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 Note3 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," "projections," or "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.

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.

(in thousands, except percentages)	Fiscal Years 2016		Fiscal Years 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.

(in thousands, except percentages)	Fiscal Years 2016 Cost/Exp.	2016 % net sales	Fiscal Years 2015 Cost/Exp.	2015 % 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 year2016 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 years2016 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 in2016. We recorded $11.6 million in intangible asset impairments in fiscal year2015 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 year2015, 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.

	Fiscal Years				
(in thousands, except percentages)	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.	2015 % net sales	2014 Cost/Exp.	2014 % 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 year2015 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 years2015 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 year2015 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 certain revenue and operating income targets are achieved in each of the five measurement periods. See Note14 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 Note2 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