well suited for battery-powered, hand-held and wireless consumer electronic applications and high-volume consumer electronic devices such as LCD and LED televisions and LCD panels, set-top boxes and consumer portables such as smartphones, tablets and notebooks.

CUSTOMERS

We serve over 240 direct customers worldwide, including major direct sales customers and EMS providers. Additionally, we have 87 distribution customers worldwide, through which we indirectly serve tens of thousands of customers. Our customers represent: (i) leading direct sales customers including a broad range of industries, such as Continental AG, Delta Electronics, Honeywell, Osram, Phillips, Arris, Emerson, Hella, LG Electronics, Lenovo, Quanta Computer, Seagate, Sagem Communication, and Samsung Electronics; (ii) leading EMS providers, such as Celestica, Flextronics, Hon Hai Precision Industry, Inventec, Jabil Circuit, and Sanmina-SCI, who build end-market products incorporating our semiconductors for companies such as Google, GoPro, Cisco, Dell, EMC, Intel, Microsoft, Thompson, and Roche Diagnostics; and (iii) leading distributors such as Arrow, Avnet, Future Electronics, Rutronic, Yosun Industrial, DigiKey, and Zenitron.

For the years 2018, 2017 and 2016, our direct sales and EMS customers together accounted for 29%, 32% and 34%, respectively, of our net sales. One customer accounted for 10% or more of our net sales in 2018 and 2017, but not 10% of our outstanding accounts receivable at December 31, 2018 or 2017. No customers accounted for 10% or more of our net sales in 2016. In addition, for information concerning our business with related parties, see “Business – Certain Relationships and Related Party Transactions.”

We believe that our close relationships with our customers have provided us with deeper insight into our customers’ product needs. In addition to seeking to expand relationships with our existing customers, our strategy is to pursue new customers and diversify our customer base by focusing on leading global consumer electronics companies and their EMS providers and distributors. See “Risk Factors – Our customers require our products to undergo a lengthy and expensive qualification process without any assurance of product sales and may demand to audit our operations from time to time. A failure to qualify a product or a negative audit finding could adversely affect our net sales, operating results and financial condition.” in Part I, Item 1A of this Annual Report for additional information.

We generally warrant that products sold to our customers will, at the time of shipment, be free from defects in workmanship and materials and conform to our approved specifications. Subject to certain exceptions, our standard warranty extends for a period of one year from the date of shipment. Warranty expense has not been significant. Generally, our customers may cancel orders on short notice without incurring a penalty. See “Risk Factors – Our customer orders are subject to cancellation or modification usually with no penalty. High volumes of order cancellation or reduction in quantities ordered could adversely affect our net sales, operating results and financial condition.” in Part I, Item 1A of this Annual Report for additional information.

Many of our customers are based in Asia or have manufacturing facilities in Asia. Net sales by country consist of sales to customers in that country based on the country to which products are shipped. We report net sales based on “shipped to” customer locations as we believe this best represents where our customers’ business activities occur. The table below sets forth net sales by country. “All others” represents countries with less than 3% of total net sales each.

	Percentage of Net Sales					
	2018		2017		2016	
China	55	%	56	%	58	%
U.S.	10	%	8	%	8	%
Korea	5	%	6	%	6	%
Germany	8	%	7	%	7	%
Singapore	6	%	6	%	5	%
Taiwan	6	%	6	%	6	%
All others	10	%	11	%	10	%
Total	100	%	100	%	100	%

SALES AND MARKETING

We market and sell our products worldwide through a combination of direct sales and marketing personnel, independent sales representatives and distributors. We have direct sales personnel in the U.S., the U.K., France, Germany, Korea, Hong Kong, Taiwan and China. We also have independent sales representatives in the U.S., Asia, and Europe. In addition, we have distributors in the U.S., Asia, and Europe. As of December 31, 2018, our direct global sales and marketing organization consisted of approximately 311 employees operating out of 17 offices. We have sales and marketing offices or representatives in Taipei, Taiwan; Shanghai, Shenzhen, Wuhan, Guangzhou, Jinan, Qingdao, China; Gyeonggi, South Korea; Munich, Frankfurt, Germany; Oldham, U.K.; Tokyo, Japan; and

Plano, Texas, USA. As of December 31, 2018, we also had approximately 18 independent sales representative firms marketing our products.

Our marketing group focuses on our product strategy, product development roadmap, new product introduction process, demand assessment and competitive analysis. Our marketing programs include participation in industry tradeshows, technical conferences and technology seminars, sales training and public relations. Our marketing group works closely with our sales and research and development teams to align our product development roadmap. Our marketing group coordinates its efforts with our product development, operations and sales groups, as well as with our customers, sales representatives and distributors. We support our customers through our global field application engineering and customer support organizations.

Our website, www.diodes.com, features an extensive online product catalog with advanced search capabilities. This, coupled with a comprehensive competitor cross-reference search, facilitates quick and thorough product selection. Our website also provides easy access to our worldwide sales contacts and customer support and incorporates a distributor-inventory check to provide component inventory availability.

MANUFACTURING OPERATIONS AND FACILITIES

We operate two assembly and test facilities located in Shanghai, China, one in Chengdu, China and one in Neuhaus, Germany. We have two 150mm wafer fabrication facilities located in Shanghai and one 150mm wafer fabrication facility located in Oldham, U.K. One of our Shanghai facilities has completed qualification on the production of 200mm wafers.

During the fourth quarter of 2017 we shut down our wafer manufacturing facility located in Lee's Summit, MO ("KFAB") and transferred those manufacturing activities to our wafer fabrication facilities located in Oldham and Shanghai or to outside foundries. Total costs to shut down KFAB were approximately $10.3 million, which has been reflected in the financial statements included in this Annual Report. We do not expect to incur any further costs associated with the shutdown of KFAB.

In 2010, we entered into an agreement with the Management Committee of the Chengdu Hi-Tech Industrial Development Zone (the "CDHT"). In connection with the agreement with CDHT, we formed a joint venture entity with a Chinese company, Chengdu Ya Guang Electronic Company Limited ("Ya Guang"), to establish a semiconductor assembly and test manufacturing facility in Chengdu, China. We currently own approximately 98% of the equity of the joint venture entity. The CDHT granted the joint venture entity a 50-year land lease, provides corporate and employee tax incentives, tax refunds, subsidies and other financial support. We believe this arrangement will be a long-term, multi-year project that will provide us additional capacity as needed. As of December 31, 2018, we have invested approximately $179.0 million, primarily for infrastructure, buildings and equipment-related capital expenditures.

In February 2019, we announced the proposed acquisition of Texas Instruments' 200mm wafer fabrication facility and operations located in Greenock, Scotland ("GFAB"). Assuming the acquisition of GFAB successfully closes, this facility will not only add to Diodes' existing global footprint, but also provide expanded wafer capacity to support our product growth, in particular for the automotive market. The acquisition of GFAB is expected to close by the end of the first quarter 2019.

For the years ending December 31, 2018 and 2017, our total capital expenditures were approximately $79.7 million and $125.2 million, respectively. The majority of our capital expenditures are in China.

Our manufacturing processes use many raw materials, including silicon wafers, aluminum and copper lead frames, gold and copper wire and other metals, molding compounds and various chemicals and gases. We also rely on equipment and finished product suppliers. We are continuously evaluating our raw material costs in order to reduce our consumption while protecting and maintaining product performance. We have no material agreements with any of our suppliers that impose minimum or continuing supply obligations. From time to time, suppliers may extend lead-times, limit supplies or increase prices due to capacity constraints or other factors. Although we believe that supplies of the raw materials we use are currently and will continue to be available, shortages could occur in various essential materials due to interruption of supply or increased demand in the industry. See "Risk Factors – We depend on third-party suppliers for timely deliveries of raw materials, manufacturing services, product and process development, parts and equipment, as well as finished products from other manufacturers, and our reputation with customers, operating results and financial condition could be adversely affected if we are unable to obtain adequate supplies in a timely manner." in Part I, Item 1A of this Annual Report for additional information.

Our corporate headquarters is located in a facility we own in Plano, Texas. We also lease or own properties around the world for use as sales and administrative offices, research and development centers, manufacturing facilities, warehouses and logistics centers. The size or location of these properties can change from time to time based on our business requirements. See "Properties" in Part I, Item 2 of this Annual Report for additional information.

BACKLOG

The amount of backlog to be shipped during any period is dependent upon various factors, and orders are subject to cancellation or modification, usually with no penalty to the customer. Orders are generally booked from one month to greater than twelve months in advance of delivery. The rate of booking of new orders can vary significantly from month to month. We, and the industry as a whole, continue to experience a trend towards shorter customer-requested lead-times, and we expect this trend to continue. The amount of backlog at any date depends upon various factors, including the timing of the receipt of orders, fluctuations in orders of existing product lines, and the introduction of new product lines. Accordingly, we believe that the amount of our backlog at any date is not an accurate measure of our future sales. We strive to maintain proper inventory levels to support our customers' just-in-time order expectations. Our backlog of orders, based on expected ship date, was $394.2 million at December 31, 2018 and $407.4 million at December 31, 2017.

PATENTS, TRADEMARKS AND LICENSES

Historically, patents and trademarks have not been material to our operations, but we expect them to become more important, particularly as they relate to our miniature and power-efficient packaging technologies.

Our initial product patent portfolio was primarily composed of discrete technologies. In the late 1990s, our engineers began to research and develop innovative packaging technologies, which produced several important breakthroughs and patents, such as the PowerDI® series of packaging technology to foster our growth in the semiconductor industry.

Our 2006 acquisition of Anachip Corp., a fabless semiconductor company, initiated our presence in the analog product market with a portfolio of standard linear and low dropout regulator products, among others.

Through our acquisition of the assets of APD Semiconductor, Inc. in 2006, we acquired the SBR® patents and trademark. SBR® is a state-of-the-art integrated circuit wafer processing technology, which is able to integrate and improve the benefits of the two existing rectifier technologies into a single device. The creation of a finite conduction cellular IC, combined with inherent design uniformity, has allowed manufacturing costs to be kept competitive with the existing power device technology, and thus has produced a breakthrough in rectifier technology.

In 2008, we acquired Zetex Semiconductor ("Zetex"), which subsequently increased our available discrete and analog technologies with patents and trademarks for bipolar transistors and power management products such as LED drivers. LED drivers support a wide range of applications for automotive, safety and security, architecture, and portable lighting and are highly efficient and cost effective.

In 2012, we acquired Power Analog Microelectronics, Inc. ("PAM"), a provider of advanced analog and high-voltage power ICs. PAM's product portfolio includes Class D audio amplifiers, DC-DC converters and LED backlighting drivers, which strengthened our position as a global provider of high-quality and high-efficiency, space-saving analog products by expanding our product portfolio with innovative "filter-less" digital audio amplifiers, application-specific power management ICs, as well as high-performance LED drivers and DC-DC converters.

We acquired BCD Semiconductor Manufacturing Limited ("BCD"), a leading supplier of standard linear and power management devices in 2013. BCD has a product portfolio that includes AC-DC and DC-DC solutions for chargers and power adapters. BCD's established presence in Asia, with a particularly strong local market position in China, offers us even greater participation in the consumer electronics, computing and communications end-markets.

Pericom, acquired by us in 2015, designs, develops and markets high-performance ICs and FCPs used in many of today's advanced electronic systems. ICs include functions that support the connectivity, timing and signal conditioning of high-speed parallel and serial protocols that transfer data among a system's microprocessor, memory and various peripherals, such as displays and monitors, and between interconnected systems. FCPs are electronic components that provide frequency references such as crystals and oscillators for computer, communication and consumer electronic products. Pericom's analog, digital and mixed-signal ICs, together with our legacy FCPs enable higher system bandwidth and signal quality, resulting in better operating reliability and signal integrity, and lower overall system cost in applications such as notebook computers, servers, network switches and routers, storage area networks, digital TVs, cell phones, GPS devices and digital media players.

Currently, our licensing of patents to other companies is not material. We do, however, license certain product technology from other companies, but we do not consider licensed technology royalties paid by us to be material. We believe the duration and other terms of the licenses are appropriate for our current needs. See "Risk Factors – 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, reduction in our intellectual property rights and a negative impact on our business, operating results and financial condition." in Part I, Item 1A of this Annual Report for additional information.

This Annual Report may include trade names and trademarks of other companies. Our use or display of other parties' trade names, trademarks or products is not intended to, and does not, imply a relationship with, or endorsement or sponsorship of us by, the trade names or trademark owners. All trademarks appearing in this Annual Report not owned by us are the property of their holders.

COMPETITION

Numerous semiconductor manufacturers and distributors serve the discrete, logic and analog semiconductor components market, making competition intense. Some of our larger competitors include Infineon Technologies A.G., Nexperia, formerly the Standard Products business of NXP Semiconductors N.V., ON Semiconductor Corporation, Rohm Electronics USA, LLC, Toshiba Corporation and Vishay Intertechnology, Inc., many of which have greater financial, marketing, distribution, brand name recognition, research and development, manufacturing and other resources than we do. Accordingly, we, from time to time, may reposition product lines or decrease prices, which may affect our sales of, and profit margins on, such product lines. The price, features, availability and quality of our products, and our ability to design products and deliver customer service in keeping with our customers' needs, determine the competitiveness of our products. We believe that our product focus, packaging expertise and our flexibility and ability to quickly adapt to customer needs affords us competitive advantages. See "Risk Factors – The semiconductor business is highly competitive, and increased competition may harm our business, operating results and financial condition." in Part I, Item 1A of this Annual Report for additional information.

ENGINEERING AND RESEARCH AND DEVELOPMENT

Our engineering and research and development groups consist of applications, circuit design, and product development engineers who assist in determining the direction of our future product lines. One of their key functions is to work closely with market-leading customers to further refine, expand and improve our product portfolio within our target product types and packages. In addition, customer requirements and acceptance of new package types are assessed and new, higher-density and more energy-efficient packages are developed to satisfy customers' needs.

Product development engineers work directly with our semiconductor circuit design and layout engineers to develop and design products that match our customers' requirements. We have the capability to capture the customers' electrical and packaging requirements and translate those requirements into product specifications which can then be designed and manufactured to support customers' end-system applications.

EMPLOYEES

As of December 31, 2018, we employed 7,710 employees (including approximately 975 temporary labor or independent contractors). 6,979 of our employees were in Asia, 249 were in the U.S. and 482 were in Europe. None of our employees in Asia or the U.S. are subject to a collective bargaining agreement, but a majority of our employees in Europe are covered by local labor agreements. The decrease from 8,586 employees in 2017 is due to productivity and operational improvements in our China facilities. We consider our relations with our employees to be satisfactory. See "Risk Factors – We may fail to attract or retain the qualified technical, sales, marketing, finance and management/executive personnel required to operate our business successfully, which could adversely affect our business, operating results and financial condition." in Part I, Item 1A of this Annual Report for additional information.

ENVIRONMENTAL MATTERS

We are subject to a variety of U.S. federal, state, local and foreign governmental laws, rules and regulations related to the use, storage, handling, discharge or disposal of certain toxic, volatile or otherwise hazardous chemicals used in our manufacturing process in China and the U.K. where our wafer fabrication facilities are located, and in China, Taiwan and Germany where our assembly and test facilities are located. Any of these regulations could require us to acquire equipment or to incur substantial other costs to comply with environmental regulations or remediate problems. For the years ended December 31, 2018, 2017 and 2016, our capital expenditures for environmental controls have not been material. In August 2018, the Company received a letter from the U.S. Environmental Protection Agency (the "EPA") concerning potential violations under the Clean Air Act Amendments of 1990, which do not involve any actual discharge of materials into the environment, arising as a result of an inspection at KFAB. In February 2019, we fully resolved this matter with the EPA and paid approximately $0.2 million. During 2018, we received notice from the

Shanghai Municipal Bureau of Ecology and Environment of possible environmental law violations at BCD. The notice stated that we installed and used environmental protection devices at our plant, prior to final approval from the authorities. We paid approximately $0.2 million during the fourth quarter of 2018 to settle the matter.

See “Risk Factors – We are subject to many environmental laws and regulations that could result in significant expenses and could adversely affect our business, operating results and financial condition.” in Part I, Item 1A of this Annual Report for additional information.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

We conduct business with two related companies: Lite-On Semiconductor Corporation and its subsidiaries and affiliates (collectively, “LSC”), and Nuvoton Technology Corporation and its subsidiaries and affiliates (collectively, “Nuvoton”). LSC owned approximately 15.5% of our outstanding Common Stock as of December 31, 2018. We conduct business with a significant company, Keylink International (B.V.I.) Inc. and its subsidiaries and affiliates (collectively, “Keylink”). Keylink is our 5% joint venture partner in our two Shanghai assembly and test facilities. In addition, Ya Guang is our 2% joint venture partner in one of our Chengdu assembly and test facilities and our 5% joint venture partner in our other Chengdu assembly and test facility; however, we have no material transactions with Ya Guang, other than the joint venture.

Raymond Soong, the Chairman of the Board of Directors, is also the Chairman of LSC and the Chairman of Lite-On Technology Corporation (“LTC”), a significant shareholder of LSC. C.H. Chen, our former President and Chief Executive Officer and currently the Vice Chairman of the Board of Directors, is also Vice Chairman of LSC and a board member of LTC. Dr. Keh-Shew Lu, a member of our Board of Directors and our President and Chief Executive Officer, is also a board member of Nuvoton.

The Audit Committee of our Board of Directors reviews all related party transactions for potential conflict of interest situations on an ongoing basis. We believe that all related party transactions are on terms no less favorable to us than would be obtained from unaffiliated third parties. For more information concerning our relationships with LSC, Keylink and Nuvoton, see “Risk Factors – One of our external suppliers is also a related party. The loss of this supplier could harm our business, operating results and financial condition.” in Part I, Item 1A and Note 14 of “Notes to Consolidated Financial Statements” of this Annual Report for additional information.

SEASONALITY

Historically, our net sales have been affected by the cyclical nature of the semiconductor industry, whereby typically the fourth quarter is the quarter of the calendar year with the smallest revenue. In addition, our net sales have been subject to some seasonal variation with weaker net sales in the first and fourth calendar quarters. See Note 20 (unaudited) of “Notes to Consolidated Financial Statements” of this Annual Report for additional information on our quarterly results.

AVAILABLE INFORMATION

Our website address is http://www.diodes.com. We make available, free of charge through our website, our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, proxy statements, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after such material is electronically filed with or furnished to the Securities and Exchange Commission (the “SEC”).

The SEC maintains an Internet site (http://www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file with the SEC.

Our website also provides investors access to financial and corporate governance information including our corporate governance guidelines, Code of Business Conduct, whistleblower hotline, and press releases. The contents of our website and any other information accessible through our website are not incorporated by reference into this Annual Report on Form 10-K.

Cautionary Statement for Purposes of the “Safe Harbor” Provision of the Private Securities Litigation Reform Act of 1995

Many of the statements, included in this Annual Report on Form 10-K, contain forward-looking statements and forward-looking information relating to our company. We generally identify forward-looking statements by the use of terminology such as “may,” “will,” “could,” “should,” “potential,” “continue,” “expect,” “intend,” “plan,” “estimate,” “anticipa “project,” or similar phrases or the negatives of such terms. We base these statements on our management’s beliefs as well as assumptions we made using information currently available to us. Such statements are subject to risks, uncertainties and assumptions, including those identified in the “Risk Factors” section of this Annual Report and the “Risk Factors” section of other documents we file with the SEC, as well as other matters not yet known to us or not currently considered material by us. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, estimated or projected. Given these risks and uncertainties, prospective investors are cautioned not to place undue reliance on such forward-looking statements. Forward-looking statements do not guarantee future performance and should not be considered as statements of fact.

You should not unduly rely on these forward-looking statements, which speak only as of the date of this Annual Report on Form 10-K. Unless required by law, we undertake no obligation to publicly update or revise any forward-looking statements to reflect new information or future events or otherwise. The Private Securities Litigation Reform Act of 1995 (the “Act”) provides certain “safe harbor” provisions for forward-looking statements. All forward-looking statements, made on this Annual Report on Form 10-K, are made pursuant to the Act.

Item 1A. Risk Factors.

Investing in our Common Stock involves a high degree of risk. You should carefully consider the following risks and other information in this Annual Report before you make any trading decisions regarding our Common Stock. Our business, financial condition or operating results may suffer if any of the following risks are realized. Additional risks and uncertainties not currently known to us may also adversely affect our business, financial condition or operating results. If any of these risks or uncertainties occurs, the trading price of our Common Stock could decline and you could lose part or all of your investment.

RISKS RELATED TO OUR BUSINESS

The success of our business depends on the strength of the global economy and the stability of the financial markets, and any weaknesses in these areas may have a material adverse effect on our net sales, operating results and financial condition.

Weaknesses in the global economy and financial markets can lead to lower consumer discretionary spending and demand for items that incorporate our products in the consumer electronics, computing, industrial, communications and the automotive sectors. A decline in end-user demand can affect our customers’ demand for our products, the ability of our customers to meet their payment obligations and the likelihood of customers canceling or deferring existing orders. Our net sales, operating results and financial condition could be negatively affected by such actions.

During times of difficult market conditions, our fixed costs combined with lower net sales and lower profit margins may have a negative impact on our business, operating results and financial condition.

The semiconductor industry is characterized by high fixed costs. Notwithstanding our utilization of third-party manufacturing capacity, most of our production requirements are met by our own manufacturing facilities. In difficult economic environments, we could be faced with a decline in the utilization rates of our manufacturing facilities due to decreases in product demand. During such periods, our manufacturing facilities do not operate at full capacity and the costs associated with this excess capacity are expensed immediately and not capitalized into inventory. When our utilization rates decline to abnormally low production levels, we generally experience lower gross margins. The market conditions in the future may adversely affect our utilization rates and consequently our future gross margins, and this, in turn, could have a material negative impact on our business, operating results and financial condition.

Downturns in the highly cyclical semiconductor industry or changes in end-market demand could adversely affect our operating results and financial condition.

The semiconductor industry is highly cyclical, and periodically experiences significant economic downturns characterized by diminished product demand, production overcapacity and excess inventory, which can result in rapid erosion in average selling prices. From time to time, the semiconductor industry experiences order cancellations and reduced demand for products, resulting in significant net sales declines, due to excess inventories at end-equipment manufacturers and general economic conditions, especially in the technology sector. The market for semiconductors may experience renewed, and possibly more severe and prolonged downturns, which may harm our operating results and financial condition.

In addition, we operate in a few narrow markets of the broader semiconductor market and, as a result, cyclical fluctuations may affect these segments to a greater extent than they affect the broader semiconductor market. This may cause us to experience greater fluctuations in our operating results and financial condition than compared to some of our broad line semiconductor competitors. In addition, we may experience significant changes in our profitability as a result of variations in sales, changes in product mix, changes in end-user markets and the costs associated with the introduction of new products. The markets for our products depend on continued demand in the consumer electronics, computing, communications, industrial and automotive sectors. These end-user markets also tend to be cyclical and may also experience changes in demand that could adversely affect our operating results and financial condition.

The semiconductor business is highly competitive, and increased competition may harm our business, operating results and financial condition.

The semiconductor industry in which we operate is highly competitive. We expect intensified competition from existing competitors and new entrants. Competition is based on price, product performance, product availability, quality, reliability, technological innovation and customer service. We compete in various markets with companies of various sizes, many of which are larger and have greater resources or capabilities as it relates to financial, marketing, distribution, brand name recognition, research and development, manufacturing and other resources than we have. As a result, they may be better able to develop new products, market their products, pursue acquisition candidates and withstand adverse economic or market conditions. Most of our current major competitors are broad line semiconductor manufacturers who often have a wider range of product types and technologies than we do. In addition, companies not currently in direct competition with us may introduce competing products in the future. Some of our current major competitors are Infineon Technologies A.G., Nexperia, formerly the Standard Products business of NXP Semiconductors N.V., ON Semiconductor Corporation, Rohm Electronics USA, LLC, Toshiba Corporation and Vishay Intertechnology, Inc. We may not be able to compete successfully in the future, and competitive pressures may harm our business, operating results and financial condition.

One of our external suppliers is also a related party. The loss of this supplier could harm our business, operating results and financial condition.

In 2018, 2017 and 2016, LSC, our largest stockholder, accounted for less than 3% of our silicon wafer supply and our finished goods supply. The loss of LSC as a supplier could materially harm our business, operating results and financial condition.

Delays in initiation of production at facilities due to implementing new production techniques or resolving problems associated with technical equipment malfunctions could adversely affect our manufacturing efficiencies, operating results and financial condition.

Our manufacturing efficiency has been and will be an important factor in our future profitability, and we may not be able to maintain or increase our manufacturing efficiency. Our manufacturing and testing processes are complex, require advanced and costly equipment and are continually being modified in our efforts to improve product performance and cost. Difficulties in the manufacturing process can lower yields. Technical or other problems could lead to production delays, order cancellations and lost net sales. In addition, any problems in achieving acceptable yields, construction delays, or other problems in upgrading or expanding existing facilities, building new facilities, bringing new manufacturing capacity to full production or changing our process technologies, could also result in capacity constraints, production delays and a loss of future net sales and customers. Our operating results also could be adversely affected by any increase in fixed costs and operating expenses related to increases in production capacity if net sales do not increase proportionately, or in the event of a decline in demand for our products. Any disruption at any of our wafer fabrication facilities or assembly and test facilities could have a material adverse effect on our manufacturing efficiencies, operating results and financial condition.

We are and will continue to be under continuous pressure from our customers and competitors to reduce the price of our products, which could adversely affect our growth and profit margins.

Prices for our products tend to decrease over their life cycle. There is substantial and continuing pressure from customers to reduce the total cost of purchasing our products. To remain competitive and retain our customers and gain new ones, we must continue to reduce our costs through design, product and manufacturing improvements. We must also strive to minimize our customers' shipping and inventory financing costs and to meet their other goals for rationalization of supply and production. Our net sales growth and profit margins will suffer if we cannot effectively continue to reduce our costs and keep our product prices competitive.

Our customers require our products to undergo a lengthy and expensive qualification process without any assurance of product sales and may demand to audit our operations from time to time. A failure to qualify a product or a negative audit finding could adversely affect our net sales, operating results and financial condition.

Prior to purchasing our products, our customers may require our products to undergo an extensive qualification process, which involves rigorous reliability testing. This qualification process may continue for six months or longer. However, qualification of a product by a customer does not ensure any sales of the product to that customer. In addition, we are focusing more on the automotive and industrial markets. These markets, automotive in particular, require higher quality standards. Although we are working to ensure our organization and products meet the more rigorous quality standards, there can be no assurances we will succeed. Even after successful qualification and sales of a product to a customer, a subsequent revision to the product, changes in the product's manufacturing process or the selection of a new supplier by us may require a requalification process, which may result in delayed net sales, foregone sales and excess or obsolete inventory. After our products are qualified, it can take an additional six months or more before the customer commences volume production of components or devices that incorporate our products. Despite these uncertainties, we devote substantial resources, including design, engineering, sales, marketing and management efforts, toward qualifying our products with customers in anticipation of sales. If we are unsuccessful or delayed in qualifying any of our products with a customer, such failure or delay would preclude or delay sales of such product to the customer, which may adversely affect our net sales, operating results and financial condition.

In addition, from time to time, our customers may demand an audit of our records, product manufacturing, qualification, and packaging processes, business practices and other related items to verify that we have complied with our business obligations, standard processes and procedures, product specifications and certain governing laws and regulations related to our business practices, and in accordance with the agreed terms and conditions of mutual business agreements. If the audit shows any deficiency in any of these categories, our customers may require us to implement extensive protocols to remedy the deficiency, assess us significant penalties, refuse shipments of our products, return existing inventory, cancel orders, or terminate our business relationship, each of which will adversely affect our net sales, operating results and financial condition.

Our customer orders are subject to cancellation or modification usually with no penalty. High volumes of order cancellation or reduction in quantities ordered could adversely affect our net sales, operating results and financial condition.

All of our customer orders are subject to cancellation or modification, usually with no penalty to the customer. Orders are generally made on a purchase order basis, rather than pursuant to long-term supply contracts, and are booked from immediate delivery to twelve months or more in advance of delivery. The rate of booking new orders can vary significantly from month to month. We, and the semiconductor industry as a whole, are experiencing a trend towards shorter customer-requested lead times, which is the amount of time between the date a customer places an order and the date the customer requires shipment. Furthermore, our industry is subject to rapid changes in customer outlook and periods of excess inventory due to changes in demand in the end-markets our industry serves. As a result, many of our purchase orders are revised, and may be cancelled, with little or no penalty and with little or no notice. However, we must still commit production and other resources to fulfilling these purchase orders even though they may ultimately be cancelled. If a significant number of purchase orders are cancelled or product quantities ordered are reduced, and we are unable to timely generate replacement orders, we may build up excess inventory and our net sales, operating results and financial condition may suffer.

Production at our manufacturing facilities could be disrupted for a variety of reasons, including natural disasters and other extraordinary events, which could prevent us from producing enough of our products to maintain our sales and satisfy our customers' demands and could adversely affect our operating results and financial condition.

A disruption in production at our manufacturing facilities could have a material adverse effect on our business. Disruptions could occur for many reasons, including fire, floods, hurricanes, typhoons, droughts, tsunamis, volcanoes, earthquakes, disease or other similar natural disasters, unplanned maintenance or other manufacturing problems, labor shortages, power outages or shortages, telecommunications failures, strikes, transportation interruption, government regulation, terrorism or other extraordinary events. Such disruptions may cause direct injury or damage to our employees and property and related internal controls with significant indirect consequences. Alternative facilities with sufficient capacity or capabilities may not be available, may cost substantially more or may take a significant time to start production, each of which could negatively affect our business and financial performance. If one of our key manufacturing facilities is unable to produce our products for an extended period of time, our sales may be reduced by the shortfall caused by the disruption, and we may not be able to meet our customers' needs, which could cause our customers to seek other suppliers. Such disruptions could have an adverse effect on our operating results and financial condition.

New technologies could result in the development of new products by our competitors and a decrease in demand for our products, and we may not be able to develop new products to satisfy changes in demand, which would adversely affect our net sales, market share, operating results and financial condition.

Our product range and new product development program are focused on low pin count semiconductor devices with one or more active or passive components. Our failure to develop new technologies, or anticipate or react to changes in existing technologies, either within or outside of the semiconductor market, could materially delay development of new products, which could result in a decrease in our net sales and a loss of market share to our competitors. The semiconductor industry is characterized by rapidly changing technologies and industry standards, together with frequent new product introductions. This includes the development of new types of technology or the improvement of existing technologies, such as analog and digital technologies that compete with, or seek to replace, discrete semiconductor technology. Our financial performance depends on our ability to design, develop, manufacture, assemble, test, market and support new products and product enhancements on a timely and cost-effective basis. New products often command higher prices and, as a result, higher profit margins. We may not successfully identify new product opportunities or develop and bring new products to market or succeed in selling them into new customer applications in a timely and cost-effective manner.

Products or technologies developed by other companies may render our products or technologies obsolete or noncompetitive, and since we operate primarily in a narrower segment of the broader semiconductor industry, this may have a greater effect on us than it would if we were a broad-line semiconductor supplier with a wider range of product types and technologies. Many of our competitors are larger and more established international companies with greater engineering and research and development resources than us. Our failure to identify or capitalize on any fundamental shifts in technologies in our product markets, relative to our competitors, could harm our business, have a material adverse effect on our competitive position within our industry and harm our relationships with our customers. In addition, to remain competitive, we must continue to reduce package sizes, improve manufacturing costs and expand our sales. We may not be able to accomplish these goals, which would adversely affect our net sales, market share, operating results and financial condition.

We may be adversely affected by any disruption in our information technology systems, which could adversely affect our cash flows, operating results and financial condition.

Our operations are dependent upon our information technology systems, which encompass all of our major business functions. We rely upon such information technology systems to manage and replenish inventory, to fill and ship customer orders on a timely basis, to coordinate our sales activities across all of our products and services and to coordinate our administrative activities. A substantial disruption in our information technology systems for any prolonged time period (arising from, for example, system capacity limits from unexpected increases in our volume of business, outages or delays in our service) could result in delays in receiving inventory and supplies or filling customer orders and adversely affect our customer service and relationships. Our systems might be damaged or interrupted by natural or man-made events or by computer viruses, physical or electronic break-ins and similar disruptions affecting the Internet generally. There can be no assurance that such delays, problems, or costs will not have a material adverse effect on our cash flows, operating results and financial condition.

As our operations grow in both size and scope, we will continuously need to improve and upgrade our systems and infrastructure while maintaining the reliability and integrity of our systems and infrastructure. The expansion of our systems and infrastructure will require us to commit substantial financial, operational and technical resources before the volume of our business increases, with no assurance that the volume of business will increase. In particular, we have upgraded our financial reporting system and are currently seeking to upgrade other information technology systems. These and any other upgrades to our systems and information technology, or new technology, now and in the future, will require that our management and resources be diverted from our core business to assist in compliance with those requirements. There can be no assurance that the time and resources our management will need to devote to these upgrades, service outages or delays due to the installation of any new or upgraded technology (and related customer issues), or the impact on the reliability of our data from any new or upgraded technology will not have a material adverse effect on our cash flows, operating results and financial condition.

A significant portion of our operations operate on a single Enterprise Resource Planning ("ERP") platform. To manage our international operations efficiently and effectively, we rely heavily on our ERP system, internal electronic information and communications systems and on systems or support services from third parties. Any of these systems are subject to electrical or telecommunications outages, computer hacking or other general system failure. It is also possible that future acquisitions will operate on different ERP systems and that we could face difficulties in integrating operational and accounting functions of new acquisitions. Difficulties in upgrading or expanding our ERP system or system-wide or local failures that affect our information processing could adversely affect our cash flows, operating results and financial condition and could result in material weaknesses or significant deficiencies in internal controls.

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, reduction in our intellectual property rights and a negative impact on our business, operating results and financial condition.

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 technology that is important to our business and have demanded, and may in the future demand, that we license their patents and technology. Any litigation to determine the validity of allegations that our products infringe or may infringe these rights, including claims arising through our contractual indemnification of our customers, or claims challenging the validity of our patents, regardless of its merit or resolution, could be costly and divert the efforts and attention of our management and technical personnel. We may not prevail in litigation given the complex technical issues and inherent uncertainties in intellectual property litigation. If litigation results in an adverse ruling, we could be required to:

- pay substantial damages for past, present and future use of the infringing technology;
- cease manufacture, use or sale of infringing products;
- discontinue the use of infringing technology;
- expend significant resources to develop non-infringing technology;
- pay substantial damages to our customers or end-users to discontinue use or replace infringing technology with non-infringing technology;
- license technology from the third party claiming infringement, which license may not be available on commercially reasonable terms, or at all; or
- relinquish intellectual property rights associated with one or more of our patent claims, if such claims are held invalid or otherwise unenforceable.

We depend on third-party suppliers for timely deliveries of raw materials, manufacturing services, product and process development, parts and equipment, as well as finished products from other manufacturers, and our reputation with customers, operating results and financial condition could be adversely affected if we are unable to obtain adequate supplies in a timely manner.

Our manufacturing operations depend upon obtaining adequate supplies of raw materials, manufacturing services, product and process development, parts and equipment on a timely basis from third parties. In some instances, a supplier may be our sole-source supplier. Our operating results could be adversely affected if we are unable to obtain adequate supplies of raw materials, manufacturing services, product and process development, parts and equipment in a timely manner or if the costs charged to us were to increase significantly. Our business could also be adversely affected if there is a significant degradation in the quality of raw materials used in our products, or if the raw materials give rise to compatibility or performance issues in our products, any of which could lead to an increase in customer returns or product warranty claims. Although we maintain rigorous quality control systems, errors or defects may arise from a supplied raw material and be beyond our detection or control. In addition, we may be subject to quality claims from customers who purchased goods from companies before we acquired those companies. Any interruption in, or change in quality of, the supply of raw materials, manufacturing services, product and process development, parts or equipment needed to manufacture our products could adversely affect our reputation with customers, operating results and financial condition.

In addition, we sell finished products from other manufacturers. Our business could also be adversely affected if there are quality problems with the finished products we sell. From time to time, various suppliers may extend lead-times, limit supplies or increase prices due to capacity constraints or other factors. We have no long-term purchase contracts with any of these manufacturers and, therefore, have no contractual assurances of continued supply, pricing or access to finished products that we sell, and any such manufacturer could discontinue supplying to us at any time. Additionally, some of our suppliers of finished products or wafers compete directly with us and may, in the future, choose not to supply products to us.

If we do not succeed in continuing to vertically integrate our business, we will not realize the cost and other efficiencies we anticipate, which could adversely affect our ability to compete, our operating results and financial condition.

We are continuing to vertically integrate our business. Key elements of this strategy include continuing to expand our sales organization, manufacturing capacity, wafer foundry and research and development capability and expand our marketing, product development, package development and assembly and test operations in company-owned facilities or through the acquisition of established contractors. There are certain risks associated with our vertical integration strategy, including:

- difficulties associated with owning a manufacturing business, including, but not limited to, the maintenance and management of manufacturing facilities, equipment, employees and inventories and limitations on the flexibility of controlling overhead;
- difficulties in continuing expansion of our operations in Asia and Europe, because of the distance from our U.S. headquarters and differing regulatory and cultural environments;
- the need for skills and techniques that are outside our traditional core expertise;
- less flexibility in shifting manufacturing or supply sources from one region to another;
- even when independent suppliers offer lower prices, we may continue to source wafers from our captive manufacturing facilities, which may result in us having higher costs than our competitors;
- difficulties developing and implementing a successful research and development team; and
- difficulties developing, protecting, and gaining market acceptance of, our proprietary technology.

The risks of becoming a fully integrated manufacturer are amplified in an industry-wide slowdown because of the fixed costs associated with manufacturing facilities. In addition, we may not realize the cost, operating and other efficiencies that we expect from continued vertical integration. If we fail to successfully vertically integrate our business, our ability to compete, profit margins, operating results and financial condition may suffer.

Part of our growth strategy involves identifying and acquiring companies. We may be unable to identify suitable acquisition candidates or consummate desired acquisitions and, if we do make any acquisitions, we may be unable to successfully integrate any acquired companies with our operations, which could adversely affect our business, operating results and financial condition.

A significant part of our growth strategy involves acquiring companies. For example, (i) in 2000, we acquired FabTech, Inc., a wafer fabrication company, in order to have our own wafer manufacturing capabilities, (ii) in 2006, we acquired Anachip Corp. as an entry into the analog market, (iii) in 2006, we acquired the net operating assets of APD Semiconductor, Inc., (iv) in 2008, we acquired Zetex plc., (v) in 2012, we acquired over 50% of the outstanding common stock of Eris Technology Corporation, (vi) also in 2012, we acquired Power Analog Microelectronics, Inc., (vii) in 2013, we acquired BCD Semiconductor Manufacturing Limited and (viii) in 2015, we acquired Pericom Semiconductor Corporation. Also, in February 2019 we announced the proposed acquisition of Texas Instruments' 200mm wafer fabrication facility and operations located in Greenock, Scotland, which is expected to close by the end of the first quarter of 2019. In addition, from time to time, we may be in various stages of discussions with potential acquisition targets as we intend to continue to expand and diversify our operations by making further acquisitions. However, we may be unsuccessful in identifying suitable acquisition candidates, or we may be unable to consummate a desired acquisition. To the extent we do make acquisitions, if we are unsuccessful in integrating these companies or their operations or product lines with our operations, or if integration is more difficult than anticipated, we may experience disruptions that could have a material adverse effect on our business, operating results and financial condition. In addition, we may not realize all of the benefits we anticipate from any such acquisitions. Some of the risks that may affect our ability to integrate or realize any anticipated benefits from acquisitions that we may make include those associated with:

- unexpected losses of key employees or customers of the acquired company;
- delays in obtaining customer qualification of acquired facilities;
- bringing the acquired company’s standards, processes, procedures and controls into conformance with our operations;
- coordinating our new product and process development;
- hiring additional management and other critical personnel;
- increasing the scope, geographic diversity and complexity of our operations;
- difficulties in consolidating facilities and transferring processes and know-how;
- difficulties in reducing costs of the acquired entity’s business;
- diversion of management’s attention from the management of our business; and

- adverse effects on existing business relationships with customers.

We are subject to litigation risks, including securities class action litigation and intellectual property litigation, which may be costly to defend and the outcome of which is uncertain and could adversely affect our business and financial condition.

All industries, including the semiconductor industry, are subject to legal claims, with and without merit, including securities class action litigation that may be particularly costly and which may divert the attention of our management and our resources in general. We are involved in a variety of legal matters, most of which we consider either routine matters that arise in the normal course of business or immaterial for our aggregate business operations. These routine matters typically fall into broad categories such as those involving suppliers and customers, employment and labor, and intellectual property. We believe it is unlikely that the final outcome of these legal claims will have a material adverse effect on our financial position, operating results or cash flows. However, defense and settlement costs can be substantial, even with respect to claims that we believe have no merit. Due to the inherent uncertainty of the litigation process, the resolution of any particular legal claim or proceeding could adversely affect our business, operating results and financial condition.

From time to time, we have been, or may in the future be, involved in securities litigation or litigation arising from our acquisitions. We can provide no assurance as to the outcome of any such litigation matter in which we are a party. These types of matters are costly to defend and even if resolved in our favor, could have a material adverse effect on our business, financial condition, operating results and cash flow. Such litigation could also substantially divert the attention of our management and our resources in general. Uncertainties resulting from the initiation and continuation of securities or other litigation could harm our ability to obtain credit and financing for our operations and to compete in the marketplace. Because the price of our Common Stock has been, and may continue to be, volatile, we can provide no assurance that securities litigation will not be filed against us in the future. In addition, we can provide no assurance that our past or future acquisitions will not subject us to additional litigation. See Part I, Item 3 “Legal Proceedings” of this Annual Report for more information on our legal proceedings.

We are subject to many environmental laws and regulations that could result in significant expenses and could adversely affect our business, operating results and financial condition.

We are subject to a variety of U.S. federal, state, local and foreign governmental laws, rules and regulations related to the use, storage, handling, discharge or disposal of certain toxic, volatile or otherwise hazardous chemicals used in manufacturing our products throughout the world. Some of these regulations in the U.S. include the Federal Clean Water Act, Clean Air Act, Resource Conservation and Recovery Act, Comprehensive Environmental Response, Compensation, and Liability Act and similar state statutes and regulations. Any of these regulations could require us to acquire equipment or to incur substantial other expenses to comply with environmental regulations. If we were to incur additional expenses related to any potential or alleged violation or environmental regulations, our product costs could significantly increase, materially affecting our business, financial condition and operating results. Any failure to comply with present or future environmental laws, rules and regulations could result in fines, suspension of production or cessation of operations, any of which could have a material adverse effect on our business, operating results and financial condition. Our operations affected by such requirements include, among others: the disposal of wastewater containing residues from our manufacturing operations through publicly operated treatment works or sewer systems, and which may be subject to volume and chemical discharge limits and may also require discharge permits; and the use, storage and disposal of materials that may be classified as toxic or hazardous. Any of these may result in, or may have resulted in, environmental conditions for which we could be liable. For example, as described under Part I., Item 1. “Business, Environmental Matters,” in this Annual Report, in August 2018, the Company received a letter from the EPA concerning potential violations under the Clean Air Act Amendments of 1990, which do not involve any actual discharge of materials into the environment, arising as a result of an inspection at KFAB. In February 2019, we fully resolved this matter with the EPA and paid approximately $0.2 million. During 2018 we received notice from the Shanghai Municipal Bureau of Ecology and Environment of possible environmental law violations at BCD. The notice stated that we installed and used environmental protection devices at our plant, prior to final approval from the authorities. We paid approximately $0.2 million during the fourth quarter of 2018 to settle the matter.

Some environmental laws impose liability, sometimes without fault, for investigating or cleaning up contamination on, or emanating from, our currently or formerly owned, leased or operated properties, as well as for damages to property or natural resources and for personal injury arising out of such contamination. Such liability may also be joint and several, meaning that we could be held responsible for more than our share of the liability involved, or even the entire liability. In addition, the presence of environmental contamination could also interfere with ongoing operations or adversely affect our ability to sell or lease our properties. Environmental requirements may also limit our ability to identify suitable sites for new or expanded plants. Discovery of contamination for which we are responsible, the enactment of new laws and regulations, or changes in how existing requirements are enforced, could require us to incur additional costs for compliance or subject us to unexpected financial liabilities.

Our products, or products we purchase from third parties for resale, may be found to be defective and, as a result, warranty claims and product liability claims may be asserted against us and we may not have recourse against our suppliers, which may harm our business, reputation with our customers, operating results and financial condition.

Our products, or products we purchase from third parties for resale, are typically sold at prices that are an insignificant portion of the overall value of the equipment or other goods in which they are incorporated. For example, our products that are incorporated into a television may be sold for several cents, whereas the television maker might sell the television for several hundred dollars. Although we maintain rigorous quality control systems, we receive warranty claims and product liability claims for some of these products that are defective, or that do not perform to published specifications. Since a defect or failure in our products could give rise to failures in the end-products that incorporate them (and consequential claims for damages against our customers from their customers), we may face claims for damages that are disproportionate to the net sales and profits we receive from the products involved and we may not have recourse against our suppliers. In addition, our ability to reduce such liabilities may be limited by the laws or the customary business practices of the countries where we do business. Even in cases where we do not believe we have legal liability for such claims, we may choose to pay for them to retain a customer’s business or goodwill or to settle claims to avoid protracted litigation. Our operating results and business could be adversely affected as a result of a significant quality or performance issue in our products, if we are required or choose to pay for the damages that result. We may choose not to carry liability insurance, may not have sufficient insurance coverage, or may not have sufficient resources, to satisfy all possible warranty claims and product liability claims. In addition, any perception that our products are defective would likely result in reduced sales of our products, loss of customers and harm to our business, reputation, operating results and financial condition.

We may fail to attract or retain the qualified technical, sales, marketing, finance and management/executive personnel required to operate our business successfully, which could adversely affect our business, operating results and financial condition.

Our future success depends, in part, upon our ability to attract and retain highly qualified technical, sales, marketing, finance and managerial personnel. Personnel with the necessary expertise are scarce and competition for personnel with these skills is intense. We may not be able to retain existing key technical, sales, marketing, finance and managerial employees or be successful in attracting, assimilating or retaining other highly qualified technical, sales, marketing, finance and managerial/executive personnel in the future. For example, we have faced, and continue to face, intense competition for qualified technical and other personnel in China, where our assembly and test facilities are located. A number of U.S. and multi-national corporations, both in the semiconductor industry and in other industries, have recently established and are continuing to establish factories and plants in China, and the competition for qualified personnel has increased significantly as a result. If we are unable to retain existing key employees or are unsuccessful in attracting new highly qualified employees, our business, operating results and financial condition could be materially and adversely affected.

We may not be able to achieve future growth, and any such growth may place a strain on our management and on our systems and resources, which could adversely affect our business, operating results and financial condition.

Our ability to successfully grow our business requires effective planning and management. Our past growth, and our targeted future growth, may place a significant strain on our management and on our systems and resources, including our financial and managerial controls, reporting systems and procedures. In addition, we will need to continue to train and manage our workforce worldwide. If we are unable to effectively plan and manage our growth effectively, our business and prospects will be harmed and we will not be able to maintain our profitable growth, which could adversely affect our business, operating results and financial condition.

Obsolete inventories as a result of changes in demand for our products and change in life cycles of our products could adversely affect our business, operating results and financial condition.

The life cycles of some of our products depend heavily upon the life cycles of the end-products into which our products are designed. End-market products with short life cycles require us to manage closely our production and inventory levels. Inventory may also become obsolete because of adverse changes in end-market demand. We may in the future be adversely affected by obsolete or excess inventories, which may result from unanticipated changes in the estimated total demand for our products or the estimated life cycles of the end-products into which our products are designed. In addition, some customers restrict how far back the date of manufacture for our products can be and certain customers may stop ordering products from us and go out of business due to adverse economic conditions; therefore, some of our product inventory may become obsolete and, thus, adversely affect our business, operating results and financial condition.

If our direct sales customers do not design our products into their applications, our net sales may be adversely affected.

We expect an increasingly significant portion of net sales will come from products we design specifically for our customers. However, we may be unable to achieve these design wins. In addition, a design win from a customer does not guarantee future sales to that customer. Without design wins from direct sales customers, we would only be able to sell our products to these direct sales customers as a second source, which usually means we are only able to sell a limited amount of product to them. Once a direct sales customer designs another supplier's semiconductors into one of its product platforms, it is more difficult for us to achieve future design wins with that direct sales customer's product platform because changing suppliers involves significant cost, time, effort and risk to a direct sales customer. Achieving a design win with a customer does not ensure that we will receive significant net sales from that customer, and we may be unable to convert design wins into actual sales. Even after a design win, the customer is not obligated to purchase our products and can choose at any time to stop using our products, if, for example, its own products are not commercially successful or if the customer can obtain a superior product or the product at a lower cost from one of our competitors.

We are subject to interest rate risk that could have an adverse effect on our cost of working capital and interest expenses, which could adversely affect our business, operating results and financial condition.

We currently have a U.S. banking credit facility under which as of December 31, 2018, we had a remaining principal balance of $124.5 million under a term loan, and had drawn $85.5 million on a $250.0 million revolver ($164.5 million of which remained available as of December 31, 2018), with the possibility of an additional $200.0 million of borrowings. In addition to our U.S. banking credit facility we have $10.3 million outstanding under foreign credit facilities. See "Liquidity and Capital Resources" below and Note 7 of "Notes to Consolidated Financial Statements" of this Annual Report for additional information. A rise in interest rates could have an adverse impact upon our cost of working capital and our interest expense. Based on our debt balances at December, 31, 2018, an increase or decrease in interest rates by 1.0% for the year on our credit facilities would increase or decrease our annual interest rate expense by less than $1.0 million, net of the amounts realized from our interest rate swaps.

Our hedging strategies may not be successful in mitigating our risks associated with interest rates or foreign exchange exposure or our counterparties might not perform as agreed.

We use interest rate swaps and foreign exchange forward contracts to provide a level of protection against interest rate risks and foreign exchange exposure, but no hedging strategy can protect us completely. The nature and timing of hedging transactions influence the effectiveness of these strategies. Poorly designed strategies, improperly executed and documented transactions or inaccurate assumptions could actually increase our risks and losses. In addition, hedging strategies involve transaction and other costs. The hedging strategies and the derivatives that we use may not be able to adequately offset the risks of interest rate volatility and our hedging transactions may result in or magnify losses. Furthermore, interest rate and foreign exchange derivatives may not be available on favorable terms or at all, particularly during economic downturns. Any of the foregoing risks could adversely affect our business, financial condition and results of operations. We are exposed to counterparty credit risk in the event of non-performance by counterparties to the interest rate swaps and foreign exchange contracts.

We may have a significant amount of debt with various financial institutions worldwide. Any indebtedness could adversely affect our business, operating results, financial condition and our ability to meet payment obligations under such debt.

We may have a significant amount of debt and substantial debt service requirements on our borrowings, including our credit facilities with various financial institutions worldwide. As of December 31, 2018, $210.0 million was outstanding under our U.S. banking credit facility. In addition, we have short-term foreign credit facilities with borrowing capacities of approximately $123.2 million with an unused amount of $112.5 million.

A significant amount of debt could have significant consequences on our future operations, including:

- making it more difficult for us to meet our payment and other obligations under our outstanding debt;
- resulting in an event of default if we fail to comply with the financial and other restrictive covenants contained in our debt agreements, which event of default could result in all of our debt becoming immediately due and payable and, in the case of an event of default under our secured debt could permit the lenders to foreclose on our assets securing that debt;
- reducing the availability of our cash flow to fund working capital, capital expenditures, acquisitions and other general corporate purposes, and limiting our ability to obtain additional financing for these purposes;
- subjecting us to the risk of increased sensitivity to interest rate increases on our indebtedness with variable interest rates;
- limiting our flexibility in planning for, or reacting to, and increasing our vulnerability to, changes in our business, the industry in which we operate and the general economy; and
- placing us at a competitive disadvantage compared to our competitors that have less debt or are less leveraged.

Any of the above-listed factors could have an adverse effect on our business, operating results, financial condition and our ability to meet our payment obligations under our debt.

Our U.S. Credit Facility and our foreign credit lines bear interest at LIBOR or similar indices plus a specified margin. On July 27, 2017, the Financial Conduct Authority (the authority that regulates LIBOR) announced that it intends to stop compelling banks to submit rates for the calculation of LIBOR after 2021, and it is unclear whether new methods of calculating LIBOR will be established. If LIBOR ceases to exist after 2021, and if the U.S. Credit Facility is not amended to incorporate an alternate benchmark rate to replace LIBOR once such an alternate benchmark rate has been identified, the interest rates under the U.S. Credit Facility will be based on the Base Rate (as defined in the U.S. Credit Facility), which may result in higher interest rates. The U.S. Credit Facility provides a streamlined mechanism for amendment to its interest rate provisions in the event LIBOR becomes unavailable that would permit substitution of an alternate benchmark rate by agreement between the Company and the Administrative Agent, subject only to rejection by a majority of the lenders under the U.S. Credit Facility. However, such an amendment would depend upon the identification of an alternate benchmark rate, and agreement between the Company and the Administrative Agent on the alternate benchmark rate and on terms for incorporation of that alternate benchmark rate into the U.S. Credit Facility. If an alternate benchmark rate is not agreed under the U.S. Credit Facility and/or if an alternate benchmark rate is not available under our foreign credit lines, interest rates governing such indebtedness may increase. To the extent that these interest rates increase, our interest expense will increase, which could adversely affect our financial condition, operating results and cash flows.

Restrictions in our credit facilities may limit our business and financial activities, including our ability to obtain additional capital in the future.

Our U.S. banking credit facility contains covenants imposing various restrictions on our business and financial activities. These restrictions may affect our ability to operate our business and undertake certain financial activities and may limit our ability to take advantage of potential business or financial opportunities as they arise. The restrictions these covenants place on us include limitations on our ability to incur liens, incur indebtedness, make investments, dissolve or merge or consolidate with or into another entity, dispose of certain property, make restricted payments (including dividends and share repurchases), issue or sell equity interests, engage in other different material lines of business, conduct related party transactions, enter into certain burdensome contractual obligations and use proceeds from any credit facility to purchase or carry margin stock or to extend credit to others for the same purpose. Our U.S. banking credit facility also requires us to meet certain financial ratios, including a minimum consolidated fixed charge coverage ratio and a maximum consolidated leverage ratio.

Our ability to comply with the U.S. banking credit facility may be affected by events beyond our control, including prevailing economic, financial and industry conditions, and are subject to the risks stated in this section of the Annual Report. The breach of any of these covenants or restrictions could result in an event of default under the facility. An event of default under the facility would permit the lenders under the facility to declare all amounts owed under such facility to be immediately due and payable in full. Upon acceleration of our indebtedness, we may be unable to repay the accelerated amount of principal and interest on the credit facilities that would then be due. See "Management's Discussion and Analysis of Financial Condition and Results of Operations – Financial Condition-Debt instruments" in Part II, Item 7 of this Annual Report for additional information.

Our business benefits from certain Chinese government incentives. Expiration of, or changes to, these incentives could adversely affect our operating results and financial condition.

The Chinese government has provided various incentives to technology companies, including our manufacturing facilities located in Shanghai and Chengdu, China, in order to encourage development of the high-tech industry. These incentives include reduced tax rates and other measures. As a result, we are entitled to a preferential enterprise income tax rate of 15% so long as our manufacturing facilities continue to maintain their High and New Technology Enterprise ("HNTE") status. One of our Shanghai manufacturing facilities has been approved for HNTE status for the tax years 2018-2020. In addition, two of our wafer fabrication facilities and one research and development facility located in Shanghai were approved for HNTE status for the tax years 2017-2019. HNTE qualification requires, but is not limited to, metrics based on China research and development expenditures as well as research and development headcount and overall college-degreed headcount. Any prior years that have already been approved are subject to audit requirements. If we were to no longer meet the HNTE requirements, our statutory tax rate for our approved Shanghai assembly and test facility and wafer fabrication facility would increase to 25% for any period in which an audit shows we were not compliant, which could adversely affect our operating results and financial condition.

In connection with our joint venture in Chengdu, China, with Ya Guang, we have qualified for tax incentives offered in the Go West Initiative (“Go West”), where companies are entitled to a preferential income tax rate of 15% for doing business in western China. If we were to no longer meet the Go West requirements, our statutory tax rate for this joint venture would increase to 25%, which could adversely affect our operating results and financial condition since we own 98% of this joint venture entity.

The impact of our HNTE and Go West status, collectively called tax holidays, decreased our tax expense by approximately $1.6 million, $3.7 million and $7.3 million for the years ended December 31, 2018, 2017 and 2016, respectively. The benefit of the tax holidays on basic and diluted earnings per share for the twelve months ended December 31, 2018, 2017 and 2016 was approximately $0.03, $0.08 and $0.15, respectively.

We operate a global business through numerous foreign subsidiaries, and there is a risk that tax authorities will challenge our transfer pricing methodologies or legal entity structures, which could adversely affect our operating results and financial condition.

We conduct operations worldwide through our foreign subsidiaries and are, therefore, subject to complex transfer pricing regulations in the jurisdictions in which we operate. Transfer pricing regulations generally require that, for tax purposes, transactions between related parties be priced on a basis that would be comparable to an arm's length transaction between unrelated parties. There is uncertainty and inherent subjectivity in complying with these rules. To the extent that any foreign tax authorities disagree with our transfer pricing policies, we could become subject to significant tax liabilities and penalties. Based on our current knowledge and probability assessment of potential outcomes, we believe that we have provided for all tax exposures. However, the ultimate outcome of a tax examination could differ materially from our provisions and could have a material adverse effect on our business, financial condition, operating results and cash flows.

Our legal organizational structure could result in unanticipated unfavorable tax or other consequences which could have a material adverse effect on our financial condition and operational results. In some countries, we maintain multiple entities for tax or other purposes. Changes in tax laws, regulations, future jurisdictional profitability of us and our subsidiaries, and related regulatory interpretations in the countries in which we operate may impact the taxes we pay or tax provision we record, which could have a material adverse effect on our operating results. In addition, any challenges to how our entities are structured or realigned or their business purpose by taxing authorities could result in us becoming subject to significant tax liabilities and penalties which could have a material adverse effect on our business, financial condition, operating results and cash flows.

The value of our benefit plan assets and liabilities is based on estimates and assumptions, which may prove inaccurate and the actual amount of expenses recorded in the consolidated financial statements could differ materially from the assumptions used.

Certain of our employees in the U.K. participate in a company-sponsored defined benefit plan, which is closed to new entrants and is frozen with respect to future benefit accruals. The retirement benefit is based on the final average compensation and service of each eligible employee. In accounting for these plans, we are required to make actuarial assumptions that are used to calculate the earning value of the related assets, where applicable, and liabilities and the amount of expenses to be recorded in our consolidated financial statements. Assumptions include, but are not limited to, the expected return on plan assets, discount rates, and mortality rates. While we believe the underlying assumptions under the projected unit credit method are appropriate, the carrying value of the related assets and liabilities and the actual amount of expenses recorded in the consolidated financial statements could differ materially from the assumptions used.

Changes in actuarial assumptions for our defined benefit plan could increase the volatility of the plan's asset value, require us to increase cash contributions to the plan and have a negative impact on our cash flows, operating results and financial condition.

The assets of our defined benefit pension plan (the "plan") in the U.K. provide pensions to employees and former employees. The plan's assets are invested in a diverse range of listed and unlisted securities, including corporate bonds and mutual funds and are determined, from time to time, based on their fair market value. The plan's obligation to pay pensions is estimated by using actuarial assumptions. To the extent that the plan's assets are not sufficient to meet the estimated amount of the plan's obligations, further funding of the plan will be required by the plan's sponsoring employers, Diodes Zetex Limited and Diodes Zetex Semiconductors Limited, over an agreed upon deficit recovery period.

As of December 31, 2018, the benefit obligation of the plan was approximately $141.1 million and the total assets in such plan were approximately $117.2 million. Therefore, the plan was underfunded by approximately $23.9 million. The difference between plan obligations and assets, or the funded status of the plan, is a significant factor in determining the net periodic benefit costs of the plan and the ongoing funding requirements of the plan.

Any fluctuations in the U.K. equity markets and bond markets or changes in several key actuarial assumptions, including, but not limited to, changes in discount rate, estimated return on the plan and mortality rates, can (i) affect the level of plan funding, (ii) cause volatility in the net periodic pension cost, and (iii) increase our future funding requirements. In the event that actual results differ from the actuarial assumptions or actuarial assumptions are changed, the funding status of the plan may change. Any deficiency in the funding of the plan could result in additional charges to equity and an increase in future plan expense and cash contribution. A significant increase in our funding requirements could have a negative impact on our cash flows, operating results and financial condition.

During the first quarter of 2015, we agreed to a payment plan with the trustees of the defined benefit plan, under which we would make annual contributions each year through 2030, of approximately 2 million British Pounds ("GBP") (approximately $2.6 million based on a GBP:USD exchange rate of 1.27, effective at December 31, 2018). The annual contributions were expected to meet the deficit disclosed in the plan as of April 5, 2013, by December 31, 2030. The trustees are required to review the funding position every three years, and a further review was carried out as of April 5, 2016 and the next review scheduled for April 2019. The outcome of the review, as agreed to with the trustees during the first quarter of 2017, was that contributions would continue at the existing level, up to December 31, 2029. If we fail to reach an agreement with the trustees, as we are required to do every three years, the Pension Regulator in the U.K. could impose contributions on Diodes Zetex Limited or Diodes Zetex Semiconductors Limited, or in limited circumstances could require financial support to be provided to the plan from entities connected or associated with Diodes Zetex Limited or Diodes Zetex Semiconductors Limited. Furthermore, Diodes Zetex Limited and Diodes Zetex Semiconductors Limited remain ultimately liable to fully fund the plan regardless of any failure to agree upon future contributions in respect of a particular actuarial valuation, i.e., if either the plan or those companies were wound up, a debt equal to each company's share of the entire outstanding deficit at that time (calculated on a statutory conservative basis) would be owed by the relevant company. This could have a material adverse effect on our cash flows, operating results and financial condition.

Certain of our customers and suppliers require us to comply with their codes of conduct, which may include certain restrictions that may substantially increase our cost of doing business as well as have an adverse effect on our operating efficiencies, operating results and financial condition.

Certain of our customers and suppliers require us to agree to comply with the Electronic Industry Code of Conduct ("EICC") or their own codes of conduct, which may include detailed provisions on labor, human rights, health and safety, environment, corporate ethics and management systems. Certain of these provisions are not requirements under the laws of the countries in which we operate and may be burdensome to comply with on a regular basis. Moreover, new provisions may be added or material changes may be made to any these codes of conduct, and we may have to promptly implement such new provisions or changes, which may substantially further increase the cost of our business, be burdensome to implement and adversely affect our operational efficiencies and operating results. If we violate any such codes of conduct, we may lose further business with the customer or supplier and, in addition, we may be subject to fines from the customer or supplier. While we believe that we are currently in compliance with our customers and suppliers' codes of conduct, there can be no assurance that, from time to time, if any one of our customers and suppliers audits our compliance with such code of conduct, we would be found to be in full compliance. A loss of business from these customers or suppliers could have a material adverse effect on our business, operating results and financial condition.

Compliance with government regulations and customer demands regarding the use of "conflict minerals" may result in increased costs and may have a negative impact on our business, operating results and financial condition.

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 imposes new disclosure requirements regarding the use of certain minerals, which are mined from the Democratic Republic of Congo and adjoining countries, known as conflict minerals. These requirements affect the pricing, sourcing and availability of minerals used in the manufacture of semiconductor devices (including our products). We are incurring additional costs associated with complying with the disclosure requirements, such as costs related to determining the source of any conflict minerals used in our products. Our supply chain is complex, and we may be unable to verify the origins for all metals used in our products. Customers may demand that the products they purchase be free of conflict minerals. Therefore, we may encounter challenges with our customers and stockholders if we are unable to certify that our products are conflict free. This requirement could affect the sourcing and availability of products we purchase from suppliers. This may reduce the number of suppliers that may be able to provide conflict-free products, and may affect our ability to obtain products in sufficient quantities to meet customer demand or at competitive prices.

There are risks associated with previous and future acquisitions. We may ultimately not be successful in overcoming these risks or any other problems encountered in connection with acquisitions.

The risks commonly encountered in acquisitions of companies include, among other things, higher than anticipated acquisition costs and expenses, the difficulty and expense in integrating the operations and personnel of the companies, the difficulty of bringing standards, procedures and controls, including disclosure controls and procedures and internal control over financial reporting, into conformance with our operations, the ability to coordinate our new products and process development, the ability to hire additional management and other critical personnel, the ability to increase the scope, geographic diversity and complexity of our operations, difficulties in consolidating facilities and transferring processes and know-how, difficulties in reducing costs, prolonged diversion of our management’s attention from the management of our business, the ability to clearly define our present and future strategies, the loss of key employees and customers as a result of changes in management and any geographic distances may make integration slower and more challenging. We may ultimately not be successful in overcoming these risks or any other problems encountered in connection with acquisitions.

In addition, any acquisition may cause large one-time expenses as well as create goodwill and other intangible assets that may result in significant asset impairment charges in the future.

If we fail to maintain an effective system of internal controls or discover material weaknesses in our internal control over financial reporting, we may not be able to report our financial results accurately or detect fraud, which could harm our business and the trading price of our Common Stock.

Effective internal controls are necessary for us to produce reliable financial reports and are important in our effort to prevent financial fraud. We are required to periodically evaluate the effectiveness of the design and operation of our internal controls. These evaluations may result in the conclusion that enhancements, modifications or changes to our internal controls are necessary or desirable. While management evaluates the effectiveness of our internal controls on a regular basis, these controls may not always be effective. There are inherent limitations on the effectiveness of internal controls, including collusion, management override, and failure of human judgment. Because of this, control procedures are designed to reduce rather than eliminate business risks. If we fail to maintain an effective system of internal controls or if management or our independent registered public accounting firm were to discover material weaknesses in our internal controls, we may be unable to produce reliable financial reports or prevent fraud, which could harm our financial condition and operating results, and could result in a loss of investor confidence and a decline in our stock price.

Terrorist attacks, or threats or occurrences of other terrorist activities, whether in the U.S. or internationally, may affect the markets in which our Common Stock trades, the markets in which we operate and our operating results and financial condition.

Terrorist attacks, or threats or occurrences of other terrorist or related activities, whether in the U.S. or internationally, may affect the markets in which our Common Stock trades, the markets in which we operate and our profitability. Future terrorist or related activities could affect our domestic and international sales, disrupt our supply chains and impair our ability to produce and deliver our products. Such activities could affect our physical facilities or those of our suppliers or customers. Such terrorist attacks could cause seaports or airports, to or through which we ship, to be shut down, thereby preventing the delivery of raw materials and finished goods to or from our manufacturing facilities in China, Taiwan and Germany and our wafer fabrication facilities in China, the U.S. and the U.K., or to our regional sales offices. Due to the broad and uncertain effects that terrorist attacks have had on financial and economic markets generally, we cannot provide any estimate of how these activities might negatively affect our future operating results and financial condition.

System security risks, data protection breaches, cyber-attacks and other related cybersecurity issues could disrupt our internal operations, and any such disruption could reduce our expected net sales, increase our expenses, damage our reputation and adversely affect our stock price.

Experienced computer programmers and hackers may be able to penetrate our security controls and misappropriate or compromise our confidential information or that of third parties, create system disruptions, compromise physical assets, intellectual property, or misappropriate monetary assets or cause shutdowns. Computer programmers and hackers also may be able to develop and deploy viruses, worms and other malicious software programs that attack our websites or exploit any security vulnerabilities of our websites and information systems. In 2016 the Company became aware of an attempted cyber-intrusion, as part of our third-party network penetration test. In response to this attempted cyber-intrusion we engaged an information technology security company to assess the scope of the attempted intrusion and to assist in designing security measures to strengthen our protection against such attacks. We completed the assessment and have enhanced and continue to enhance our security measures. These efforts continue. At this time we have no reason to believe the cyber-intruder obtained any confidential or propriety information. The costs to us to eliminate or alleviate cyber or other security problems, bugs, viruses, worms, malicious software programs and security vulnerabilities could be significant, and our ongoing efforts to prevent and address these problems may not be successful. Specific measures we have taken are focused on identifying and protecting against advanced and emerging security threats thereby leveraging intelligence from an extensive global data security network. In addition, we strengthened our global network access control to further prevent unauthorized or non-compliant devices from accessing our internal networks.

The costs to the Company to eliminate or alleviate cyber or other security problems, bugs, viruses, worms, malicious software programs and security vulnerabilities could be significant, and our ongoing efforts to prevent and address these problems may not be successful. Such problems could result in interruptions, delays, cessation of service, extortionate demands to decrypt files and loss of existing or potential customers that may impede our sales, manufacturing, distribution or other critical functions and materially adversely affect our operating results, stock price and reputation.

We manage and store various proprietary information and sensitive or confidential data relating to our business and third party business. Breaches of our security measures or the accidental loss, inadvertent disclosure or unapproved dissemination of proprietary information or sensitive or confidential data about us or our partners or customers, including the potential loss, encryption or disclosure of such information or data or the unauthorized transfer of monetary assets as a result of fraud, trickery or other forms of deception, could expose us, our partners and customers or the individuals affected to a risk of loss or misuse of this information, extortionate demands to decrypt files, result in litigation and potential liability for us, damage our brand and reputation or otherwise harm our business. In addition, the cost and operational consequences of implementing further data protection measures could be significant. Delayed sales, significant costs or lost customers resulting from these system security risks, data protection breaches, cyber-attacks and other related cyber-security issues could materially adversely affect our operating results, stock price and reputation.

RISKS RELATED TO OUR INTERNATIONAL OPERATIONS

Our international operations subject us to risks that could adversely affect our operations.

We expect net sales from foreign markets to continue to represent a significant portion of our total net sales. In addition, the majority of our manufacturing facilities are located in China. In each of the years ended 2018, 2017 and 2016, our Asian and European subsidiaries represented over 85% of our net sales. There are risks inherent in doing business internationally, and any or all of the following factors could cause harm to our business:

- changes in, or impositions of, legislative or regulatory requirements, including income tax or value added tax laws in the U.S. and in the countries in which we manufacture or sell our products;
- compliance with trade or other laws in a variety of jurisdictions;
- trade restrictions, transportation delays, work stoppages, and economic and political instability;
- changes in import/export regulations, tariffs and freight rates;
- difficulties in collecting receivables and enforcing contracts;
- currency exchange rate fluctuations;
- restrictions on the transfer of funds from foreign subsidiaries to the U.S.;
- the possibility of international conflict, particularly between or among China, the U.K., Germany, Taiwan and the U.S.;
- legal, regulatory, political and cultural differences among the countries in which we do business;
- longer customer payment terms; and
- changes in U.S. or foreign tax regulations.

We have significant operations and assets in China, the U.K., Germany, Hong Kong and Taiwan and, as a result, will be subject to risks inherent in doing business in those jurisdictions, which may adversely affect our financial performance and operating results.

We have a significant portion of our assets in mainland China, U.K., Germany, Hong Kong and Taiwan. In addition, in February 2019, we announced the proposed acquisition of Texas Instruments' 200mm wafer fabrication facility and operations located in Greenock, Scotland. Our ability to operate in these countries may be adversely affected by changes in those jurisdictions' laws and regulations, including those relating to taxation, including, but not limited to income tax and value added tax, import and export tariffs, environmental regulations, land use rights, property and other matters. In addition, our operating results and financial performance are subject to the economic and political situations. We believe that our operations are in compliance with all applicable legal and regulatory requirements. However, the central or local governments of these jurisdictions may impose new, stricter regulations or interpretations of existing regulations that would require additional expenditures and efforts on our part to ensure our compliance with such regulations or interpretations.

Changes in the political environment or government policies in those jurisdictions could result in revisions to laws or regulations or their interpretation and enforcement, increased taxation, restrictions on imports, import duties or currency revaluations. In addition, a significant destabilization of relations between or among China, the U.K., Germany, Hong Kong, Taiwan and the U.S. could result in restrictions or prohibitions on our operations or the sale of our products or the forfeiture of our assets in these jurisdictions. There can be no certainty as to the application of the laws and regulations of these jurisdictions in particular instances. Enforcement of existing laws or agreements may be sporadic and implementation and interpretation of laws inconsistent. Moreover, there is a high degree of fragmentation among regulatory authorities, resulting in uncertainties as to which authorities have jurisdiction over particular parties or transactions. The possibility of political conflict between these countries or with the U.S. could have an adverse impact upon our ability to transact business in these jurisdictions and to generate profits.

Significant uncertainties related to changes in governmental policies and participation in international trading partnerships or economic unions currently exist, and, depending upon how such uncertainties are resolved, the changes could have a material adverse effect on us.

Changes to existing trade agreements, such as the North American Free Trade Agreement, greater restrictions on international trade generally and significant increases in tariffs on goods imported into the United States, particularly from China, could materially adversely affect our business and operations. Changes in U.S. social, political, regulatory and economic conditions or in laws and policies governing foreign trade, manufacturing, development and investment in the territories and countries where we currently develop, manufacture and sell products, and any negative reactions towards the United States as a result of such changes, could adversely affect our business and operations. In addition, negative sentiments towards the U.S. among non-U.S. customers and among non-U.S. employees or prospective employees could adversely affect our international sales or the hiring and retention of qualified employees, respectively.

The United Kingdom referendum to exit the European Union has also created political and economic uncertainty, particularly in the U.K. and the European Union, and this uncertainty may last for years. Our business in the U.K. the European Union, and worldwide could be adversely affected during this period of uncertainty, and, depending upon developments following completion of the U.K. exit, may materially adversely affect our business and operations. Future events as a consequence of the U.K. exit, including stresses within the U.K. itself, may cause significant volatility in global financial markets, including global currency and debt markets, and result in a slowdown in economic activity in the U.K., Europe or globally, which could materially adversely affect our operating results and growth prospects. In addition, our business and operations could be materially adversely affected by new or revised trade agreements between countries in which we have operations or do business, including the U.S., the U.K., the European Union and China, as well as by the possible impositions of tariffs or trade or other regulatory barriers by any nation where we have operations or do business.

Tariffs or other restrictions imposed by the United States Trade Representative may affect our operations in the U.S. and may disrupt our activities in the U.S. and may have an adverse impact on our profitability and results of operations.

The U.S. government has recently imposed additional new or higher tariffs on specified products imported from China in response to what it characterizes as unfair trade practices. The U.S. government also proposed higher tariffs beginning on January 1, 2019. China responded by proposing new or higher tariffs on specified products imported from the United States. In December 2018, the U.S. government and Chinese government agreed to a 90-day truce on implementing the proposed tariffs.

Most of our products are manufactured in China and then a portion of those products are imported into the U.S. The impacts on us of the recently imposed tariffs are uncertain because of the dynamic nature of governmental actions and responses, as well as possible exemptions for certain products. If the U.S. and China are able to negotiate the issues to restore a mutually advantageous and fair trading regime, the increased tariffs could be eliminated, but given the uncertainties, there can be no assurance of whether, or when, this will be accomplished. We have taken actions, and may take additional steps, to mitigate those impacts and protect our competitive position in the marketplace. If we determine to pass some or all of these new tariff burdens on to our customers, the result may be a degradation of our competitive position and a loss of customers that would adversely affect our operating performance. It is not clear at this time what the ultimate outcome of these tariff actions and our mitigation efforts will be, but given the importance of our Chinese operations and related sales, and the impacts of existing and possible future restrictions with regard to transactions with Chinese entities, it is very possible that our operating results and/or financial condition may be adversely affected.

The U.K.'s referendum to exit from the European Union ("E.U.") will continue to have uncertain effects and could adversely impact our business, results of operations and financial condition.

On June 23, 2016, the U.K. voted to exit from the E.U. (commonly referred to as "Brexit"). The U.K. is currently scheduled to exit the E.U. on March 29, 2019. The impacts of the implementation of Brexit and the resulting relationship between the U.K. and the E.U. are uncertain for companies doing business both in the U.K. and the overall global economy. The U.K. vote impacted global markets, including various currencies, and resulted in a sharp decline in the value of the British Pound as compared to the U.S. dollar and other major currencies. The fluctuation of currency exchange rates may expose us to gains and losses on non-U.S. currency transactions. Volatility in the securities markets and in currency exchange rates may continue as the U.K. negotiates its exit from the E.U. While we have not experienced any material financial impact from Brexit on our business to date, we cannot predict its future implications. Any impact from Brexit on our business and operations over the long term will depend, in part, on the outcome of tariff, tax treaties, trade, regulatory, and other negotiations the U.K. conducts.

A slowdown in the Chinese economy could limit the growth in demand for electronic devices containing our products, which would have a material adverse effect on our business, operating results and prospects.

We believe that an increase in demand in China for electronic devices that include our products will be an important factor in our future growth. Continuing weakness in the Chinese economy could result in a decrease in demand for electronic devices containing our products and, thereby, materially and adversely affect our business, operating results and prospects.

Economic regulation in China could materially and adversely affect our business, operating results and prospects.

We have a significant portion of our manufacturing capacity in mainland China. In addition, in 2018 approximately 55% of our total sales were shipped to customers in China. In recent years, the Chinese economy has experienced periods of rapid expansion and wide fluctuations in the rate of inflation. In response to these factors, the Chinese government has, from time to time, adopted measures to regulate growth and contain inflation, including measures designed to restrict credit or control prices. Such actions in the future could increase the cost of doing business in China or decrease the demand for our products in China and, thereby, have a material adverse effect on our business, operating results and prospects.

We could be adversely affected by violations of the United States' Foreign Corrupt Practices Act, the U.K.'s Bribery Act 2010, China's anti-corruption campaign and similar worldwide anti-bribery laws.

The United States' Foreign Corrupt Practices Act ("FCPA"), the United Kingdom's Bribery Act 2010 (the "U.K. Bribery Act"), China's anti-corruption campaign and similar anti-bribery laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments to government officials for the purpose of obtaining or retaining business. Our policies mandate compliance with these anti-bribery laws. We operate in many parts of the world that may have experienced governmental corruption to some degree and, in certain circumstances, strict compliance with anti-bribery laws may conflict with local customs and practices. We train our staff concerning FCPA, the U.K. Bribery Act and related anti-bribery laws. We have established procedures and controls to monitor internal and external compliance. There can be no assurance that our internal controls and procedures always will protect us from reckless or criminal acts committed by our employees or agents, and we have no third party attestation to the effectiveness of our internal controls related to fraud and corruption. If we are found to be liable for FCPA, the U.K. Bribery Act and other anti-bribery law violations (either due to our own acts or inadvertence, or due to the acts or inadvertence of others), we could incur criminal or civil penalties or other sanctions, which could have a material adverse effect on our business and operating results.

We are subject to foreign currency risk as a result of our international operations.

We face exposure to adverse movements in foreign currency exchange rates, principally the Chinese Yuan, the Taiwanese dollar, the Euro and the British Pound Sterling and, to a lesser extent, the Japanese Yen and the Hong Kong dollar. Our income and expenses are based on a mix of currencies and a decline in one currency relative to the other currencies could adversely affect our operating results. Furthermore, our operating results are reported in U.S. dollars, which is our reporting currency. In the event the U.S. dollar weakens against a foreign currency, we will experience a currency transaction loss, which could adversely affect our operating results. Also, fluctuations in foreign currency exchange rates may have an adverse impact and be increasingly influential to our overall sales, profits and operating results as amounts that are measured in foreign currency are translated back to U.S. dollars for reporting purposes. Our foreign currency risk may change over time as the level of activity in foreign markets grows and could have an adverse impact upon our financial results, especially if the portion of our sales attributable to Europe increases. We have taken, and plan to continue to take, efforts to mitigate some of our foreign currency exposure by entering into foreign exchange hedging agreements with financial institutions to reduce exposures to some of the principal currencies in countries in which we conduct sales, acquire raw materials, build products and make capital investments, but these efforts may not be successful. In this regard, these hedging agreements do not cover all currencies in which we do business, do not eliminate foreign currency risk entirely for the currencies that they do cover, and involve costs and risks of their own in the form of transaction costs, credit requirements and counterparty risk.

China is experiencing rapid social, political and economic change, which has increased labor costs and other related costs that could make doing business in China less advantageous than in prior years. Increased labor costs in China could adversely affect our business, operating results and financial condition.

Historically, labor in China has been readily available at a lower cost compared to other countries. However, because China is experiencing rapid social, political and economic change, there can be no assurance that labor will continue to be available in China at costs consistent with historical levels. Any future increase in labor cost in China is likely to be higher than historical and projected amounts and may occur multiple times in any given year. As a result of experiencing such rapid social, political and economic change, China is also likely to enact new, and/or revise its existing, labor laws and regulations on employee compensation and benefits. These changes in Chinese labor laws and regulations will likely to have an adverse effect on product manufacturing costs in China. Furthermore, if China workers go on strike to demand higher wages, our operations could be disrupted. Many of our suppliers are currently dealing with labor shortages in China, which may result in future supply delays and disruptions and may drive a substantial increase in their labor costs that is likely to be shared by us in the form of price increases to us. New or revised government labor laws or regulations, strikes or labor shortages could cause our product costs to rise and/or could cause manufacturing partners on whom we rely to exit the business. These events could have a material adverse impact on our product availability and quality, which would affect our business, operating results and financial condition.

We may not continue to receive preferential tax treatment in Asia, thereby increasing our income tax expense and reducing our net income.

As an incentive for establishing our manufacturing subsidiaries in China, we receive preferential tax treatment. Governmental changes in foreign tax law may cause us not to be able to continue receiving these preferential tax treatments in the future, which may cause an increase in our income tax expense, thereby reducing our net income.

The distribution of any earnings of certain foreign subsidiaries may be subject to foreign income taxes, thus reducing our net income.

As a result of enactment of the Tax Cuts and Jobs Act (the "Tax Act") on December 22, 2017, all of our undistributed foreign subsidiary earnings immediately became subject to U.S. income tax. We had not previously accrued U.S. taxes on these earnings, due to our policy of indefinitely reinvesting the earnings overseas. Refer to the U.S. Tax Reform section in Item 7 and the Tax Cuts and Jobs Act section in Note 11 of "Notes to Consolidated Financial Statements" of this Annual Report for further discussion. Our undistributed foreign earnings continue to be indefinitely reinvested in foreign operations, with limited exceptions related to earnings of European and Asian subsidiaries. Any future distributions of foreign earnings will not be subject to additional U.S. income tax, but may be subject to foreign withholding taxes. As of December 31, 2018, we had undistributed earnings from non-U.S. operations of approximately $742 million (including approximately $55 million of restricted earnings, which are not available for dividends). Undistributed earnings of our China subsidiaries comprise $381 million of this total. Additional Chinese withholding taxes of approximately $37 million would be required should the $381 million of such earnings be distributed out of China as dividends.

RISKS RELATED TO OUR COMMON STOCK

Variations in our quarterly operating results may cause our stock price to be volatile.

We have experienced substantial variations in net sales, gross profit margin and operating results from quarter to quarter. We believe that the factors that influence this variability of quarterly results include:

- strength of the global economy and the stability of the financial markets;
- general economic conditions in the countries where we sell our products;
- seasonality and variability in the computing and communications market and our other end-markets;
- the timing of our and our competitors' new product introductions;
- product obsolescence;
- the scheduling, rescheduling and cancellation of large orders by our customers;
- the cyclical nature of the demand for our customers' products;
- our ability to develop new process technologies and achieve volume production at our fabrication facilities;
- changes in manufacturing yields;
- adverse movements in exchange rates, interest rates or tax rates; and
- the availability of adequate supply commitments from our outside suppliers or subcontractors.

Accordingly, a comparison of our operating results from period to period is not necessarily meaningful to investors and our operating results for any period do not necessarily indicate future performance. Variations in our quarterly results may trigger volatile changes in our stock price.

General or industry-specific market conditions or stock market performance or domestic or international macroeconomic and geopolitical factors unrelated to our performance also may affect the price of our stock. For these reasons, investors should not rely on recent or historical trends to predict future stock prices, financial condition, operating results or cash flows. In addition, as discussed in Part I, Item 3 “Legal Proceedings” of this Annual Report, we are involved in various legal proceedings that arise in the normal course of business. Additional volatility in the price of our securities could result in litigation matters, which could result in substantial costs and the diversion of management time and resources.

We may enter into future acquisitions and take certain actions in connection with such acquisitions that could adversely affect the price of our Common Stock.

As part of our growth strategy, we expect to review acquisition prospects that would implement our vertical integration strategy or offer other growth opportunities. From time to time, we may be in various stages of discussions and we may acquire businesses, products or technologies in the future. In the event of future acquisitions, we could:

- use a significant portion of our available cash;
- issue equity securities, which would dilute current stockholders' percentage ownership;
- incur substantial debt;
- incur or assume contingent liabilities, known or unknown;
- incur amortization expenses related to intangibles;
- incur large, immediate accounting write-offs;
- incur substantial expense and diversion of management attention, regardless of the success of the acquisition; and
- create goodwill and other intangible assets that may require impairment charges in the future.

Such actions by us could harm our operating results and adversely affect the price of our Common Stock.

Our directors, executive officers and significant stockholders hold a substantial portion of our Common Stock, which may lead to conflicts with other stockholders over corporate transactions and other corporate matters.

Our directors, executive officers and our affiliate, LSC, beneficially own approximately 22% of our outstanding Common Stock, including options to purchase shares of our Common Stock that are exercisable within 60 days of December 31, 2018. These stockholders, acting together, will be able to influence significantly all matters requiring stockholder approval, including the election of directors and significant corporate transactions such as mergers or other business combinations. This control may delay, deter or prevent a third party from acquiring or merging with us, which could adversely affect the market price of our Common Stock.

LSC, our largest stockholder, owns approximately 15.5% (approximately 7.8 million shares) of our Common Stock. Some of our directors and executive officers may have potential conflicts of interest because of their positions with LSC or their ownership of LSC common stock.

Raymond Soong, the Chairman of the Board of Directors, is the Chairman of LSC, and is the Chairman of Lite-On Technology Corporation ("LTC"), a significant shareholder of LSC. C.H. Chen, our former President and Chief Executive Officer and currently the Vice Chairman of the Board of Directors, is also Vice Chairman of LSC and a board member of LTC. Dr. Keh-Shew Lu, a member of our Board of Directors and our President and Chief Executive Officer, is a board member of LTC and a board member of Nuvoton. Several of our directors and executive officers may own LSC common stock or hold options to purchase LSC common stock. Service on our Board of Directors and as a director or officer of LSC, or ownership of LSC common stock by our directors and executive officers, could create, or appear to create, actual or potential conflicts of interest when directors and officers are faced with decisions that could have different implications for LSC and us. For example, potential conflicts could arise in connection with decisions involving the Common Stock owned by LSC, or under the other agreements we may enter into with LSC. In 2018, 2017 and 2016, LSC accounted for less than 3% of our silicon wafer supply and our finished good's supply. We may have difficulty resolving any potential conflicts of interest with LSC, and even if we do, the resolution may be less favorable than if we were dealing with an unrelated third party.

We were formed in 1959, and our early corporate records are incomplete. As a result, we may have difficulty in assessing and defending against claims relating to rights to our Common Stock purporting to arise during periods for which our records are incomplete.

We were formed in 1959 under the laws of California and reincorporated in Delaware in 1968. We have had several transfer agents since being formed. In addition, our early corporate records, including our stock ledger, are incomplete. As a result, we may have difficulty in assessing and defending against claims relating to rights to our Common Stock purporting to arise during periods for which our records are incomplete.

Non-cash tender offers, debt equity swaps or equity exchanges to consummate our business activities are likely to have the effect of diluting the ownership interest of existing stockholders, including qualified stockholders who receive shares of our Common Stock in such business activities.

We, from time to time, may utilize non-cash tender offers, debt equity swaps or equity exchanges in accordance with the guidance and rules promulgated by the SEC to consummate our business activities. Such means to consummate our business activities will likely involve issuance of our Common Stock in large quantities and will subsequently dilute the ownership interest of existing stockholders, including stockholders who previously received shares of our Common Stock in such transactions. Any sales in the public market of the newly issued Common Stock could adversely affect prevailing market prices of our Common Stock. In addition, utilizing non-cash tender offers, debt equity swaps or equity exchanges may encourage short selling because such utilization could depress the market price of our Common Stock.

Anti-takeover effects of certain provisions of Delaware law and our Certificate of Incorporation and Bylaws, may hinder a take-over attempt.

Some provisions of Delaware law, our certificate of incorporation and bylaws may be deemed to have an anti-takeover effect and may delay or prevent a tender offer or takeover attempt, including those attempts that might result in a premium over the market price for the shares held by stockholders.

Section 203 of Delaware General Corporation Law may deter a take-over attempt.

Section 203 of the Delaware General Corporation Law prohibits transactions between a Delaware corporation and an "interested stockholder," which is defined as a person who, together with any affiliates or associates, beneficially owns, directly or indirectly, 15.0% or more of the outstanding voting shares of a Delaware corporation. This provision prohibits certain business combinations between an interested stockholder and a Delaware corporation for a period of three years after the date the stockholder becomes an interested stockholder, unless:

(i) either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder is approved by the corporation's board of directors prior to the date the interested stockholder becomes an interested stockholder;

(ii) the interested stockholder acquired at least 85.0% of the voting stock of the corporation (other than stock held by directors who are also officers or by certain employee stock plans) in the transaction in which the stockholder became an interested stockholder; or

(iii) the business combination is approved by a majority of the board of directors and by the affirmative vote of 66-2/3% of the outstanding voting stock that is not owned by the interested stockholder.

For this purpose, business combinations include mergers, consolidations, sales or other dispositions of assets having an aggregate value in excess of 10.0% of the aggregate market value of the consolidated assets or outstanding stock of the corporation, and certain transactions that would increase the interested stockholder's proportionate share ownership in the corporation.

Certificate of Incorporation and Bylaw Provisions may deter a take-over attempt.

Provisions of our certificate of incorporation and bylaws may have the effect of making it more difficult for a third party to acquire control of us. In particular, our certificate of incorporation authorizes our Board of Directors to issue, without further action by the stockholders, up to 1.0 million shares of preferred stock with rights and preferences, including voting rights, designated from time to time by the Board of Directors. The existence of authorized but unissued shares of preferred stock enables our Board of Directors to render it more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise.

Item 1B. Unresolved Staff Comments.

None

Item 2.Properties.

Our corporate headquarters are located in Plano, Texas. As of December 31, 2018, we own approximately 3.7 million square feet of property and lease approximately 3.1 million square feet of property, with leases expiring at various times between 2019 and 2028 and with land rights expiring in 2056. The table below sets forth the use, location and square footage of the principal property either owned or leased by the Company:

Primary use	Location	Sq. Ft.
Headquarters/R&D center	USA - Plano, TX	41,780
Land (future headquarters site)	USA - Plano, TX	696,960
Regional sales office	USA - Amherst, New Hampshire	600
Regional sales office/Administrative office/R&D center/apartment	USA - Milpitas, California	86,321
Regional sales office/R&D center	USA - San Jose, California	4,060
Regional sales office/Administrative office	USA - Westlake Village, California	1,295
Regional sales office	China - Bejing	969
Land use right/Manufacturing facilities/Administrative office/R&D center/Logistics	China - Chengdu	1,689,474
Regional sales office	China - Guangzhou	1,646
Regional sales office/R&D center/Warehouse	China - Hong Kong	360,395
Administrative office/Land use right/manufacturing facility/R&D center	China - Jinan, Shandong	1,059,907
Regional sales office	China - Qingdao, Shandong	1,469
Manufacturing facility/R&D center/Logistics/Dormitory/Manufacturing facility/Sales/Administrative office/Land use right	China - Shanghai	2,322,424
Regional sales office	China - Shenzhen	17,318
Regional sales office	China - Wuhan	1,266
Regional sales office	China - Xiamen	1,507
R&D center/Dormitory	China - Yangzhou	7,095
Administrative office/Logistics/Manufacturing/R&D center	England - Oldham	156,076
Regional sales office	Germany - Munich	6,297
Manufacturing facility/R&D center	Germany - Neuhaus	52,508
Regional sales office	Japan - Tokyo	145
Regional sales offices	South Korea - Seongnam-si	2,990
Apartment	South Korea -Suwon-si	646
Manufacturing facility/R&D center/Logistics/Administrative office	Taiwan - Hsinbei	120,441
R&D center	Taiwan - Hsinchu	25,372
Regional sales office	Taiwan - Kaohsiung	355
Regional sales office/Administrative office/Logistics/Regional Sales/Logistics	Taiwan - Taipei	52,348
Regional sales office/Administrative office/Logistics	Taiwan - Taoyuan	78,899
R&D center	Taiwan - Zhunan	1,272

We believe our current facilities are adequate for the foreseeable future.

Item 3. Legal Proceedings.

From time to time, we are involved in various legal proceedings that arise in the normal course of business. While we intend to defend any lawsuit vigorously, we presently believe that the ultimate outcome of any current pending legal proceeding will not have any material adverse effect on our financial position, cash flows or operating results. However, litigation is subject to inherent uncertainties, and unfavorable rulings could occur. An unfavorable ruling could include monetary damages, which could impact our business and operating results for the period in which the ruling occurs or future periods.

In August 2018, the Company received a letter from the EPA concerning potential violations under the Clean Air Act Amendments of 1990, which do not involve any actual discharge of materials into the environment, arising as a result of an inspection at KFAB. In February 2019, we fully resolved this matter with the EPA and paid approximately $0.2 million. The settlement amount was accrued at December 31, 2018. During 2018 we received notice from the Shanghai Municipal Bureau of Ecology and Environment of possible environmental law violations at BCD. The notice stated that we installed and used environmental protection devices at our plant, prior to final approval from the authorities. We paid approximately $0.2 million during the fourth quarter of 2018 to settle the matter.

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

Our Common Stock is traded on the Nasdaq Global Select Market (“NasdaqGS”) under the symbol “DIOD.”

Holders

As of February 12, 2019, the approximate number of common stockholders was 252.

Dividends

We have never declared or paid dividends on our Common Stock, and currently do not intend to pay dividends in the foreseeable future as we intend to retain any earnings for future use in our business. Our U.S. banking credit facility permits us to pay dividends up to $3.0 million per fiscal year to our stockholders so long as we have not defaulted at the time of such dividend and no default would result from declaring and paying such dividend. The payment of dividends is within the discretion of our Board of Directors, and will depend upon, among other things, our earnings, financial condition, capital requirements, and general business conditions.

Securities Authorized for Issuance Under Equity Compensation Plans

The information regarding our equity compensation plans required to be disclosed by Item 201(d) of Regulation S-K is incorporated by reference from our 2019 definitive proxy statement, which we expect to file with the SEC in April 2019, in Item 12 of Part III of this Annual Report.

Performance Graph

The following graph compares the yearly percentage change in the cumulative total stockholder return of our Common Stock against the cumulative total return of the Nasdaq Composite and the Nasdaq Industrial Index for the five calendar years ending December 31, 2018. The graph is not necessarily indicative of future price performance.

The graph shall not be deemed incorporated by reference by any general statement incorporating by reference this Annual Report into any filing under the Securities Act of 1933 or under the Securities Exchange Act of 1934, except to the extent that the Company specifically incorporates this information by reference, and shall not otherwise be deemed filed under such Acts.

Source: Prepared by Zacks Investment Research, Inc. Used with permission. All rights reserved. Copyright 1980-2019.

The graph assumes $100 invested on December 31, 2013 in our Common Stock, the stock of the companies in the Nasdaq Composite Index and the stock of companies in the Nasdaq Industrial Index, and that all dividends received within a quarter, if any, were reinvested in that quarter.

December 2018							
		2013	2014	2015	2016	2017	2018
Diodes Incorporated	Return %		17.02	(16.65)	11.71	11.69	12.52
	Cum $	100	117.02	97.54	108.96	121.69	136.93
NASDAQ Industrial Index	Return %		2.98	9.56	9.47	25.21	(1.13)
	Cum $	100	102.98	112.83	123.52	154.66	152.90
NASDAQ Composite-Total Returns	Return %		14.75	6.96	8.87	29.64	(2.84)
	Cum $	100	114.75	122.74	133.62	173.22	168.30

Issuer Purchases of Equity Securities

The Company repurchases shares of its Common Stock from time to time pursuant to publicly announced share repurchase programs. During the fourth quarter of 2018, the Company did not repurchase any shares of its Common Stock.

Item 6. Selected Financial Data.

The following selected consolidated financial data for the fiscal years ended December 31, 2014 through 2018, is qualified in its entirety by, and should be read in conjunction with, the other information and consolidated financial statements, including the notes thereto, appearing elsewhere herein. Certain immaterial amounts as presented in the accompanying consolidated financial statements have been reclassified to conform to 2018 financial statement presentation.

(In thousands, except per share data)	Twelve Months Ended December 31,				
Statement of Income Data	2018	2017	2016	2015	2014
Net sales	$1,213,989	$1,054,204	$942,162	$848,904	$890,651
Gross profit	435,276	356,776	286,923	248,583	277,279
Selling, general and administrative expense	176,197	168,590	158,321	139,245	133,701
Research and development expense	86,286	77,877	69,937	57,027	52,136
Amortization of acquisition-related intangible assets	18,351	18,798	20,478	8,596	7,914
Impairment of fixed assets	390	2,211	114	1,672	198
Restructuring	206	10,137	12	-	-
Other operating (income) expense	(636)	(246)	70	(59)	(1,181)
Total operating expenses	280,794	277,367	248,932	206,481	192,768
Income from operations	154,482	79,409	37,991	42,102	84,511
Interest income	1,978	1,475	1,357	1,006	1,470
Interest expense	(9,901)	(13,448)	(13,257)	(4,232)	(4,332)
Gain on securities carried at fair value	-	-	-	400	1,364
Foreign currency (loss) gain, net	(3,701)	(7,995)	2,171	1,257	1,820
Impairment of cost-basis investment	-	-	(3,218)	-	-
Other income (expense)	7,104	3,150	(9)	62	1,159
Income before income taxes and noncontrolling interest	149,962	62,591	25,035	40,595	85,992
Income tax provision	44,556	62,325	6,558	14,082	20,359
Net income	105,406	266	18,477	26,513	65,633
Less: net income attributable to noncontrolling interest	(1,385)	(2,071)	(2,542)	(2,239)	(1,955)
Net income (loss) attributable to common stockholders	104,021	(1,805)	15,935	24,274	63,678
Earnings (loss) per share attributable to common stockholders					
Basic	$2.09	$(0.04)	$0.33	$0.50	$1.35
Diluted	$2.04	$(0.04)	$0.32	$0.49	$1.31
Number of shares used in computation:					
Basic	49,841	48,824	48,210	48,210	47,184
Diluted	50,935	48,824	49,500	49,500	48,594

	As of December 31,				
Balance Sheet Data	2018	2017	2016	2015	2014
Total assets	$1,526,371	$1,488,673	$1,528,552	$1,598,827	$1,179,157
Working capital	480,814	415,162	547,409	570,888	526,239
Long-term debt, net of current portion	186,143	247,492	413,126	453,738	140,787
Total Diodes Incorporated stockholders' equity	931,463	831,504	776,019	795,345	768,275

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Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.
The following section discusses management's view of the financial condition, results of operations and cash flows of Diodes Incorporated and its subsidiaries (collectively, "the Company," "our Company," "we," "our," "ours," or "us") and shou read together with the consolidated financial statements and the notes to consolidated financial statements included elsewhere in this Form 10-K.

The following discussion contains forward-looking statements and information relating to our Company. We generally identify forward-looking statements by the use of terminology such as "may," "will," "could," "should," "potential," "continue," "expect," "intend," "plan," "estimate," "anticipate," "believe," "project," or similar phrases or the negatives of sucl We base these statements on our beliefs as well as assumptions we made using information currently available to us. Such statements are subject to risks, uncertainties and assumptions, including those identified in Part I, Item 1A."Risk Factors," as well as other matters not yet known to us or not currently considered material by us. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, estimated or projected. Given these risks and uncertainties, prospective investors are cautioned not to place undue reliance on such forward-looking statements. Forward-looking statements do not guarantee future performance and should not be considered as statements of fact.

You should not unduly rely on these forward-looking statements, which speak only as of the date of this Annual Report on Form 10-K. Unless required by law, we undertake no obligation to publicly update or revise any forward-looking statements to reflect new information or future events or otherwise. The Private Securities Litigation Reform Act of 1995 (the "Act") provides certain "safe harbor" provisions for forward-looking statements. All forward-looking statements made in this Annual Report on Form 10-K are made pursuant to the Act.

Summary of the Twelve Months Ended December 31, 2018

- Revenue grew to a record $1.2 billion, an increase of 15.2% over the $1.05 billion in 2017;
- Gross profit was a record $435.3 million, a 22.0% increase, compared to the $356.8 million in 2017;
- Gross margin improved 210 basis points to 35.9% from 33.8 percent in 2017;
- Operating income increased to a record $154.5, or 12.7% of revenue, compared to 7.5 percent, in 2017;
- Net income was a record $104.0 million, or $2.04 per diluted share, compared to a net loss of ($1.8) million, or ($0.04) per share, in 2017; and
- Achieved $185.6 million cash flow from operations. We had $87.5 million of capital expenditures, or 7.2% of revenue. Net cash flow was a positive $36.6 million, which includes the net pay down of $56.8 million of long-term debt.

Summary of the Twelve Months Ended December 31, 2017

- Revenue grew to $1.1 billion, an increase of 12.0% over the $942.2 million in 2016 due to continued market share gains;
- Gross profit was $356.8 million compared to $286.9 million in 2016;
- Gross margin was 33.8% compared to 30.5% in 2016, an increase of 330 basis points;
- We had a net loss $1.8 million for the 12 months ended December 31, 2017. Included in this loss was total tax expense of $62.3 million, of which $45.9 million specifically related to the Tax Cuts and Jobs Act that was signed into law on December 22, 2017;
- We completed the shutdown of wafer fabrication facility located in Lee's Summit, MO. ("KFAB") and relocated the manufacturing capacity to other wafer fabrication facilities;
- Selling and administrative expenses were $167.6 million due to increases in wages and benefits;
- Cash flow from operations was approximately $181.1 million compared to $124.7 million in 2016;
- During 2017 we paid down approximately $159.9 million of our outstanding debt;
- We repurchased approximately $8.7 million or 300,000 shares of our outstanding common stock; and
- We received qualification of 200mm wafers at one of our wafer fabrication facilities located in Shanghai.

KFAB Shutdown

During 2017 we completed the shutdown of KFAB and final expenses were paid during 2018. The Company ceased production operations at KFAB late in third-quarter 2017 and vacated the premises during November 2017. Employees were provided retention and standard severance packages. Total costs incurred for the shutdown were approximately $10.3 million and the Company does not expect to incur any further expense associated with the shutdown.

Business Outlook

During 2018 we achieved a record high of $1.2 billion in annual revenue. We continue to pursue our previously announced goals of achieving revenue of $2.5 billion and gross margin of 40%, representing gross profit of $1.0 billion, all by 2025. Acquisitions will continue to be a key part of our growth strategy to reach our 2025 revenue goal. We have a solid pipeline of designs and expanded customer relationships across all regions and product lines. The success of our business depends on, among other factors, the strength of the global economy and the stability of the financial markets, our customers' demand for our products, the ability of our customers to meet their payment obligations, the likelihood of customers not canceling or deferring existing orders, and the strength of consumers' demand for items containing our products in the end-markets we serve. We believe the long-term outlook for our business remains generally favorable despite the uncertainties in the global economy as we continue to execute on the strategy that has proven successful for us over the years. In February 2019, the Company announced the proposed acquisition of Texas Instruments' 200mm wafer fabrication facility and operations located in Greenock, Scotland ("GFAB"). The acquisition of GFAB is subject to customary closing conditions and is expected to close by the end of the first quarter of 2019. See "Risk Factors – The success of our business depends on the strength of the global economy and the stability of the financial markets, and any weaknesses in these areas may have a material adverse effect on our net sales, operating results and financial condition." in Part I, Item 1A of this Annual Report for additional information.

Factors Relevant to Our Results of Operations

In 2018, the following factors affected, and, we believe, will continue to affect, our results of operations:

- In late 2017, we closed our KFAB facility, relocated the operations to our other wafer fabrication facilities and in 2018 completed all retention payments to former KFAB employees;
- We continue to experience pressure from our customers to reduce the selling price for our products, and we expect future improvements in net income to result primarily from increases in sales volume and improvements in product mix, as well as manufacturing cost reductions in order to offset any reduction in average selling prices of our products;
- In terms of our end markets, our automotive business reached 9% of revenue;
- During 2018, we made an additional capital contribution of $50 million (which was funded in part by a $47.7 million draw on the revolving portion of our U.S. Credit Facility in the fourth quarter of 2018) and invested approximately $59.5 million for property, plant and equipment in our manufacturing and wafer fabrication facilities in China, and we expect to continue to invest in our facilities, although the amount to be invested will depend on product demand and new product developments; and
- Our wafer fabrication plants use epitaxial wafers. Currently there is a supply shortage of these types of wafers, which may impact our ability to meet market demand for our products; however as of December 31, 2018, we have entered into commitments to purchase approximately $117.8 million of wafers to be used in our manufacturing process. These wafer purchases will occur during 2019 and 2020.

Description of Sales and Expenses

Net sales

The principal factors that have affected or could affect our net sales from period to period are:

- The condition of the economy in general and of the semiconductor industry in particular;
- Political tension, including the implementation of tariffs, among and between the countries in which we do business;
- Our customers' adjustments in their order levels;
- Changes in our pricing policies or the pricing policies of our competitors or suppliers;
- The addition or termination of key supplier relationships;
- The rate of introduction and acceptance by our customers of new products;

- Our ability to compete effectively with our current and future competitors;
- Our ability to enter into and renew key corporate and strategic relationships with our customers, vendors and strategic alliances;
- Changes in foreign currency exchange rates;
- A major disruption of our information technology infrastructure;
- Unforeseen catastrophic events, such as armed conflict, terrorism, fires, typhoons and earthquakes; and
- Any other disruptions, such as change in the political or governmental policies, labor shortages, unplanned maintenance or other manufacturing problems.

Cost of goods sold

Cost of goods sold includes manufacturing costs for our semiconductors and our wafers. These costs include raw materials used in our manufacturing processes as well as labor costs and overhead expenses. Cost of goods sold is also impacted by yield improvements, capacity utilization and manufacturing efficiencies. In addition, cost of goods sold includes the cost of products that we purchase from other manufacturers and sell to our customers. Cost of goods sold is also affected by inventory obsolescence if our inventory management is not efficient.

Selling, general and administrative

Selling, general and administrative expenses relate primarily to compensation and associated expenses for personnel in general management, sales and marketing, information technology, engineering, human resources, procurement, planning and finance, and sales commissions, as well as outside legal, investor relations, accounting, consulting and other operating expenses. Also included in selling, general and administrative expenses are acquisition costs from business combinations.

Research and development

Research and development expenses consist of compensation and associated costs of employees engaged in research and development projects, as well as materials and equipment used for these projects. Research and development expenses are primarily associated with our wafer facilities in China and Oldham, U.K. and our manufacturing facilities in Taiwan and China, as well as with our engineers in the U.S. and Taiwan. All research and development expenses are expensed as incurred.

Amortization of acquisition-related intangible assets

Amortization of acquisition-related intangible assets consists of assets such as developed technologies and customer relationships.

Impairment of fixed assets

Impairment of fixed assets consists of the impairment amount recognized as a result of the fair value of an asset being below its recorded value.

Restructuring

Restructuring are one-time charges that must be paid by the Company due to reorganizing or restructuring a part of the business.

Interest income / expense

Interest income consists of interest earned on our cash and investment balances. Interest expense consists of interest payable on our outstanding credit facilities and other debt instruments.

Gain (loss) on securities carried at fair value

We may hold investments in the form of common stock or some other similar equivalent and have elected fair value accounting treatment.

Foreign currency (loss) gain, net

This income account is used to show the amount gained or lost as a result of foreign currency transactions.

Income tax provision

Our global presence requires us to pay income taxes in a number of jurisdictions. See Note 11 of "Notes to Consolidated Financial Statements" for additional information.

Net income attributable to noncontrolling interest

This represents the minority investors' share of our subsidiaries' earnings.

Net income attributable to common stockholders

Net income attributable to common stockholders is net income less net income attributable to noncontrolling interest.

U.S. Tax Reform

The Tax Act was enacted on December 22, 2017. The Tax Act reduces the U.S. federal corporate tax rate from 35% to 21%, requires companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred, provides an exemption from U.S. federal tax for dividends received from foreign subsidiaries, and creates new taxes on certain foreign sourced earnings. As of the fourth quarter of 2018, the Company completed its accounting for the tax effects of the Tax Act and recorded a $2.8 million adjustment to the provisional tax expense recorded in the fourth quarter of 2017. See Note 11 of "Notes to Consolidated Financial Statements" of this Annual Report for further discussion.

The table below sets forth the significant components of the provisional amount recorded in the fourth quarter of 2017, and the net $2.8 million adjustment to tax expense recorded in the fourth quarter of 2018. These amounts were recorded as a component of income tax expense from continuing operations:

Component	Provisional Amount	Final Amount	Adjustment
Remeasurement of U.S. deferred tax assets and liabilities	$ 2,913	$ 3,112	$ 199
Transition tax on foreign earnings	104,327	101,512	(2,815)
Foreign tax credits used to offset transition tax	(58,975)	(54,350)	4,625
Other adjustments	(2,357)	(1,604)	753
Total net tax expense related to the Tax Act	$ 45,908	$ 48,670	$ 2,762

The Company was able to use net operating loss carryforwards and tax credits to completely offset any cash tax obligations resulting from the transition tax. The other components shown above represent noncash adjustments to tax expense.

Remeasurement of U.S. deferred tax assets and liabilities

We remeasured certain U.S. deferred tax assets and liabilities using the lower corporate income tax rate of 21%.

Transition tax on foreign earnings

The one-time transition tax is based on our total post-1986 earnings and profits ("E&P") that we previously deferred from U.S. income taxes, and is net of indirect effects of unrecognized tax benefits. The $2.8 million adjustment referred to in the table above results from completing our analysis and calculation of post-1986 E&P, including amounts held in cash and other specified assets.

No additional income taxes have been provided for any remaining undistributed foreign earnings not subject to the transition tax, or any additional outside basis difference inherent in these entities. Our undistributed foreign earnings, including those subject to the transition tax, continue to be indefinitely reinvested in foreign operations, with limited exceptions related to earnings of European and Asian subsidiaries. Determining the amount of unrecognized deferred tax liability related to any remaining undistributed foreign earnings not subject to the transition tax and additional outside basis difference in these entities (i.e., basis difference in excess of that subject to the one-time transition tax) is not practicable.

Foreign tax credits used to offset transition tax

The Company is able to claim foreign tax credits against the incremental U.S. tax due on its previously deferred foreign earnings. The $4.6 million adjustment referred to in the table above results from completing our analysis of the total amount of foreign taxes previously paid or accrued by our foreign subsidiaries that are creditable against the transition tax.

Other adjustments

We have completed our analysis of the direct and indirect implications of the Tax Act on the Company's tax attributes, such as tax credit carryforwards. As a result, we recorded a $0.8 million adjustment to finalize the accounting of the effect of our change in judgment regarding realizability of foreign tax credits and R&D credits.

Results of Operations

The following table sets forth, for the periods indicated, the percentage that certain items in the statements of income bear to net sales:

	Percent of Net Sales Twelve Months Ended December 31,		
	2018	2017	2016
Net sales	100.0%	100.0%	100.0%
Cost of goods sold	(64.1)	(66.2)	(69.5)
Gross profit	35.9	33.8	30.5
Operating expenses	(23.1)	(26.3)	(26.4)
Income from operations	12.7	7.5	4.0
Interest income	0.2	0.1	0.1
Interest expense	(0.8)	(1.3)	(1.4)
Foreign currency (loss) gain, net	(0.3)	(0.8)	0.2
Impairment of cost-basis investment	-	-	(0.3)
Other income (expenses)	0.6	0.3	-
Income before income taxes and noncontrolling interest	12.4	5.9	2.7
Income tax provision	3.7	5.9	0.7
Net income	8.7	-	2.0
Net (income) loss attributable to noncontrolling interest	(0.1)	(0.2)	0.3
Net income attributable to common stockholders	8.6	(0.2)	1.7

The following discussion explains in greater detail our consolidated operating results and financial condition. This discussion should be read in conjunction with the consolidated financial statements and notes thereto appearing elsewhere in this Annual Report (in thousands).

2018 Compared to 2017

	Twelve Months Ended December 31,			
	2018	2017	Increase/(Decrease)	% Change
Net sales	$1,213,989	$1,054,204	$ 159,785	15.2 %
Cost of goods sold	778,713	697,428	81,285	11.7 %
Gross profit	435,276	356,776	78,500	22.0 %
Operating expenses				
Selling, general and administrative	176,197	168,590	7,607	4.5 %
Research and development	86,286	77,877	8,409	10.8 %
Amortization of acquisition-related intangible assets	18,351	18,798	(447)	(2.4 %)
Impairment of fixed assets	390	2,211	(1,821)	(82.4 %)
Restructuring	206	10,137	(9,931)	(98.0 %)
Other operating income	(636)	(246)	390	158.5 %
Other income (expense)				
Interest income	1,978	1,475	503	34.1 %
Interest expense	(9,901)	(13,448)	(3,547)	(26.4 %)
Foreign currency loss	(3,701)	(7,995)	(4,294)	(53.7 %)
Other income	7,104	3,150	3,954	125.5 %
Income tax provision	44,556	62,325	(17,769)	(28.5 %)

Net Sales

Net sales increased for the twelve months ended December 31, 2018, compared to the same period last year due to continued market share gains, growth in our automotive, industrial and communications end markets, as well as growth from our Pericom products.

Cost of Goods Sold

Cost of goods sold increased approximately $81.3 million for the twelve months ended December 31, 2018 compared to the same period last year, primarily as a result of our increased sales. During 2018, cost of goods sold was positively impacted by the receipt of approximately $0.4 million of business interruption insurance proceeds and negatively impacted, when compared to 2017, by receipt, in 2017 of $3.9 million of business interruption insurance and $0.6 million of inventory insurance recovery received related to a fire that occurred at KFAB in 2016. As a percent of sales, cost of goods sold was 64.1% for the twelve months ended December 31, 2018, compared to 66.2% for the same period last year. Average unit cost increased 13.6% for the twelve months ended December 31, 2018, compared to the same period last year, due to the sale of higher margin products and increased production facility utilization. For the twelve months ended December 31, 2018, gross profit increased approximately 22.0% when compared to the same period last year. Gross profit margin for the twelve month periods ended December 31, 2018 and 2017, was 35.9% and 33.8%, respectively.

Operating expenses

Operating expenses for the twelve months ended December 31, 2018 increased approximately $4.4 million, or 1.6%, compared to the same period last year. Selling, general and administrative expenses (“SG&A”) increased approximately $7.6 million. The increase in SG&A was driven by increases in salaries and benefits, consulting and legal fees and accounting and auditing services, partially offset by decreases in other SG&A expense categories. Research and development expenses (“R&D”) increased approximately $8.4 million, tracking with the increase in sales. Amortization of acquisition-related intangibles decreased approximately $0.4 million reflecting the overall reduction in the balance of intangible assets subject to amortization. During the twelve months ended December 31, 2018, we recognized impairment of fixed assets of $0.4 million. SG&A, as a percentage of sales, was 14.6% and 15.9% for the twelve months ended December 31, 2018 and 2017, respectively. R&D, as a percentage of sales, was 7.1% and 7.4% for the twelve months ended December 31, 2018 and 2017, respectively.

Other (expense)/income

Interest income increased for the twelve months ended December 31, 2018, due to a higher amount of invested funds. The decrease in interest expense for the twelve months ended December 31, 2018, was due to lower levels of debt partially offset by higher interest rates on the floating rate portion of the borrowings we incurred to effect the Pericom acquisition in 2015. Foreign currency losses decreased during the twelve months ended December 31, 2018, due to strength of the U.S. dollar when compared to the currencies in the foreign countries in which we operate.

Income tax provision

We recognized an income tax expense of approximately $44.6 million for the twelve months ended December 31, 2018, and income tax expense of approximately $62.3 million for the twelve months ended December 31, 2017, resulting in effective income tax rates of 29.7% and 99.6%, respectively. The decrease in income taxes for 2018 compared to 2017 is primarily attributable to the impact of the Tax Act. During the twelve months ended December 31, 2017, the enactment of the Tax Act resulted in an increase in our tax expense by approximately $45.9 million. Other than the effects of the Tax Act, the decrease in income tax expense in 2018 when compared to 2017 was partially offset by an increase in our tax expense in 2018 which is primarily due to the increase in pretax earnings in 2018 when compared to 2017. We had not previously accrued U.S. taxes on these earnings, due to our policy of indefinitely reinvesting the earnings overseas. Refer to “U.S. Tax Reform” above in this Item 7 and the Tax Cuts and Jobs Act section in Note 11 of the “Notes to Consolidated Financial Statements” in this Annual Report for further discussion. Our undistributed foreign earnings continue to be indefinitely reinvested in foreign operations, with limited exceptions related to earnings of European and Asian subsidiaries. Any future distributions of foreign earnings will not be subject to additional U.S. income tax, but may be subject to foreign withholding taxes. As of December 31, 2018, our foreign subsidiaries held approximately $197 million of cash, cash equivalents and investments of which approximately $92 million would be subject to foreign withholding tax if distributed outside the country in which the related earnings were generated.

2017 Compared to 2016

	Twelve Months Ended December 31,			
	2017	2016	Increase/(Decrease)	% Change
Net sales	$1,054,204	$942,162	$ 112,042	11.9 %
Cost of goods sold	697,428	655,239	42,189	6.4 %
Gross profit	356,776	286,923	69,853	24.3 %
Operating expenses				
Selling, general and administrative	168,590	158,321	10,270	6.5 %
Research and development	77,877	69,937	7,940	11.4 %
Amortization of acquisition-related intangible assets	18,798	20,478	(1,680)	(8.2 %)
Impairment of fixed assets	2,211	114	2,097	N/A
Restructuring	10,137	12	10,125	N/A
Other operating (income) expense	(246)	70	(316)	N/A
Other income (expense)				
Interest income	1,475	1,357	118	8.7 %
Interest expense	(13,448)	(13,257)	191	1.4 %
Foreign currency (loss) gain, net	(7,995)	2,171	10,166	N/A
Impairment on cost-basis investment	-	(3,218)	3,218	N/A
Other income (expense)	3,150	(9)	3,160	N/A

Income tax provision	62,325	6,558	55,767	850.4 %

Net Sales

Net sales increased for the twelve months ended December 31, 2017, compared to the prior year due to continued market share gains and strength across all our geographies, growth in our automotive, industrial and communications end markets as well as growth from our Pericom products.

Cost of Goods Sold

Cost of goods sold increased approximately $42.2 million for the twelve months ended December 31, 2017, compared to the same period last year. Cost of goods sold primarily increased as a result of our increased sales. A portion of the increase in cost of goods sold was $2.7 million of KFAB inventory that was expensed, as it will not be used in the future, and other inventory that was scrapped. Cost of goods was positively impacted in 2017 by receipt of $3.9 million of business interruption insurance and $0.6 million of inventory insurance recovery received related to a fire at KFAB that occurred in 2016. As a percent of sales, cost of goods sold was 66.2% for the twelve months ended December 31, 2017, compared to 69.5% for the prior period. Average unit cost decreased 7% for the twelve months ended December 31, 2017, compared to the same period last year, due to increased production facility utilization. For the twelve months ended December 31, 2017, gross profit increased approximately 24.3% when compared to the prior period. Gross profit margin for the twelve month periods ended December 31, 2017 and 2016, was 33.8% and 30.5%, respectively.

Operating expenses

Operating expenses for the twelve months ended December 31, 2017, increased approximately $27.5 million, or 11.1%, compared to the prior period. SG&A increased approximately $9.4 million. The increase in SG&A was driven by an increase in wages and benefits, partially offset by decreases in other SG&A expense categories. Research and development expenses (“R&D”) increased approximately $7.9 million, tracking with the increase in sales. Amortization of acquisition-related intangibles decreased approximately $1.7 million reflecting the overall reduction in the balance of intangible assets subject to amortization. During the twelve months ended December 31, 2017, we recognized impairment of fixed assets of $2.2 million, primarily related to the KFAB shutdown, and also recognized restructuring costs of $10.1 million related to the KFAB shutdown. SG&A, as a percentage of sales, was 15.9% and 16.8% for the twelve months ended December 31, 2017 and 2016, respectively. R&D, as a percentage of sales, was constant at 7.4% for the twelve months ended December 31, 2017 and 2016.

Other (expense)/income

Interest income increased for the twelve months ended December 31, 2017, due to a higher amount of invested funds. The increase in interest expense for the twelve months ended December 31, 2017, is due to higher interest rates on the borrowing to effect the Pericom acquisition. Foreign currency losses increased during the twelve months ended December 31, 2017, due to the weakness of the U.S. dollar when compared to the currencies in the foreign countries in which we operate. These losses were partially offset by $1.5 million in hedging gains.

Income tax provision

We recognized an income tax expense of approximately $62.3 million for the twelve months ended December 31, 2017, and income tax expense of approximately $6.6 million for the twelve months ended December 31, 2016, resulting in effective income tax rates of 99.6% and 26.2%, respectively. The increase in income taxes for 2017 compared to 2016 is primarily attributable the impact of the Tax Act. The Tax Act increased our tax expense by approximately $45.9 million. The remainder of the increase in our tax expense is primarily due to the increase in pretax earnings from 2016 to 2017.

Financial Condition

Liquidity and Capital Resources

Our primary sources of liquidity are cash and cash equivalents, funds from operations and, if necessary, borrowings under our credit facilities. We currently have a U.S. banking credit facility (the “U.S. Credit Facility”) under which we may draw up to $250 million on a revolving basis, in addition to a $250 million term loan included in the U.S. Credit

Facility. The U.S. Credit Facility matures October 26, 2021. The term loan portion of the U.S. Credit Facility is repayable in part through quarterly installments that increase over time from $3.1 million per quarter in 2016 to $9.4 million per quarter in the final year of the U.S. Credit Facility. We may from time to time request increases in the aggregate commitments under the U.S. Credit Facility of up to $200 million, subject to the lenders electing to increase their commitments or by means of the addition of new lenders, and subject to at least half of each increase in aggregate commitments being in the form of term loans, with the remaining amount of each increase being an increase in the amount of the revolving portion of the U.S. Credit Facility. The U.S. Credit Facility bears interest at LIBOR or similar indices plus a specified margin. The U.S. Credit Facility contains certain financial and non-financial covenants, including, but not limited to, a maximum consolidated leverage ratio, a minimum consolidated fixed charge coverage ratio, and restrictions on liens, indebtedness, investments, fundamental changes, dispositions, and restricted payments (including dividends and share repurchases). At December 31, 2018, we owed $210.0 million under the U.S. Credit Facility, $85.5 million of which was drawn under the revolving portion and $124.5 million of which was outstanding under the term loan.

In addition to our U.S. Credit Facility, we maintain credit facilities with several financial institutions through our foreign entities worldwide totaling $123.2 million as of December 31, 2018. As of December 31, 2018, our Asia subsidiaries had unused and available credit lines of up to an aggregate of approximately $112.5 million, under several uncommitted short-term revolving loan facilities with several financial institutions. Other than two Taiwanese credit facilities that are collateralized by assets, our foreign credit lines are unsecured, uncommitted, repayable on demand, terminable by the lender at any time and contain no restrictive covenants. Our foreign credit lines bear interest at LIBOR or similar indices plus a specified margin. At December 31, 2018, $10.3 million was outstanding on these credit lines. In addition to our credit lines, during 2018, our 51% owned subsidiary, ERIS Technology Corporation ("ERIS"), borrowed $4.6 million on a long-term basis in order to make an investment. That investment was made in July 2018. The $4.6 million loan, matures in 2033, but will be increasing over time to as much as $27.6 million, as the amount of investment grows. See Note 19 – ERIS Acquisition in the Notes to Condensed Consolidated Financial Statements above, for a description of this investment by ERIS.

Our primary liquidity requirements have been to meet our capital expenditure needs and to fund ongoing operations. For 2018, 2017, and 2016, our working capital was $480.8 million, $415.2 million, and $547.4 million, respectively. In 2018, our working capital increased compared to 2017 due to increases in cash and accounts receivable. These changes reflect our increased sales during 2018 compared to 2017. In 2017, our working capital decreased compared to 2016 due to the use of cash and short-term investments to pay down our long-term debt. We expect cash generated by our operations together with existing cash, cash equivalents, short-term investments and available credit facilities to be sufficient to satisfy our working capital needs, capital asset purchases, outstanding commitments and other liquidity requirements associated with our existing operations for at least the next 12 months.

In 2018, 2017 and 2016, our capital expenditures were approximately $79.7 million, $125.2 million and $52.2 million, respectively, which includes approximately $10.2 million, $23.8 million and $10.5 million of capital expenditures related to the investment agreement with the Management Committee of the Chengdu Hi-Tech Industrial Development Zone (the "CDHT") for 2018, 2017 and 2016, respectively. Our capital expenditures for these periods were primarily related to manufacturing expansion in our facilities in China and, to a lesser extent, our office buildings. Capital expenditures in 2018 were approximately 6.6% of our net sales.

In 2010, we announced an investment agreement with the Management Committee of the CDHT. Under this agreement, we formed a joint venture with a Chinese partner, Chengdu Ya Guang Electronic Company Limited ("Ya Guang"), to establish a semiconductor assembly and test facility in Chengdu, China. In December 2016, we increased our investment and currently own approximately 98% of the joint venture entity. The CDHT granted the joint venture a 50 year land lease, provides corporate and employee tax incentives, tax refunds, subsidies and other financial support. We believe that this will be a long-term, multi-year project that will provide us additional capacity as needed. As of December 31, 2018, we have invested $179.0 million, primarily for infrastructure, buildings and equipment related capital expenditures.

Restricted cash is pledged as collateral when we enter into agreements with banks for certain banking facilities. As of December 31, 2018, restricted cash of $0.8 million was pledged as collateral for issuance of bank acceptance notes and letters of credit.

As of December 31, 2018, we had short-term investments of approximately $7.5 million. These investments are highly liquid with maturity dates greater than three months at the date of purchase. The increase from $4.6 million in 2017, to $7.5 million in 2018 reflects the investment of excess liquidity in short-term certificates of deposit. We generally can access these investments in a relatively short amount of time but in doing so we generally forfeit a portion of interest income.

Discussion of Cash Flows

Cash and cash equivalents, including restricted cash increased, approximately $36.6 million to $241.8 million in 2018 from $205.2 million in 2017. The increase in 2018 compared to 2017 was primarily due to lower cash outflows for debt repayments. Cash and cash equivalents, including restricted cash, decreased approximately $44.0 million to $205.2 million in 2017 from $249.7 million in 2016. The decrease was primarily due to cash being used for capital expenditures and the repayment of long-term debt we incurred in 2015 in connection with our acquisition of Pericom.

	Twelve Months Ended December 31,					
	2018	2017	Change	2017	2016	Change
Net cash provided by operating activities	$185,566	$181,123	$4,443	$181,123	$124,742	$56,381
Net cash used by investing activities	(88,944)	(78,912)	(10,032)	(78,912)	(26,407)	(52,505)
Net cash used by financing activities	(51,911)	(158,184)	106,273	(158,184)	(63,458)	(94,726)
Effect of exchange rates on cash and cash equivalents, including restricted cash	(8,078)	11,461	(19,539)	11,461	(4,588)	16,049
Net increase (decrease) in cash and cash equivalents, including restricted cash	$36,633	$(44,512)	$81,145	$(44,512)	$30,289	$(74,801)

Operating Activities

Net cash provided by operating activities for 2018 was approximately $185.6 million, due to $105.4 million of net income, $104.6 million of depreciation and amortization and $20.7 million of non-cash share-based compensation, partially offset by a decrease of $42.8 million of working capital accounts. Net cash provided by operating activities for 2017 was approximately $181.1 million, due primarily to $96.2 million of depreciation and amortization, $25.3 million of deferred tax assets, $18.6 million from non-cash share-based compensation, and an increase in working capital accounts of $40.6 million. Net cash provided by operating activities for 2016 was approximately $124.7 million, due primarily to $18.5 million of net income, $100.9 million in depreciation and amortization, $14.0 million from non-cash share-based compensation and a net increase in operating capital assets and liabilities of $5.5 million. These positive effects to operating cash flow were partially offset by the negative effect of a change in deferred income taxes of $14.9 million.

Investing Activities

Net cash used by investing activities for 2018 was approximately $88.9 million, due primarily to $87.5 million in cash capital expenditures and $3.3 million in net purchases of short-term investments. Net cash used by investing activities for 2017 was approximately $78.3 million, due primarily to $111.2 million in cash capital expenditures, $12.2 million in purchases of short-term investments and a $7.0 million grant from a foreign government, partially offset by a $38.6 million sale of short-term investments. Net cash used by investing activities for 2016 was approximately $27.4 million, due primarily to $58.5 million used for purchases of property, plant and equipment. This use of cash for investing was partially offset by a net decrease in short-term investments of $32.7 million.

Financing Activities

Net cash used by financing activities for 2018 was approximately $51.9 million, due primarily to a $50.5 million net reduction of debt, $11.3 million payment of taxes on net share settlements and a dividend to a noncontrolling interest of $2.7 million and partially offset by a capital contribution from a noncontrolling interest of $6.3 million and proceeds from stock option exercises of $4.9 million. Net cash used by financing activities for 2017 was approximately $158.1 million, due primarily to a $159.9 million net reduction of debt and an $8.7 million repurchase of Common Stock, partially offset by $13.6 million in proceeds from stock option exercises. Net cash used in financing activities for 2016 was approximately $63.5 million, due primarily to the net repayment of long-term debt of $36.4 million, the repurchase of 691,196 shares of the Company's common stock for $18.0 million, the payment of dividends to noncontrolling interest of $4.9 million, payment of taxes on net share settlement of $2.5 million related to vesting of Diodes stock awards for Pericom employees and payment of $2.0 million of debt issuance costs from refinancing our long-term debt.

Debt instruments

The U.S. Credit Facility contains certain financial and non-financial covenants, including, but not limited to, a maximum consolidated leverage ratio, a minimum consolidated fixed charge coverage ratio, and restrictions on liens, indebtedness, investments, fundamental changes, dispositions, and restricted payments (including dividends and share repurchases).

As of December 31, 2018, our Asia subsidiaries had unused and available credit lines of up to an aggregate of approximately $112.5 million, with several financial institutions. In some cases, our foreign credit lines are unsecured, uncommitted and may be repayable on demand, except for two Taiwanese credit facilities that are collateralized by assets. Our foreign credit lines bear interest at LIBOR or similar indices plus a specified margin. At December 31, 2018, $10.3 million was outstanding under these lines of credit. See "Liquidity and Capital Resources" above and Note 7 of "Notes to Consolidated Financial Statements" of this Annual Report for additional information.

Off-Balance Sheet Arrangements

We do not have any transactions, arrangements and other relationships with unconsolidated entities that will affect our liquidity or capital resources. We have no special purpose entities that provided off-balance sheet financing, liquidity or market or credit risk support, nor do we engage in leasing, hedging or research and development services, that could expose us to liability that is not reflected on the face of our financial statements.

Contractual Obligations

The following table represents our contractual obligations as of December 31, 2018 (in thousands):

	Total	Less than 1 year	1-3 years	4-5 years	More than 5 years
Debt	$215,191	$27,385	$184,067	$580	$3,159
Interest on long-term debt [1]	16,783	6,767	9,690	93	233
Operating leases	41,543	10,988	16,919	9,184	4,452
Capital leases	2,190	1,129	1,061	-	-
Defined benefit obligations	28,859	2,624	5,247	5,247	15,741
Purchase obligations	126,950	69,751	57,199	-	-
Total obligations	$431,516	$118,644	$274,183	$15,104	$23,585

(1) Interest on long-term debt assumes there is no change in current interest rates and no change in long-term debt from the balance outstanding as of December 31, 2018, other than required principal payments. The Revolver and Term Loan mature in October 2021.

Tax liabilities are not included in the above contractual obligations as we cannot make reasonable estimates of the amount and period in which those tax liabilities would be paid. See "Accounting for income taxes" below and Note 11 of "Notes to Consolidated Financial Statements" of this Annual Report for additional information. In addition to these purchase commitments, we have equity investment obligations for our Chengdu facilities of $30 million, $25 million and $16 million for 2019, 2020 and 2021, respectively, and capital investment obligations of $25 million for each 2019 and 2020.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with generally accepted principles in the United States of American ("U.S. GAAP") requires that management make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of net sales and expenses during the reporting period. On an ongoing basis, we evaluate our estimates, which are based upon historical experiences, market trends and financial forecasts and projections, and upon various assumptions that management believes to be reasonable under the circumstances at that certain point in time. Actual results may differ, significantly at times, from these estimates under different assumptions or conditions.

We believe the following critical accounting policies and estimates affect the significant estimates and judgments we use in the preparation of our consolidated financial statements, and may involve a higher degree of judgment and complexity than others.

Revenue recognition

We generate revenue primarily through the sale of semiconductor products either directly to a customer or to a distributor. We typically have contracts with our direct customers and distributors and in determining whether a contract exists we evaluate the terms of the agreement, the relationship with the direct customer or distributor and their ability to pay.

Under revenue recognition guidance, a performance obligation is a promise in a contract to transfer a distinct good or service to the customer, and is considered the unit of account. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. Generally speaking, our primary performance obligation is the delivery of a specific good through the purchase order submitted by our customer and revenue is recognized at the time of shipment or delivery, depending on the contract terms.

We record allowances/reserves for the following items: (i) ship and debit, which arise when we, from time to time based on market conditions, issue credit to certain distributors upon their shipments to their end customers; (ii) stock rotation, which are contractual obligations that permit certain distributors, up to four times a year, to return a portion of their inventory based on historical shipments to them in exchange for an equal and offsetting order; and (iii) price protection, which arise when market conditions cause average selling prices to decrease and we issue credit to certain distributors on their inventory. Ship and debit reserves are recorded as a reduction to net sales with a corresponding reduction to accounts receivable. Stock rotation reserves are recorded as a reduction to net sales with a corresponding reduction to cost of goods sold for the estimated cost of inventory that is expected to be returned. Price protection reserves are recorded as a reduction to net sales with a corresponding increase in accrued liabilities.

We also assess our customer’s ability and intention to pay, which is based on a variety of factors including our customer’s historical payment experience, their financial condition and the condition of the global economy and financial markets. Payment terms and conditions typically vary depending on negotiations with the customer.

Certain customers have limited rights of return or are entitled to price adjustments on products held in their inventory or upon sale to their end customers. We reduce net sales in the period of sale for estimates of product returns, distributor price adjustments and other allowances. Our reserve estimates are based upon historical data as well as projections of sales, distributor inventories, price adjustments, average selling prices and market conditions. Actual returns and adjustments could be significantly different from our estimates and provisions, resulting in an adjustment to net sales.

Inventories

Inventories are stated at the lower of cost or net realizable value. Cost is determined principally by the first-in, first-out method. On an ongoing basis, we evaluate our inventory for obsolescence and slow-moving items. This evaluation includes analysis of sales levels, sales projections, and purchases by item, as well as raw material usage related to our manufacturing facilities. If our review indicates a reduction in utility below carrying value, we reduce our inventory to a new cost basis. If future demand or market conditions are different than our current estimates, an inventory adjustment may be required, and would be reflected in cost of goods sold in the period the revision is made.

Accounting for income taxes

As part of the process of preparing our consolidated financial statements, we are required to estimate our income taxes in each of the tax jurisdictions in which we operate. This process involves using an asset and liability approach whereby deferred tax assets and liabilities are recorded for differences in the financial reporting bases and tax bases of our assets and liabilities. A valuation allowance is provided against deferred tax assets unless it is more likely than not that such deferred tax assets will be realized. This analysis requires considerable judgment and is subject to change to reflect future events and changes in the tax laws.

The benefit of a tax position is recognized only if it is more likely than not that the tax position would be sustained based on its technical merits in a tax examination, using the presumption the tax authority has full knowledge of all relevant facts regarding the position. The amount of benefit recognized is the largest amount of tax benefit that is greater than 50% likely of being realized on ultimate settlement with the tax authority. For tax positions not meeting the more likely than not test, no tax benefit is recorded.

Goodwill and other indefinite lived intangible assets

Goodwill and other indefinite lived assets are tested for impairment on an annual basis or when an event or changes in circumstances indicate that its carrying value may not be recoverable. Goodwill impairment is tested at the reporting unit level, which is defined as an operating segment or one level below the operating segment. Diodes has one operating segment. Goodwill is reviewed for impairment using either a qualitative assessment or a quantitative goodwill impairment test. If we choose to perform a qualitative assessment and determine the fair value more likely than not exceeds the carrying value, no further evaluation is necessary. When we perform the quantitative goodwill impairment test, we compare fair value to carrying value, which includes goodwill. If fair value of exceeds carrying value, the goodwill is not considered impaired. If the carrying value is higher than the fair value, the difference would be recognized as an impairment loss.

Derivative Instruments and Hedging Activities

The Company records all derivatives on the balance sheet at fair value. The accounting for changes in the fair value of derivatives depends on the intended use of the derivative, whether the Company has elected to designate a derivative in a hedging relationship and apply hedge accounting and whether the hedging relationship has satisfied the criteria necessary to apply hedge accounting. Derivatives designated and qualifying as a hedge of the exposure to variability in expected future cash flows, or other types of forecasted transactions, are considered cash flow hedges. Hedge accounting generally provides for the matching of the timing of gain or loss recognition on the hedging instrument with the recognition of the changes in the fair value of the hedged asset or liability that are attributable to the hedged risk in a fair value hedge or the earnings effect of the hedged forecasted transactions in a cash flow hedge.

Recently Issued Accounting Pronouncements

See Note 1 of "Notes to Consolidated Financial Statements" of this Annual Report for additional information regarding the status of recently issued accounting pronouncements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.
Foreign Currency Risk

We face exposure to adverse movements in foreign currency exchange rates, primarily in Asia and Europe. Our foreign currency risk may change over time as the level of activity in foreign markets grows and could have a material adverse impact upon our financial results. Certain of our assets, including certain bank accounts and accounts receivable, and liabilities exist in non–U.S. dollar denominated currencies, which are sensitive to foreign currency exchange fluctuations. These currencies are principally the Chinese Yuan, the Taiwanese dollar, the Euro, and the British Pound Sterling and, to a lesser extent, the Japanese Yen and the Hong Kong dollar. We have entered into hedging arrangements designed to mitigate foreign currency fluctuations. See "Risk Factors – We are subject to foreign currency risk as a result of our international operations." in Part I, Item 1A of this Annual Report for additional information.

Foreign Currency Transaction Risk

We also are subject to foreign currency risk arising from intercompany transactions that are expected to be settled in cash in the near term where the cash balances are held in denominations other than our subsidiaries' functional currency. If exchange rates weaken against the functional currency, we would incur a remeasurement gain in the value of the cash balances, and if the exchange rates strengthen against the functional currency, we would incur a remeasurement loss in the value of the cash balances, assuming the net monetary asset balances remained constant. Our ultimate realized gain or loss with respect to currency fluctuations will generally depend on the size and type of transaction, the size and currencies of the net monetary assets and the changes in the exchange rates associated with these currencies. Based on balances at December, 31, 2018, if the Chinese Yuan, the Taiwanese dollar, the Euro and the British Pound Sterling were to weaken (or strengthen) by 1.0% against the U.S. dollar, we would experience currency transaction gain (or loss) of less than $1.6 million. Net foreign exchange transaction gains (or losses) are included in other income and expense.

Foreign Currency Translation Risk

When our foreign subsidiaries' books are maintained in their functional currency, fluctuations in foreign currencies impact the amount of total assets and liabilities that we report for our foreign subsidiaries upon the translation of these amounts into U.S. dollars for reporting purposes. All elements of the subsidiaries' financial statements, except for stockholders' equity accounts, are translated using a currency exchange rate. Assets and liabilities denominated in foreign currencies are translated at the exchange rate on the balance sheet date. Income and expense accounts denominated in foreign currencies are translated at the weighted-average exchange rate during the period presented. Resulting translation adjustments are recorded as a separate component of accumulated other comprehensive income or loss within stockholders' equity in the consolidated balance sheets, which are accumulated in this account until sale or liquidation of the foreign entity investment, at which time they are reported as adjustments to the gain or loss on sale of investment.

Foreign Currency Denominated Defined Benefit Plans

We have a contributory defined benefit plan that covers certain employees in the U.K., which is closed to new entrants and frozen with respect to future benefit accruals. The retirement benefit is based on the final average compensation and service of each eligible employee. December 31 is our annual measurement date, and on the measurement date, defined benefit plan assets are determined based on fair value. Defined benefit plan assets consist primarily of high quality corporate bonds and stocks that are denominated in the currency in which the benefits will be paid and that have terms to maturity approximating to the terms of the related pension liability. The net pension and supplemental retirement benefit obligations and the related periodic costs are based on, among other things, assumptions of the discount rate, estimated return on plan assets and mortality rates. These obligations and related periodic costs are measured using actuarial techniques and assumptions. The projected unit credit method is the actuarial cost method used to compute the pension liabilities and related expenses.

As of December 31, 2018, the plan was underfunded and a liability of approximately $23.9 million was reflected in our consolidated financial statements as a noncurrent liability. The amount recognized in accumulated other comprehensive income was a net loss of $40.6 million. If the British Pound Sterling were to (weaken) or strengthen by 1.0% against the U.S. dollar, we would experience currency translation liability (decrease) or increase of less than $0.5 million. The weighted-average discount rate assumption used to determine benefit obligations as of December 31, 2018, was 2.9%. A 0.2% increase/(decrease) in the discount rate used to calculate the net period benefit cost for the year would reduce/increase annual benefit cost by less than $0.5 million. A 0.2% increase/(decrease) in the discount rate used to calculate the year-end projected benefit obligation would increase/(decrease) the year–end projected benefit obligation by approximately $6.0 million. The expected return on plan assets is determined based on historical and expected future returns of the various assets classes and as such, each 1.0% increase/(decrease) in the expected rate of return assumption would increase/(decrease) the net period benefit cost by approximately $1.2 million. The asset value of the defined benefit plan has been volatile in recent years due primarily to wide fluctuations in the U.K. equity markets and bond markets. See “Risk Factors – Changes in actuarial assumptions for our defined benefit plan could increase the volatility of the plan’s asset value, require us to increase cash contributions to the plan and have a negative impact on our cash flows, operating results and financial condition” in Part I, Item 1A of this Annual Report for additional information.

Interest Rate Risk

We have credit facilities with financial institutions in the U.S., Asia and Europe as well as other debt instruments with interest rates equal to LIBOR or similar indices plus a negotiated margin. A rise in interest rates could have an adverse impact upon our cost of working capital and our interest expense. Through the use of financial instruments, we have hedged $210.0 million of our floating rate debt. As a matter of policy, we do not enter into derivative transactions for speculative purposes. As of December 31, 2018, our outstanding principal debt included $210.0 million outstanding under our revolving senior credit facility and term loan, $5.2 million outstanding under foreign long term liabilities and $0.4 million used for import and export guarantees and bank acceptance notes. Based on our debt balances at December, 31, 2018, an increase or decrease in interest rates by 1.0% for the year on our credit facilities would increase or decrease our annual interest rate expense by less than $1.0 million, net of the amounts realized from our interest rate swaps. See “Risk Factors,” – “We are subject to interest rate risk that could have an adverse effect on our cost of working capital and interest expenses, which could adversely affect our business, operating results and financial condition” in Part I, Item 1A of this Annual Report for additional information.

Political Risk

We have a significant portion of our assets in mainland China, Taiwan and the U.K. The possibility of political conflict between any of these countries or with the U.S. could have a material adverse impact upon our ability to transact business through these important business channels and to generate profits. See “Risk Factors” – Risks Related to our International Operations” in Part I, Item 1A of this Annual Report for additional information.

Inflation Risk

Inflation did not have a material effect on net sales or net income in fiscal year 2018. A significant increase in inflation could affect future performance.

Credit Risk

The success of our business depends, among other factors, on the strength of the global economy and the stability of the financial markets, which in turn affect our customers' demand for our products, the ability of our customers to meet their payment obligations, the likelihood of customers canceling or deferring existing orders and the strength of consumer demand for items containing our products in the end-markets we serve. We provide credit to customers in the ordinary course of business and perform ongoing credit evaluations, while at times providing extended terms. We believe that our exposure to concentrations of credit risk with respect to trade receivables is largely mitigated by dispersion of our customers over various geographic areas, operating primarily in electronics manufacturing and distribution. We believe our allowance for doubtful accounts is sufficient to cover customer credit risks.

Item 8. Financial Statements and Supplementary Data.

See Part IV, Item 15 "Exhibits and Financial Statement Schedules" for our consolidated financial statements and the notes and schedules thereto filed as part of this Annual Report.

Item 9. Changes In and Disagreements With Accountants on Accounting and Financial Disclosure.

Not Applicable.

Item 9A. Controls and Procedures.

Disclosure Controls and Procedures

Our Chief Executive Officer, Keh-Shew Lu, and Chief Financial Officer, Richard D. White, with the participation of our management, carried out an evaluation as of December 31, 2018, of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) of the Securities Exchange Act of 1934, as amended). Based upon that evaluation, our Chief Executive Officer and our Chief Financial Officer believe that, as of the end of the period covered by this report, our disclosure controls and procedures are effective at the reasonable assurance level to ensure that information required to be included in this report is:

- recorded, processed, summarized and reported within the time period specified in the Commission's rules and forms and
- accumulated and communicated to our management, including the Chief Executive Officer and the Chief Financial Officer, to allow timely decisions regarding disclosure.

Disclosure controls and procedures, no matter how well designed and implemented, can provide only reasonable assurance of achieving an entity's disclosure objectives. The likelihood of achieving such objectives is affected by limitations inherent in disclosure controls and procedures. These include the fact that human judgment in decision-making can be faulty and that breakdowns in internal control can occur because of human failures such as simple errors, mistakes or intentional circumvention of the established processes.

Management's Annual Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer and implemented by our 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 U.S. GAAP.

Our 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 our assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP, and that receipts and expenditures of ours are being made only in accordance with authorizations of our management and directors; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our 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.

Under the supervision and with the participation of management, including our Chief Executive Officer and the Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework and criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). This evaluation included review of the documentation of controls, testing of operating effectiveness of controls and a conclusion on this evaluation. Based on this evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2018.

The effectiveness of our internal control over financial reporting as of December 31, 2018, has been audited by Moss Adams LLP, an independent registered public accounting firm, as stated in their report which appears in Item 8 of this Annual Report on Form 10-K.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting, known to the Chief Executive Officer or the Chief Financial Officer, that occurred during the last fiscal quarter covered by this report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information.
None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.
The information concerning our directors, executive officers and corporate governance is incorporated herein by reference from the section entitled “Proposal One – Election of Directors” contained in our definitive proxy statement to be filed pursuant to Section 14(a) of the Securities Exchange Act of 1934 within 120 days after our fiscal year end of December 31, 2018, for our annual stockholders’ meeting for 2019 (the “Proxy Statement”).

We have adopted a code of ethics that applies to our Chief Executive Officer and senior financial officers. The code of ethics has been posted on our website under the Corporate Governance portion of the Investor Relations section at www.diodes.com. We intend to satisfy disclosure requirements regarding amendments to, or waivers from, any provisions of our code of ethics on our website.

Item 11. Executive Compensation.
The information concerning executive compensation is incorporated herein by reference from the sections entitled “Compensation Discussion and Analysis,” “Executive Compensation,” and “Compensation Committee Interlocks and Insider Participation” contained in the Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.
The information concerning the security ownership of certain beneficial owners and management and related stockholder matters is incorporated herein by reference from the sections entitled “General Information – Security Ownership of Certain Beneficial Owners and Management,” and “Executive Compensation – Equity Compensation Plan Information” contained in the Proxy Statement.

Item 13. Certain Relationships, Related Transactions and Director Independence.
The information concerning certain relationships, related transactions and director independence is incorporated herein by reference from the sections entitled “Corporate Governance – Certain Relationships and Related Person Transactions” and “Corporate Governance – Director Independence” and “Proposal One – Election of Directors” contained in the Proxy Statement.

Item 14. Principal Accounting Fees and Services.
The information concerning our principal accountant’s fees and services is incorporated herein by reference from the section entitled “Ratification of the Appointment of Independent Registered Public Accounting Firm” contained in the Proxy Statement.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a) Financial Statements and Schedules

Our consolidated financial statements are as set forth under Item 8 of this report on Form 10-K.

(2) Schedules:

None

Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements and note thereto.

(b) Exhibits

The exhibits listed on the Index to Exhibits are filed as exhibits or incorporated by reference to this Annual Report.

(c) Financial Statements of Unconsolidated Subsidiaries and Affiliates

Not Applicable.

Item 16. Form 10-K Summary.

None

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Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of

Diodes Incorporated

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Diodes Incorporated and Subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of income, comprehensive income (loss), equity, and cash flows for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO").

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2018 and 2017, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by COSO.

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 included in Item 9A. 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 to 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.

/s/ Moss Adams LLP

Los Angeles, California

February 21, 2019

We have served as the Company’s auditor since 1993.

DIODES INCORPORATED AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(In thousands, except share and per share amounts)

	December 31, 2018	2017
Assets		
Current assets:		
Cash and cash equivalents	$241,053	$203,820
Short-term investments	7,499	4,558
Accounts receivable, net of allowances of $4,102 and $4,480 at December 31, 2018 and December 31, 2017, respectively	228,405	200,112
Inventories	215,435	216,506
Prepaid expenses and other current assets	42,446	37,328
Total current assets	734,838	662,324
Property, plant and equipment, net	446,835	459,169
Deferred income tax	31,652	40,580
Goodwill	132,437	134,187
Intangible assets, net	137,935	156,445
Other long-term assets	42,674	35,968
Total assets	$1,526,371	$1,488,673
Liabilities		
Current liabilities:		
Line of credit	$10,254	$1,008
Accounts payable	117,808	108,001
Accrued liabilities	82,605	99,301
Income tax payable	15,744	18,216
Current portion of long-term debt	27,613	20,636
Total current liabilities	254,024	247,162
Long-term debt, net of current portion	186,143	247,492
Deferred tax liabilities	17,993	25,176
Other long-term liabilities	90,779	94,925
Total liabilities	548,939	614,755
Commitments and contingencies (See Note 16)		
Stockholders' equity		
Preferred stock - par value $1.00 per share; 1,000,000 shares authorized; no shares issued or outstanding	-	-
Common stock - par value $0.66 2/3 per share; 70,000,000 shares authorized; 50,221,035 and 49,130,090, issued and outstanding at December 31, 2018 and December 31, 2017, respectively	34,454	33,727

Additional paid-in capital	399,915	386,338
Retained earnings	636,708	532,687
Treasury stock, at cost, 1,457,206 shares held at December 31, 2018 and December 31, 2017	(37,768)	(37,768)
Accumulated other comprehensive loss	(101,846)	(83,480)
Total stockholders' equity	931,463	831,504
Noncontrolling interest	45,969	42,414
Total equity	977,432	873,918
Total liabilities and stockholders' equity	$1,526,371	$1,488,673

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

DIODES INCORPORATED AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF INCOME

(In thousands, except per share data)

	Twelve Months Ended December 31,		
	2018	2017	2016
Net sales	$1,213,989	$1,054,204	$942,162
Cost of goods sold	778,713	697,428	655,239
Gross profit	435,276	356,776	286,923
Operating expenses			
Selling, general and administrative	176,197	168,590	158,321
Research and development	86,286	77,877	69,937
Amortization of acquisition-related intangible assets	18,351	18,798	20,478
Impairment of fixed assets	390	2,211	114
Restructuring	206	10,137	12
Other operating (income) expense	(636)	(246)	70
Total operating expenses	280,794	277,367	248,932
Income from operations	154,482	79,409	37,991
Other income (expense)			
Interest income	1,978	1,475	1,357
Interest expense	(9,901)	(13,448)	(13,257)
Foreign currency (loss) gain, net	(3,701)	(7,995)	2,171
Impairment of cost-basis investment	-	-	(3,218)
Other income (expense)	7,104	3,150	(9)
Total other expense	(4,520)	(16,818)	(12,956)
Income before income taxes and noncontrolling interest	149,962	62,591	25,035
Income tax provision	44,556	62,325	6,558
Net income	105,406	266	18,477
Less: net income attributable to noncontrolling interest	(1,385)	(2,071)	(2,542)
Net income (loss) attributable to common stockholders	$104,021	$(1,805)	$15,935
Earnings (loss) per share attributable to common stockholders			
Basic	$2.09	$(0.04)	$0.33
Diluted	$2.04	$(0.04)	$0.32
Number of shares used in computation			
Basic	49,841	48,824	48,597
Diluted	50,935	48,824	49,789

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

DIODES INCORPORATED AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(In thousands)

	Twelve Months Ended December 31,		
	2018	2017	2016
Net income	$105,406	$266	$18,477
Unrealized gain (loss) on defined benefit plan, net of tax	3,440	(4,897)	(7,777)
Unrealized gain on interest rate swap, net of tax	737	1,018	1,506
Unrealized foreign currency (gain) loss, net of tax	(22,543)	33,065	(21,979)
Comprehensive income (loss)	87,040	29,452	(9,773)
Less: Comprehensive income attributable to noncontrolling interest	(1,385)	(2,071)	(2,542)
Total comprehensive income (loss) attributable to common stockholders	$85,655	$27,381	$(12,315)

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

DIODES INCORPORATED AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF EQUITY

(In thousands)

(Amounts in thousands)	Common stock Shares	Common stock Amount	Treasury stock Shares	Treasury stock Amount	Additional paid-in capital	Retained earnings	Accumulated other comprehensive loss	Total Diodes Incorporated Stockholders' equity	Noncontrolling interest	Total equity
Balance, December 31, 2015	48,614	$32,404	(466)	$(11,009)	$344,086	$514,280	$(84,416)	$795,345	$47,652	$842,997
Total comprehensive income	-	-	-	-	-	15,935	(28,250)	(12,315)	2,542	(9,773)
Dividends to noncontrolling interest	-	-	-	-	-	-	-	-	(5,746)	(5,746)
Common stock issued for share-based plans	762	515	-	-	(395)	-	-	120	-	120
Net excess tax benefit from share-based compensation	-	-	-	-	(567)	-	-	(567)	-	(567)
Stock buyback	-	-	(691)	(18,014)	-	-	-	(18,014)	-	(18,014)
Share-based compensation	-	-	-	-	13,978	-	-	13,978	-	13,978
Tax related to net share settlement	-	-	-	-	(2,528)	-	-	(2,528)	-	(2,528)
Balance, December 31, 2016	49,376	$32,919	(1,157)	$(29,023)	$354,574	$530,215	$(112,666)	$776,019	$44,448	$820,467
Total comprehensive income	-	-	-	-	-	(1,805)	29,186	27,381	2,071	29,452
Noncontrolling interests	-	-	-	-	(165)	-	-	(165)	641	476
Dividends to noncontrolling interest	-	-	-	-	-	-	-	-	(4,746)	(4,746)
	-	-	-	-	771	4,277	-	5,048	-	5,048

Adoption of new accounting standard, ASU 2016-09										
Common stock issued for share-based plans	1,211	808	-	-	12,798	-	-	13,606	-	13,606
Stock buyback	-	-	(300)	(8,745)	-	-	-	(8,745)	-	(8,745)
Share-based compensation	-	-	-	-	18,638	-	-	18,638	-	18,638
Tax related to net share settlement	-	-	-	-	(278)	-	-	(278)	-	(278)
Balance, December 31, 2017	50,587	$33,727	(1,457)	$(37,768)	$386,338	$532,687	$(83,480)	$831,504	$42,414	$873,918
Total comprehensive income	-	-	-	-	-	104,021	(18,366)	85,655	1,385	87,040
Contributions from noncontrolling interests	-	-	-	-	-	-	-	-	4,902	4,902
Dividends to noncontrolling interest	-	-	-	-	-	-	-	-	(2,732)	(2,732)
Common stock issued for share-based plans	1,091	727	-	-	4,134	-	-	4,861	-	4,861
Share-based compensation	-	-	-	-	20,736	-	-	20,736	-	20,736
Tax related to net share settlement	-	-	-	-	(11,293)	-	-	(11,293)	-	(11,293)
Balance, December 31, 2018	51,678	$34,454	(1,457)	$(37,768)	$399,915	$636,708	$(101,846)	$931,463	$45,969	$977,432

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

DIODES INCORPORATED AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

	Twelve Months Ended December 31, 2018	2017	2016
Operating Activities			
Net income	$ 105,406	$ 266	$ 18,477
Adjustments to reconcile net income to net cash provided by operating activities, net of effects of acquisitions:			
Depreciation	86,291	76,883	78,482
Amortization of intangibles	18,353	18,798	20,483
Amortization of debt issuance costs	522	514	1,889
Share-based compensation	20,736	18,609	14,029