SEMTECH CORP
Form 10-K
March 31, 2016

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

FORM 10-K

(Mark One)
x Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the fiscal year ended January 31, 2016
or
o 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 1-6395

SEMTECH CORPORATION
(Exact name of registrant as specified in its charter)

Delaware	95-2119684
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

200 Flynn Road, Camarillo, California, 93012-8790
(Address of principal executive offices, Zip Code)

Registrant’s telephone number, including area code: (805) 498-2111
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 $.01 per share	The NASDAQ Stock Market LLC

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes x No ¨
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ¨ No x

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 x No ¨
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T

(§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No ¨

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

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

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

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

The aggregate market value of the common stock held by non-affiliates of the registrant (based upon the closing sale price of $17.93 on the NASDAQ Global Select Market) as of July 26, 2015 was approximately $0.8 billion. Stock held by directors, officers and shareholders owning 10% or more of the outstanding common stock (as reported by shareholders on Schedules 13D and 13G) were excluded as they may be deemed affiliates. This determination of affiliate status is not a conclusive determination for any other purpose.

Number of shares of Common Stock, $0.01 par value per share, outstanding at March 25, 2016: 65,207,553

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the following documents are incorporated by reference in Part III, Item numbers 11, 12, 13 and 14 and portions of Item 10 of this report to: Definitive Proxy Statement in connection with registrant's annual meeting of shareholders to be held on June 16, 2016, to be filed no later than 120 days after the end of the registrant's fiscal year ended January 31, 2016.

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PART IV

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Unless the context otherwise requires, the use of the terms “Semtech,” “the Company,” “we,” “us” and “our” in this Annual Report on Form 10-K refers to Semtech Corporation and, as applicable, its consolidated subsidiaries.

Special Note Regarding Forward-Looking and Cautionary Statements

This Annual Report on Form 10-K contains “forward-looking statements” within the meaning of the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995, as amended, based on our current expectations, estimates and projections about our operations, industry, financial condition, performance, results of operations, and liquidity. Forward-looking statements are statements other than historical information or statements of current condition and relate to matters such as future financial performance, future operational performance, the anticipated impact of specific items on future earnings, and our plans, objectives and expectations. Statements containing words such as “may,” “believe,” “anticipate,” “expect,” “intend,” “plan,” “project,” “estimate,” “should,” “will,” “designed to,” “proj “business outlook,” or other similar expressions constitute forward-looking statements. Forward-looking statements involve known and unknown risks and uncertainties that could cause actual results and events to differ materially from those projected. Potential factors that could cause actual results to differ materially from those in the forward-looking statements include, but are not limited to: fluctuation in the Company's future results; downturns in the business cycle; reduced demand for the Company's products due to global economic conditions; business interruptions; the Company's reliance on a limited number of suppliers and subcontractors for component and materials; potentially insufficient liability insurance if the Company's products are found to be defective; obsolete inventories as a result of changes in demand and change in life cycles for the Company’s products; the Company may be unsuccessful in developing and selling new products; the Company’s products having to undergo a lengthy and expensive qualification process without any assurance of product sales; the Company's products failing to meet industry standards; the Company's inability to protect intellectual property rights; the Company suffering losses if its products infringe the intellectual property rights of others; the Company's need to commit resources to product production prior to receipt of purchase commitments; increased business risk from foreign customers; the Company's foreign currency exposures; potential increased tax liabilities and effective tax rate if the Company needs to repatriate funds held by foreign subsidiaries; export restrictions and laws affecting the Company's trade and investments; competition against larger, more established entities; increased competition due to industry consolidation; the loss of any one of the Company's significant customers; volatility of customer demand; termination of a contract by a distributor; government regulations and other standards that impose operational and reporting requirements; the Company's failure to comply with applicable environmental regulations; compliance with conflict minerals regulations; increase in the Company’s cost of doing business as a result of having to comply with the codes of conduct of certain of the Company’s customers and suppliers; changes in tax laws and review by taxing authorities; taxation of the Company in other jurisdictions; the Company's failure to maintain effective internal control over financial reporting and disclosure controls and procedures; the Company’s limited experience with government contracting; potential government investigations and inquiries; loss of the Company's key personnel; risks associated with companies the Company has acquired in the past and may acquire in the future and the Company's ability to successfully integrate acquired businesses and benefit from expected synergies; the Company may be required to recognize additional impairment charges; the Company may be adversely affected by new accounting pronouncements; the Company's ability to generate cash to service its debt obligations; restrictive covenants in the Company's credit agreement which may restrict its ability to pursue its business strategies; the Company's reliance on certain critical information systems for the operation of its business; costs associated with the Company's indemnification of certain customers, distributors and other parties; the Company's share price could be subject to extreme price fluctuations; the impact on the Company’s common stock price if securities or industry analysts do not publish reports about the Company’s business or adversely change their recommendations regarding the Company’s common stock; anti-takeover provisions in the Company’s organizational documents could make an acquisition of the Company more difficult; the Company is subject to litigation risks which may be costly to defend; the Company's ability to realize expected benefits from the implementation of a new enterprise resource planning ("ERP") system; and disruption of the Company's operations caused by the adjustment to the new ERP system and the transition from the Company's legacy systems and databases. Additionally, forward-looking statements should be considered in conjunction with the cautionary statements contained in this Annual Report on Form 10-K, including, without limitation, information under the captions “Management's Discussion and Analysis of Financial Condition and Results of Operations” and “Risk Factors” and additional factors that accompany the related forward-looking statements in this Annual Report on Form 10-K, in the Company's other filings with the Securities and Exchange Commission (“SEC”), and in material incorporated herein and therein by reference. In light of the significant risks and uncertainties inherent in the forward-looking information included herein that may cause actual performance and results to differ materially from those predicted, any such forward-looking information should not be regarded as representations or guarantees by the Company of future performance or results, or that its objectives or plans will be achieved, or that any of its operating expectations or financial forecasts will be realized. Reported results should not be considered an indication of future performance. Investors are cautioned not to place undue reliance on any forward-looking information contained herein, which reflect management's analysis only as of the date hereof. Except as required by law, the

Company assumes no obligation to publicly release the results of any update or revision to any forward-looking statement that may be made to reflect new information, events or circumstances after the date hereof or to reflect the occurrence of unanticipated or future events, or otherwise.

In addition to regarding forward-looking statements with caution, you should consider that the preparation of the consolidated financial statements requires us to draw conclusions and make interpretations, judgments, assumptions and estimates with respect to certain factual, legal, and accounting matters. Our financial statements might have been materially impacted if we had reached different conclusions or made different interpretations, judgments, assumptions or estimates.

PART I

Item 1. Business
General
We are a leading supplier of analog and mixed-signal semiconductor products and were incorporated in Delaware in 1960. We design, develop and market a wide range of products for commercial applications, the majority of which are sold into the enterprise computing, communications, high-end consumer and industrial end-markets.
Enterprise Computing: datacenters, passive optical networks, desktops, notebooks, servers, graphic boards, monitors, printers and other computer peripherals.
Communications: base stations, optical networks, carrier networks, switches and routers, cable modems, wireless LAN and other communication infrastructure equipment.
High-End Consumer: handheld products, smartphones, set-top boxes, digital televisions, tablets, digital video recorders and other consumer equipment.
Industrial and other: video broadcast studio equipment, automated meter reading, Internet of Things ("IoT"), smart grid, wireless charging, military and aerospace, medical, security systems, automotive, industrial and home automation, video security and surveillance and other industrial equipment.
Our end-customers are primarily original equipment manufacturers and their suppliers, including Cisco Systems, Inc., Huawei Technologies Co., Ltd., LG Electronics, Sharp Corporation, Itron, Inc., Sonova International, Samsung Electronics Co. Ltd., Alphabet Inc., Amazon.com Inc., and ZTE Corporation.
In March 2016, the United States Department of Commerce published in the Federal Register a “final rule” amending the Export Administration Regulations to add ZTE Corporation and three of its subsidiaries to the “Entity List” maintained by the Department for actions contrary to the national security and foreign policy interests of the United States. We do not expect this event to have a material impact on our results of operations.
Overview of the Semiconductor Industry
The semiconductor industry is broadly divided into analog and digital semiconductor products. Analog semiconductors condition and regulate “real world” functions such as temperature, speed, sound and electrical current. Digital semiconductors process binary information, such as that used by computers. Mixed-signal devices incorporate both analog and digital functions into a single chip and provide the ability for digital electronics to interface with the outside world.
The market for analog and mixed-signal semiconductors differs from the market for digital semiconductors. The analog and mixed-signal industry is typically characterized by longer product life cycles than the digital industry. In addition, analog semiconductor manufacturers tend to have lower capital investment requirements for manufacturing because their facilities tend to be less dependent than digital producers on state-of-the-art production equipment to manufacture leading edge process technologies. The end-product markets for analog and mixed-signal semiconductors are more varied and more specialized than the relatively standardized digital semiconductor product markets.
Another difference between the analog and digital markets is the amount of available talented labor. The analog industry relies more heavily than the digital industry on design and applications talent to distinguish its products from one another. Digital expertise is extensively taught in universities due to its overall market size, while analog and mixed-signal expertise tends to be learned over time based on experience and hands-on training. Consequently, personnel with analog training are scarcer than digital trained engineers. This has historically made it more difficult for new suppliers in the analog market to quickly develop products and gain significant market share.
Advancements in digital signal processing technology typically drive the need for corresponding advancements in analog and mixed-signal solutions. We believe that the diversity of our applications allows us to take advantage of areas of relative market strength and reduces our vulnerability to competitive pressure in any one area.
Business Strategy
Our objective is to be a leading supplier of analog and mixed-signal semiconductor devices to the fastest growing segments of our target markets. We intend to leverage our pool of skilled technical personnel to develop new products, or, where appropriate, use strategic acquisitions to either accelerate our position in the fastest growing areas or to gain entry into these

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areas. In order to capitalize on our strengths in analog and mixed-signal processing design, development and marketing, we intend to pursue the following strategies:

Leverage our rare analog/mixed signal design expertise

We have developed a strategy to invest heavily in human resources needed to define, design and market high-performance analog and mixed signal platform products. We have built a team of experienced engineers who combine industry expertise with advanced semiconductor design expertise to meet customer requirements and enable our customers to get their products to market rapidly. We intend to leverage this strategy to achieve new levels of integration, power reduction and performance, enabling our customers to achieve differentiation in their end systems.

Continue to release proprietary new products, achieve new design wins, and cross-sell products

We are focused on developing unique, new, proprietary products that bring value to our target customers in our target markets. These products typically are differentiated in performance but are priced competitively. We also focus on achieving design wins for our products with current and future customers. Design wins are indications by the customer that they intend to incorporate our products into their new designs. Although we believe that a design win is an indicator of future potential growth, it does not inevitably result in us being awarded business or receiving a purchase commitment. Our technical talent works closely with our customers in securing design wins, defining new products and in implementing and integrating our products into their systems. We also focus on selling our complete portfolio of products to our existing customers, as we believe the technical expertise of our marketing and sales team allows us to identify and capitalize on cross-selling opportunities.

Focus on fast-growing market segments and regions

We have chosen to target the analog/mixed signal sub-segments of some of the fastest growing end-markets. We participate in these markets by focusing on specific product areas within the analog and mixed-signal market, including products for handheld equipment, mobile equipment, enterprise computing equipment, high-end consumer equipment, communications infrastructure and certain broad-based industrial markets. All of these markets are characterized by their need for leading-edge, high-performance analog and mixed-signal semiconductor technologies. The enterprise computing, communications, high-end consumer and industrial end-markets we supply are characterized by several trends that we believe drive demand for our products. The key trends that we believe are significant for our future growth include:

- Increasing bandwidth over high-speed networks, fueling growth in high speed voice, video and data transmission
- Increasing electronic system requirements for smaller, lighter, more highly integrated and feature rich devices
- Increasing need for more efficient energy management in the home and in industrial environments and the proliferation of ”green” standards

Our products address these market trends by providing solutions that are ultra-low power thus extending battery life, small form factor enabling smaller more mobile devices, highly integrated enabling more functionality within devices and high performance enabling product differentiation within our customer base. Additionally, as communications functions are increasingly integrated into a range of systems and devices, these products require analog sensing, processing and control capabilities, which increases the number and size of our end-markets.

Leverage outsourced semiconductor fabrication capacity

We outsource most of our manufacturing in order to focus more of our resources on defining, developing and marketing our products. Our primary outside wafer foundries are based in China, Israel, the United States, Europe and Taiwan. Our largest wafer source is a foundry based in China. We believe that outsourcing provides us numerous benefits, including capital efficiency, the flexibility to adopt and leverage emerging process technologies without significant investment risk and a more variable cost of goods, which provides us with greater operating flexibility.

Products and Technology

We design, develop, manufacture and market high-performance analog and mixed-signal semiconductor products. We operate and account for results in one reportable segment through four product lines: Signal Integrity, Protection, Wireless and Sensing and Power and High-Reliability.

On March 4, 2015, we completed the acquisition of Triune Systems, LLC. ("Triune"), a privately-held supplier of wireless charging, isolated switching and power management platforms targeted at high and low power, high efficiency applications.

This transaction, which was accounted for using the acquisition method of accounting, expanded our power management portfolio.

On January 13, 2015, we completed the acquisition of certain assets of EnVerv, Inc. (“EnVerv”), a privately held company developing innovative products in the Smart Grid and Power Line Communication (“PLC”) market place. This transaction, which was accounted for using the acquisition method of accounting, complements our business in the Metering and Machine to Machine (“M2M”) markets. It is expected that the EnVerv PLC platform combined with our LoRa Wireless Platform will create a highly differentiated and compelling offering to the energy management, smart grid, IoT and residential gateway markets.

On March 20, 2012, we acquired, through our wholly-owned subsidiary Semtech Canada Inc., all outstanding equity interests of Gennum Corporation (“Gennum”) (TSX: GND), a leading supplier of high speed analog and mixed-signal semiconductors for the optical communications and video broadcast markets.

Our primary reasons for the acquisition were to broaden our existing portfolio of high performance analog/mixed signal platforms and to acquire a portfolio of high-speed data communications and video platforms to create one of the industry’s most complete and robust high-speed analog and mixed signal portfolios. In addition, Gennum’s strong position in the emerging high-definition (“HD”) video surveillance market further diversifies our portfolio of high-performance analog semiconductors and provides cross-selling potential with the combined customer base.

On March 7, 2012, we completed the acquisition of Cycleo SAS (“Cycleo”), a privately held company based in France that develops intellectual property (“IP”) for wireless long-range semiconductor products used in smart metering and other industrial and consumer markets. This transaction, which was accounted for using the acquisition method of accounting, complements our current wireless offerings and brings customers a set of high-end, digitally enhanced wireless solutions.

Beginning in fiscal year 2016, we split the product line previously known as Protection, Power and High-Reliability into two new product lines now known as Protection Product Group and Power and High-Reliability Product Group. The presentation of historical performance of these product lines has been recast for consistency for fiscal years 2015 and 2014.

Our product lines include:

Signal Integrity Products. We design, develop and market a portfolio of optical communications, broadcast video, surveillance video, active cable transceiver and backplane products used in a wide variety of enterprise computing, industrial, communications and high-end consumer applications. Our comprehensive portfolio of integrated circuits (“ICs”) for optical transceivers, backplane applications and high-speed interfaces ranges from 100Mbps to 100Gbps and supports key industry standards such as Fibre Channel, Infiniband, Ethernet, passive optical networks ("PON") and SONET. Our broadcast video products offer advanced solutions for next generation video formats, ever increasing data rates and evolving I/O and distance requirements. Our security and surveillance products for high-definition closed circuit television (“HDcctv”) enable upgrade of analog closed circuit television installations to full digital HD, leveraging the installed base of COAX cabling, and our fully integrated transmit and receive products enable the highest performance, longest reach HDcctv standards-compliant designs.

We also sell proprietary advanced wired communication, ultra-high speed Serializer/Deserializer (“SerDes”) products for long-haul optical transport communication. These ICs perform transmission functions used in high-speed networks at 40Gbps and 100Gbps. We have ceased development of new products for this market due to our strategic decision in the fourth quarter of fiscal year 2014 to reduce investment in the long-haul optical market, but we continue to service our existing customer base.

Protection Products. We design, develop and market high performance protection devices, which are often referred to as transient voltage suppressors (“TVS”). TVS devices provide protection for electronic systems where voltage spikes (called transients), such as electrostatic discharge or secondary lightning surge energy, can permanently damage sensitive complementary metal-oxide-semiconductor (“CMOS”) ICs. Our portfolio of protection solutions include filter and termination devices that are integrated with the TVS device. Our products provide robust protection while preserving signal integrity in high-speed communications, networking and video interfaces. These products also operate at very low voltage. Our protection products can be found in a broad range of applications including smart phones, LCD TVs, set-top boxes, tablets, computers, notebooks, base stations, routers, automobile, and industrial instruments.

Wireless and Sensing Products. We design, develop and market a portfolio of specialized radio frequency products used in a wide variety of industrial, medical and communications applications, and specialized sensing products used in industrial and consumer applications. Our wireless products feature industry leading and longest range industrial, scientific and medical radio, enabling a lower total cost of ownership and increased reliability in all environments, making them particularly suitable for machine to machine (“M2M”) and Internet of Things (“IoT”) applications. Our unique sensing interface platforms can interface to any sensor and output digital data in any form. Specifically, the proximity sensing capability of our devices enable advanced user interface solutions for mobile and consumer products. Our wireless and sensing products can be found in a broad range of applications in the industrial, medical and consumer markets.

Power and High-Reliability Products. We design, develop and market power product devices that control, alter, regulate and condition the power within electronic systems. The highest volume product types within the power product line are switching voltage regulators, combination switching and linear regulators, smart regulators, charge pumps and wireless charging. Our Power products feature highly integrated functionality for the communications, industrial and computing markets and low-power, small form factor and high-efficiency products for mobile phones, notebook computers, computer peripherals and other consumer devices. The primary application for these products is power regulation for enterprise computing, communications, high-end consumer and industrial systems. Our high-reliability discrete semiconductor products are comprised of rectifiers, assemblies (packaged discrete rectifiers) and other products that are typically used to convert alternating currents into direct currents and to protect circuits against very high voltage spikes or high current surges.

Our high-reliability products can be found in a broad range of applications including industrial, military, medical, automotive, aerospace and defense systems, including satellite communications.

Systems Innovation Group. Our Systems Innovation Group combines the analog/mixed signal design competencies from our previous Sierra Monolithics, Inc. and Gennum Corporation acquisitions and is chartered with developing innovative analog/mixed signal intellectual property (“IP”) for emerging systems. These IP cores are targeted at the datacenter, cloud computing and storage networking markets and complement our rapidly growing library of analog/mixed signal IP Cores that have been developed over several years by our Snowbush IP team based in Canada. We also have developed advanced products in Data Converter IP at the latest, cutting edge CMOS process nodes that are targeted at high performance communications systems.

Our sales by product line are as follows:

	Fiscal Years		
(in thousands)	2016	2015	2014
Signal Integrity	$221,185	$219,024	$254,556
Protection	138,674	191,341	198,514
Wireless and Sensing	70,712	80,632	65,947
Power and High-Reliability	54,999	64,402	58,295
Systems Innovation	4,649	2,486	17,665
Total	$490,219	$557,885	$594,977

Semtech End-Markets

Our products are sold primarily to customers in the enterprise computing, communications, high-end consumer, and industrial end-markets. Our estimate of sales by major end-markets is detailed below:

	Fiscal Years		
(percentage of net sales)	2016	2015	2014
Enterprise Computing	30 %	21 %	16 %
Industrial and Other	26 %	26 %	25 %
High-End Consumer	25 %	31 %	29 %
Communications	19 %	22 %	30 %
Total	100 %	100 %	100 %

We believe that our diversity in end-markets provides stability to our business and opportunity for growth.

The following table depicts our main product lines and their end-market and product applications:

	Typical End-Product Applications			
Product Groups	Enterprise Computing	Communications	High-End Consumer	Industrial / Other
Signal Integrity	Optical Transceiver Module IC’s supporting 100Mb/s to 100Gb/s for Ethernet, Fibre Channel and CPRI protocols in Datacenter and Fiber to the Home applications, Backplane CDR’s and signal conditioners for use in Datacenter, storage and cloud computing networks	Optical Transceiver Module IC's for wireless basestations Optical Transceiver Module IC’s supporting 100Mb/s to 100Gb/s for Telecom applications	Signal Conditioners for Thunderbolt Cables	Serial Digital Interconnect interface IC’s for Broadcast Video and HD Surveillance
Protection	Servers, workstations, desktop PC/ notebooks, Ultrabooks, add-on cards, printers, copiers	4G/LTE Base stations, 10/100/1000 Gb/s	Smartphones, tablets, wearables cameras, TVs, set top boxes	Measurement & instrumentation devices, automobile
Wireless and Sensing		4G/LTE wireless basesations	Smartphones, media players, tablets, digital/still video cameras	Automated meter readers, industrial automation, IoT, keyless entry hearing aids
Power and High-Reliability	Servers, workstations, desktop PC/ notebooks	Routers/Switches Network cards, routers and hubs, telecom network boards	Smartphones, tablets, wearables cameras, smart TVs, set top boxes	Power supplies, wireless charging, industrial systems, military, aerospace, medical
Systems Innovation	High Speed Connectivity and Interfaces, Datacenters			

Seasonality

Historically, our results have reflected some seasonality, with demand levels generally being slightly lower in the enterprise computing and high-end consumer products end-markets during the first and fourth quarters of our fiscal year in comparison to the second and third quarters.

Intellectual Capital and Product Development

The development of intellectual property ("IP") and the resulting proprietary products is a critical success factor for us. Recruiting and retaining key technical talent is the foundation for designing, developing and selling this IP, in the form of new proprietary products, in the global marketplace. Our ability to recruit and retain our engineering talent is one of the keys to maintaining our competitive advantage. Historically, we have been successful in retaining our key engineering staff and recruiting new talent. One of our strategies to recruit this talent is the establishment of multiple design center locations. As a result, we have design centers throughout the world.

Circuit design engineers, layout engineers, product and test engineers, application engineers and field application engineers are our most valuable employees. Together they perform the critical tasks of design and layout of integrated circuits, turning these circuits into silicon devices, and conferring with customers about designing these devices into their applications. The majority of our engineers fit into one of these categories. Most of these engineers have many years of experience in the design, development and layout of circuits targeted for use in protection, advanced communications, power management and high-reliability, multimedia and data communications, and wireless and sensing applications. We also employ a number of software engineers and systems engineers that specialize in the development of software and systems architecture, who enable us to develop systems oriented products in select markets.

In fiscal year 2016, we incurred $113.7 million of product development and engineering expense. This represents 23% of net sales. Product development and engineering costs were $119.4 million or 21% of net sales and $137.4 million or 23% of net sales in fiscal years 2015 and 2014, respectively. The expenses in fiscal year 2015 included $6.6 million of impairment charges relating to our decision to reduce investments in the optical long-haul market.

We occasionally enter into agreements with customers that allow us to recover certain costs associated with product design and engineering services. Any recovery for these services is recognized during the period in which services are performed, which historically lags behind the period in which we recognize expense. This difference in recognition timing can create volatility in our reported development and engineering expenses.

Sales and Marketing

Sales made directly to customers during fiscal years 2016, 2015 and 2014, were approximately 42%, 44% and 57%, of net sales, respectively. The remaining 58%, 56% and 43% of net sales were made through independent distributors. The decline in direct sales in the past three years is related to substantially lower sales of our 40 Gbps and 100 Gbps long-haul transport products which were predominantly sold directly to our end-customers and lower sales to Korean customers. We have direct sales personnel located throughout the United States, Europe and Asia who manage the sales activities of independent sales representative firms and independent distributors. We expense our advertising costs as they are incurred.

We operate internationally through our wholly owned Swiss and Canadian subsidiaries, Semtech International AG and Semtech Canada Corporation. Semtech International AG serves the European and Asian markets from its headquarters in Rapperswil, Switzerland and through its wholly owned subsidiaries based in France, Germany, Neuchatel - Switzerland, the United Kingdom, Japan, China and Malaysia. Semtech International AG also maintains branch offices, either directly or through one of its wholly owned subsidiaries, in multiple countries, including China, Taiwan and Korea. Semtech Canada Corporation serves the Canadian market for Gennum products, which are now part of the Signal Integrity product group, from its headquarters in Burlington, Ontario. Independent representatives and distributors are also used to serve customers throughout the world. Some of our distributors and sales representatives also offer products from our competitors, as is customary in the industry.

In the fourth quarter of fiscal year 2016, we entered into an agreement with STMicroelectronics to scale LoRa® technology to provide customers with an additional resource for developing and deploying IoT solutions. While no revenue has been recorded as a result of this arrangement in fiscal year 2016, we believe that this type of arrangement will provide a meaningful enhancement in our approach to supporting our customers in the future.

Customers, Sales Data and Backlog

As a result of the breadth of our products and markets, we have a broad and balanced range of customers.

Representative Customers by End-Markets:

Enterprise Computing	Industrial	High-End Consumer	Communications
Hewlett-Packard	Sharp Corporation	LG Electronics Inc.	Cisco Systems, Inc.
ZTE Corporation	Honeywell Inc.	Huawei Technologies Co., Ltd.	Huawei Technologies Co., Ltd.
Sumitomo Electric	Panasonic Corp	Sharp Corporation	Ericsson
Oclaro, Inc.	Itron, Inc.	Quanta Computer	Samsung Electronics Co., Ltd.
Samsung Electronics Co., Ltd.	Sony Corp	Samsung Electronics Co., Ltd.	ZTE Corporation
LuxNet Corp	Sonova International	Sumitomo Electric	
Alphabet Inc.	Raytheon Company		
Amazon.com Inc.	Rockwell Automation		

Our customers include major original equipment manufacturers ("OEMs") and their subcontractors in the enterprise computing, communications, high-end consumer and industrial end-markets. Our products are typically purchased by these customers for our performance, price, or technical support, as compared to our competitors.

During fiscal years 2016, 2015 and 2014, U.S. sales contributed 12%, 12% and 16%, respectively to our net sales. Foreign sales constituted 88%, 88% and 84% of our net sales during fiscal years 2016, 2015 and 2014, respectively. Sales to customers located in Taiwan, South Korea, Japan, and China (including Hong Kong) comprised 8%, 6%, 8%, and 47% of our net sales, respectively, in fiscal year 2016. No other foreign country comprised more than 5% of net sales in fiscal year 2016. See Note 15 to our consolidated financial statements included in Item 8 of this report for additional financial information by geographic region. Additional information regarding certain risks associated with our international operations is provided under Item 1A. Risk Factors - Risks Relating to Our Business - Risks Relating to International Operations.

A summary of net sales by region follows.

Sales by Region

(in thousands, except percentages)	Fiscal Years 2016			2015			2014		
Asia-Pacific	$358,480	73	%	$412,514	74	%	$432,097	73	%
Europe	85,587	17	%	60,232	11	%	68,306	11	%
North America	46,152	9	%	85,139	15	%	94,574	16	%
Total Net Sales	$490,219	100	%	$557,885	100	%	$594,977	100	%

The following table sets forth the concentration of net sales and accounts receivable among the customers that accounted for more than 10% of our net sales or accounts receivable at the end of fiscal years 2016, 2015 and 2014:

Concentration of Net Sales - Significant Customers

(percentage of net sales)	Fiscal Years 2016		2015		2014	
Samsung Electronics (and affiliates)	7	%	11	%	12	%

Concentration of Accounts Receivable - Significant Customers

(percentage of net accounts receivable as of fiscal year end)	Fiscal Years 2016		2015	
Samsung Electronics (and affiliates)	5	%	12	%

For fiscal year 2016, end-market concentration for our significant customers was as follows:

(percentage of net sales)	Samsung Electronics (and affiliates)	
High-End Consumer (1)	7	%
Communications	—	%
Enterprise Computing	—	%
Industrial and Other	—	%
Total	7	%

(1) For Samsung Electronics Co., Ltd., approximately 87% of the sales into the High-End Consumer end-market relate to products focused on the handheld market, which includes cell phones.

Our backlog of orders as of the end of fiscal years 2016, 2015 and 2014 was approximately $84.2 million, $72.7 million and $84.4 million, respectively. The majority of our backlog is typically requested for delivery within six months. In markets where the end system life cycles are relatively short, customers typically request delivery in four to eight weeks. A backlog analysis at any given time gives little indication of our future business except on a short-term basis, principally within the next 45 days. We do not have any significant contracts with our customers calling for shipments over a period of more than 18 months.

Manufacturing Capabilities

Our strategy is to outsource the majority of our manufacturing functions to third-party foundries and assembly and test contractors. The third-party foundries fabricate silicon wafers and the assembly and test contractors package and test our products. We believe this outsourcing permits us to take advantage of the best available technology, leverage the capital investment of others, and reduce our operating costs associated with manufacturing assets.

We perform a limited amount of internal probe and final test activities at our facilities in Camarillo, Irvine, and San Diego in California; Neuchatel in Switzerland; and Reynosa in Mexico. These activities accommodate situations in which tight coupling with product design is desirable or where there are unique requirements. Our packaged discrete rectifier products are packaged and tested in-house in Reynosa, Mexico. Almost all of our other products are packaged and tested by outside subcontractors.

In keeping with our mostly “fabless” business model, we have no wafer fabrication facilities except for our operation in Reynosa, Mexico. For fiscal year 2016, the Reynosa facility provided almost all of the silicon for our packaged discrete rectifier products, which were approximately 3% of our end product sales. The remaining 97% of our end products were supported with finished silicon wafers purchased from outside wafer foundries in China, Taiwan, Germany, and Israel. We anticipate that more than 90% of all silicon wafers we require will come from outside foundries in fiscal year 2017.

Despite our use of outside wafer foundries for sourcing a majority of our silicon needs, we do maintain internal process development capabilities. Our process engineers work closely with our outside foundries on the improvement and development of process capabilities. In fiscal year 2016, we purchased the vast majority of our wafers from approximately six different third-party wafer foundries and used various manufacturing processes, including Bipolar, CMOS, RF-CMOS and Silicon Germanium ("SiGe") BI-CMOS processes.

While we do have some redundancy of fabrication processes by using multiple outside foundries, any interruption of supply by one or more of these foundries could materially impact us. As a result, we maintain some amount of business interruption insurance to help reduce the financial risk associated with a wafer supply interruption, but we are not fully insured against this risk.

Although our products are made from basic materials (principally silicon, metals and plastics), all of which are available from a number of suppliers, capacity at wafer foundries sometimes becomes constrained. The limited availability of certain materials, such as silicon wafer substrates, may impact our suppliers’ ability to meet our demand needs or impact the price we are charged. The prices of certain other basic materials, such as metals, gases and chemicals used in the production of circuits have all increased in recent years as demand has grown for these basic commodities. In most cases we do not procure these materials ourselves, but we are nevertheless reliant on these materials for producing our products because our outside foundry and package and test subcontractors must procure them. To help minimize risks associated with constrained capacity, we use multiple foundries and have taken other steps to prevent supply interruptions at certain foundries and subcontractors.

Our largest wafer source is a foundry in China. In fiscal years 2016, 2015, and 2014, this Chinese foundry provided 28%, 37% and 38% of our total silicon requirements in terms of cost of wafers purchased, respectively. We have consigned certain equipment to this foundry to support our specialized processes run at the foundry and to ensure a specified level of capacity over the next few years. While the provision of these assets to the wafer foundry may be factored into certain pricing arrangements with the foundry, the impact of any pricing adjustments is insignificant and does not impact our margin trends.

We use third-party subcontractors to perform almost all of our assembly and test operations. A majority of our assembly and test activity is conducted by third-party subcontractors based in China, Malaysia, Taiwan, Thailand, Korea and the Philippines. We have operations offices located in the Philippines, Malaysia and China that support and coordinate some of the worldwide shipment of products. We have installed our own test equipment at some of our packaging and testing subcontractors in order to ensure a certain level of capacity, assuming the subcontractor has ample employees to operate the equipment.

Our arrangements with both outside wafer foundries and package and test subcontractors are designed to provide some assurance of capacity but are not expected to assure access to all the manufacturing capacity we may need in the future.

Competition

The analog and mixed-signal semiconductor industry is highly competitive, and we expect competitive pressures to continue. Our ability to compete effectively and to expand our business will depend on our ability to continue to recruit and retain key engineering talent, our ability to execute on new product developments and our ability to persuade customers to design these new products into their applications.

Our industry is characterized by decreasing unit selling prices over the life of a product as the volumes typically increase. However, price decreases can sometimes be quite rapid and faster than the rate of increase of the associated product volumes. We believe we compete effectively based upon our ability to capitalize on efficiencies and economies of scale in production and sales, and our ability to maintain or improve our productivity and product yields to reduce manufacturing costs.

We are in direct and active competition, with respect to one or more of our product lines, with numerous manufacturers of varying size, technical capability and financial strength. A number of these competitors are dependent on semiconductor products as their principal source of income, and some are much larger than we are. The number of competitors has grown due to expansion of the market segments in which we participate. Additionally, there has been a trend toward consolidation in our industry as companies attempt to strengthen or hold their market positions in an evolving industry. Such consolidations may make it more difficult for us to compete effectively, including on the basis of price, sales and marketing programs, channel coverage, technology or product functionality.

We consider our primary competitors with respect to our Protection Products to include STMicroelectronics, NXP Semiconductors N.V., ON Semiconductor Corporation and Infineon Technologies AG. Our primary competitors with respect to our Signal Integrity Products are Texas Instruments Incorporated, Maxim Integrated Products, Inc., M/A-COM Technology Solutions Holdings, Inc., Inphi Corporation, Broadcom Limited, Applied Micro Circuits Corporation and our customers' own internal solutions. With respect to our Power and High-Reliability products, we consider our primary competitors to include Texas Instruments Incorporated, Linear Technology Corporation, Maxim Integrated Products Inc., Microsemi Corporation and Monolithic Power Systems. Our primary competitors with respect to our Wireless and Sensing products include Silicon Laboratories, Texas Instruments Incorporated, Atmel Corporation, Analog Devices Inc. and Cypress Semiconductor Corp.

Intellectual Property and Licenses

We have been granted 175 U.S. patents and 42 foreign patents and have numerous patent applications pending with respect to our products and to technologies associated with our business. The expiration dates of issued patents range from 2016 to 2034. Although we consider patents to be helpful in maintaining a competitive advantage, we do not believe they create definitive competitive barriers to entry. There can be no assurance that our patent applications will lead to issued patents, that others will not develop or patent similar or superior products or technologies, or that our patents will not be challenged, invalidated, or circumvented by others. We have no revenue from patents that expire in calendar year 2016 and no significant revenue associated with patents that expire in 2017 or 2018.

We have registered many of our trademarks in the U.S. and in various foreign jurisdictions. Registration generally provides rights in addition to basic trademark protections and is typically renewable upon proof of continued use. We have registered, or are in the process of registering, our SEMTECH trademark in many jurisdictions. In one location use of this trademark is prohibited, but we are permitted to use our Semtech International trade name. This restriction has not had a material impact on our business to date and we do not anticipate it will have a material impact in the future.

We also have registered certain materials in which we have copyright ownership, which provides additional protection for this intellectual property.

Employees

As of January 31, 2016, we had 1,335 full-time employees. There were 567 employees in research and development, 233 in sales, marketing and field services, and 179 in general, administrative and finance. The remaining employees support operational activities, including product and test engineering, assembly, manufacturing, distribution and quality functions.

We have not had a work stoppage in the last decade and the only unionized employees are approximately 206 Mexican nationals who work at our manufacturing facility in Reynosa, Mexico. Our employee relations during the last fiscal year have been, and remain, satisfactory.

We adjust our workforce from time to time to meet the changing needs of our business. Competition for key design engineering talent globally is significant.

Government Regulations and Environmental Matters
We are required to comply, and it is our policy to comply, with numerous government regulations that are normal and customary to businesses in our industry and that operate in our markets and operating locations.

Our sales that serve the military and aerospace markets primarily consist of our High-Reliability products that have been qualified to be sold in these markets by the U.S. Department of Defense (“DOD”). In order to maintain these qualifications, we must comply with certain specifications promulgated by the DOD. As part of maintaining these qualifications, we are routinely audited by the DOD. Based on current specifications, we believe we can maintain our qualifications for the foreseeable future. However, these specifications could be modified by the DOD in the future or we could become subject to other government requirements, which could make the manufacturing of these products more difficult and thus could adversely impact our profitability in the Power and High-Reliability product group. In fiscal year 2016, our sales that serve military and aerospace markets made up 3% of net sales. The U.S. State Department has determined that a small number of special assemblies from the Power and High-Reliability product line are subject to the International Traffic in Arms Regulations (“ITAR”). We have a Technical Assistance Agreement in place that permits us to assemble certain of these products in Mexico. International shipments of products subject to ITAR require a State Department license.

Our facilities throughout the world are subject to various environmental laws and regulations and we believe our operations are in substantial compliance with those laws and regulations. We have incurred, and may continue to incur, liabilities under various statutes for the cleanup of pollutants at locations we have operated and at third-party disposal and recycling sites we have used. During fiscal years 2016 and 2015, the expense incurred with respect to these cleanup matters was not material. In fiscal year 2013, we recorded a $2.5 million environmental reserve associated with the November 2012 draft clean up and abatement order discussed below. In the third quarter of fiscal 2015, we revised the estimate to $2.7 million. New laws or regulations or changes to existing laws or regulations could subject our ongoing operations to different or additional environmental standards that could increase our cost of compliance in the future. In addition, our cost of doing business could increase if our suppliers increase prices to recoup the cost of their compliance with environmental laws or regulations. See Note 14 to our consolidated financial statements included in Item 8 of this report.

We have used an environmental firm, specializing in hydrogeology, to perform monitoring of the groundwater at our former facility in Newbury Park, California that was leased for approximately forty years. We vacated the building in May 2002. Certain contaminants have been found in the local groundwater and site soils. Groundwater monitoring results to date over a number of years suggest that a measurable amount of groundwater contaminants of concern are believed to come from, or be contributed by, in full or in material part, adjacent facilities and/or to come from environmental cleanup operations separately conducted on the adjacent facilities, never owned or occupied by us. Responsibility for soil contamination remains under investigation. The location of key soil contamination (and some related site groundwater impact associated with the soil contamination) is concentrated in and found to emanate from an area of an underground storage tank that we believe to have been installed and primarily used in the early 1960s by a former tenant at the site who preceded our tenancy.

The Los Angeles Regional Water Quality Control Board (“RWQCB”), as the applicable regulatory agency having authority over the site issued joint instructions in November 2008, ordering us and the current owner of the site to perform additional assessments and surveys, and to create ongoing groundwater monitoring plans before any final regulatory action for “no further action” may be approved. In September 2009, the regulatory agency issued supplemental instructions to us and the current site owner regarding previously ordered site assessments, surveys and groundwater monitoring.

In October 2013, an order was issued including a scope of proposed additional site work, monitoring, and proposed remediation activities. We filed appeals of the October 2013 order seeking reconsideration by the RWQCB and review by the State Water Resources Control Board (“SWRCB”) of the removal of two other potentially responsible parties, and seeking clarification of certain other factual findings. In April 2015, the RWQCB denied our request to name the two other potentially responsible parties to the order, but did correct certain findings of fact identified by us in our petition for reconsideration. The SWRCB has not yet ruled on our petition for review of the RWQCB’s action as the petition was filed with a request it be held in abeyance.

We have been engaged with the regulatory agency, including technical discussion between our environmental firm and RWQCB staff, and have initiated the technical efforts to comply with the order. We submitted technical reports prepared by the environmental firm to the RWQCB and have received confirmation regarding the satisfaction of

portions of the order. We also submitted a remedial action plan prepared by the environmental firm outlining the cleanup of soil, groundwater, and soil vapor at the site. The parties are continuing to work toward compliance with the October 2013 order and anticipate working cooperatively on any ultimate proposed cleanup and abatement work.
We have accrued liabilities where it is probable that a loss will be incurred and the cost or amount of loss can be reasonably estimated. Based on our preliminary assessment following a November 2012 draft cleanup and abatement order, which has been reviewed under the October 2013 order pending the current appeal by us and other impacted parties, we determined a likely range of probable loss between $2.7 million and $5.7 million with respect to our former facility at Newbury Park, California. Based on recent determinations by the RWQCB and refinement of the draft remedial action plan, we have revised our likely range of probable loss to be between $5.3 million and $7.5 million. Given the uncertainties associated with environmental assessment and the remediation activities, we are unable to determine a best estimate within the revised range of

loss. Therefore, we have recorded the minimum amount of $5.3 million, $1.1 million of which is recorded under "Accrued liabilities" with the remaining $4.2 million recorded under “Other long-term liabilities” on our consolidated balance sheets. These estimates could change as a result of changes in planned remedial actions, further actions from the regulatory agency, remediation technology, and other factors.

Available Information

General information about us can be found on our website at www.semtech.com. The information on our website is for informational purposes only and should not be relied on for investment purposes. The information on our website is not incorporated by reference into this report and should not be considered part of this or any other report filed with the SEC.

We make available free of charge, either by direct access on our website or a link to the SEC website, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), as soon as reasonably practicable after such reports are electronically filed with, or furnished to, the SEC. Our reports filed with, or furnished to, the SEC are also available directly at the SEC’s website at www.sec.gov.

Item 1A. Risk Factors

You should carefully consider and evaluate all of the information in this Annual Report on Form 10-K, including the risk factors listed below. The risks described below are not the only ones facing our Company. Additional risks not now known to us or that we currently deem immaterial may also impair our business operations. If any of these risks actually occur, our business could be materially harmed. If our business is harmed, the trading price of our common stock could decline.

As discussed earlier in “Special Note Regarding Forward-Looking and Cautionary Statements,” this Annual Report on Form 10-K contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of such risks and uncertainties and certain factors including the risks faced by us described below and elsewhere in this Annual Report on Form 10-K, including, without limitation, information under the section “Management's Discussion and Analysis of Financial Condition and Results of Operations” and additional factors that accompany the related forward-looking statements in this Annual Report on Form 10-K, in the Company's other filings with the SEC, and in material incorporated herein and therein by reference. In light of the significant risks and uncertainties inherent in the forward-looking information included herein that may cause actual performance and results to differ materially from those predicted, any such forward-looking information should not be regarded as representations or guarantees by the Company of future performance or results, or that its objectives or plans will be achieved or that any of its operating expectations or financial forecasts will be realized. Reported results should not be considered an indication of future performance. Investors are cautioned not to place undue reliance on any forward-looking information contained herein, which reflect management's analysis only as of the date hereof. Except as required by law, the Company assumes no obligation to publicly release the results of any update or revision to any forward-looking statements that may be made to reflect new information, events or circumstances after the date hereof or to reflect the occurrence of unanticipated or future events, or otherwise.

Risks Relating to General Business Conditions

Our future results may fluctuate, fail to match past performance or fail to meet expectations.

Our results may fluctuate in the future, may fail to match our past performance or fail to meet our expectations and the expectations of analysts and investors. Our results and related ratios, such as gross margin, operating income percentage and effective tax rate may fluctuate as a result of:

- general economic conditions in the countries where we sell our products;
- seasonality and variability in the computer market and our other end-markets;
- the timing of new product introductions by us, our customers and our competitors;
- product obsolescence;
- the scheduling, rescheduling or cancellation of orders by our customers;
- the cyclical nature of demand for our customers’ products;

- our ability to predict and meet evolving industry standards and consumer preferences;
- our ability to develop new process technologies and achieve volume production;
- our ability to integrate and realize synergies from recent acquisitions;

- changes in manufacturing yields;
- capacity utilization;
- product mix and pricing;
- movements in exchange rates, interest rates or tax rates;
- the availability of adequate supply commitments from our outside suppliers;
- the manufacturing and delivery capabilities of our subcontractors; and
- litigation and regulatory matters.

As a result of these factors, our past financial results are not necessarily indicative of our future results.

Downturns in the business cycle could adversely affect our revenues and profitability.

The semiconductor industry is highly cyclical and has experienced significant downturns, which are characterized by reduced product demand, production overcapacity, increased levels of inventory, industry-wide fluctuations in the demand for semiconductors and the significant erosion of average selling prices. The cyclical nature of the semiconductor industry may cause us to experience substantial period-to-period fluctuations in our results of operations. The growth rate of the global economy is one of the factors affecting demand for semiconductor components. Many factors could adversely affect regional or global economic growth including increased price inflation for goods, services or materials, rising interest rates in the United States and the rest of the world, or tight credit markets. In addition, economic slowdowns may also affect our customers' ability to pay for our products. Accordingly, economic slowdowns may harm our business.

Current global economic conditions could reduce demand for our products.

Uncertainty about global economic conditions, including in Europe and Asia, can pose a risk to the overall economy by causing fluctuations to and reductions in consumer and commercial spending. Demand for our products could be different from our expectations due to many factors including changes in business and economic conditions, conditions in the credit market that affect consumer confidence, customer acceptance of our products, changes in customer order patterns, including order cancellations, and changes in the level of inventory held by vendors. In particular, in fiscal year 2016, sales to customers in China comprised 47% of our net sales. The recent economic slowdown in China could adversely affect our sales to customers in China and consequently, our business, results of operations and financial condition.

Business interruptions could harm our business.

Our corporate headquarters, a portion of our assembly and research and development activities and certain other critical business operations are located near major earthquake fault lines. We do not maintain earthquake insurance and our business could be harmed in the event of a major earthquake. We generally do not maintain flood coverage, including for our Asian locations where certain of our operations support and sales offices are located. Such flood coverage has become very expensive; as a result we have elected not to purchase this coverage. If one of these locations were to experience a major flood, our business may be harmed.

Our business could be harmed if natural disasters interfere with production of wafers by our suppliers, with assembly and testing of products by our subcontractors, or with our distribution network. We maintain some business interruption insurance to help reduce the effect of such business interruptions, but we are not fully insured against such risks. Likewise, our business could be adversely impacted if a natural disaster were to shut down or significantly curtail production by one or more of our end customers. Any such loss of revenue due to a slowdown or cessation of end customer demand is uninsured.

When natural disasters such as an earthquake or other causes result in wide-spread destruction, the impact on our business may not be readily apparent. This is especially true when trying to assess the impact of the disaster on our end customers, who themselves may not fully understand the impact of the event on their businesses. The full extent and scope of natural disaster impacts, both in terms of direct impact on us and our supply chain, as well as on our end customers (to include their own supply chain issues as well as end-market issues), may not be known for a considerable period of time following the disaster. When any such natural disaster occurs, there can be no assurance that our results of operations may not be materially affected as a result of the impact of the disaster on us or on our end customers.

We rely on third party freight firms for nearly all of our shipments from vendors to assembly and test sites, primarily in Asia, and for shipments of our final product to customers. This includes ground and air transportation. Any significant disruption of such freight business globally or in certain parts of the world, particularly where our operations are concentrated, could materially and adversely affect our ability to generate revenues. Business interruption insurance may not provide enough protection to compensate us for losses that may occur. Accordingly, any of these disruptions could significantly harm our business.

Terrorist attacks, wars and other acts of violence, or any other national or international crisis, calamity or emergency, may result in interruption to the business activities of many entities, business losses and overall disruption of the economy at many levels. These events may directly impact our physical facilities or those of our customers and suppliers. Additionally, these events or armed conflicts may cause some of our customers or potential customers to reduce the level of expenditures on their services and products that ultimately may reduce our revenue. The consequences of these reductions are unpredictable, and we may not be able to foresee events that could have an adverse effect on our business. For example, as a result of these events, insurance premiums for businesses may increase and the scope of coverage may be decreased. Consequently, we may not be able to obtain adequate insurance coverage for our business and properties. To the extent that these disruptions result in delays or cancellations of customer orders, a general decrease in corporate spending, or our inability to effectively market our services and products, our business and results of operations could be harmed.

We operate a manufacturing facility in Reynosa, Mexico. Historically, certain regions in Mexico have experienced high levels of violence. Any significant disruption of our operations at this facility could materially affect our ability to generate revenues for certain products within our High-Reliability product line. Some of the products that we produce at this facility require certification by the Defense Contract Audit Agency (“DCAA”). Failure to secure or maintain the required certification, either directly through the DCAA or through a qualifying third party would materially affect our authorization to manufacture applicable products at this facility, and our revenue for certain products within our Power and High-Reliability product line could materially decline. An audit was performed in May 2012 by the Defense Logistics Agency (DLA) Land and Maritime office, which is the DOD agency having oversight responsibility for applicable products manufactured in this facility. We received a letter of certification allowing us to continue producing High-Reliability products in 2013. The applicable certification will maintain our listing on the DOD Qualified Parts List (QPL) as a MIL-PRF-19500 Semiconductor Manufacturer of JAN, JANTX, JANTXV and JANS quality level components. The DLA has indicated, barring any unforeseen circumstances, that our next surveillance audit may occur in late 2016.

A large percentage of our sales are to customers located in Asia and a large percentage of our products are manufactured in Asia. One of our largest customer bases in Asia is located in Taiwan. Our largest wafer source is located in China. An outbreak of SARS or other health related issues, such as an avian influenza (bird flu) pandemic, could have a negative impact on consumer demand, on travel needed to secure new business or manage our operations, on transportation of our products from our suppliers or to our customers, or on workers needed to sell or manufacture our products or our customers’ products.

Risks Relating to Production Operations

We obtain many essential components and materials and certain critical manufacturing services from a limited number of suppliers and subcontractors, most of which are foreign-based entities.

Our reliance on a limited number of subcontractors and suppliers for wafers, packaging, testing and certain other processes involves several risks, including potential inability to obtain an adequate supply of required components and reduced control over the price, timely delivery, reliability and quality of components. These risks are attributable to several factors, including limitations on resources, labor problems, equipment failures or the occurrence of natural disasters. The good working relationships we have established with our suppliers and subcontractors could be disrupted, and our supply chain could suffer, if a supplier or subcontractor were to experience a change in control. There can be no assurance that problems will not occur in the future with suppliers or subcontractors. Disruption or termination of our supply sources or subcontractors could significantly delay our shipments and harm our business. Delays could also damage relationships with current and prospective customers. Any prolonged inability to obtain timely deliveries or quality manufacturing or any other circumstances that would require us to seek alternative sources of supply or to manufacture or package certain components internally could limit our growth and harm our business.

We are subject to risk from fluctuating market prices of certain commodity raw materials, particularly gold, that are incorporated into our end products or used by our suppliers to process our end products. Increased commodity prices are passed on to us in the form of higher prices from our suppliers, either in the form of general price increases or commodity surcharges. Although we generally deal with our suppliers on a purchase order basis rather than on a long-term contract basis, we generally attempt to obtain firm pricing for volumes consistent with planned production. Our gross margins may decline if we are not able to increase selling prices of our products or obtain manufacturing efficiencies to offset the increased cost. We do not enter into formal hedging arrangements to mitigate against commodity risk.

Most of our outside subcontractors and suppliers, including third-party foundries that supply silicon wafers, are located in foreign countries, including China, Taiwan, Europe and Israel. For fiscal year 2016, approximately 28% of our silicon in terms of cost of wafers, was supplied by a third-party foundry in China, and this percentage could be even higher in future periods. For fiscal years 2015 and 2014, approximately 37% and 38% of our silicon in terms of cost of wafers was supplied by this third-party foundry in China, respectively. While our utilization of multiple outside foundries does create some redundancy of fabrication processes, any interruption of supply by one or more of these foundries could materially impact us. We maintain some amount of business interruption insurance to help reduce the risk of wafer supply interruption, but we are not fully insured against such risk.

A majority of our package and test operations are performed by third-party contractors based in Malaysia, Korea, Taiwan, Thailand, the Philippines and China. Our international business activities, in general, are subject to a variety of potential risks resulting from political and economic uncertainties. Any political turmoil or trade restrictions in these countries, particularly China, could limit our ability to obtain goods and services from these suppliers and subcontractors. The effect of an economic crisis or political turmoil on our suppliers located in these countries may impact our ability to meet the demands of our customers. If we find it necessary to transition the goods and services received from our existing suppliers or subcontractors to other firms, we would likely experience an increase in production costs and a delay in production associated with such a transition, both of which could have a significant negative effect on our operating results, as these risks are substantially uninsured.

Our products may be found to be defective, product liability claims may be asserted against us and we may not have sufficient liability insurance.

Manufacturing semiconductors is a highly complex and precise process, requiring production in a tightly controlled, clean environment. Minute impurities in our manufacturing materials, contaminants in the manufacturing environment, manufacturing equipment failures, and other defects can cause our products to be non-compliant with customer requirements or otherwise nonfunctional. We face an inherent business risk of exposure to warranty and product liability claims in the event that our products fail to perform as expected or such failure of our products results, or is alleged to result, in bodily injury or property damage (or both). Since a defect or failure in our product could give rise to failures in the goods 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 revenues and profits we receive from the products involved.

Our general warranty policy provides for repair or replacement of defective parts. In some cases, a refund of the purchase price is offered. In certain instances, we have agreed to other warranty terms, including some indemnification provisions, which could prove to be significantly more costly than repair, replacement or refund. We attempt to limit our liability through our standard terms and conditions and negotiation of sale and other customer contracts, but there is no assurance that such limitations will be accepted or effective. While we maintain some insurance for such events, a successful warranty or product liability claim against us in excess of our available insurance coverage, if any, and established reserves, or a requirement that we participate in a product recall, would have adverse effects (that could be material) on our business, results of operations and financial condition.

Additionally, in the event that our products fail to perform as expected, our reputation may be damaged, which could make it more difficult for us to sell our products to existing and prospective customers and could adversely affect our business, results of operations 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.
Risks Relating to Research and Development, Engineering, Intellectual Property and New Technologies
We may be unsuccessful in developing and selling new products, which is central to our objective of maintaining and expanding our business.
We operate in a dynamic environment characterized by price erosion, rapid technological change, and design and other technological obsolescence. Our competitiveness and future success depend on our ability to predict and adapt to these changes in a timely and cost-effective manner by designing, developing, manufacturing, marketing and providing support for our own new products and technologies.

A failure to achieve design wins, to introduce these new products in a timely manner, or to achieve market acceptance for these products on commercially reasonable terms could harm our business.
The introduction of new products presents significant business challenges because product development commitments and expenditures must be made well in advance of product sales. The success of a new product depends on accurate forecasts of long-term market demand and future technological developments, as well as on a variety of specific implementation factors, including:

- timely and efficient completion of technology, product and process design and development;
- timely and efficient implementation of manufacturing, assembly, and test processes;
- the ability to secure and effectively utilize fabrication capacity in different geometries;
- product performance;
- product quality and reliability; and
- effective marketing, sales and service.

Even if we are able to develop products and achieve design wins, the design wins may never generate revenues if end-customer projects are unsuccessful in the marketplace or the end-customer terminates the project, which may occur for a variety of reasons. Mergers and consolidations among customers may lead to termination of certain projects before the associated design win generates revenue. If design wins do generate revenue, the time lag between the design win and meaningful revenue can be uncertain and could be significant. If we fail to develop products with required features or performance standards or experience even a short delay in bringing a new product to market, or if our customers fail to achieve market acceptance of their products, our business, financial condition and results of operations could be materially and adversely impacted.
Our customers require our products to undergo a lengthy and expensive qualification process without any assurance of product sales.

Prior to purchasing our products, our customers require that our products undergo an extensive qualification process, which involves testing of the products in the customer's system as well as 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. Even after successful qualification and sales of a product to a customer, a subsequent revision to the product or software, changes in the manufacturing process or the selection of a new supplier by us may require a new qualification process, which may result in delays and in us holding 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 impede our growth and cause our business to suffer.
Our products may fail to meet new industry standards or requirements and the efforts to meet such industry standards or requirements could be costly.

Many of our products are based on industry standards that are continually evolving. Our ability to compete in the future will depend in part on our ability to anticipate, identify and ensure compatibility or compliance with these evolving industry standards. The emergence of new industry standards could render our products incompatible with products developed by our customers and potential customers. As a result, we could be required to invest significant time and effort and to incur significant expense to redesign our products to ensure compliance with relevant standards. If our products are not in compliance with prevailing industry standards or requirements, we could miss opportunities to achieve crucial design wins which in turn could have a material adverse effect on our business, operations and financial results.

We may be unable to adequately protect our intellectual property rights.

We pursue patents for some of our new products and unique technologies, but we rely primarily on trade secret protections through a combination of nondisclosure agreements and other contractual provisions, as well as our employees' commitment to confidentiality and loyalty, to protect our know-how and processes. We intend to continue protecting our proprietary technology, including through trademark and copyright registrations and patents. Despite this intention, we may not be successful in achieving adequate protection. Our failure to adequately protect our material know-how and processes could harm our business. There can be no assurance that the steps we take will be adequate to protect our proprietary rights, that our patent applications will lead to issued patents, that others will not develop or patent similar or superior products or technologies, or that our patents will not be challenged, invalidated, or circumvented by others. Furthermore, the laws of the countries in which our products are or may be developed, manufactured or sold may not protect our products and intellectual property rights to the same extent as laws in the United States.

We may suffer losses and business interruption if our products infringe the intellectual property rights of others.

The semiconductor industry is characterized by frequent claims of infringement and litigation regarding patent and other intellectual property rights. Due to the number of competitors, intellectual property infringement is an ongoing risk since other companies in our industry could have intellectual property rights that may not be identifiable when we initiate development efforts. Litigation may be necessary to enforce our intellectual property rights and we may have to defend ourselves against infringement claims. Any such litigation could be very costly and may divert our management's resources. If one of our products is found to infringe on a third party's rights, we may have liability for past infringement and may need to seek a license to use such intellectual property going forward. If a license is not available or if we are unable to obtain a license on terms acceptable to us, we would either have to change our product so that it does not infringe or stop making the product.

We must commit resources to product production prior to receipt of purchase commitments and could lose some or all of the associated investment.

Sales are made primarily on a current delivery basis, pursuant to purchase orders that may be revised or cancelled by our customers without penalty, rather than pursuant to long-term contracts. Some contracts require that we maintain inventories of certain products at levels above the anticipated needs of our customers. As a result, we must commit resources to the production of products without binding purchase commitments from customers. Our inability to sell products after we devote significant resources to them could harm our business.

Risks Relating to International Operations

We sell and trade with foreign customers, which subjects our business to increased risks.

Sales to foreign customers accounted for approximately 88% of net sales in the fiscal year ended January 31, 2016. Sales to our customers located in China (including Hong Kong) and South Korea constituted 47% and 6%, respectively, of net sales for fiscal year 2016. International sales are subject to certain risks, including unexpected changes in regulatory requirements, tariffs and other barriers, political and economic instability, difficulties in accounts receivable collection, difficulties in managing distributors and representatives, difficulties in staffing and managing foreign subsidiary and branch operations and potentially adverse tax consequences. These factors may harm our business. Our use of the Semtech name may be prohibited or restricted in some countries, which may negatively impact our sales efforts. In addition, substantially all of our foreign sales are denominated in U.S. dollars and currency exchange fluctuations in countries where we do business could harm us by resulting in pricing that is not competitive with prices denominated in local currencies.

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

As a global enterprise, we face exposure to adverse movements in foreign currency exchange rates. Certain of our assets, including certain bank accounts, exist in non-U.S. dollar-denominated currencies, which are sensitive to foreign currency exchange rate fluctuations. The non-U.S. dollar-denominated currencies are principally the Swiss Franc, Euro, Canadian dollars, Mexican Peso, Japanese Yen and British Pound Sterling. We also have a significant number of employees that are paid in foreign currency, the largest groups being United Kingdom-based employees who are paid in British Pound Sterling, Swiss-based employees who are paid in Swiss Francs, Canada-based employees who are paid in Canadian dollars, and Mexican nationals who are paid in Mexican Pesos.

Although the value of the U.S. dollar has strengthened recently, if the value of the U.S. dollar weakens relative to these specific currencies, as it has done in recent years, the cost of doing business in terms of U.S. dollars rises. With the growth of our international business, our foreign currency exposures may grow and under certain circumstances, could harm our business.

As a means of managing our foreign exchange exposure, we routinely convert U.S. dollars into foreign currency in advance of the expected payment. We regularly assess whether or not to hedge foreign exchange exposure. Any future use of forward contracts to hedge foreign exchange exposure may be required to be marked-to-market each quarter and can create volatility in net income not directly tied to our operating results.

We may be subject to increased tax liabilities and an increased effective tax rate if we need to repatriate funds held by our foreign subsidiaries.

As of January 31, 2016, our foreign subsidiaries held approximately $170.7 million of cash, cash equivalents, and short-term investments and $516.8 million of unremitted earnings for which no Federal or State taxes have been provided. If we needed

these funds for investment in our domestic operations, any repatriation, such as that which occurred in fiscal year 2010 to partially fund the acquisition of Sierra Monolithics, Inc. ("SMI"), could result in increased tax liabilities.
We are subject to export restrictions and laws affecting trade and investments.
As a global company headquartered in the United States, we are subject to U.S. laws and regulations that limit and restrict the export of some of our products and services and may restrict our transactions with certain customers, business partners and other persons, including, in certain cases, dealings with or between our employees and subsidiaries. In certain circumstances, export control and economic sanctions regulations may prohibit the export of certain products, services and technologies, and in other circumstances we may be required to obtain an export license before exporting the controlled item. Compliance with these laws has not significantly limited our operations or our sales in the recent past, but could significantly limit them in the future. We maintain an export compliance program but there are risks that the compliance controls could be circumvented, exposing us to legal liabilities. We must also comply with export restrictions and laws imposed by other countries affecting trade and investments. Although these restrictions and laws have not significantly restricted our operations in the recent past, there is a risk that they could do so in the future.
Risks Relating to Sales, Marketing and Competition
We compete against larger, more established entities and our market share may be reduced if we are unable to respond to our competitors effectively.
The semiconductor industry is intensely competitive and is characterized by price erosion, rapid technological change, and design and other technological obsolescence. We compete with domestic and international semiconductor companies, many of which have substantially greater financial and other resources with which to pursue engineering, manufacturing, marketing and distribution of their products. We consider our primary competitors with respect to our Protection Products to include STMicroelectronics, NXP Semiconductors N.V., ON Semiconductor Corporation and Infineon Technologies AG. Our primary competitors with respect to our Signal Integrity products are Texas Instruments Incorporated, Maxim Integrated Products, Inc., M/A-COM Technology Solutions Holdings, Inc., Inphi Corporation, Broadcom Limited, Applied Micro Circuits Corporation and our customers' own internal solutions. With respect to our Power and High-Reliability products, we consider our primary competitors to include Texas Instruments Corporation, Linear Technology Corporation, Maxim Integrated Products Inc., Microsemi Corporation and Monolithic Power Systems. Our primary competitors with respect to our Wireless and Sensing products include Silicon Laboratories, Texas Instruments Incorporated, Atmel Corporation, Analog Devices Inc. and Cypress Semiconductor Corp.
We expect continued competition from existing competitors as well as competition from new entrants in the semiconductor market. Our ability to compete successfully in the rapidly evolving area of integrated circuit technology depends on several factors, including:
- success in designing and manufacturing new products that implement new technologies;
- protection of our processes, trade secrets and know-how;
- maintaining high product quality and reliability;
- pricing policies of our competitors;
- performance of competitors’ products;
- ability to deliver in large volume on a timely basis;
- marketing, manufacturing and distribution capability; and
- financial strength.

To the extent that our products achieve market success, competitors typically seek to offer competitive products or lower prices; if they are successful, they could harm our business.

Industry consolidation may lead to increased competition and may harm our operating results.

There has been a trend toward industry consolidation in our industry as companies attempt to strengthen or hold their market positions in an evolving industry and as companies are acquired or are unable to continue operations. Some of our competitors have made acquisitions or entered into partnerships or other strategic relationships to offer a more comprehensive solution than they individually had offered. Such consolidations or strategic partnerships may continue in the future. The companies or alliances resulting from these possible consolidations may create more compelling bundled products as well as being able to offer greater pricing flexibility, making it more difficult for us to compete effectively, including on the basis of price, sales and marketing programs, channel coverage, technology or product functionality. Continued industry consolidation may adversely impact customers' perceptions of the viability of smaller and even medium-sized semiconductor companies such as ourselves and, consequently, customers' willingness to purchase from us. We believe that industry consolidation may result in stronger competitors, with more efficient cost structures that are better able to compete as sole-source vendors for our end-customers. This could lead to more variability in our operating results and could have a material adverse effect on our business, operating results and financial condition.

We receive a significant portion of our revenues from a small number of customers and the loss of any one of these customers or failure to collect a receivable from them could adversely affect our business.

Our largest customers have varied from year to year. Historically, we have had significant customers that individually accounted for 10% or more of consolidated revenues in certain quarters or represented 10% or more of net accounts receivables at any given date.

Concentration of Net Sales - Significant Customers

	Fiscal Years					
(percentage of net sales)	2016		2015		2014	
Samsung Electronics Co., Ltd.(and affiliates)	7	%	11	%	12	%

Concentration of Accounts Receivable - Significant Customers

	Fiscal Years			
(percentage of net accounts receivable as of fiscal year end)	2016		2015	
Samsung Electronics Co., Ltd.(and affiliates)	5	%	12	%

In addition to those customers representing greater than 10% of net sales or accounts receivable listed above, we had several end-customers in fiscal year 2016 that, on an annual basis, accounted for more than 2% of net sales, but less than 10% of net sales.

Sales to our customers are generally made on open account, subject to credit limits we may impose, and the receivables are subject to the risk of being uncollectible.

The volatility of customer demand limits our ability to predict future levels of sales and profitability.

We primarily conduct our sales on a purchase order basis, rather than pursuant to long-term contracts. The loss of any significant customer, any material reduction in orders by any of our significant customers, the cancellation of a significant customer order or the cancellation or delay of a customer’s significant program or product could harm our business.

Semiconductor suppliers can rapidly increase production output in response to slight increases in demand, leading to a sudden oversupply situation and a subsequent reduction in order rates and revenues as customers adjust their inventories to account for shorter lead times. Conversely, when circumstances create longer lead times customers may orders in excess of what they need to ensure availability, then cancel orders if lead times are reduced. A rapid and sudden decline in customer demand for products or cancellation of orders can result in excess quantities of certain products relative to demand. Should this occur, our operating results may be adversely affected as a result of charges to reduce the carrying value of our inventory to the estimated demand level or market price. Our quarterly revenues are highly dependent upon turns fill orders (orders booked and shipped in the same quarter). The short-term and volatile nature of customer demand makes it extremely difficult to accurately predict near term revenues and profits.

Most of our authorized distributors, which together represent approximately half of our net sales, can terminate their contract with us with little or no notice. The termination of a distributor could negatively impact our business, including net sales and accounts receivable.

In fiscal year 2016, authorized distributors accounted for approximately 58% of our net sales. We generally do not have long-term contracts with our distributors and most can terminate their agreement with us with little or no notice. For fiscal year 2016, our two largest distributors were based in Asia.

The termination of any of our distributor relationships could impact our net sales and limit our access to certain end-customers. It could also result in the return of excess inventory of our product held by that distributor. Since many distributors simply resell finished products, they generally operate on very thin profit margins. If a distributor were to terminate an agreement with us or go out of business, our accounts receivable from the particular distributor would be subject to significant collection risk. Our reliance on distributors also subjects us to a number of additional risks, including:

- write-downs in inventories associated with stock rotation rights and increases in provisions for price adjustments granted to certain distributors;
- potential reduction or discontinuation of sales of our products by distributors;
- failure to devote resources necessary to sell our products at the prices, in the volumes and within the time frames that we expect;
- dependence upon the continued viability and financial resources of these distributors, some of which are small organizations with limited working capital and all of which depend on general economic conditions and conditions within the semiconductor industry;
- dependence on the timeliness and accuracy of shipment forecasts and resale reports from our distributors; and
- management of relationships with distributors, which can deteriorate as a result of conflicts with efforts to sell directly to our end customers.

If any significant distributor becomes unable or unwilling to promote and sell our products, or if we are not able to renew our contracts with the distributors on acceptable terms, we may not be able to find a replacement distributor on reasonable terms or at all and our business could be harmed.

Risks Relating to Governmental Regulations, including Taxes, Financial Reporting Rules and Regulations, and Environmental Regulations

Failure to maintain effective internal control over financial reporting or disclosure controls and procedures could have a material adverse effect on our business and stock price.

Section 404 of the Sarbanes-Oxley Act requires an annual management assessment of the effectiveness of internal controls over financial reporting and an annual report by our independent registered public accounting firm opining on our internal controls over financial reporting. Management is similarly required to review disclosure controls, which are controls established to ensure that information required to be disclosed in SEC reports is recorded, processed, summarized and reported in a timely manner.

If we fail to maintain the adequacy of our internal controls, as such standards are modified, supplemented or amended from time to time, we may not be able to ensure that we can conclude on an ongoing basis that we have effective internal control over financial reporting. Moreover, effective internal controls are necessary for us to produce reliable financial reports and are important to help prevent fraud. As a result, any failure to satisfy the requirements of Section 404 on a timely basis could result in the loss of investor confidence in the reliability of our financial statements, which in turn could harm our business and negatively impact the trading price of our common stock.

We are subject to government regulations and other standards that impose operational and reporting requirements.

We, our suppliers, and our customers are subject to a variety of United States federal, foreign, state and local governmental laws, rules and regulations, including those related to the use, storage, handling, discharge or disposal of certain toxic, volatile or otherwise hazardous chemicals and the incorporation of such substances into products available for sale. If we or our suppliers were to incur substantial additional expenses to acquire equipment or otherwise comply with environmental regulations, product costs could significantly increase, thus harming our business.

We are also subject to laws, rules, and regulations related to export licensing and customs requirements, including the International Traffic in Arms Controls, the North American Free Trade Agreement and State Department and Commerce Department rules. In March 2016, the United States Department of Commerce published in the Federal Register a “final rule” amending the Export Administration Regulations to add ZTE Corporation and three of its subsidiaries to the “Entity List” maintained by the Department for actions contrary to the national security and foreign policy interests of the United States. We do not expect this event to have a material impact on our results of operations. However, if more restrictions are placed on sales of our products to our existing or potential customers, this could adversely affect or business, results of operations and financial condition.

Additional laws, rules and regulations at the United States federal and relevant foreign levels governing data privacy protections for personal information, and corrupt practices/anti-bribery prohibitions, impact our business in terms of ongoing monitoring of compliance. Legislation and related regulations in the United Kingdom under that country's Bribery Act could have extra-territorial application of compliance standards that may be inconsistent with comparable United States law, requiring us to re-evaluate and amend our compliance programs, policies and initiatives.

The SEC and NASDAQ Stock Market ("NASDAQ") have revised, and continue to revise, their regulations and listing standards. These developments have increased, and may continue to increase, our legal compliance and financial reporting costs. These developments also may make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. This, in turn, could make it more difficult for us to attract and retain qualified members of our Board of Directors, or qualified executive officers.

Failure to comply with present or future laws, rules and regulations of any kind that govern our business could result in suspension of all or a portion of production, cessation of all or a portion of operations, or the imposition of significant regulatory, administrative, civil, or criminal penalties or sanctions, any of which could harm our business.

Our failure to comply with any applicable environmental regulations could result in a range of consequences, including fines, suspension of production, excess inventory, sales limitations, and criminal and civil liabilities.

We are subject to various state, federal and international laws and regulations governing the environment, including restricting the presence of certain substances in electronic products and making producers of those products financially responsible for the collection, treatment, recycling and disposal of those products. Although our management systems are designed to maintain compliance, we cannot assure you that we have been or will be at all times in complete compliance with such laws and regulations. If we violate or fail to comply with any of them, a range of consequences could result, including fines, import/export restrictions, sales limitations, criminal and civil liabilities or other sanctions. We could also be held liable for any and all consequences arising out of exposure to hazardous materials used, stored, released, disposed of by us or located at, under or emanating from our facilities or other environmental or natural resource damage. We have incurred, and may continue to incur, liabilities under various statutes for the cleanup of pollutants at locations we have operated and at third-party disposal and recycling sites we have used. For example, during our fiscal year 2016, we recorded a total of $2.9 million for an environmental reserve associated with a cleanup and abatement order from a regulatory authority at our former facility in Newbury Park, California for groundwater contamination.

Environmental laws are complex, change frequently and have tended to become more stringent over time. For example, the European Union and China are two among a growing number of jurisdictions that have enacted in recent years restrictions on the use of lead, among other chemicals, in electronic products. These regulations affect semiconductor packaging. There is a risk that the cost, quality and manufacturing yields of lead-free products may be less favorable compared to lead-based products or that the transition to lead-free products may produce sudden changes in demand, which may result in excess inventory.

Future environmental legal requirements may become more stringent or costly and our compliance costs and potential liabilities arising from past and future releases of, or exposure to, hazardous substances may harm our business and our reputation.

"Conflict minerals" regulations may cause us to incur additional expenses, may make our supply chain more complex and may result in damage to our reputation with customers.

On August 22, 2012, under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, or the Dodd-Frank Act, the SEC adopted requirements for companies that use certain minerals and metals, known as conflict minerals, in their products, whether or not these products are manufactured by third parties. These metals are commonly used in electronic components and devices, including our products. These regulations require companies to investigate and disclose whether or not such minerals originate from the Democratic Republic of Congo or adjoining countries; the first such report was due on June 2, 2014. The implementation of these requirements could adversely affect the sourcing, availability and pricing of such minerals used in the manufacture of semiconductor devices. As a result, there may only be a limited pool of suppliers who provide conflict free metals, and we cannot assure you that we will be able to obtain products in sufficient quantities or at competitive prices. In addition, we could incur additional costs to the extent that we are required to make changes to products, processes, or sources of supply due to the foregoing requirements, including costs related to determining the source of any of the relevant minerals and metals used in our products. Also, since our supply chain is complex, we may face reputational challenges with our customers and other stockholders if we are unable to sufficiently verify the origins for all metals used in our products. In such event, we may also face difficulties in satisfying customers who require that all of the components of our products are certified as conflict mineral free. Our revenues and margins may be harmed if we are unable to meet this requirement at a reasonable price, or at all, or are unable to pass through any increased costs associated with meeting this requirement. To the extent that proposed conflict minerals legislation is adopted by the European Commission, these risks could increase.

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 their 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.

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

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

In addition, due to the complexity associated with the calculation of our tax provision, we have hired independent tax advisors to assist us. Significant judgment is required in the calculation of our tax provision and the resulting tax liabilities as well as determination of our ability to realize our deferred tax assets. Our estimates of future taxable income and the regional mix of this income can change as new information becomes available. Any such changes in our estimates or assumptions can significantly impact our tax provision in a given period by, for example, requiring us to impair existing deferred tax assets. Such required changes could result in us having to restate our financial statements. Restatements are generally costly and could adversely impact our results of operations or have a negative impact on the trading price of our common stock.

Changes in tax laws may materially impact tax liabilities and our effective tax rate.

We do not provide U.S. federal or state taxes for our unremitted income of wholly owned foreign subsidiaries that is considered to be permanently reinvested offshore and is not otherwise subject to current domestic taxation. The current U.S. administration and Congress have proposed changes to current U.S. tax law, including international tax reform that, if enacted, could materially impact our tax liabilities and effective tax rate.

We are subject to review by taxing authorities, including the Internal Revenue Service.

We are subject to review by domestic and foreign taxing authorities, including the IRS. Tax years prior to 2012 (fiscal year 2013) are generally not subject to examination by the IRS except for items with tax attributes that could impact open tax years. Changes to our tax filings could materially impact our tax liabilities and effective tax rate.

We may be subject to taxation and review of our compliance with value-added and other sales-type tax regulations in other jurisdictions which could negatively affect our operations.

As a global organization, we may be subject to a variety of transfer pricing or permanent establishment challenges by taxing authorities in various jurisdictions. If certain of our non-U.S. activities were treated as carrying on business as a permanent establishment and therefore, subject to income tax in such jurisdiction, our results of operations could be materially adversely affected.

We are required to comply with rules regarding value-added taxes and other sales-type taxes in various jurisdictions. If these taxes are not properly collected and paid, our results of operations could be materially adversely affected.

We have limited experience with government contracting, which entails differentiated business risks.
Although such contracts have not constituted a material portion of our revenue in the past, we may from time-to-time derive revenue from contracts and subcontracts with agencies of, or prime or secondary contractors to, the U.S. government, including U.S. military agencies. Consequently, we are subject to certain business risks that are particular to companies that contract with U.S. government agencies. These risks include the ability of the U.S. government or related contractors to unilaterally:

- terminate contracts at its convenience;
- terminate, modify or reduce the value of existing contracts, if budgetary constraints or needs change;
- cancel multi-year contracts and related orders, if funds become unavailable;
- adjust contract costs and fees on the basis of audits performed by U.S. government agencies;
- control and potentially prohibit the export of our products;
- require that we continue to supply products despite the expiration of a contract under certain circumstances;
- require that we fill certain types of rated orders for the U.S. government prior to filling any orders for other customers; and
- suspend us from receiving new contracts pending resolution of any alleged violations of procurement laws or regulations.

In addition, because we may enter into defense industry contracts with respect to products that are sold both within and outside of the United States, we are subject to the following additional risks in connection with government contracts:

- the need to bid on programs prior to completing the necessary design, which may result in unforeseen technological difficulties, delays and/or cost overruns;
- the difficulty in forecasting long-term costs and schedules and the potential obsolescence of products related to long-term fixed price contracts; and
- the need to transfer and obtain security clearances and export licenses, as appropriate.

Government investigations and inquiries from regulatory agencies could lead to enforcement actions, fines, restatement of our financial statements or other penalties and could result in litigation against us.
In the past, we have been subject to government investigations and inquiries from regulatory agencies such as the SEC and we have had to restate our historical financial statements in connection with such inquiry related to our historical stock option practices. We may be subject to government investigations and receive additional inquiries from regulatory agencies in the future, which may lead to enforcement actions, fines or other penalties.
In addition, litigation has often been brought against a company in connection with the announcement of a government investigation or inquiry from a regulatory agency. Such lawsuits could result in the diversion of management’s time and attention away from business operations, which could harm our business. In addition, the costs of defense and any damages resulting from litigation, a ruling against us, or a settlement of the litigation could adversely affect our cash flow and financial results.
If such government investigations or inquiries result in a restatement of our financial statements, this could delay the filing of our subsequent SEC reports which, in turn, might result in the delisting of our common stock from NASDAQ for failure to meet continued listing requirements.
Risks Relating to our Business Strategies, Personnel and Other Operations
The loss of any of our key personnel or the failure to attract or retain specialized technical and management personnel could impair our ability to grow our business.
Our future success depends upon our ability to attract and retain highly qualified technical, marketing and managerial personnel. We are dependent on a relatively small group of key technical personnel with analog and mixed-signal expertise. Personnel with highly skilled managerial capabilities, and analog and mixed-signal design expertise, are scarce and competition for personnel with these skills is intense. There can be no assurance that we will be able to retain key employees or that we will be successful in attracting, integrating or retaining other highly qualified personnel in the future. If we are unable to retain the services of key employees or are unsuccessful in attracting new highly qualified employees, our business could be harmed.

If our stock price declines below the exercise price of stock options held by our employees, the retention incentive aspect of the stock options is lost and there is a greater likelihood we will be unable to retain key talent.

We face risks associated with companies we have acquired in the past and may acquire in the future.
We have expanded our operations through strategic acquisitions, such as the acquisition of Sierra Monolithics Inc. ("SMI") in December 2009, Gennum Corporation in March 2012, EnVerv in January 2015, and Triune Systems LLC in March 2015, and we may continue to expand and diversify our operations with additional acquisitions. Acquisitions have used and could use in the future a significant portion of our available liquid assets or we could incur debt or issue equity securities to fund acquisitions. Issuance of equity securities could be dilutive to existing shareholders. Debt financing could subject us to restrictive covenants that could have an adverse effect on our business. Although we undertake detailed reviews of proposed acquisition candidates and attempt to negotiate acquisition terms favorable to us, we may encounter difficulties or incur liabilities for which we have no recourse. We cannot provide any assurance that any acquisition will have a positive impact on our future performance.
If we are unsuccessful in integrating acquired companies into our operations or if integration is more difficult than anticipated, then we may not achieve anticipated cost savings or synergies and may experience disruptions that could harm our business. Some of the risks that may affect our ability to successfully integrate acquired companies include those associated with:

- conforming the acquired company's standards, processes, procedures and controls with our operations;
- coordinating new product and process development, especially with respect to highly complex technologies;
- assuring acquired products meet our quality standards;
- loss of key employees or customers of the acquired company;
- hiring additional management and other critical personnel;
- increasing the scope, geographic diversity and complexity of our operations;
- consolidation of facilities and functions;
- the geographic distance between the companies; and
- disparate corporate cultures.

Acquisitions could have a negative impact on our future earnings by way of poor performance by the acquired company or, if we later conclude we are unable to use or sell an acquired product or technology, we could be required to write down the related intangible assets and goodwill.

We may be required to recognize additional impairment charges in the future which could have an adverse effect on our financial condition and results of operations.
We assess our goodwill, other intangible assets and our long-lived assets on an annual basis and whenever events or changes in circumstances indicate the carrying value of our assets may not be recoverable, and as and when required by accounting principles generally accepted in the United States to determine whether they are impaired. In fiscal year 2014, in connection with the restructuring related to the combination of our former Advanced Communications Product group, we recorded charges of approximately $150.0 million for the impairment of goodwill and certain intangible assets. Additionally, in fiscal year 2015, in connection with our strategic decision to reduce our investment in the defense and microwave communications infrastructure markets and to further reduce investment in the long-haul optical market we recorded additional charges of approximately $14.8 million for impairment of intangible assets. Future restructuring or appraisal of our business impacting fair value of our assets or changes in estimates of our future cash flows could affect our impairment analysis in future periods and cause us to record either an additional expense for impairment of assets previously determined to be partially impaired or record an expense for impairment of other assets. Depending on future circumstances, we may never realize the full value of intangible assets. Any future determination or impairment of a significant portion of our goodwill and other intangibles could have an adverse effect on our financial condition and results of operations.

We have significant investments in entities that we do not control. Losses in the value of such investments could have an adverse effect on our financial condition or results of operations.
We have significant investments in entities that we do not control, including equity and cost method investments. Some of these investments are in variable interest entities. Our interests in such entities do not provide us with control over the business strategy, financial goals, development roadmaps or other operational aspects of these entities. We

cannot provide assurance that these entities will operate in a manner that will increase or maintain the value of our investment, that our proportionate share of income or loss from these investments will continue at the current level in the future or that we will not incur losses from the holding of such investments.

To the extent that we have any variable interest entities for which we are required to consolidate, we would need to rely on those entities to timely deliver important financial information to us. In the event that the financial information is inaccurate, incomplete, or not timely, we may not be able to meet our financial reporting obligations as required by the SEC.

While we currently do not have any variable interest entities that we are required to consolidate, to the extent we create such arrangements for which we would be required to consolidate and the financial statements of such entities are not prepared by us, we will not have direct control over their financial statement preparation. As a result, we will, for our financial reporting, depend on what these entities report to us, which could result in us adding monitoring and audit processes, which could increase the difficulty of implementing and maintaining adequate controls over our financial processes and reporting in the future. This may be particularly true when such entities do not have sophisticated financial accounting processes in place, or where we are entering into new relationships at a rapid pace, straining our integration capacity. Additionally, if we do not receive the information from the variable interest entity on a timely basis, this could cause delays in our external reporting obligations as required by the SEC.

Our reported financial results may be adversely affected by new accounting pronouncements or changes in existing accounting standards and practices.

We prepare our financial statements in conformity with accounting principles generally accepted in the United States. These accounting principles are subject to interpretation by the Financial Accounting Standards Board, SEC and various organizations formed to interpret and create appropriate accounting standards and practices. New accounting pronouncements and varying interpretations of accounting standards and practices have occurred and may occur in the future. New accounting pronouncements or a change in the interpretation of existing accounting standards or practices may have a significant effect on our reported financial results and may even affect our reporting of transactions completed before the change is announced or effective.

Our ability to generate the significant amount of cash needed to service our debt obligations or to obtain additional financing depends on many factors beyond our control.

We completed the acquisition of Gennum on March 20, 2012 and entered into senior secured first lien credit facilities in an aggregate principal amount of $350 million. On May 2, 2013, the initial credit facility was replaced with a new credit facility in an aggregate amount of $400 million as described further under “Note 10: Credit Facilities” of Item 8 of this Form 10-K. Prior to the completion of the acquisition of Gennum, we did not have any material outstanding indebtedness. Our ability to make payments on amounts borrowed under our credit facilities, and to fund our operations, will depend on our ability to generate substantial operating cash flow. Our cash flow generation will depend on our future performance, which will be subject to prevailing economic conditions and to financial, business and other factors, many of which are beyond our control.

Our business may not generate sufficient cash flow from operations and, if we cannot service our debt, we will have to take actions such as reducing or delaying capital investments, selling assets, or seeking additional equity capital. We may not be able to, if required, effect these actions on commercially reasonable terms, or at all. Because of these and other factors beyond our control, we may be unable to pay the interest on or other amounts in respect of our indebtedness.

Restrictive covenants in the credit agreement governing our senior secured first lien credit facilities may restrict our ability to pursue our business strategies.

The credit agreement governing our senior secured first lien credit facilities contain a number of restrictive covenants that impose significant operating and financial restrictions on us and may limit our ability to engage in acts that may be in our long-term best interests. The credit agreement includes covenants restricting, among other things, our and our subsidiaries’ ability to:

- incur or guarantee additional debt or issue certain preferred stock;
- pay dividends or make distributions on our capital stock or redeem, repurchase or retire our capital stock;
- make certain investments and acquisitions;
- create liens on our or our subsidiaries’ assets;

- enter into transactions with affiliates;
- merge or consolidate with another person or sell or otherwise dispose of substantially all of our assets;
- make certain payments in respect of other material indebtedness;
- alter the business that we conduct; and
- make certain capital expenditures.

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Under the credit agreement, we are required to maintain a total leverage ratio and an interest expense coverage ratio. Our ability to meet such financial ratios can be affected by events beyond our control, and we cannot assure you that we will be able to meet such ratios. The credit agreement also contains various covenants and restrictions and a breach of any covenant or restriction could result in a default under our credit agreement. If any such default occurs, the lenders may elect (after the expiration of any applicable notice or grace periods) to declare all outstanding borrowings, together with accrued and unpaid interest and other amounts payable thereunder, to be immediately due and payable. Further, following an event of default under our credit facilities, the lenders will have the right to proceed against the collateral granted to them to secure that debt. If the debt under our credit facilities were to be accelerated, our assets may not be sufficient to repay in full that debt that may become due as a result of that acceleration.

We rely on certain critical information systems for the operation of our business and a disruption in our information systems, including those related to cybersecurity, could adversely affect our business operations.

We maintain and rely upon certain critical information systems for the effective operation of our business. These information systems include telecommunications, the Internet, our corporate intranet, various computer hardware and software applications, network communications, and e-mail. These information systems may be owned by us or by our outsource providers or even third parties such as vendors and contractors and may be maintained by us or by such providers or third parties. These information systems are subject to attacks, failures, and access denials from a number of potential sources including viruses, destructive or inadequate code, power failures, and physical damage to computers, hard drives, communication lines and networking equipment. To the extent that these information systems are under our control, we have implemented security procedures, such as virus protection software and emergency recovery processes, to address the outlined risks; however, security procedures for information systems cannot be guaranteed to be failsafe and our inability to use or access these information systems at critical points in time could unfavorably impact the timely and efficient operation of our business. Additionally, any compromise of our information security could result in the unauthorized publication of our confidential business or proprietary information, including potential theft of our intellectual property or trade secrets (including our proprietary technology) or the unauthorized release of customer, supplier or employee data and result in a violation of privacy or other laws, thus exposing us to litigation or damage to our reputation. To the extent that our business is interrupted or data or proprietary technology is lost, destroyed or inappropriately used or disclosed, such disruption could adversely affect our competitive position, relationship with customers, suppliers or employees or our business, financial condition and results of operations. In addition, we may be required to incur significant costs to protect against or repair the damage caused by these disruptions or security breaches in the future.

The costs associated with our indemnification of certain customers, distributors, and other parties could be higher in future periods.

In the normal course of our business, we indemnify other parties, including customers, distributors, and lessors, with respect to certain matters. These obligations typically arise pursuant to contracts under which we agree to hold the other party harmless against losses arising from a breach of representations and covenants related to certain matters, such as acts or omissions of our employees, infringement of third-party intellectual property rights, and certain environmental matters. We have not incurred any significant expense as a result of agreements of this type in at least a decade, but there can be no assurances that we will not incur expense under these indemnification provisions in the future.

We have also entered into agreements with our current and former directors and certain of our current and former executives indemnifying them against certain liabilities incurred in connection with their duties. Our Certificate of Incorporation and Bylaws contain similar indemnification obligations with respect to our current and former directors and employees, as does the California Labor Code. We cannot estimate the amount of potential future payments, if any, that we might be required to make as a result of these agreements.

Our share price could be subject to extreme price fluctuations, and stockholders could have difficulty trading shares.

Historically, the market for the stock of technology companies has been volatile, and the market price of our common stock has been and may continue to be subject to significant fluctuations. Fluctuations could be in response to items such as operating results, announcements of technological innovations, or market conditions for technology stocks in general. Additionally, the stock market in recent years has experienced extreme price and volume fluctuations that often have been unrelated to the operating performance of individual companies. These market fluctuations, as well as general economic conditions, may adversely affect the price of our common stock.

In addition, the future sale of a substantial number of shares of common stock by us or by our existing stockholders or option holders (including directors, officers, and employees, some of whom hold stock options that are approaching their expiration date) may have an adverse impact on the market price of the shares of common stock. There can be no assurance that the trading price of our common stock will remain at or near its current level.

If securities or industry analysts do not publish research or reports about our business, or if they adversely change their recommendations regarding our common stock or if our operating results do not meet their expectations, the trading price of our common stock could decline.

The market price of our common stock is influenced by the research and reports that industry or securities analysts publish about us or our business. There is no guarantee that these analysts will understand our business and results, or that their reports will be accurate or correctly predict our operating results or prospects. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause the market price of our common stock or its trading volume to decline. Moreover, if one or more of the analysts who cover our company downgrade our common stock or if our operating results or prospects do not meet their expectations, the market price of our common shares could decline significantly.

Anti-takeover provisions in our Certificate of Incorporation and Bylaws could make an acquisition of us more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Certain provisions in our Certificate of Incorporation and Bylaws may delay or prevent an acquisition of us or a change in our management. These provisions include:

- the ability of our board of directors to determine the rights, preferences and privileges of our preferred shares and to issue the preferred shares without stockholder approval;
- advance notice requirements for election to our board of directors and for proposing matters that can be acted upon at stockholder meetings; and
- the inability of stockholders to call a special meeting.

These provisions could make it more difficult for a third-party to acquire us, even if the third-party's offer may be considered beneficial by many stockholders. As a result, stockholders may be limited in their ability to obtain a premium for their shares.

We are subject to litigation risks 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, which may divert the attention of our management and our resources in general. From time to time in the ordinary course of its business, the Company is involved in various claims, litigation, and other legal actions that are normal to the nature of its business, including with respect to IP, contract, product liability, employment, and environmental matters. 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.

We could experience interruption in our operational transactions and additional expense following the implementation of a new Enterprise Resource Planning (“ERP”) software platform.

We recently implemented SAP’s ERP software in January 2015 and made related enhancements to our integrated financial and supply chain management systems.

Our new ERP software platform has involved, and will continue to involve, substantial expenditures on system hardware and software, as well as design, development and implementation activities. Our cost estimates related to our new ERP system are based on assumptions which are subject to wide variability, require a great deal of judgment and are inherently uncertain.

Operational disruptions during the course of using the new ERP system could materially impact our operations. For example, our ability to forecast sales demand, ship products, manage our product inventory and record and report financial and management information on a timely and accurate basis could be impaired as we become familiar with the ERP system following the implementation. To the extent that there are significant problems with the transition to the new ERP system, our business, results of operations and financial results could be adversely affected.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our headquarters is located in Camarillo, California where we own an approximately 87,600 square foot facility that was completed in 2002. The parcel on which our headquarters is located can accommodate substantial expansion. The Camarillo facility houses inside sales, marketing and administrative offices, including finance, human resources, and legal as well as some research and development, and a very limited amount of test and probe activity.

We also own a 30,000 square foot building in Reynosa, Mexico that supports some of the assembly and production needs of the Power and High-Reliability product line.

We lease an approximately 13,800 square foot building in San Diego, California that houses design, test and administrative functions and serves as a development center for our Wireless and Sensing product line. The lease on this facility runs through September 2019. We also lease approximately 20,100 square feet in Irvine, California which facility houses design, test and administrative functions for our Signal Integrity product lines. The Irvine lease for the first floor facilities will expire in September 2020. As a result of the Triune acquisition in 2015, we also now lease approximately 14,784 square feet in Plano, Texas, which houses the Power and High-Reliability Product Group.

We lease a facility in Rapperswil, Switzerland which serves as corporate headquarters for our Semtech (International) AG subsidiary and houses finance, administrative, legal, and other general functions. The lease on this facility runs through January 2017. In addition, we lease office and warehouse space in Neuchatel, Switzerland, the headquarters for our Wireless and Sensing product line. The lease on this facility expires in February 2017.

We also lease space to house certain of our other administrative, design, sales and marketing, and operations domestically, in Plano, Texas; San Jose, California; Morrisville (Raleigh), North Carolina; and internationally, in Canada; China; Finland; France; Germany; India; Japan; Lithuania; Mexico; South Korea; the Philippines; Taiwan; and the United Kingdom. We terminated our leases in Buckingham Township (Philadelphia) Pennsylvania and Sweden in 2015.

We believe that our existing leased and owned space is more than adequate for our current operations, and that suitable replacement and additional space will be available in the future on commercially reasonable terms as circumstances warrant.

Item 3. Legal Proceedings

The descriptions of the legal proceedings in Note 14 to the financial statements included in this report are incorporated by reference to this Item 3.

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

During fiscal years 2016 and 2015, our common stock traded on the NASDAQ Global Select Market under the symbol "SMTC." The following table sets forth, for the periods indicated, the high and low sale prices of our common stock, as reported on the NASDAQ market, giving effect to all stock splits through the date hereof.

	High	Low
Fiscal year ended January 31, 2016:		
First Quarter	$30.01	$23.43
Second Quarter	$24.68	$17.48
Third Quarter	$18.31	$14.04
Fourth Quarter	$20.37	$16.82
Fiscal year ended January 25, 2015:		
First Quarter	$27.34	$21.38
Second Quarter	$28.10	$21.66
Third Quarter	$28.25	$21.84
Fourth Quarter	$28.49	$22.84

On March 25, 2016, the reported last sale price of our common stock on the NASDAQ Global Select Market was $21.45 per share.

Holders

As of March 25, 2016, we had 223 holders of record of our common stock.

Dividends

The payment of dividends on our common stock is within the discretion of our Board of Directors. Currently, we intend to retain earnings to finance the growth of our business. We have not paid cash dividends on our common stock during at least the five most recent fiscal years and our Board of Directors has not indicated any intent to declare a cash dividend on the common stock in the foreseeable future. The credit agreement governing our senior secured first lien credit facilities includes covenants limiting our ability to pay dividends or make distributions on our capital stock.

Purchases of Equity

We maintain a stock repurchase program that was initially approved by our Board of Directors in March 2008. The stock repurchase program does not have an expiration date and our Board of Directors has authorized expansion of the program over the years. During fiscal years 2016 and 2015, we repurchased shares of common stock in an amount of $57.3 million and $40.9 million, respectively. As of January 31, 2016, we had repurchased $135.7 million in shares of our common stock under the program since inception and the current remaining authorization under our stock repurchase program is $62.7 million. Under our stock repurchase program, we may repurchase our common stock at any time or from time to time, without prior notice, subject to market conditions and other considerations. Our repurchases may be made through 10b5-1 plans, open market purchases, privately negotiated transactions, block purchases or other transactions. We intend to fund repurchases under the program from cash on hand. We have no obligation to repurchase any shares under the stock repurchase program and may suspend or discontinue it at any time.

The Company did not repurchase shares of its common stock during the fourth quarter of fiscal 2016.

Information with respect to purchases by the Company of shares of common stock during the fourth quarter of fiscal year 2016 follows:

Issuer Purchases of Equity Securities

Fiscal Month/Year	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of	Approximate Dollar Value of Shares That May Yet

			Publicly Announced Program	Be Purchased Under The Program	
November 2015 (10/26/15-11/22/15)	—	$ —	—	$62.7	million
December 2015 (11/23/15-12/20/15)	—	$ —	—	62.7	million
January 2016 (12/21/15-1/31/16)	—	$ —	—	$62.7	million
Total activity in the fourth quarter	—	$ —	—		

Securities Authorized for Issuance Under Equity Compensation Plans

See the information set forth in Part III, Item 12 of this Form 10-K.

Sales of Unregistered Securities

We did not make any unregistered sales of equity securities during fiscal year 2016.

Performance Graph

This chart and graph show the value of a $100 cash investment on the last day of fiscal year 2011 in (i) the Company's common stock, (ii) the NASDAQ Composite Index, and (iii) the Philadelphia Semiconductor Index. Note that historic stock price performance is not necessarily indicative of future stock price performance.

Fiscal Year	2011	2012	2013	2014	2015	2016
Semtech	$100	$133	$137	$107	$125	$92
NASDAQ Composite	$100	$105	$117	$154	$177	$172
PHLX SEMICONDUCTOR SECTOR	$100	$94	$95	$121	$155	$140

The information contained in this Item 5 under the heading "Performance Graph" (i) is being furnished and shall not be deemed "filed" for the purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities of that section, and (ii) shall not be incorporated by reference into any registration statement or other document pursuant to the Exchange Act, or the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such filing to this Item 5 Performance Graph information.

Item 6. Selected Financial Data

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The consolidated statements of operations data set forth below for fiscal years 2016, 2015 and 2014 and the consolidated balance sheet data as of the end of fiscal years 2016 and 2015 are derived from, and qualified by reference to, the audited consolidated financial statements included in Item 8 of this report. The consolidated statements of operations data for fiscal years 2013 and 2012 and the consolidated balance sheet data as of the end of fiscal years 2014, 2013 and 2012 are derived from the audited financial statements previously filed with the SEC on Form 10-K.
This information should be read in conjunction with Management's Discussion and Analysis contained in Item 7 of this report, the audited financial statements and accompanying notes included in Item 8 of this report, and the corresponding items included in our Form 10-K for fiscal years 2015 and 2014.

The fiscal year ended January 31, 2016 consisted of fifty-three weeks. All other fiscal years presented consisted of fifty-two weeks. Our past results are not necessarily indicative of our future performance.
Income Statement Data

	Fiscal Year Ended				
(in thousands, except per share amounts)	January 31, 2016 (1)	January 25, 2015	January 26, 2014	January 27, 2013 (2)	January 29, 2012
Net sales	$490,219	$557,885	$594,977	$578,827	$480,601
Cost of sales	197,109	229,093	244,719	264,215	194,956
Cost of sales - lower of cost or market write down	—	—	15,047	—	—
Gross profit	293,110	328,792	335,211	314,612	285,645
Operating costs and expenses:					
Selling, general and administrative	136,151	127,134	126,033	149,070	100,629
Product development and engineering	113,737	119,371	137,437	120,009	80,577
Intangible amortization	25,059	25,718	29,002	29,244	8,383
Intangible asset impairments	—	11,636	32,538	700	2,470
Goodwill impairment	—	—	116,686	—	—
Changes in the fair value of contingent earn-out obligations	(16,362)	1,391	(654)	—	—
Restructuring	4,526	1,285	3,086	—	—
Total operating costs and expenses	263,111	286,535	444,128	299,023	192,059
Operating (loss) income	29,999	42,257	(108,917)	15,589	93,586
Interest expense	(7,819)	(5,927)	(18,174)	(14,363)	—
Interest income and other (expense) income, net	(1,801)	165	(1,390)	(977)	593
(Loss) income before taxes	20,379	36,495	(128,481)	249	94,179
Provision (benefit) for taxes	8,882	8,548	35,985	(41,690)	5,092
Net (loss) income	$11,497	$27,947	$(164,466)	$41,939	$89,087
Earnings per share:					
Basic	$0.18	$0.42	$(2.44)	$0.64	$1.37
Diluted	$0.17	$0.41	$(2.44)	$0.62	$1.32
Weighted average number of shares used in computing earnings per share:					
Basic	65,657	67,108	67,471	65,809	65,099
Diluted	65,961	67,685	67,471	67,472	67,350
Anti-dilutive shares not included in the EPS calculations	2,569	1,714	1,245	783	625

Balance Sheet Data

(in thousands)	January 31, 2016 [(1)]	January 25, 2015	January 26, 2014	January 27, 2013 [(2)]	January 29, 2012
Cash, cash equivalents and investments	$211,810	$230,328	$246,868	$236,072	$327,665
Working capital	237,334	288,647	282,706	248,311	360,330
Total assets	911,517	929,431	948,940	1,171,013	726,321
Long term debt, less current	239,177	234,746	273,293	282,286	—
Other long-term liabilities	279,579	270,032	302,207	318,505	29,151
Total stockholders’ equity	528,051	551,358	535,843	694,826	630,188

(1) The Company acquired Triune on March 4, 2015 and EnVerv on January 13, 2015. Refer to Note 3 to our audited consolidated financial statements included in Item 8 of this report.

(2) The Company acquired Gennum on March 20, 2012 and Cycleo SAS on March 7, 2012. Both of these acquisitions occurred during our fiscal year 2013 with Gennum being the more significant of the two. As a result, fiscal year 2013 reflects almost a full year of these acquisitions in our consolidated statements of operations.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with Item 6 “Selected Consolidated Financial Data” and our audited consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K.

This Annual Report on Form 10-K contains “forward-looking statements” within the meaning of the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995, as amended, based on our current expectations, estimates and projections about our operations, industry, financial condition, performance, results of operations, and liquidity. Forward-looking statements are statements other than historical information or statements of current condition and relate to matters such as future financial performance, future operational performance, the anticipated impact of specific items on future earnings, and our plans, objectives and expectations. Statements containing words such as “may,” “believe,” “anticipate,” “expect,” “intend,” “plan,” “project,” “estimate,” “should,” “will,” “designed to,” “proj “business outlook,” or other similar expressions constitute forward-looking statements. Forward-looking statements involve known and unknown risks and uncertainties that could cause actual results and events to differ materially from those projected. Please see Special Note Regarding Forward-Looking and Cautionary Statements elsewhere in this Annual Report on Form 10-K for potential factors that could cause actual results to differ materially from those in the forward-looking statements.

Overview

We are a leading supplier of analog and mixed-signal semiconductor products and were incorporated in Delaware in 1960. We design, produce and market a broad range of products that are sold principally into applications within the high-end consumer, industrial, enterprise computing and communications end-markets. The high-end consumer end-market includes handheld devices, smartphones, tablets, wireless charging, set-top boxes, digital televisions, digital video recorders, thunderbolt cables and other consumer equipment. Applications for the industrial market include video broadcast studio equipment, automated meter reading, smart grid, wireless charging, military and aerospace, medical, security systems, automotive, Internet of Things ("IoT"), industrial and home automation, video security and surveillance and other industrial equipment. Enterprise computing end-markets include desktops, notebooks, servers, graphic boards, printers, monitors, datacenter related equipment, passive optical networks, storage networks and computer peripherals. Communications end-market applications include 3G/4G/LTE wireless base stations, long-haul optical networks, carrier networks, switches and routers, cable modems, signal conditioners, wireless LAN, and other communication infrastructure equipment.

We report results on the basis of 52 and 53 week periods and our fiscal year ends on the last Sunday in January. The fiscal year ended January 31, 2016 consisted of 53 weeks. The fiscal years January 25, 2015 and January 26, 2014 each consisted of 52 weeks.

Our end-customers are primarily original equipment manufacturers and their suppliers, including Cisco Systems, Inc., Huawei Technologies Co., Ltd., LG Electronics, Sharp Corporation, Itron, Sonova International, Samsung Electronics Co. Ltd., Google Inc., Amazon.com Inc., and ZTE Corporation.

In March 2016, the United States Department of Commerce published in the Federal Register a “final rule” amending the Export Administration Regulations to add ZTE Corporation and three of its subsidiaries to the “Entity List” maintained by the Department for actions contrary to the national security and foreign policy interests of the United States. We do not expect this event to have a material impact on our results of operations.

On March 4, 2015, we completed the acquisition of Triune Systems, LLC. ("Triune"), a privately-held supplier of wireless charging, isolated switching and power management platforms targeted at high and low power, high efficiency applications. Under the terms of the purchase agreement, we acquired all of the outstanding equity interests of Triune Systems for an aggregate purchase price of $45.0 million consisting of $35.0 million cash paid at closing, with an additional cash consideration of $10.0 million of which $9.5 million was paid in September 2015. The remaining $0.5 million is expected to be paid in the first quarter of fiscal year 2017. Subject to achieving certain future financial goals (“Triune Earn-out”), up to an additional $70.0 million of additional contingent consideration will be paid over three years if certain revenue targets are achieved in each of the fiscal years 2016 through 2018. An additional payment of up to $16.0 million will be paid after fiscal year 2018 if certain cumulative revenue and operating income targets are achieved. The Triune Earn-out targets for fiscal year 2016 were not met and we do not expect to make any payments with regards to this period which represented $13.0 million of the total $70.0 million opportunity. See Note 3 and Note 14 to our audited consolidated financial statements included in Item 8 of this report.

Our primary reason for the acquisition was to broaden our existing portfolio with platforms that are very complementary to our current market focus, including Triune's isolated switching platform and wireless charging platform.

On January 13, 2015, we completed the acquisition of select assets of EnVerv, Inc. ("EnVerv"), a privately-held supplier of power line communications ("PLC") and Smart Grid solutions targeted at advanced metering infrastructure, home energy management systems and IoT applications. We paid $4.9 million in cash at closing. See Note 3 to our audited consolidated financial statements included in Item 8 of this report.

We operate and account for results in one reportable segment. In the first quarter of fiscal year 2016, we completed a reassessment of our operations in light of our recent strategic business decisions. See Note 17 to our audited consolidated financial statements included in Item 8 of this report. Based on this reassessment, we have identified a total of five operating segments. Four of these operating segments aggregate into one reportable segment; the Semiconductor Products Group. The remaining operating segment, the Systems Innovation Group (shown as "All others"), could not be aggregated with the other operating segments and did not meet the criteria for a separate reportable segment as defined by the guidance regarding segment disclosure. The four operating segments aggregated into our one reportable segment all exhibit similar economic characteristics and we manage that business to a targeted gross margin range which all of the aggregated product lines are expected to meet. The historical activity of the reportable segment has been recast for consistent presentation for fiscal years 2015 and 2014.

Gross margins for our Protection product group and Power and High-Reliability product group performed below our targeted range in fiscal year 2016 as their businesses were negatively impacted by significantly lower sales volumes and an unfavorable product mix. We expect the gross margin for the Protection product group to recover as sales volumes improve and customers transition to our new generation of products. The lower sales volumes within the Power and High-Reliability product group are the result of the group's on-going strategic transition away from certain markets (i.e., the personal computer market) that are characterized by non-differentiated offerings in sectors that are highly competitive. Specifically, the Power and High-Reliability product group is transitioning its product offerings to better support its current target markets, which include high-end consumer and medical, space, industrial and automotive applications that have historically enjoyed higher gross margins. Additionally, we believe that the recent addition of the wireless charging and isolated switching platforms will allow us to accelerate this transition.

Most of our sales to customers are made on the basis of individual customer purchase orders. Many customers include cancellation provisions in their purchase orders. Trends within the industry toward shorter lead-times and "just-in-time" deliveries have resulted in our reduced ability to predict future shipments. As a result, we rely on orders received and shipped within the same quarter for a significant portion of our sales. Orders received and shipped in fiscal year 2016 represented 54% of net sales. Sales made directly to customers during fiscal year 2016 were 42% of net sales. The remaining 58% of net sales were made through independent distributors.

Our business relies on foreign-based entities. Most of our outside subcontractors and suppliers, including third-party foundries that supply silicon wafers, are located in foreign countries, including China, Taiwan, Europe and Israel. For the fiscal year ended January 31, 2016, approximately 29% of our silicon, in terms of cost of wafers purchased, was manufactured in China. Foreign sales for fiscal year 2016 constituted approximately 88% of our net sales. Approximately 83% of foreign sales in fiscal year 2016 were to customers located in the Asia-Pacific region. The remaining foreign sales were primarily to customers in Europe and Canada.

We use several metrics as indicators of future potential growth. The indicators that we believe best correlate to potential future revenue growth are design wins and new product releases. There are many factors that may cause a design win or new product release to not result in revenue, including a customer decision not to go to system production, a change in a customer's perspective regarding a product's value or a customer's product failing in the end-market. As a result, although a design win or new product introduction is an important step towards generating future revenue, it does not inevitably result in us being awarded business or receiving a purchase commitment.

Restructuring - fiscal 2016

On July 15, 2015, we announced a worldwide reduction in force as part of an overall plan to align operating expenses with business conditions and leverage recent infrastructure investments. The reduction in force affected approximately 8% of our global workforce and was completed in our third quarter of fiscal year 2016. As a result of the reduction in force, we recorded restructuring charges of $4.5 million in fiscal year 2016. Such costs consisted primarily of termination benefits, including severance, which have been settled in cash. The benefits from this plan, after full implementation, are expected to reduce our current operating expenses by approximately $20.0 million on an annual basis.

Restructuring charges	
(in thousands)	
Employee terminations and related costs	$4,526
Total restructuring costs	$4,526

Restructuring - fiscal 2015

In December 2014, we made a strategic decision to reduce our investment in the defense and microwave communications markets and to make additional reductions in our investments in the long-haul optical market. As a result of these actions, we recorded restructuring charges and impairments of certain intangible assets. Additionally, certain long-lived assets were determined to be impaired. The financial impact of these actions for the twelve month period ending January 25, 2015, is presented below:

Restructuring charges	
(in thousands)	
Employee terminations and related costs	$662
Contract termination costs	623
Total restructuring costs	$1,285

Impairment of finite-lived intangibles	
(in thousands)	Finite-lived intangible assets
Intangible asset impairments	$11,636

Other charges

(in thousands)	Cost of sales	Selling general and administrative	Product development and engineering	Total
Long-lived asset impairments	$2,810	$6	$6,630	$9,446
Contract commitments	2,983			2,983
	$5,793	$6	$6,630	$12,429

As a result of these restructuring actions we realized operating cost savings of approximately $6.4 million in fiscal year 2016.

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Restructuring - fiscal 2014

In December 2013, after filing our Form 10-Q for the period ended October 27, 2013, we became aware of changes tied to the decision of a customer, disclosed in our filings as a key customer, to transition from our standard product to their internal application specific integrated circuit (“ASIC”) solution. This decision by our key customer to utilize an internal ASIC solution was accelerated by continued delays in the release of capital investment tenders, primarily within China, which also provided other potential customers of ours with additional time to develop their internal solutions. While some of these potential customers had indicated an interest in transitioning to an internal ASIC solution, it was our key customer’s decision to do so that prompted our strategic reassessment and resulting restructuring.

Upon completing the reassessment of our strategic options in January 2014, we decided to reduce the level of investments that we are making in the long-haul optical market. This reduction in investment was expected to significantly impact our ability to generate future revenue from the long-haul optical market. This anticipated reduction in potential future revenue resulted in us recording significant impairments of goodwill and other intangibles. Additionally, certain long-lived assets were determined to be impaired. As a result of our communications to our customers regarding our operational changes, our customers have accelerated the transition away from some of our current platforms, including certain products in the 40Gbps and 100Gbps SerDes class. In anticipation of these customer transitions, we reduced the cost basis of inventories in the fourth quarter of fiscal year 2014. Additionally, we incurred significant costs to terminate certain contract commitments and to provide for certain severance benefits to employees who were terminated prior to January 26, 2014 as a result of these investment reductions. The financial impact of these actions for the twelve month period ending January 26, 2014 is presented below:

Restructuring charges

(in thousands)	
Employee terminations and related costs	$1,841
Contract termination costs	1,245
Total restructuring costs	$3,086

Impairment of finite and indefinite-lived intangibles

(in thousands)	Finite-lived intangible assets	Indefinite-lived intangible assets	Total
Intangible asset impairments	$29,938	$—	$29,938
Goodwill impairment	—	116,686	116,686
Total	$29,938	$116,686	$146,624

Other charges

(in thousands)	Cost of sales	Selling general and administrative	Product development and engineering	Total
Inventory write-downs	$15,047	$—	$—	$15,047
Long-lived asset impairments	4,341	314	4,541	9,196
Contract commitments	1,729	—	3,197	4,926
Total other charges	$21,117	$314	$7,738	$29,169

Results of Operations
Fiscal Year 2016 Compared With Fiscal Year 2015

Presented below is our estimate of the end-market classification of net sales.

	Fiscal Years				
(in thousands, except percentages)	2016		2015		Change
Enterprise Computing	$145,047	30 %	$115,812	21 %	25 %
Industrial and Other	127,779	26 %	147,410	26 %	(13)%
High-End Consumer (1)	125,033	25 %	173,799	31 %	(28)%
Communications	92,360	19 %	120,864	22 %	(24)%
Total	$490,219	100 %	$557,885	100 %	(12)%

(1) Approximately $32.8 million and $46.7 million of our total sales to Samsung Electronics (and Affiliates), one of our significant customers, in fiscal year 2016 and 2015, respectively, were for products that target the handheld market (which includes mobile phones). This activity is included in the high-end consumer end-market category.

Net Sales. Net sales for fiscal year 2016 were $490.2 million, a decrease of 12% compared to $557.9 million for fiscal year 2015. Net sales for fiscal year 2016 benefited from an additional week compared to fiscal year 2015. Fiscal year 2016 revenues within the Enterprise Computing end-market benefited from particular strength from our optical products which are well positioned for the current cycle of datacenter upgrades and increased deployments of PON, particularly in China. This strength was more than offset by the further decline in the Communications market driven by the anticipated weakness in 40Gbps and 100Gbps SerDes devices going into the long-haul optical market as our customers transitioned away from our solutions and lower net sales to the 4G/LTE wireless base station market. Net sales were also lower in our high-end consumer end market due to lower demand from our largest Korean customers due to their loss of world-wide market share. Revenue from the licensing of intellectual property was $3.4 million and $0.4 million in fiscal years 2016 and 2015, respectively.

In fiscal year 2017, activity in the communications, enterprise computing and industrial end markets is expected to improve, due to continued demand for datacenter upgrades, and the build-out of metro communications infrastructure, including wireless base stations (specifically in China) and IoT applications.

Gross Profit. Gross profit was $293.1 million and $328.8 million in fiscal years 2016 and 2015, respectively. Our gross margin was 59.8% for fiscal year 2016, up from 58.9% in fiscal year 2015. We incurred significant charges in fiscal year 2015 related to our strategic decision to reduce our investments in the long-haul optical and defense and microwave communications markets. These charges included $2.8 million of asset impairment charges and $3.0 million of charges related to settlement of contract commitments. Excluding the charges related to these business alignment decisions, our gross margin profile for fiscal years 2016 and 2015 were similar. We expect overall gross margins to remain consistent in fiscal year 2017.

Operating Costs and Expenses.

	Fiscal Years				
(in thousands, except percentages)	2016		2015		
	Cost/Exp.	% net sales	Cost/Exp.	% net sales	Change
Selling, general and administrative	$136,151	28 %	$127,134	23 %	7 %
Product development and engineering	113,737	23 %	119,371	21 %	(5)%
Intangible amortization	25,059	5 %	25,718	5 %	(3)%
Intangible asset impairments	—	— %	11,636	2 %	(100)%
Changes in fair value of contingent earn-out obligations	(16,362)	(3)%	1,391	— %	— %
Restructuring charge	4,526	1 %	1,285	— %	252 %
Total operating costs and expenses	$263,111	54 %	$286,535	51 %	(8)%

Selling, General & Administrative Expenses

Selling, general and administrative ("SG&A") expenses for fiscal year 2016 increased by $9.0 million as a result of higher support costs related to our new enterprise resource planning ("ERP") software and the recurring amortization expense associated with our new ERP software of approximately $2.2 million per year. In fiscal year 2016, we recorded a reserve for certain environmental matters of $2.9 million and incurred approximately $6.8 million of costs associated with various legal matters, including our acquisition of Triune, our investment in MultiPhy Ltd., and our Active Semi litigation. These costs were partially offset by $9.1 million of lower stock-based compensation expense.

Product Development and Engineering Expenses

Product development and engineering expenses for fiscal years 2016 and 2015 were $113.7 million and $119.4 million, respectively or a decrease of 5%. The decrease was primarily a result of our decision to reduce our investment in the defense and microwave communications markets and to make additional reductions in our investments in the long-haul optical market, partially offset by higher costs associated with our acquisitions of Triune and EnVerv and lower recoveries from third parties for non-recurring engineering services.

The levels of product development and engineering expenses reported in a fiscal period can be significantly impacted, and therefore experience period over period volatility, by the number of new product tape-outs and by the timing of recoveries from non-recurring engineering services which are recorded as a reduction to product development and engineering expense.

Intangible Amortization

Intangible amortization was $25.1 million and $25.7 million in fiscal years 2016 and 2015, respectively.

Intangible Asset Impairments

There were no intangible asset impairments in 2016. We recorded $11.6 million in intangible asset impairments in fiscal year 2015 related to our decision to reduce our investment in the defense and microwave communications markets and to make additional reductions in our investments in the long-haul optical market.

Changes in the Fair Value of Contingent Earn-out Obligations

The contingent earn-out expense decreased by $17.8 million in fiscal year 2016 primarily as a result of a significant reduction in our estimate of projected revenue associated with the Triune Earn-out.

We measure contingent earn-out liabilities at fair value on a recurring basis using significant unobservable inputs classified within Level 3 of the fair value hierarchy. We use a Monte Carlo valuation method as a valuation technique to determine the value of the earn-out liability. The significant unobservable inputs used in the fair value measurements are revenue projections over the earn-out period, and the probability outcome percentages assigned to each scenario. Significant increases or decreases to either of these inputs in isolation would result in a significantly higher or lower liability, with a higher liability capped by the contractual maximum of the contingent earn-out obligation. Ultimately, the liability will be equivalent to the amount paid, and the difference between the fair value estimate and amount paid will be recorded in earnings. The Triune Earn-out targets for fiscal year 2016 were not met and we do not expect to make any payments with regards to this period which represented $13.0 million of the total $70.0 million opportunity.

Restructuring

In the second quarter of fiscal year 2016, we announced a worldwide reduction in force as part of an overall plan to align operating expenses with business conditions and leverage recent infrastructure investments. As a result of the reduction in force, we recorded restructuring charges of $4.5 million in fiscal year 2016.

We incurred $1.3 million for restructuring charges in fiscal year 2015, respectively, for severance and contract cancellation liabilities related to our decision to reduce our investments in the defense and microwave communications and long-haul optical markets, realign product groupings, and align spending with anticipated demand levels.

Interest Expense. Interest expense was $7.8 million and $5.9 million for fiscal years 2016 and 2015, respectively. The $1.9 million increase is primarily related to higher levels of outstanding debt under our credit facilities and higher amortization costs associated with our interest rate hedge. Our interest rate under the Credit Agreement can be influenced by our leverage ratio, as defined in our Credit Agreement ("Leverage Ratio"). Our Leverage Ratio is influenced by our consolidated indebtedness and our adjusted earnings before interest, taxes, depreciation and amortization. Historically, our Leverage Ratio under the Credit Agreement has been between 1.50 and 2.25 which resulted in an interest rate margin of 1.75%. Primarily as a result of declining revenue, our Leverage Ratio exceeded 2.50 at the end of fiscal year 2016 which will result in our rate margin increasing to 2.25%. We believe that our Leverage Ratio will improve in the first quarter of fiscal year 2017, to a level below 2.50, as a result of higher sales. If our Leverage Ratio were to remain above 2.50, the higher interest rate would increase our annual interest expense by approximately $0.9 million.
Interest Income and Other Expense, Net. Interest income and other expense, net was expense of $1.8 million in fiscal year 2016 compared to expense of $0.2 million in fiscal year 2015. Interest income earned in the past few years has been insignificant. The higher expense in fiscal year 2016 was primarily related to the impact of unfavorable movements in foreign exchange rates and higher interest costs associated with the Cycleo Amended Earn-Out discussed in Note 14 to our audited consolidated financial statements included in Item 8 of this report.

Provision for Taxes. The provision for income taxes was $8.9 million for fiscal year 2016 compared to $8.5 million for fiscal year 2015. The effective tax rates for fiscal years 2016 and 2015 were a tax provision of 43.6% and 23.4%, respectively. The effective tax rates for fiscal years 2016 and 2015 reflect the adverse impact of $1.8 million and $14.3 million respectively, related to a valuation reserve against our deferred tax assets.

Our effective tax rate in fiscal year 2016 differs from the statutory federal income tax rate of 35% due primarily to a valuation reserve against our deferred tax assets and certain undistributed foreign earnings for which no U.S. taxes are provided, because such earnings are indefinitely reinvested outside of the U.S. The effective tax rate in fiscal year 2016 is higher than the statutory federal income tax rate due to additional non-cash tax expense in the US resulting from the reversal of a contingent liability (discussed in Note 14) and its related impact on a book-tax difference in the basis of Goodwill. During fiscal year 2016, we also received an income tax rate benefit for our research and development tax credits in the U.S., U.K., and Canada.

We account for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and tax basis of the assets and liabilities.

As of January 31, 2016, we have a valuation allowance against our U.S. deferred tax assets of approximately $77.4 million. We are required to assess whether a valuation allowance should be recorded against our deferred tax assets ("DTAs") based on the consideration of all available evidence, using a "more likely than not" realization standard. The four sources of taxable income that must be considered in determining whether DTAs will be realized are; (1) future reversals of existing taxable temporary differences (i.e. offset of gross deferred tax assets against gross deferred tax liabilities); (2) taxable income in prior carryback years, if carryback is permitted under the tax law; (3) tax planning strategies and (4) future taxable income exclusive of reversing temporary differences and carry-forwards.

In assessing whether a valuation allowance is required, significant weight is to be given to evidence that can be objectively verified. We have evaluated our DTAs each reporting period, including an assessment of our cumulative income or loss over the prior three-year period, to determine if a valuation allowance was required. A significant negative factor in our assessment was our three-year cumulative loss history in the U.S. as of January 31, 2016.

In fiscal years 2013 through 2015, our Canadian operations were in a cumulative loss position due to a loss generated in fiscal year 2013. However, as of the end of fiscal year 2016, Gennum was in a three year cumulative income position, since the loss that was generated in fiscal year 2013 was no longer included in the three year window for measuring income or loss. We are forecasting pretax income growth for Gennum over the next five years, and correspondingly estimated our Canadian based taxes over the next five years. We compared the amount of taxes that we will owe in this period to our net deferred tax assets and concluded that we would be able to utilize our deferred tax assets without any concerns related to expiration.

We are forecasting pretax income growth for Gennum over the next five years, and correspondingly estimated our Canadian based taxes over the next five years. We compared the amount of taxes that we will owe in this period to our net deferred tax assets and concluded that we would be able to utilize our deferred tax assets without any concerns related to expiration.

We were able to conclude that the positive evidence related to long-term profitability and utilization of all deferred tax assets was sufficient to warrant a full release of the reserve on our Canadian deferred tax assets. As such, in the fourth quarter of fiscal year 2016, we released the entire reserve of approximately $7.2 million on our Canadian deferred tax assets.

After a review of the four sources of taxable income described above and in view of our three-year cumulative loss, we were not able to conclude that it is more likely than not that our U.S. DTAs will be realized. As a result, we recorded a full valuation allowance on our DTAs in the U.S, with a corresponding charge to the income tax provision of approximately $9.0 million. During the fourth quarter of fiscal year 2016, we revisited our analysis of whether a valuation allowance would be appropriate for our Canadian deferred tax assets, and concluded that enough positive evidence exists to fully release the reserve, with a corresponding benefit to the income tax provision of approximately $7.2 million. This resulted in a net charge to the income tax provision of approximately $1.8 million as of January 31, 2016.

As we enter fiscal year 2017, we expect our tax rate to face upward pressure as a result of a less favorable mix of foreign and domestic income and our expected inability to benefit from deferred tax assets as a result of our recent history of tax losses in the United States.

As a global organization, we are subject to audit by taxing authorities in various jurisdictions. To the extent that an audit, or the closure of a statute of limitations, results in our adjusting our reserves for uncertain tax positions, our effective tax rate could experience extreme volatility since any adjustment would be recorded as a discrete item in the period of adjustment.

Fiscal Year 2015 Compared With Fiscal Year 2014

Presented below is our estimate of the end-market classification of net sales.

(in thousands, except percentages)	Fiscal Years 2015			2014			Change	
Enterprise Computing	$115,812	21	%	$94,021	16	%	23	%
Industrial and Other	147,410	26	%	148,748	25	%	(1	)%
High-End Consumer (1)	173,799	31	%	171,640	29	%	1	%
Communications	120,864	22	%	180,568	30	%	(33	)%
Total	$557,885	100	%	$594,977	100	%	(6	)%

(1) Approximately $46.7 million and $43.8 million of our total sales to Samsung Electronics (and Affiliates), one of our significant customers, in fiscal years 2015 and 2014, respectively, were for products that target the handheld market (which includes mobile phones).These revenues are included in the high-end consumer end-market category.

Net Sales. Net sales for fiscal year 2015 were $557.9 million, a decrease of 6% from $595.0 million for fiscal year 2014. Fiscal year 2015 revenues within the Enterprise Computing end-market benefited from particular strength from our optical products which are well positioned for the current cycle of datacenter upgrades. This strength was more than offset by the substantial decline in the Communications market driven by the anticipated weakness in 40Gbps and 100Gbps SerDes devices going into the long-haul optical market as our customers transitioned away from our solutions. Revenue from the licensing of intellectual property was $0.4 million and $2.5 million in fiscal years 2015 and 2014, respectively.

Gross Profit. Gross profit was $328.8 million and $335.2 million in fiscal years 2015 and 2014, respectively. Our gross margin was 58.9% for fiscal year 2015, up from 56.3% in fiscal year 2014. In both fiscal years 2015 and 2014, we incurred significant charges related to our strategic decision to reduce our investments in the long-haul optical and defense and microwave communications markets. Specifically, the fiscal year 2014 gross margin was impacted by a $15.0 million charge related to lower of cost or market write-down of inventory and $6.1 million of charges related to asset impairments and settlement of contract commitments. The fiscal year 2015 gross margin was impacted by $2.8 million of asset impairment charges and $3.0 million of charges related to settlement of contract commitments. Excluding the charges related to these business alignment decisions, our gross margin profile for fiscal year 2015 and 2014 were similar.

Operating Costs and Expenses

(in thousands, except percentages)	Fiscal Years 2015 Cost/Exp.	% net sales	2014 Cost/Exp.	% net sales	Change
Selling, general and administrative	$127,134	23 %	$126,033	21 %	1 %
Product development and engineering	119,371	21 %	137,437	23 %	(13)%
Intangible amortization	25,718	5 %	29,002	5 %	(11)%
Intangible asset impairments	11,636	2 %	32,538	5 %	(64)%
Goodwill impairment	—	— %	116,686	20 %	(100)%
Restructuring charge	1,285	— %	3,086	1 %	(58)%
Total operating costs and expenses	$285,144	51 %	$444,782	75 %	(36)%

Selling, General & Administrative Expenses

Selling, general, and administrative expenses for fiscal year 2015 increased by $1.1 million or 1% as a result of higher stock-based compensation expense partially offset by lower levels of variable compensation tied to lower sales. SG&A stock-based compensation expense was $17.4 million and $12.1 million in fiscal years 2015 and 2014, respectively. The year over year increase in equity compensation was principally driven by the impact of a higher stock price on awards that are classified as liability awards and must be marked to market at the end of each financial period.

Product Development and Engineering Expenses

Product development and engineering expenses for fiscal years 2015 and 2014 were $119.4 million and $137.4 million, respectively or a decrease of 13%. The decrease was primarily a result of significantly lower levels of investment in the long-haul optical market and an $11.7 million increase in recoveries from third parties for non-recurring engineering services.

Intangible Amortization and Impairments

Intangible amortization was $25.7 million and 29.0 million in fiscal years 2015 and 2014, respectively. The decrease in amortization expense in fiscal year 2015 reflects the impact of impairment charges recorded in fiscal 2014. Intangible asset impairments was $11.6 million and $32.5 million in fiscal years 2015 and 2014 respectively.

Goodwill Impairment

As a result of the actions taken to reduce our investments in the long-haul optical market, the Company recorded an impairment charge of $116.7 million in the fourth quarter of fiscal year 2014 to write-off the value of all goodwill associated with our former Advanced Communications group.

Restructuring

We incurred $1.3 million and $3.1 million for restructuring charges in fiscal year 2015 and 2014, respectively, for severance and contract cancellation liabilities related to our decision to reduce our investment in the defense and microwave communications and long-haul optical markets, realign product groupings, and align spending with anticipated demand levels.

Interest Expense. Interest expense was $5.9 million and $18.2 million for fiscal year 2015 and 2014, respectively. The decrease was primarily due to a $7.1 million write-off of unamortized original issue discount and debt issuance cost associated with the debt modification in the second quarter of fiscal year 2014 and lower interest rates associated with the new credit facilities.

Interest Income and Other Expense, Net. Interest income and other expense, net was income of $0.2 million in fiscal year 2015 compared to expense of $1.4 million in fiscal year 2014. The net decrease in fiscal year 2015 was primarily related to the impact of favorable movements in foreign exchange rates.

Provision for Taxes. The provision for income taxes was $8.5 million for fiscal year 2015 compared to $36.0 million for fiscal year 2014. The effective tax rates for fiscal years 2015 and 2014 were a tax provision of 23.4% and 28.0%, respectively. The effective tax rates for fiscal years 2015 and 2014 reflect the adverse impact of $14.3 million and $52.9 million respectively, related to a valuation reserve against our deferred tax assets.

Our effective tax rate in fiscal year 2015 differs from the statutory federal income tax rate of 35% due primarily to a valuation reserve against our deferred tax assets and certain undistributed foreign earnings for which no U.S. taxes are provided, because such earnings are indefinitely reinvested outside of the U.S.

We account for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and tax basis of the assets and liabilities.

As of January 25, 2015, we had a valuation allowance against our U.S. and Canadian deferred tax assets of approximately $75.5 million. We are required to assess whether a valuation allowance should be recorded against our deferred tax assets based on the consideration of all available evidence, using a “more likely than not” realization standard. The four sources of taxable income that must be considered in determining whether DTAs will be realized are; (1) future reversals of existing taxable temporary differences (i.e. offset of gross deferred tax assets against gross deferred tax liabilities); (2) taxable income in prior carryback years, if carryback is permitted under the tax law; (3) tax planning strategies and (4) future taxable income exclusive of reversing temporary differences and carryforwards.

In assessing whether a valuation allowance is required, significant weight is to be given to evidence that can be objectively verified. We have evaluated our DTAs each reporting period, including an assessment of our cumulative income or loss over the prior three-year period, to determine if a valuation allowance was required. A significant negative factor in our assessment was our three-year cumulative loss history in the U.S. and Canada as of January 25, 2015.

After a review of the four sources of taxable income described above and in view of our three-year cumulative loss, we were not able to conclude that it is more likely than not that our U.S. and Canadian DTAs will be realized. As a result, we recorded an additional valuation allowance on our DTAs, with a corresponding charge to our income tax provision, of approximately $14.3 million as of January 25, 2015.

Liquidity and Capital Resources

Our capital requirements depend on a variety of factors, including but not limited to, the rate of increase or decrease in our existing business base; the success, timing and amount of investment required to bring new products to market; revenue growth or decline; and potential acquisitions. We believe that we have the financial resources necessary to meet business requirements for the next 12 months, including funds needed for working capital requirements.

As of January 31, 2016, our total shareholders' equity was $528.1 million. At that date we also had approximately $211.8 million in cash and temporary investments and $257.7 million of borrowings, net of debt discount.
Our primary sources and uses of cash for the corresponding periods are presented below:

	Fiscal Year Ended		
(in millions)	January 31, 2016	January 25, 2015	January 26, 2014
Sources of Cash			
Operating activities	$102.1	$106.2	$118.0
Proceeds from exercise of stock options	5.8	8.9	20.6
Proceeds from sale of investments	—	3.7	10.2
Borrowings under line of credit	35.0	5.0	324.4
	$142.9	$123.7	$473.2
Uses of Cash			
Capital expenditures on property, plant and equipment, net of sale proceeds	$(13.0)	$(31.7)	$(37.1)
Payment for employee stock-based compensation payroll taxes	(6.5)	(7.2)	(10.5)
Acquisitions, net of cash acquired	(39.2)	(4.9)	—
Purchase of cost method investments	(14.6)	(7.1)	(2.5)
Purchases of investments	—	—	(1.1)
Purchase of intangible assets	—	(1.1)	(3.5)
Payment of long-term debt	(30.8)	(43.7)	(368.5)
Repurchase of common stock	(57.3)	(40.9)	(30.0)
	$(161.4)	$(136.6)	$(453.2)
Effect of exchange rate increase on cash and cash equivalents	$—	$—	$—
Net (decrease) increase in cash and cash equivalents	$(18.5)	$(12.9)	$20.0

We incur significant expenditures in order to fund the development, design, and manufacture of new products. We intend to continue to focus on those areas that have shown potential for viable and profitable market opportunities, which may require additional investment in equipment and the hiring of additional design and application engineers aimed at developing new products. Certain of these expenditures, particularly the addition of design engineers, do not generate significant payback in the short-term. We plan to finance these expenditures with cash generated by our operations and our existing cash balances.

A meaningful portion of our capital resources, and the liquidity they represent, are held by our foreign subsidiaries. As of January 31, 2016, our foreign subsidiaries held approximately $170.7 million of cash and cash equivalents compared to $149.9 million at January 25, 2015. Earnings previously taxed in the U.S. of $17.2 million could be repatriated subject only to a 5% withholding tax, as we do not assert permanent reinvestment of earnings previously taxed in the U.S. As of January 31, 2016, our foreign subsidiaries had $516.8 million of unremitted earnings for which no Federal or state taxes have been provided. We currently do not need these earnings for investment in our domestic operations, thus our assertion regarding the permanent investment of these earnings.

One of our primary goals is to improve the cash flows from our existing business activities. Our cash, cash equivalents and free cash flow have provided us in recent years with the flexibility to pay down debt, return value to shareholders (in the form of stock repurchases) and also pursue business improvement opportunities.

Additionally, we will continue to seek to maintain and improve our existing business performance with capital expenditures and, potentially, acquisitions that meet our rate of return requirements. Acquisitions may be made for either cash or stock consideration, or a combination of both.

Operating Activities
Net cash provided by operating activities is primarily due to net income adjusted for non-cash items plus fluctuations in operating assets and liabilities.
Operating cash flows for fiscal years 2016 and 2015 were impacted by several significant non-cash transaction related items including, for fiscal 2016, depreciation, amortization and impairment expenses of $48.9 million, stock-based compensation expense of $20.5 million, and the benefit of reductions in the fair value of contingent earn-out obligations of $16.4 million. The significant non-cash transactions for fiscal 2015 included depreciation, amortization, and impairment expense of $69.3 million, and stock-based compensation expense of $29.6 million.
Investing Activities

Cash used for investing activities is primarily attributable to acquisitions, net of cash received, capital expenditures and other equity or cost method investments.

On March 4, 2015, we acquired Triune, a privately-held supplier of wireless charging and power management platforms targeted at, among other things, high and low power, high-efficiency applications. Under the terms of the purchase agreement we acquired all of the outstanding equity interest in Triune for a guaranteed minimum purchase price of $45.0 million which consisted of $35.0 million in cash paid at closing and $10.0 million to be paid at a future date (“Deferred Payment”). To fund the Triune acquisition, we borrowed $35.0 million under our revolving line of credit in March 2015. In September 2015, we paid $9.5 million of the deferred payment with the remaining $0.5 million expected to be paid in the first quarter of fiscal year 2017. Subject to achieving certain future financial goals (“Triune Earn-out”), up to $70.0 million of consideration will be paid over three years if certain revenue targets are achieved in each of the fiscal years 2016 through 2018. An additional payment of up to $16.0 million will be paid after fiscal year 2018 if certain cumulative revenue and operating income targets are achieved. The Triune Earn-out targets for fiscal year 2016 were not met and we do not expect to make any payments with regards to this period which represented $13.0 million of the total $70.0 million opportunity.

Capital expenditures were $13.0 million for fiscal year 2016 compared to $31.8 million for fiscal year 2015. The year over year decrease in spending was due primarily to the completion of our development of our new ERP software. In fiscal year 2016, we focused on controlling our capital expenditure to align with our lower revenues. In fiscal year 2017, we expect our capital expenditures to increase modestly as we increase our investments in test and manufacturing equipment to support new product releases. If product demand were to increase significantly beyond current projections, we would expect to increase capital spending to accommodate the growth.
Financing Activities

Cash provided by financing activities is primarily attributable to borrowings under our revolving commitments offset by principal and interest payments related to our long-term debt and repurchase of outstanding common stock.

On May 2, 2013, we entered into a credit agreement with certain lenders (the “Lenders”) and HSBC Bank USA, National Association, as administrative agent and as swing line lender and letter of credit issuer (the "Credit Agreement"). In accordance with this Credit Agreement, the Lenders provided us with senior secured first lien credit facilities in an aggregate principal amount of $400.0 million, consisting of term loans in an aggregate principal amount of $150.0 million and revolving commitments in an aggregate principal amount of $250.0 million. Payments of long term debt in fiscal years 2016 and 2015 were $30.8 million and $43.7 million, respectively. Under the terms of the Credit Agreement, we are required to make $4.7 million in quarterly principal payments on the term loans through the second quarter of fiscal year 2018. Beginning in the third quarter of fiscal year 2018, the required quarterly principal payment will increase to $7.5 million. On March 4, 2015, we borrowed $35.0 million under the revolving commitments in connection with our acquisition of Triune. The Company made voluntary payments of $12.0 million and $25.0 million against the Revolving Commitments in fiscal years 2016 and 2015, respectively. As of January 31, 2016, we have $77.1 million outstanding under our term loans and $181.0 million outstanding under the revolving commitments.

Our interest rate under the Credit Agreement can be influenced by our Leverage Ratio, as defined in our Credit Agreement. Our Leverage Ratio is influenced by our consolidated indebtedness and our adjusted earnings before interest, taxes, depreciation and amortization. Historically, our Leverage Ratio under the Credit Agreement has been between 1.50 and 2.25 which resulted in an interest rate margin of 1.75%. Primarily as a result of declining revenue, our Leverage Ratio exceeded 2.50 at the end of fiscal year 2016 which will result in our rate margin increasing to 2.25%. We believe that our Leverage Ratio will improve in the first quarter of fiscal year 2017, to a level below 2.50, as a result of higher sales. If our Leverage Ratio were to remain above 2.50, the higher interest rate would increase our annual interest expense by approximately $0.9 million.

In fiscal year 2016, we received $5.8 million in proceeds from the exercise of stock options compared to $8.9 million in the fiscal year 2015. We do not directly control the timing of the exercise of stock options. Such exercises are independent decisions made by grantees and are influenced most directly by the stock price and the expiration dates of stock option awards. Such proceeds are difficult to forecast, resulting from several factors which are outside our control.

As noted above, we maintain a stock repurchase program that was initially approved by our Board of Directors in March 2008. During fiscal years 2016 and 2015, we repurchased shares of common stock in an amount of $57.3 million and $40.9 million, respectively. As of January 31, 2016, we had repurchased $135.7 million in shares of our common stock under the program since inception and the current remaining authorization under our stock repurchase program is $62.7 million.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements, as those arrangements are defined by the SEC, that are reasonably likely to have a material effect on our financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

We do not have any unconsolidated subsidiaries or affiliated entities. We have no special purpose or limited purpose entities that provide off-balance sheet financing, liquidity or market or credit risk support. We do not engage in leasing, hedging, research and development services, or other relationships that expose us to liability that is not reflected on the face of the financial statements.

Noted below under “Contractual Obligations” are various commitments we have associated with our business, such as lease commitments and open purchase obligations, which are not recorded as liabilities on our balance sheet because we have not yet received the related goods or services as of January 31, 2016.

Contractual Obligations

Presented below is a summary of our contractual obligations as of January 31, 2016.

(in thousands)	Less than 1 year	1-3 years	4-5 years	After 5 years	Total
Long-term debt	$18,750	$239,375	$—	$—	$258,125
Operating leases	7,184	10,462	6,660	3,377	27,683
Open capital purchase commitments	1,537	—	—	—	1,537
Other open purchase commitments	41,813	3,376	—	—	45,189
Other vendor commitments	—	—	—	—	—
Deferred compensation	1,448	2,875	1,915	13,186	19,424
Cycleo-deferred compensation	2,155	3,699	—	—	5,854
Stock-based compensation	599	3,508	—	—	4,107
Total contractual cash obligations	$73,486	$263,295	$8,575	$16,563	$361,919

The table above includes the interest payments we owe on our long-term debt. We have assumed no additional borrowings or repayments under our revolving credit facility. For debt that has variable rate interest, we have calculated future interest obligations based on the interest rate for that debt as of January 31, 2016.

Capital purchase commitments and other open purchase commitments are for the purchase of plant, equipment, raw material, supplies and services. They are not recorded as liabilities on our balance sheet as of January 31, 2016, as we have not yet received the related goods or taken title to the property.

The table above does not include earn-out payments we may owe as part of our acquisition of Triune. We have agreed to pay up to $70.0 million of consideration over a three year period if certain revenue targets are achieved in each of the fiscal years 2016 through 2018. An additional payment of up to $16.0 million will be paid after fiscal year 2018 if certain cumulative revenue and operating income targets are achieved. The Triune Earn-out targets for fiscal year 2016 were not met and we do not expect to make any payments with regards to this period which represented $13.0 million of the total $70.0 million opportunity.

As part of our acquisition of Cycleo SAS and the terms of the amended earn-out agreement entered into with the former Cycleo stockholders ("Earn-out Beneficiaries"), we have agreed to pay up to $16.0 million of consideration over a five year period if

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certain revenue and operating income targets are achieved in each of the five measurement periods. See Note 14 to our audited consolidated financial statements included in Item 8 of this report.

We maintain a deferred compensation plan for certain officers and key executives that allow participants to defer a portion of their compensation for future distribution at various times permitted by the plan. Our liability for deferred compensation under this plan was $19.4 million and $19.8 million as of January 31, 2016 and January 25, 2015, respectively, and is included in accrued liabilities and other long-term liabilities on the balance sheet and in the table above. The plan provides for a discretionary Company match up to a defined portion of the employee's deferral, with any match subject to a vesting period.

We have purchased whole life insurance on the lives of some of our current and former deferred compensation plan participants. This Company-owned life insurance is held in a grantor trust and is intended to cover a majority of the costs of our deferred compensation plan. The cash surrender value of our Company-owned life insurance was $16.8 million and $18.5 million as of January 31, 2016 and January 25, 2015, respectively.

Inflation

Inflationary factors have not had a significant effect on our performance over the past several years. A significant increase in inflation would affect our future performance.

Critical Accounting Policies and Estimates

Our consolidated financial statements are prepared in accordance with generally accepted accounting principles ("GAAP"). In connection with the preparation of our financial statements, we are required to make assumptions and estimates about future events, and apply judgments that affect the reported amounts of assets, liabilities, revenue, expenses and the related disclosures. We base our assumptions, estimates and judgments on historical experience, current trends and other factors that management believes to be relevant at the time our consolidated financial statements are prepared. On a regular basis, management reviews the accounting policies, assumptions, estimates and judgments to ensure that our financial statements are presented fairly and in accordance with GAAP. However, because future events and their effects cannot be determined with certainty, actual results could differ from our assumptions and estimates, and such differences could be material.

Our significant accounting policies are discussed in Note 2 to our audited consolidated financial statements, included in Item 8, of this report on Form 10-K. We believe that the following accounting estimates are the most critical to aid in fully understanding and evaluating our reported financial results, and they require our most difficult, subjective or complex judgments, resulting from the need to make estimates about the effect of matters that are inherently uncertain. We have reviewed these critical accounting estimates and related disclosures with the Audit Committee of our Board of Directors.

Revenue and Cost of Sales

We recognize product revenue when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable and collectability is probable. Product design and engineering recoveries are recognized during the period in which services are performed and are recorded as an offset to the related expenses. We include revenue related to granted technology licenses as part of "Net sales." Historically, revenue from these arrangements has not been significant though it is part of our recurring ordinary business.

We record a provision for estimated sales returns in the same period as the related revenues are recorded. We base these estimates on historical sales returns and other known factors. Actual returns could be different from our estimates and current provisions for sales returns and allowances, resulting in future charges to earnings.

We record a provision for sales rebates in the same period as the related revenues are recorded. These estimates are based on sales activity during the period. Actual rebates given could be different from our estimates and current provisions for sales rebates, resulting in future charges to earnings. The estimated sales rebates for sales activity during the period where there are no outstanding receivables are recorded on the balance sheet under the heading of "Accrued liabilities." The portion of the estimated sales rebate where there are outstanding receivables is recorded on the balance sheet as a reduction to accounts receivable.

We defer revenue recognition on shipment of products to certain customers, principally distributors, under agreements which provide for limited pricing credits or product return privileges, until these products are sold through to end-users or the return privileges lapse. For sales subject to certain pricing credits or return privileges, the amount of future pricing credits or inventory returns cannot be reasonably estimated given the relatively long period in which a particular product may be held by the customer. Therefore, we have concluded that sales to customers under these agreements are not fixed and determinable at the date of the sale and revenue recognition has been deferred. We estimate the deferred gross margin on these sales by applying an average gross profit margin to the actual gross sales. The average gross profit margin is calculated for each category of material using current standard costs. The estimated deferred gross margin on these sales, where there are no outstanding receivables, is recorded on the balance sheet under the heading of "Deferred revenue." There were no significant impairments of deferred cost of sales in fiscal year 2016 or fiscal year 2015.

The following table summarizes the deferred net revenue balance:

(in thousands)	January 31, 2016	January 25, 2015
Deferred revenues	$5,991	$6,237
Deferred cost of revenues	(1,139)	(1,562)
Deferred revenue, net	4,852	4,675
Deferred product design and engineering recoveries	3,776	1,173
Total deferred revenue	$8,628	$5,848

Allowance against Accounts Receivable

We evaluate the collectability of our accounts receivable based on a combination of factors. If we are aware of a customer's inability to meet its financial obligations to us, we record an allowance to reduce the net receivable to the amount we reasonably believe we will be able to collect from the customer. For all other customers, we recognize allowances for doubtful accounts based on the length of time the receivables are past due, the current business environment, the size and number of certain large accounts and our historical experience. If the financial condition of our customers were to deteriorate or if economic conditions worsen, additional allowances may be required in the future.

We record a provision for estimated sales returns in the same period as the related revenues are recorded. These estimates are based on historical sales returns and other known factors. Actual returns could be different from our estimates and current provisions for sales returns and allowances, resulting in future charges to earnings. The portion of the estimate sales returns where there are outstanding receivables are recorded on the balance sheet as a reduction to accounts receivable.

We record a provision for sales rebates in the same period as the related revenues are recorded. These estimates are based on sales activity during the period. The actual rebate could be different from current provisions for sales rebates, resulting in future adjustments to earnings. The estimated sales rebate for sales for which there are no outstanding receivables is recorded on the balance sheet under the heading of "Accrued liabilities." The portion of the estimated sales rebate where there are outstanding receivables is recorded on the balance sheet as a reduction to accounts receivable.

A summary of allowances against accounts receivable for fiscal years ended January 31, 2016 and January 25, 2015 is as follows:

(in thousands)	January 31, 2016	January 25, 2015
Allowance for doubtful accounts	$(889)	$(1,678)
Sales rebate allowance	(5,006)	—
Sales return allowance	(517)	(379)
Other allowances	(1,381)	(1,466)
Total	$(7,793)	$(3,523)

Inventory Valuation

Our inventories are stated at lower of cost or market and consist of materials, labor and overhead. We determine the cost of inventory by the first-in, first-out method. At each balance sheet date, we evaluate our ending inventories for excess quantities and obsolescence. This evaluation includes analysis of sales levels by product and projections of future demand. In order to state our inventory at lower of cost or market, we maintain specific reserves against our inventory which serve to write-down our inventories to a new cost basis. If future demand or market conditions are less favorable than our projections, a write-down of inventory may be required, and would be reflected in cost of goods sold in the period the revision is made.

Business Combinations
Business combinations are accounted for at fair value. Acquisition costs are expensed as incurred and recorded in general and administrative expenses; in-process research and development is recorded at fair value as an indefinite-lived intangible asset at the acquisition date; restructuring costs associated with a business combination are expensed subsequent to the acquisition date; contingent consideration obligations are recorded at fair value on the date of acquisition, with increases or decreases in the fair value arising from changes in assumptions or discount periods recorded as contingent consideration expenses in the consolidated statements of operations in subsequent periods; and changes in deferred tax asset valuation allowances and income tax uncertainties after the acquisition date generally affect income tax expense. All changes that do not qualify as measurement period adjustments are included in current period earnings. The fair values assigned to tangible and intangible assets acquired and liabilities assumed, including contingent consideration, are based on management's estimates and assumptions, as well as other information compiled by management, including valuations that utilize customary valuation procedures and techniques. Significant judgment is required in estimating the fair value of intangible assets acquired in a business combination and in assigning their respective useful lives. The fair value estimates are based on available historical information and on future expectations and assumptions deemed reasonable by management at the time.
We measure contingent earn-out liabilities at fair value on a recurring basis using significant unobservable inputs classified within Level 3 of the fair value hierarchy. On a quarterly basis, we use a Monte Carlo valuation method as a valuation technique to determine the value of the earn-out liability. The significant unobservable inputs used in the fair value measurements are revenue projections over the earn-out period, and the probability outcome percentages assigned to each scenario. Significant increases or decreases to either of these inputs in isolation would result in a significantly higher or lower liability, with a higher liability capped by the contractual maximum of the contingent earn-out obligation.
If the actual results differ from the estimates and judgments we utilized, the amounts recorded in the financial statements could result in a possible impairment of the intangible assets and goodwill, or require acceleration of the amortization expense of finite-lived intangible assets.
Contingencies and Litigation
We record accruals for contingencies when it is probable that a liability has been incurred and the amount can be reasonably estimated. These accruals are adjusted periodically as assessments change or additional information becomes available. Individually significant contingent losses are accrued when probable and reasonably estimable. The legal defense costs we accrue are based on reviews by outside counsel, in-house counsel and management and some of the significant factors considered in the review of these reserves are as follows: the actual costs incurred by us; the development of our legal defense strategy and structure in light of the scope of the litigation; the number of cases being brought against us; the costs and outcomes of completed trials and the most current information regarding anticipated timing, progression, and related costs of pre-trial activities and trials in the associated litigation.
In those situations where we are unable to determine the best estimate within the range of loss, we will record the minimum amount in the identified range of probable loss.
Stock-Based Compensation
We measure compensation cost for all share-based payments (including stock options) at fair value using valuation models, which considers, among other things, estimates and assumptions on the rate of forfeiture, expected life of options and stock price volatility and market value of our common stock. Additionally, for awards with a performance condition, we use financial forecasts that use assumptions that are consistent with those used for other valuation exercises, including goodwill valuation and asset impairment assessments. If any of the assumptions used in the valuation model change significantly, stock-based compensation expense may differ materially in the future from that recorded in the current period and actual results may differ from estimates.
Impairment of Goodwill, Other Intangibles and Long-Lived Assets
Goodwill
Goodwill is the excess of the purchase price over the fair value of identifiable net assets acquired in business combinations accounted for under the purchase method. Goodwill is not amortized but is tested for impairment using a two-step method. Step one is the identification of potential impairment. This involves comparing the fair value of

each reporting unit with its carrying amount, including goodwill. If the fair value of a reporting unit exceeds the carrying amount, the goodwill of the reporting unit is considered not impaired and the second step of the impairment test is unnecessary. If the carrying amount of a reporting unit exceeds its fair value, the second step of the impairment test is performed to measure the amount of impairment loss, if any. We test by reporting unit, goodwill and other indefinite-lived intangible assets for impairment at November 30 or more frequently if we believe indicators of impairment exist or if we make changes to a reporting unit with assigned goodwill.

For our annual impairment review, we primarily use an income approach, which incorporates multi-period excess earnings present value techniques (discounted cash flows) as well as other generally accepted valuation methodologies to determine the fair value of the assets using Level 3 inputs. Our assumptions incorporate judgments as to the price received to sell a reporting unit as a whole in an orderly transaction between market participants at the measurement date. Considering the integration of our operations, we have assumed that the highest and best use of a reporting unit follows an "in-use" valuation premise.

Significant management judgment is required in determining the estimations of future cash flows, which is dependent on internal forecasts, the long-term rate of growth for our business, the life over which cash flows will occur, and the weighted average cost of capital. Our calculations include sensitivity analysis of key assumptions such as a 10% increase in the weighted-average cost of capital, a 10% increase in the effective tax rate or a 5% decline in our compound annual growth rate. The value of our intangible assets, including goodwill, could be impacted by future adverse changes such as: (i) any future declines in our operating results, (ii) a decline in the valuation of technology company stocks, including the valuation of our common stock, (iii) a significant slowdown in the worldwide economy and the semiconductor industry or (iv) any failure to meet the performance projections included in our forecasts of future operating results.

The assumptions we have used are consistent with the plans and estimates that we use to manage our business and change year to year based on operating results, competitive conditions, customer preferences, market conditions and other factors. It is possible, however, that these assumptions are incorrect. We could incur impairment charges in a future period if our actual results or the assumptions used in future impairment analysis are lower than the original assumptions used to assess the recoverability of these assets.

As of November 30, 2015, our reporting units with assigned goodwill were as follows:

(in thousands)	Balance as of November 30, 2015
Signal Integrity Products	$261,891
Power and High-Reliability Products	49,384
Wireless and Sensing Products	18,428
Total	$329,703

In the fourth quarter of fiscal year 2016, we completed our quantitative assessment of any potential goodwill impairment and concluded that there were no indications of impairment as of January 31, 2016. Our quantitative assessment of potential goodwill impairment concluded that the fair value of the Signal Integrity Products group exceeded its carrying value by 47% and the fair value of the Wireless and Sensing Products group exceeded its carrying value by over 258%. The fair value of the Power and High-Reliability group exceeded its carrying value by 213%.

Other Intangibles and Long-lived Assets

We review indefinite-lived intangible assets for impairment as of November 30, the date of our annual goodwill impairment review or whenever events or changes in circumstances indicate the carrying value may not be recoverable. Recoverability of indefinite-lived intangible assets is measured by comparing the carrying amount of the asset to the future discounted cash flows that asset is expected to generate.

Finite-lived intangible assets resulting from business acquisitions or technology licenses purchased are amortized on a straight-line basis over their estimated useful lives. The useful lives of acquisition-related intangible assets represent the point where over 90% of realizable undiscounted cash flows for each intangible asset are recognized. The assigned useful lives are consistent with our historical experience with similar technology and other intangible assets owned by us. The useful life of technology licenses is usually based on the term of the agreement.

Acquired in-process research and development is recorded at fair value as of the date of acquisition as an indefinite-lived intangible asset until the completion or abandonment of the associated research and development efforts or impairment. Upon completion of development, acquired in-process research and development assets are transferred to finite-lived intangible assets and amortized over their useful lives.

We record impairment losses on long-lived assets used in operations when indicators of impairment, such as reductions in demand or significant economic slowdowns in the semiconductor industry, are present. Reviews are performed to determine whether the carrying value of an asset is impaired, based on comparisons to undiscounted expected future cash flows. If this comparison indicates that there is impairment, the impaired asset is written down to fair value, which is typically calculated using: (i) quoted market prices and/or (ii) discounted expected future cash flows utilizing a discount rate. Impairment is based on the excess of the carrying amount over the fair value of those assets.

Using the cost approach, we determined fair values of individual tangible long-lived assets based upon the cost to reproduce the long-lived asset taking into account the age, condition, inflation using the U.S. Bureau of Labor Statistics and Marshall Valuation Services, and cost to ready the long-lived asset for its intended use. Additionally, we considered the potential existence of functional and economic obsolescence and quantified these elements in our cost approach as appropriate.

We recognized and allocated to tangible long-lived assets an impairment loss of $0.6 million, $9.4 million, $9.1 million during the fiscal years ended January 31, 2016, January 25, 2015, and January 26, 2014, respectively, which reduced the cost basis in the corresponding assets. Also, we reassessed the estimated remaining useful lives of these assets and adjusted accordingly our estimates of future depreciation expense.

For intangible long-lived assets, which consist of core technology and customer relationships, we used the multi-period excess earnings method, an income approach, or the replacement cost method (a cost approach), to determine fair value. The multi-period excess earnings method, a form of the income approach, estimates the value of the asset based on the present value of the after-tax cash flows attributable to the intangible asset, which includes our estimates of forecasted revenue, operating margins, taxes and discount rate. The replacement cost method incorporates a market participant's assumption that an in-use premise is the highest and best use of customer relationships and core technology. We estimated the cost we would incur to rebuild or re-establish the intangible asset and the associated effort required to develop it.

We recorded impairment losses related to intangible long-lived assets as summarized below. Also, we reassessed the estimated remaining useful lives of these long-lived intangible assets and adjusted accordingly our estimates of future amortization expense.

	Fiscal years		
(in thousands)	2016	2015	2014
Finite-lived intangibles	$—	$11,636	$29,938
Indefinite-lived intangibles	—	—	2,600
Total intangible asset impairment	$—	$11,636	$32,538

Accounting for Income Taxes

The provision for income taxes is computed using the asset and liability method, under which deferred tax assets and liabilities are recognized for the expected future tax consequences of temporary differences between the financial reporting and tax bases of assets and liabilities, and for operating losses and tax credit carryforwards. Deferred tax assets and liabilities are measured using the currently enacted tax rates that apply to taxable income in effect for the years in which those tax assets and liabilities are expected to be realized or settled. We record a valuation allowance to reduce deferred tax assets to the amount that is believed more likely than not to be realized.

We evaluate whether it is more likely than not that forecasted income, including income that may be generated as a result of certain tax planning strategies, together with future reversals of existing taxable temporary differences, will be sufficient to fully recover the deferred tax assets. In the event that we determine all or part of the net deferred tax assets are not realizable in the future, we will record an adjustment to the valuation allowance that would be charged to earnings in the period such determination is made. In determining whether a valuation allowance is required, we consider projected taxable income and our historical performance. The most significant assumptions used in preparing projections of taxable income include forecasting the levels of income by region and the amount of deductible stock based compensation.

We recognize tax benefits from uncertain tax positions only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such positions are then measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. The calculation of tax liabilities involves significant judgment in estimating the impact of uncertainties in the application of U.S. GAAP and complex tax laws. Resolution of these uncertainties in a manner inconsistent with our expectations could have a material impact on our financial condition and operating results.

The income tax effects of share-based payments are recognized for financial reporting purposes only if such awards are expected to result in a tax deduction. We do not recognize a deferred tax asset for an excess tax benefit (that is, a tax benefit that exceeds the amount of compensation cost recognized for the award for financial reporting purposes) that has not been realized. In determining when an excess tax benefit is realized, we have elected to follow the ordering provision of the tax law.

In addition to the risks to the effective tax rate discussed above, the effective tax rate reflected in forward-looking statements is based on current enacted tax law. Significant changes in enacted tax law could materially affect these estimates.

In general, the amount of taxes we pay will differ from our reported tax provision as a result of differences between accounting for income under U.S. GAAP and accounting for taxable income. Typical book-tax differences include expense related to equity compensation, deemed dividends, depreciation, litigation expense and amortization of intangible assets. As a result of these book-tax differences, our tax payments are expected to differ from our tax provision during the next three years.

For intra-entity differences between the tax basis of an asset in the buyer's tax jurisdiction and their cost as reported in the consolidated financial statements, we do not recognize a deferred tax asset. Income taxes paid on intra-entity profits on assets remaining within the group are accounted for as prepaid taxes.

We continually review our position on undistributed earnings from our foreign subsidiaries to determine whether those earnings are indefinitely reinvested offshore. Domestic and foreign operating cash flow forecasts are reviewed to determine the sources and uses of cash. Based on these forecasts, we determine the need to accrue deferred tax liabilities associated with our undistributed earnings offshore.

New Accounting Standards

In February 2016, the Financial Accounting Standards Board ("FASB") issued ASU No. 2016-02, Leases (Topic 842), which requires substantially all leases be recognized by lessees on their balance sheet as a right-of-use asset and corresponding lease liability, including leases currently accounted for as operating leases. The new standard also will result in enhanced quantitative and qualitative disclosures, including significant judgments made by management, to provide greater insight into the extent of revenue and expense recognized and expected to be recognized from existing leases. The standard requires modified retrospective adoption and will be effective December 15, 2018, with early adoption permitted. We are currently assessing the basis of adoption and evaluating the impact of the adoption of the update on our consolidated financial statements.

In July 2015, the FASB issued ASU 2015-11, Inventory (Topic 330) Related to Simplifying the Measurement of Inventory which applies to all inventory except inventory that is measured using last-in, first-out ("LIFO") or the retail inventory method. Inventory measured using first-in, first-out ("FIFO") or average cost is covered by the new amendments. Inventory within the scope of the new guidance should be measured at the lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Subsequent measurement is unchanged for inventory measured using LIFO or the retail inventory method. The amendments will take effect for public business entities for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. The new guidance should be applied prospectively, and earlier application is permitted as of the beginning of an interim or annual reporting period. We are currently assessing the basis of adoption and evaluating the impact of the adoption of the update on our consolidated financial statements.

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606), which requires an entity to recognize revenue from the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The guidance addresses, in particular, contracts with more than one performance obligation, as well as the accounting for some costs to obtain or fulfill a contract with a customer, and provides for additional disclosures with respect to revenues and cash flows arising from contracts with customers. Public entities are required to apply the amendments on either a full- or modified-retrospective basis for annual periods beginning after December 15, 2017 and for interim periods within those annual periods. This update will be effective for the Company beginning in the first quarter of fiscal year 2019. Early adoption is not permitted. We are currently assessing the basis of adoption and evaluating the impact of the adoption of the update on our consolidated financial statements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are subject to a variety of market risks, including commodity risk and the risks related to foreign currency, interest rates and market performance that are detailed below. Many of the factors that can have an impact on our market risk are external to us, and so we are unable to fully predict them.

Market Conditions

Current global economic conditions, including in Europe and Asia, pose a risk to the overall economy as consumers and businesses may defer purchases in response to the uncertainty around tighter credit and negative financial news. These conditions have historically resulted in periods where demand for our products is reduced.

In addition to risks associated with global economic conditions, demand for our products could be different from our expectations due to customer acceptance of our products, changes in customer order patterns, including order cancellations, and changes in the level of inventory held by vendors.

Commodity Risk

We are subject to risk from fluctuating market prices of certain commodity raw materials, particularly gold, that are incorporated into our end products or used by our suppliers to process our end products. Increased commodity prices are passed on to us in the form of higher prices from our suppliers, either in the form of general price increases or a commodity surcharge. Although we generally deal with our suppliers on a purchase order basis rather than on a long-term contract basis, we generally attempt to obtain firm pricing for volumes consistent with planned production. Our gross margins may decline if we are not able to increase selling prices of our products or obtain manufacturing efficiencies to offset the increased cost. We do not enter into formal hedging arrangements to mitigate against commodity risk.

Foreign Currency Risk

As a global enterprise, we face exposure to adverse movements in foreign currency exchange rates and we could experience foreign currency exchange gains or losses. Historically, we have not considered our foreign currency exposure to be material. Therefore, we have not utilized foreign currency hedging products to mitigate foreign currency risks. Our foreign currency exposures may increase over time as the level of activity in foreign markets grows. Changes in rates could have an adverse impact upon our financial results.

A relatively small amount of our monetary assets and liabilities are denominated in foreign currencies, principally the Swiss Franc, Canadian dollar, Mexican Peso, British Pound Sterling and the Euro. Fluctuations in these currencies relative to the United States dollar will result in transaction gains or losses included in net earnings.

All of our foreign sales, which amounted to $431.2 million in fiscal year 2016, are denominated in United States dollars. Currency exchange rate fluctuations in foreign countries where we do business could harm our business by resulting in pricing that is not competitive with prices denominated in local currencies.

For fiscal year 2016, we spent approximately 52.8 million in Canadian dollars, 13.8 million in British Pound Sterling, 21.9 million in Swiss Francs, 7.0 million in Euros, 58.9 million in Chinese Yuan, and 101.4 million in Mexican Pesos for operating expenses.

In general, we purchase foreign currencies on a spot basis as needed to fund local operations. As of January 31, 2016, we held cash funds of 5.1 million denominated in Canadian dollars, 0.4 million denominated in British Pound Sterling, 0.7 million denominated in Swiss Francs, and 4.1 million denominated in Euros. We did not hold a significant amount of other foreign currencies. If rates of these foreign currencies were to strengthen or weaken relative to the U.S. dollar, we would realize gains or losses in converting these funds back into U.S. dollars.

Interest Rate and Market Risk

We do not engage in the trading of derivative financial instruments in the normal course of business. In the event interest rates were to increase 100 basis points and holding all other variables constant, annual net income and cash flows for the following year would decrease by approximately $2.3 million as a result of the Company’s variable-rate debt, including the effect of the interest rate contract.

Interest rates affect our return on excess cash and investments. As of January 31, 2016, we had $211.8 million of cash and cash equivalents and no temporary or long-term investments. A majority of our cash and cash equivalents generate interest income based on prevailing interest rates. Investments and cash and cash equivalents generated interest income of less than $0.1 million in fiscal year 2016. A significant change in interest rates would impact the amount of interest income generated from our cash and investments. It would also impact the market value of our investments.

Our investments are subject to market risks, primarily interest rate and credit risk. Our investments are managed by a limited number of outside professional managers following investment guidelines set by us. Such guidelines prescribe credit quality, permissible investments, diversification, and duration restrictions. These restrictions are intended to limit risk by restricting our investments to high quality debt instruments with relatively short-term durations. Our investment strategy limits investment of new funds and maturing securities to U.S. Treasury, Federal agency securities, high quality money market funds and time deposits with our principal commercial banks.

Item 8. Financial Statements and Supplementary Data

The information required by Item 8 is presented in the following order:

MANAGEMENT’S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The report called for by Item 308(a) of Regulation S-K is incorporated herein by reference to the Report of Management on Internal Control Over Financial Reporting that is included in Part II, Item 9A of this report.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The report called for by Item 308(b) of Regulation S-K is incorporated herein by reference to the Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting that is included in Part II, Item 9A of this report.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of Semtech Corporation

We have audited the accompanying consolidated balance sheets of Semtech Corporation and subsidiaries as of January 31, 2016 and January 25, 2015, and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity and cash flows for each of the three years in the period ended January 31, 2016. Our audits also included the financial statement schedule listed in the Index at Item 15(a). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Semtech Corporation and subsidiaries at January 31, 2016 and January 25, 2015, and the consolidated results of their operations and their cash flows for each of the three years in the period ended January 31, 2016, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Semtech Corporation and subsidiaries' internal control over financial reporting as of January 31, 2016, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated March 31, 2016 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP
Los Angeles, California
March 31, 2016

SEMTECH CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except earnings per share)

	Fiscal Year Ended January 31, 2016	January 25, 2015	January 26, 2014
Net sales	$490,219	$557,885	$594,977
Cost of sales	197,109	229,093	244,719
Cost of sales - lower of cost or market write-down	—	—	15,047
Gross profit	293,110	328,792	335,211
Operating costs and expenses:			
Selling, general and administrative	136,151	127,134	126,033
Product development and engineering	113,737	119,371	137,437
Intangible amortization	25,059	25,718	29,002
Intangible asset impairments	—	11,636	32,538
Goodwill impairment	—	—	116,686
Changes in the fair value of contingent earn-out obligations	(16,362)	1,391	(654)
Restructuring charges	4,526	1,285	3,086
Total operating costs and expenses	263,111	286,535	444,128
Operating income (loss)	29,999	42,257	(108,917)
Interest expense	(7,819)	(5,927)	(18,174)
Interest income and other (expense) income, net	(1,801)	165	(1,390)
Income (loss) before taxes	20,379	36,495	(128,481)
Provision (benefit) for taxes	8,882	8,548	35,985
Net income (loss)	$11,497	$27,947	$(164,466)
Earnings per share:			
Basic	$0.18	$0.42	$(2.44)
Diluted	$0.17	$0.41	$(2.44)
Weighted average number of shares used in computing earnings per share:			
Basic	65,657	67,108	67,471
Diluted	65,961	67,685	67,471

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

SEMTECH CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in thousands)

	Fiscal Year Ended		
	January 31, 2016	January 25, 2015	January 26, 2014
Net income (loss)	$11,497	$27,947	$(164,466)
Other comprehensive loss, before tax:			
Change in net unrealized holding loss on available-for-sale investments	—	(1)	(7)
Change in unrealized loss on interest rate cap	(33)	(284)	(228)
Less: Reclassification adjustments of losses on interest rate cap included in interest expense	694	242	78
Total other comprehensive loss, before tax	661	(43)	(157)
(Provision) Benefit for taxes related to items of other comprehensive loss	(171)	(47)	57
Total other comprehensive income (loss), net of tax	490	(90)	(100)
Comprehensive income (loss)	$11,987	$27,857	$(164,566)

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

SEMTECH CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
AS OF JANUARY 31, 2016 AND JANUARY 25, 2015
(in thousands, except share data)

	January 31, 2016	January 25, 2015
Assets		
Current assets:		
Cash and cash equivalents	$211,810	$230,328
Accounts receivable, less allowances of $7,793 at January 31, 2016 and $3,523 at January 25, 2015	44,132	69,301
Inventories	63,875	73,668
Deferred tax assets	—	2,478
Prepaid taxes	5,236	1,544
Other current assets	16,168	19,369
Total current assets	341,221	396,688
Non-current assets:		
Property, plant and equipment, net of accumulated depreciation of $143,782 at January 31, 2016 and $120,588 at January 25, 2015	101,006	115,471
Deferred tax assets	7,354	106
Goodwill	329,703	280,319
Other intangible assets, net	88,430	101,600
Other assets	43,803	35,247
TOTAL ASSETS	$911,517	$929,431
Liabilities and Stockholders’ Equity		
Current liabilities:		
Accounts payable	$35,486	$32,448
Accrued liabilities	41,204	49,754
Deferred revenue	8,628	5,848
Current portion - long term debt	18,569	18,547
Deferred tax liabilities	—	1,444
Total current liabilities	103,887	108,041
Non-current liabilities:		
Deferred tax liabilities	6,802	2,477
Long term debt, less current portion	239,177	234,746
Other long-term liabilities	33,600	32,809
Stockholders’ equity:		
Common stock, $0.01 par value, 250,000,000 shares authorized, 78,136,144 issued and 64,998,368 outstanding on January 31, 2016 and 78,136,144 issued and 66,812,919 outstanding on January 25, 2015	785	785
Treasury stock, at cost, 13,137,776 shares as of January 31, 2016 and 11,323,225 shares as of January 25, 2015	(266,175)	(222,969)
Additional paid-in capital	379,508	371,596
Retained earnings	413,280	401,783
Accumulated other comprehensive income	653	163
Total stockholders’ equity	528,051	551,358
TOTAL LIABILITIES AND STOCKHOLDERS’ EQUITY	$911,517	$929,431

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

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SEMTECH CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands, except share amounts)

	Common Stock						
	Number of Shares Outstanding	Amount	Additional Paid-in Capital	Retained Earnings	Treasury Stock, at Cost	Accumulated Other Comprehensive Income (Loss)	Stockholders' Equity
Balance at January 27, 2013	66,607,347	$785	$355,990	$538,302	$ (200,604)	$ 353	$ 694,826
Net loss	—	—	—	(164,466)	—	—	(164,466)
Other comprehensive loss	—	—	—	—	—	(100)	(100)
Stock-based compensation	—	—	24,991	—	—	—	24,991
Repurchase of outstanding common stock	(1,034,491)	—	—	—	(30,000)	—	(30,000)
Treasury stock reissued	1,710,365	—	(23,576)	—	29,452	—	5,876
Tax shortfall from stock based compensation	—	—	4,716	—	—	—	4,716
Balance at January 26, 2014	67,283,221	$785	$362,121	$373,836	$ (201,152)	$ 253	$ 535,843
Net income	—	—	—	27,947	—	—	27,947
Other comprehensive loss	—	—	—	—	—	(90)	(90)
Stock-based compensation	—	—	26,856	—	—	—	26,856
Repurchase of outstanding common stock	(1,578,869)	—	—	—	(40,906)	—	(40,906)
Treasury stock reissued	1,108,567	—	(17,381)	—	19,089	—	1,708
Tax benefit from stock based compensation	—	—	—	—	—	—	—
Balance at January 25, 2015	66,812,919	$785	$371,596	$401,783	$ (222,969)	$ 163	$ 551,358
Net income	—	—	—	11,497	—	—	11,497
Other comprehensive income	—	—	—	—	—	490	490
Stock-based compensation	—	—	22,778	—	—	—	22,778
Repurchase of outstanding common stock	(2,681,476)	—	—	—	(57,311)	—	(57,311)
Treasury stock reissued	866,925	—	(14,744)	—	14,105	—	(639)
Other	—	—	(154)	—	—	—	(154)
Tax benefit from stock based compensation	—	—	32	—	—	—	32
Balance at January 31, 2016	64,998,368	$785	$379,508	$413,280	$ (266,175)	$ 653	$ 528,051

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

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SEMTECH CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Fiscal Year Ended		
	January 31, 2016	January 25, 2015	January 26, 2014
Cash flows from operating activities:			
Net income (loss)	$11,497	$27,947	$(164,466)
Adjustments to reconcile net income (loss) to net cash provided by operating activities, net of effects of acquisitions:			
Depreciation, amortization and impairments	48,932	69,303	94,073
Impairment - goodwill	—	—	116,686
Effect of acquisition fair value adjustments	—	(929)	2,529
Accretion of deferred financing costs and debt discount	1,469	1,083	1,509
Write-off of deferred financing costs and debt discount	—	—	7,093
Deferred income taxes	(1,012)	27	29,987
Stock-based compensation	20,468	29,629	24,589
Earn-out liabilities	(16,362)	1,391	(654)
Environmental reserve	2,855	(65)	—
Excess tax benefits on stock based compensation	—	(13)	(4,220)
Loss (gain) on disposition of property, plant and equipment	23	74	(28)
Changes in assets and liabilities:			
Accounts receivable, net	25,354	(2,968)	2,827
Inventories	10,262	(13,290)	12,238
Prepaid expenses and other assets	619	(5,902)	623
Accounts payable	4,980	(9,077)	(11,294)
Accrued liabilities	(12,945)	2,562	(2,739)
Deferred revenue	2,780	(1,419)	3,401
Income taxes payable and prepaid taxes	2,611	2,477	1,825
Other liabilities	545	5,330	4,002
Net cash provided by operating activities	102,076	106,160	117,981
Cash flows from investing activities:			
Purchases of available-for-sale investments	—	—	(1,050)
Proceeds from sales and maturities of available-for-sale investments	—	3,674	10,249
Proceeds from sales of property, plant and equipment	—	89	57
Purchase of property, plant and equipment	(13,026)	(31,755)	(37,161)
Purchase of intangible assets	—	(1,100)	(3,533)
Purchase of cost method investment	(14,630)	(7,148)	(2,500)
Acquisitions, net of cash acquired	(39,171)	(4,852)	—
Net cash used in investing activities	(66,827)	(41,092)	(33,938)
Cash flows from financing activities:			
Proceeds from debt issuance, net of discount	35,000	5,000	327,344
Deferred financing cost	—	—	(2,980)
Excess tax benefits on stock based compensation	—	13	4,220
Payments for employee stock-based compensation payroll taxes	(6,513)	(7,172)	(10,522)
Proceeds from exercises of stock options	5,807	8,880	16,398
Repurchase of outstanding common stock	(57,311)	(40,906)	(30,000)
Payment of long term debt	(30,750)	(43,749)	(368,501)
Net cash used in financing activities	(53,767)	(77,934)	(64,041)

Effect of exchange rate increase on cash and cash equivalents	—	—	—
Net (decrease) increase in cash and cash equivalents	(18,518)	(12,866)	20,002
Cash and cash equivalents at beginning of period	230,328	243,194	223,192
Cash and cash equivalents at end of period	$211,810	$230,328	$243,194
Supplemental disclosure of cash flow information			
Income taxes paid	$7,924	$4,399	$7,227
Interest paid	$5,732	$5,441	$8,727

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

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SEMTECH CORPORATION AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1: Organization and Basis of Presentation

Semtech Corporation (together with its subsidiaries, the "Company" or "Semtech") is a global supplier of analog and mixed-signal semiconductor products. The end-customers for the Company's products are primarily original equipment manufacturers ("OEM's") that produce and sell electronics.

The Company designs, develops, and markets a wide range of products for commercial applications, the majority of which are sold into the enterprise computing, communications, high-end consumer and industrial end-markets.

Enterprise Computing: datacenters, passive optical networks, desktops, notebooks, servers, graphic boards, monitors, printers and other computer peripherals.

Communications: base stations, optical networks, carrier networks, switches and routers, cable modems, wireless LAN and other communication infrastructure equipment.

High-End Consumer: handheld products, smartphones, wireless charging, set-top boxes, digital televisions, tablets, digital video recorders and other consumer equipment.

Industrial: video broadcast equipment, automated meter reading, Internet of Things ("IoT"), smart grid, wireless charging, military and aerospace, medical, security systems, automotive, industrial and home automation, video security and surveillance and other industrial equipment.

Fiscal Year

The Company reports results on the basis of 52 and 53 week periods and ends its fiscal year on the last Sunday in January. The fiscal year ended January 31, 2016 consisted of 53 weeks. The fiscal years January 25, 2015 and January 26, 2014 each consisted of 52 weeks.

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of Semtech Corporation and its wholly-owned subsidiaries. All inter-company transactions and accounts have been eliminated.

On March 4, 2015, the Company completed the acquisition of Triune Systems, L.L.C. ("Triune"). On January 13, 2015, the Company completed the acquisition of EnVerv, Inc. ("EnVerv"). The consolidated financial statements include the results of operations of Triune and EnVerv commencing as of the acquisition date.

Segment Information

The Company's Chief Executive Officer ("CEO") has been identified as the Chief Operating Decision Maker ("CODM") as defined by guidance regarding segment disclosures (see Note 16 for further discussion). In fiscal year 2015, the Company completed the reassessment of its operations in light of its restructuring efforts (see Note 17 for further discussion) and recent strategic business decisions. Based on this reassessment, the Company has identified five operating segments in total. Four of the five operating segments aggregate into one reportable segment, the Semiconductor Products Group. The remaining operating segment, the Systems Innovation Group (shown as "All others"), could not be aggregated with the other operating segments and did not meet the criteria for a separate reportable segment as defined by the guidance regarding segment disclosure. As a result, the financial activity associated with the Systems Innovation Group is reported separately from the Company's Semiconductor Products Group. This separate reporting is included in the "All others" category. Prior to fiscal year 2015, the Company included "All others" as part of the Company's one reportable segment. The historical activity of the reportable segment and "All others" has been recast for consistent presentation for all periods presented.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Reclassification

Certain prior period footnote amounts have been re-cast to reflect the effect of the changes to the Company's identified operating segments. See Note 16.
Note 2: Significant Accounting Policies
Cash, Cash Equivalents and Investments
The Company considers all highly-liquid investments with an original maturity of 90 days or less to be cash equivalents. The Company maintains cash balances and investments in highly-qualified financial institutions. At various times such amounts are in excess of insured limits. Investments consist of government and corporate obligations and bank time deposits. The Company’s investment policy restricts investments to high credit quality investments with limits on the length to maturity and the amount invested with any one issuer. These investments, especially corporate obligations, are subject to default risk. The Company designates its investments as available for sale (“AFS”). Investments designated as AFS are reported at fair value. The Company records the unrealized gains and losses, net of tax, in stockholders’ equity as a component of comprehensive income. Realized gains or losses are recorded in “Interest income and other (expense) income, net” in the consolidated statements of operations. The Company had restricted cash associated with certain lease commitments of $0.5 million as of both January 31, 2016 and January 25, 2015, respectively, presented in "Other assets" within the condensed consolidated balance sheets.
Accounts Receivable and Allowances
Accounts receivable are recorded at net realizable value or the amount that the Company expects to collect on gross customer trade receivables. The Company evaluates the collectability of its accounts receivable based on a combination of factors. The Company generally does not require collateral on accounts receivable as the majority of the Company’s customers are large, well-established companies. Historically, bad debt provisions have been consistent with management’s expectations. If the Company becomes aware of a customer’s inability to meet its financial obligations after a sale has occurred, it records an allowance to reduce the net receivable to the amount it reasonably believes it will be able to collect from the customer. For all other customers, the Company recognizes allowances for doubtful accounts based on the length of time the receivables are past due, the current business environment and historical experience. If the financial condition of the Company’s customers were to deteriorate or if economic conditions worsen, additional allowances may be required in the future. All of the Company’s accounts receivables are trade-related receivables.
The Company records a provision for estimated sales returns in the same period as the related revenues are recorded. These estimates are based on historical sales returns and other known factors. Actual returns could be different from our estimates and current provisions for sales returns and allowances, resulting in future charges to earnings. The portion of the estimate sales returns where there are outstanding receivables are recorded on the balance sheet as a reduction to accounts receivable.
The Company records a provision for sales rebates in the same period as the related revenues are recorded. These estimates are based on sales activity during the period. The actual rebate could be different from current provisions for sales rebates, resulting in future adjustments to earnings. The estimated sales rebates for sales for which there are no outstanding receivables are recorded on the balance sheet under the heading of “Accrued liabilities.” The portion of the estimated sales rebate where there are outstanding receivables is recorded on the balance sheet as a reduction to accounts receivable.
A summary of allowances against accounts receivable for fiscal years ended January 31, 2016 and January 25, 2015 is as follows:

(in thousands)	January 31, 2016		January 25, 2015
Allowance for doubtful accounts	$(889	)	$(1,678