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. Potential factors that could cause actual results to differ materially from those in the forward-looking statements include, but are not limited to: the continuation and/or pace of key trends considered to be main contributors to the Company's growth, such as demand for increased network bandwidth, demand for increasing energy efficiency in the Company's products or end use applications of the products, and demand for increasing miniaturization of electronic components; shifts in demand among target customers, and other comparable changes or protracted weakness in projected or anticipated end-user markets; competitive changes in the marketplace, including, but not limited to the pace of growth or adoption rates of applicable products or technologies; shifts in focus among target customers, and other comparable changes in projected or anticipated end-user markets; adequate supply of components and materials from our suppliers, and of our products from our third-party manufacturers, to include disruptions due to natural causes or disasters, or related extraordinary weather events; the Company's ability to forecast and achieve anticipated revenues and earnings estimates in light of periodic economic uncertainty, to include impacts arising from European and global economic dynamics; the Company's ability to manage expenses to achieve anticipated amounts; and the amount and timing of expenditures for capital equipment deemed necessary or advisable by the Company. 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 section "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 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.

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, tablets, set-top boxes, digital televisions, digital video recorders, thunderbolt cables and other consumer equipment. Applications for the industrial market include broadcast studio equipment, automated meter reading, military and aerospace, medical, security systems, automotive, industrial and home automation, video security and surveillance and other industrial equipment. Enterprise computing end-markets include desktops, notebooks, servers, graphic boards, monitors, printers, datacenter related equipment, storage networks and computer peripherals. Communications end-market applications include base stations, optical networks, carrier networks, switches and routers, cable modems, signal conditioners, wireless LAN, and other communication infrastructure equipment. Our end-customers are primarily original equipment manufacturers and their suppliers, including Alcatel-Lucent, Cisco Systems, Inc., Huawei Technologies Co., Ltd., LG Electronics, Motorola, Nokia Siemens Networks, Itron, Apple, Phonak International, Research In Motion Limited, Samsung Electronics Co., Google Inc., Amazon.com Inc., and ZTE Corporation.

On March 20, 2012, we, through our wholly-owned subsidiary Semtech Canada Inc., completed the acquisition of 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.

Upon consummation of the acquisition, which constituted a change in control of Gennum, Gennum's stock option awards and restricted shares became fully vested. We acquired 100% of the outstanding shares and vested stock options, restricted shares, and deferred share units of Gennum for CDN$13.55 per share for a total purchase price of $506.5 million. See Note 3 to our audited consolidated financial statements included in Item 8 of this report. The acquisition was initially financed with a combination of cash from our international cash reserves and $347.0 million (net of original issue discount of $3.0 million) of five-year secured term loans with a combined interest rate of approximately 4%. See Note 10 to our audited consolidated financial statements included in Item 8 of this report.

Our primary reasons for the acquisition were to broaden our existing portfolio of high-performance analog products 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 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 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 will bring customers a set of high-end, digitally enhanced wireless solutions. Under the terms of the agreement, we paid the stockholders of Cycleo $5.0 million in cash at closing. The audited consolidated financial statements for the fiscal years 2014 and 2013 include the results of operations of Gennum and Cycleo commencing as of the acquisition dates.

We operate our business in one enterprise-wide reportable segment. All of our operating segments exhibit similar economic characteristics and we manage our business to a targeted gross margin range which all of our product lines are expected to meet. During fiscal years 2014, 2013 and 2012 the gross margin of our Power Management and High-Reliability group did not fall within our targeted range as their business was negatively impacted by lower sales volumes and an unfavorable product mix. The lower sales volumes are the result of the group's 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, this 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. We are starting to see traction in this endeavor as supported by the pace of new product introductions and customer design win communications. As a result of the lower volumes currently being experienced by this group, their gross margin has been impacted more than our other product groups by lower overhead absorption and fixed costs. In order to support existing customers while developing new cost-efficient products that can be sold at competitive prices, the Power Management and High-Reliability group has sold certain products at lower margins.

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 2014 represented 48% of net sales. Sales made directly to customers during fiscal year 2014 were 57% of net sales. The remaining 43% 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 26, 2014, approximately 38% of our silicon, in terms of cost of wafers purchased, was manufactured in China. Foreign sales for fiscal year 2014 constituted approximately 84% of our net sales. Approximately 86% of foreign sales in fiscal year 2014 were to customers located in the Asia-Pacific region. The remaining foreign sales were primarily to customers in Europe and Canada.

Restructuring

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.

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 is 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, we expect our customers to take action to transition away from some of our current platforms, including certain products in the 40Gbps and 100Gbps SerDes class which resulted in us reducing 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

We completed most of the restructuring activities in the fourth quarter of fiscal year 2014, however, we expect to take additional actions in the first quarter of fiscal year 2015 that are expected to result in approximately $0.5 million of additional restructuring charges, primarily for lease consolidation and additional severance paid to employees who entered into stay agreements.

We do not expect any significant changes to our liquidity as a result of our restructuring activities as most of the charges associated with these actions do not require settlement in cash.

As a result of these restructuring actions we expect to realize significant operating cost savings beginning in the first quarter of fiscal year 2015, including an annual reduction in compensation costs of approximately $10.0 million, development costs of approximately $10.0 million and depreciation and amortization costs of approximately $5.2 million. These savings are expected to be offset by an anticipated $70.0 to $80.0 million reduction in revenues from long-haul optical products which are included in our Signal Integrity and Timing product group. We expect the gross margins for this product group to return to normalized levels beginning in the first quarter of fiscal year 2015.

Results of Operations

Fiscal Year 2014 Compared With Fiscal Year 2013

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

(in thousands, except percentages)	Fiscal Years 2014			Fiscal Years 2013			Change
High-End Consumer (1)	$	170,203	29%	$	169,847	29%	— %
Communications		160,302	27%		181,791	31%	(12)%
Industrial and Other		149,039	25%		141,243	25%	6 %
Enterprise Computing		115,433	19%		85,945	15%	34 %
Total	$	594,977	100%	$	578,826	100%	3 %

(1) Approximately $43.8 million and $36.4 million of our total sales to Samsung Electronics (and Affiliates), one of our significant customers, in fiscal year 2014 and 2013, 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 2014 were $595.0 million, an increase of 3% compared to $578.8 million for fiscal year 2013. Fiscal year 2014 revenues within the Enterprise Computing end-market benefited from a full year of Gennum revenue, with particular strength from optical communications which was well positioned for the upgrading of data centers and the build-out of wireless infrastructure. Strength from these areas was primarily offset by a decline in the Communications market with particular weakness in 40Gbps and 100Gbps SerDes devices. The weakness in the Communications market was the result of continued delays in the release of capital investment tenders, primarily in China, and pricing pressure in this space as current suppliers to this market compete for the existing business. Higher revenue in the Industrial end-market was attributed to higher sales of video broadcast products. Revenue from the licensing of intellectual property was $2.5 million and $8.6 million in fiscal years 2014 and 2013, respectively. Licensing revenue in fiscal year 2013 benefited from a single licensing arrangement that resulted in the recognition of $7.5 million of revenue.

The decline in Communications end-market activity discussed above is expected to continue through fiscal year 2015 and be partially offset by the continued demand from the upgrade of data centers and build-out of communications infrastructure, including wireless base stations and the Internet-of-Things.

Gross Profit. Gross profit was $335.2 million and $314.6 million in fiscal years 2014 and 2013, respectively. Our gross margin was 56.3% for fiscal year 2014, up from 54.4% in fiscal year 2013. In the fourth quarter of fiscal year 2014, as a result of a significant reduction in forecasted demand for 40Gbps and 100Gbps SerDes products that support the long-haul optical market, we recorded inventory lower of cost or market write-downs of $15.0 million, asset impairment charges of $4.3 million and contract commitment settlement charges of $1.7 million. Gross profit margins for fiscal year 2013 were negatively impacted by the inventory fair value step-up of $39.4 million associated with inventory acquired as part of the Gennum acquisition that was recorded to cost of sales as the acquired inventory was sold. We expect overall gross margins to strengthen to approximately 59.0% in the first quarter of fiscal year 2015 as a result of lower levels of impairment charges and the absence of purchase accounting charges.

Operating Costs and Expenses.

(in thousands, except percentages)	Fiscal Years 2014			2013		
	Cost/Exp.		% net sales	Cost/Exp.	% net sales	Change
Selling, general and administrative	$	125,379	21%	$ 149,070	26%	(16)%
Product development and engineering		137,437	23%	120,009	21%	15 %
Intangible amortization		29,002	5%	29,244	5%	(1)%
Intangible asset impairments		32,538	5%	700	—%	4,548 %
Goodwill impairment		116,686	20%	—	—%	*
Restructuring		3,086	1%	—	—%	*
Total operating costs and expenses	$	444,128	75%	$ 299,023	52%	49 %

* Percentage is not applicable

Selling, General & Administrative Expenses

Selling, general and administrative ("SG&A") expenses for fiscal year2014 decreased by $23.7 million or (16)% as a result of lower expenses related to our acquisition of Gennum and Cycleo and by lower equity compensation expense. In fiscal year 2013, we incurred transaction and integration expenses related to the Gennum and Cycleo acquisitions of $24.8 million, including severance costs of $13.4 million. Fiscal year 2013 also included approximately $2.5 million of environmental reserves and $1.5 million of legal contingencies associated with a contract dispute.

SG&A stock-based compensation expense was $12.1 million and $15.0 million in fiscal years 2014 and 2013, respectively. The year over yeardecrease in equity compensation was principally driven by the impact of a lower stock price on awards that are classified as liability awards and must be marked to market at the end of each financial period and lower anticipated vesting for awards that have a performance vesting condition.

Product Development and Engineering Expenses

Product development and engineering expenses for fiscal years2014 and 2013 were $137.4 million and $120.0 million, respectively or an increase of 15%. The increase resulted from the inclusion of a full year of spending for Gennum and Cycleo and our decision in the fourth quarter of fiscal year 2014 to reduce our investments in the long-haul optical market. Specifically, our decision to reduce our investments in the long-haul optical market resulted in us recording an impairment charge against long-lived assets of $5.3 million and contract settlement charges of $2.4 million in the fourth quarter of fiscal year 2014.

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 third parties for non-recurring engineering services which are typically recorded as a reduction to product development and engineering expense. As a result of the actions taken to reduce our investments in the long-haul optical market, we expect product development and engineering expenses to decline to approximately $28.0 million in the first quarter of fiscal year 2015.

Intangible Amortization and Impairments

Intangible amortization was $29.0 million and $29.2 million in fiscal years 2014 and 2013, respectively. Intangible asset impairments was $32.5 million and $0.7 million in fiscal years 2014 and 2013, respectively. The increase in intangible asset impairments reflects the impact of $32.5 million of intangible impairment charges primarily related to our decision in the fourth quarter of fiscal year 2014 to reduce the level of investment in the long-haul optical market.

As a result of the impairments recorded in the fourth quarter of fiscal year 2014, we expect intangible amortization to decline to approximately $6.4 million in the first quarter of fiscal year 2015.

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 Advanced Communications group.

Restructuring

We incurred $3.1 million for restructuring charges in fiscal year2014 for severance and contract cancellation liabilities related to our decision to reduce our investment in the long haul optical market, realign product groupings, and align spending with anticipated demand levels.

Interest Expense. Interest expense was $18.2 million and $14.4 million for fiscal year 2014 and 2013, respectively. The increase 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, partially offset by lower interest rates associated with modified credit facilities.

Interest Income and Other Expense, Net. Interest income and other expense, net was expense of $1.4 million in fiscal year 2014 compared to expense of $1.0 million in fiscal year 2013. The net increase in fiscal year 2014, was due to higher levels of other interest expense and volatility of foreign exchange related to cash denominated in foreign currencies.

Provision for Taxes. The provision for income taxes was $36.0 million for fiscal year 2014 compared to a benefit of $41.7 million for fiscal year 2013. The effective tax rate for fiscal year 2014 and 2013 was a tax provision of 28.0% and a tax benefit of 16,470.4%, respectively. The effective tax rate for fiscal year 2014 reflects the impact of a valuation reserve against our deferred tax assets of $52.9 million. The effective tax rate for fiscal year 2013 reflects the impact of a one-time $23.4 million benefit related to our change in assertion to permanently reinvest $70.0 million of foreign subsidiary earnings.

During fiscal year 2014, we recognized a one-time tax benefit of $2.7 million related to the revaluation of our net Swiss deferred tax liabilities. The revaluation of these liabilities was required to reflect the impact of a new Swiss tax ruling, which was formally approved by Swiss tax authorities during the third quarter of fiscal year 2014.

Our effective tax rate in fiscal year2014 differs from the statutory federal income tax rate of 35% due primarily to the non-deductibility of goodwill impairment charges, a valuation reserve against our deferred tax assets, certain undistributed foreign earnings for which no U.S taxes are provided because such earnings are indefinitely reinvested outside of the U.S. and a change in the tax rates in Switzerland due to a new Swiss tax ruling. We receive an income tax benefit from tax differentials due to our presence in foreign jurisdictions such as Switzerland and Canada where statutory rates are lower than U.S. federal tax rates. We are currently not aware of any uncertainties or trends relating to foreign tax differential or the new Swiss tax ruling that could significantly impact our income taxes in future periods.

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 bases of the assets and liabilities.

As of January 26, 2014, we have a valuation allowance against our U.S. and foreign deferred tax assets of approximately $61.3 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 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 the Company’s three-year cumulative loss history as of January 26, 2014.

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 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 $52.9 million as of January 26, 2014.

As we enter fiscal year 2015, 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 deferred tax assets as a result of our recent history of tax losses in the United States and Canada.

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 2013 Compared With Fiscal Year 2012

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

	Fiscal Years						
(in thousands, except percentages)	2013			2012			Change
Communications	$	181,791	31%	$	186,479	39%	(3)%
High-End Consumer		169,847	29%		168,520	35%	1 %
Industrial and Other		141,243	25%		83,886	17%	68 %
Enterprise Computing		85,945	15%		41,716	9%	106 %
Total	$	578,826	100%	$	480,601	100%	20 %

Net Sales. Net sales for fiscal year 2013 were $578.8 million, an increase of 20% from $480.6 million for fiscal year 2012. Fiscal year 2013 revenues increased driven by strengthening demand in the enterprise computing and industrial end-markets and by the impact of approximately $129.6 million of Gennum sales in the current fiscal year, partially offset by a slight decrease in demand from the High-End Consumer and Communications end-markets. Fiscal year 2012 was also impacted by softening global economic conditions that resulted in a reduction in orders of our component products during the fiscal year.

Higher revenue in the Enterprise Computing end-market is driven primarily by demand for Gennum's optical communications products. Within the Communications end-market, lower revenue was attributed to softer demand for 40Gbps Communications products, partially offset by increasing demand for 100Gbps Communication products. High-End Consumer revenues were relatively flat due to softer demand in Protection products due to reduced demand from a North American Tier 1 smartphone customer offset by increasing demand for Gennum's Thunderbolt solutions. Higher revenue in the industrial category was attributed to video broadcast applications from Gennum and continued strength in the medical business of our Wireless and Sensing Group.

Gross Profit. Gross profit was $314.6 million and $285.6 million for fiscal years 2013 and 2012, respectively. Our gross margin was 54.4% for fiscal year 2013, down from 59.4% in fiscal year 2012. Gross profit margins for fiscal year 2013 were negatively impacted by the amortization of $39.4 million of the fair value adjustment related to acquired inventory recorded to cost of sales from the Gennum acquisition which offset a favorable end-market product mix driven primarily by the impact of approximately $129.6 million of Gennum sales in fiscal year 2013.

Operating Costs and Expenses.

	Fiscal Years						
(in thousands, except percentages)	2013			2012			
	Cost/Exp.		% net sales	Cost/Exp.		% net sales	Change
Selling, general and administrative	$	149,070	26%	$	100,629	21%	48 %
Product development and engineering		120,009	21%		80,577	17%	49 %
Intangible amortization		29,244	5%		8,383	2%	249 %
Intangible asset impairments		700	—%		2,470	1%	(72)%
Total operating costs and expenses	$	298,323	52%	$	189,589	40%	56 %

<u>Selling, General & Administrative Expenses</u>

SG&A expenses for fiscal year 2013 increased by $48.4 million or 48% driven primarily by $11.4 million of transaction and integration expenses related to the acquisitions of Gennum and Cycleo in March 2012 and the impact of incremental Gennum SG&A expenses.

SG&A expenses for fiscal years 2013 include approximately $2.5 million of environmental reserves and $13.4 million of severance costs associated with the integration of the acquired Gennum business with the Company’s pre-existing business (refer to Notes 15 and 17 to our audited consolidated financial statements for details). Fiscal year 2012 includes $2.0 million for expenses attributed to a reorganization plan initiated during the third quarter of fiscal year 2012 which resulted in consolidation of research and development activities and reduction in workforce.

SG&A stock-based compensation expense was $15.0 million and $15.8 million in fiscal years 2013 and 2012, respectively. The year over year decrease in equity compensation was principally driven by staffing reductions associated with our reorganization actions in fiscal year 2012 partially offset by the increase in stock price in fiscal year 2013.

Product Development and Engineering Expenses

Product development and engineering expenses for fiscal years 2013 and 2012 were $120.0 million and $80.6 million, respectively or an increase of 49%. The increase in fiscal year 2013 is principally driven by the inclusion of Gennum expenses of $40.9 million.

Intangible Amortization and Impairments

Intangible amortization, which reflects amortization costs associated with acquired intangibles, increased by $20.9 million in fiscal year 2013 compared to fiscal year 2012. The increase reflects the impact of $19.7 million intangible amortization related to the acquisition of Gennum.

Intangible asset impairments decreased by $1.8 million in fiscal year 2013 compared to fiscal year 2012. This decrease reflects an impairment charge of $0.7 million attributed to assets associated with the SMI acquisition offset by the write-off of a previous impairment charge from fiscal year 2012 of $2.5 million, attributed to assets acquired from Leadis Technology Inc.

The purchase price allocation for the Gennum acquisition included $29.1 million of acquired in-process research and development ("IPR&D") projects. Each project was analyzed to determine the unique technological innovations, the existence and reliance on core technology, the existence of any alternative future use or current technological feasibility, and the complexity, cost and time to complete the remaining development.

The fair value of the IPR&D projects was determined using an income approach or replacement cost approach as applicable. The replacement cost approach was used for IPR&D projects that were considered long-term core investments and were not anticipated to be profitable for a period of time. IPR&D projects which were valued using an income approach, measured the returns attributable to each specific IPR&D project, discounted to present value using a risk-adjusted rate of return, including as appropriate, any tax benefits derived from amortizing the intangible asset for tax purposes. Significant factors considered in the calculation of the rate of return are the weighted average cost of capital and return on assets, as well as the risks inherent in the development process, including the likelihood of achieving technological success and market acceptance. For IPR&D projects valued using a replacement cost approach, value was estimated by developing the cost to either replace or reproduce (replicate) the IPR&D to its current state.

The top three IPR&D projects that comprise $21.0 million of the total $29.1 million IPR&D balance are for enterprise computing, communications and high-end consumer products. The following table summarizes the significant assumptions underlying the valuation for such three IPR&D projects at the acquisition date:

Development Projects	Estimated Percent Complete	Estimated Time to Complete (in years)	Estimated Cost to Complete (in millions)	Risk Adjusted Discount Rate	Valuation Approach	IPR&D (In millions)
Video Platform	10%-14%	1.7 to 1.9	$3.4 - $10.4	12%	Income	$4.0
Backplane	36%-40%	0.2 to 0.4	$18.4 - $20.2	NA	Replacement Cost	$12.0
Consumer	44%-48%	0.2	$5.2 - $6.0	NA	Replacement Cost	$5.0

Costs, timing, and successful completion are subject to additional risk factors such as (i) increase in the projected technological risk of completion, (ii) decrease in the projected market size for the developed product, and (iii) subsequent decisions to postpone or delay the development of the IPR&D project. Actual results to date have been consistent, in all material respects, with our assumptions at the time of the acquisition.

Interest Expense. Interest expense was $14.4 million in fiscal year 2013. There was no interest expense in fiscal year 2012. The increase was due to interest expense and the amortization of the original issue discount and debt issuance costs related to the credit facilities used to finance the acquisition of Gennum.

***Interest Income and Other Expense, Net*.** Interest income and other expense, net was expense of $977,000 for fiscal year 2013 compared to interest income of $593,000 in fiscal year 2012. In fiscal year 2013, we recorded other expense of $700,000 for Swiss Stamp duties. Interest income in fiscal year 2013 was substantially lower as a result of our liquidation of investments to pay for the acquisition of Gennum.

Provision for Taxes. The benefit for income taxes was $41.7 million for fiscal year 2013 compared to a provision of $5.1 million for fiscal year 2012. The effective tax rate for fiscal year 2013 reflects the impact of the one-time $23.4 million benefit related to our change in assertion regarding $70.0 million of foreign subsidiary earnings. Because income before taxes was near break-even for fiscal year 2013, comparison of year-over-year effective tax rates is meaningless.

In fiscal year 2010, we concluded that $120.0 million of foreign subsidiary earnings were no longer considered to be permanently reinvested offshore. In the first quarter of fiscal year 2013, in connection with the acquisition of Gennum, we reviewed our assertion regarding the amount of foreign subsidiary earnings that were considered to be permanently reinvested offshore and concluded that due to post-acquisition foreign operating cash needs, all of our foreign subsidiary earnings are considered to be permanently reinvested offshore. This change in assertion resulted in the recognition of a one-time tax benefit of $23.4 million in the first quarter of fiscal year 2013.

In fiscal year 2013, our tax provision was adversely affected by a net increase to our valuation allowance of $2.7 million. This net increase was primarily the result of concerns related to our ability to utilize our California net operating losses due to a projected lower California apportionment in future years.

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 26, 2014, our total shareholders' equity was $535.8 million. At that date we also had approximately $243.2 million in cash and temporary investments, $3.7 million in long-term investments, and $291.8 million of borrowings, net of debt discount.

Our primary sources and uses of cash during the comparative fiscal years are presented below:

	Fiscal Year Ended		
(in millions)	January 26, 2014	January 27, 2013	January 29, 2012
Sources of Cash			
Operating activities	$ 118.0	$ 102.0	$ 99.8
Proceeds from exercise of stock options including tax benefits	10.1	12.9	45.0
Proceeds from sale of investments	10.2	112.5	131.7
Issuance of debt, net of discount and debt issuance cost	324.4	338.0	—
	$ 462.7	***$ 565.4***	***$ 276.5***
Uses of Cash			
Capital expenditures, net of sale proceeds	$ (37.1)	$ (23.3)	$ (21.5)
Acquisitions, net of cash acquired	—	(491.7)	—
Purchase of intangible assets	(3.5)	(1.3)	(3.0)
Purchases of investments	(1.1)	(24.7)	(93.3)
Purchase of cost method investments	(2.5)	(2.5)	—
Payment of long-term debt	(368.5)	(16.9)	—
Payment for interest rate cap	—	(1.1)	—
Repurchase of common stock	(30.0)	(7.8)	(50.7)
	$ (442.7)	***$ (569.3)***	***$ (168.5)***
Effect of exchange rate increase on cash and cash equivalents	***$ —***	***$ 0.1***	***$ —***
Net increase (decrease) in cash and cash equivalents	**$ 20.0**	**$ (3.8)**	**$ 108.0**

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 26, 2014, our foreign subsidiaries held approximately $219.3 million of cash, cash equivalents, and short-term investments compared to $180.2 million at January 27, 2013. Of the $219.3 million held by our foreign subsidiaries, approximately $187.0 million could be returned to the US tax free to settle an intercompany loan. An additional $9.3 million of earnings previously taxed in the US could be repatriated subject only to a 5% withholding tax, as we do not assert permanent reinvestment of earnings previously taxed in the US. The year over year increase in cash, cash equivalents, and short-term investments was attributable to the cash from operations generated by our international operations including a full year of Gennum.

One of our primary goals is to improve the cash flows from our existing business activities. Our cash, cash equivalents and investments give us the flexibility to use our free cash flow to 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 might 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 year 2014 were impacted by several significant non-cash transaction related items including a Goodwill impairment charge of $116.7 million, the write-off of $7.1 million of unamortized deferred financing costs and original issue discount associated with a debt modification, depreciation, amortization, and impairment expense of $94.1 million, the lower of cost or market write down of inventory of $15.0 million and stock-based compensation expense of $24.6 million.

Investing Activities

Cash used for investing activities is primarily attributable to capital expenditures, purchases of investments, offset by proceeds from the sales/maturities of investments. Our marketable securities investment portfolio is invested primarily in highly rated securities, generally with a minimum rating of A/A2 or equivalent.

Capital expenditures were $37.2 million for fiscal year 2014 compared to $23.3 million for fiscal year 2013. The increase in capital expenditures was primarily to maintain and expand our test capacity, support engineering and manufacturing functions, and to develop our new Enterprise Resource Planning (“ERP”) software platform. Over the next year, we expect our capital spending to be approximately 5% of revenue.

Financing Activities

Cash used by financing activities is primarily attributable to cash payments for long-term debt and our stock repurchase program offset by proceeds from debt issuance and the exercise of stock options.

We incurred debt of $347.0 million (net of original issue discount of $3.0 million) in term loans (the “Prior Credit Agreement”) in fiscal year 2013 to complete the Gennum acquisition. In accordance with the term loans, we also entered into an interest rate cap agreement protecting at least 50% of the variable interest rate exposure on the term loans and made an upfront payment of $1.1 million in June 2012.

On May 2, 2013, we entered into a new 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, which replaced the Prior Credit Agreement. In accordance with this agreement, the Lenders provided Semtech with senior secured first lien credit facilities in an aggregate principal amount of $400.0 million, consisting of term loans in aggregate principal amount of $150.0 million and revolving commitments in an aggregate principal amount of $250.0 million (the “New Credit Agreement”). We incurred loan fees of $2.2 million during the second quarter of fiscal year 2014, of which $1.0 million was expensed, and $1.2 million was capitalized and is being amortized using the effective interest method over the five year term of the agreement. Payments of long term debt in fiscal years 2014 and 2013 were $368.5 million and $16.9 million, respectively. Payments made in fiscal year 2014 include a payoff of the Prior Credit Agreement and a $26.0 million prepayment on the New Credit Agreements.

Our stock repurchase program represents one of our principal efforts to return value to our shareholders. In fiscal year 2014 and fiscal year 2013, we repurchased 1.0 million shares for $30.0 million and 0.3 million shares for $7.5 million, respectively. All stock repurchasing activity has been conducted under authorization from the Board of Directors. The original authorization was approved by the Board of Directors in November 2011, under which the Company was authorized to repurchase up to $50.0 million of shares of our common stock from time to time through negotiated or open market transactions (the "2011 Program") for a total authorized program of $100.0 million. As of January 26, 2014, we had repurchased $37.5 million of common stock under this program. On August 21, 2013, we announced an additional $50.0 million expansion of the 2011 Program.

In addition to the stock repurchase program, shares valued at $0.3 million were withheld in connection with the vesting of restricted stock to cover statutory tax withholding obligations in the fiscal year 2013. No shares were withheld in fiscal year 2014.

Cash proceeds from the exercise of stock options were $5.9 million and $12.9 million in fiscal years 2014 and 2013, respectively.

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 awards. Such proceeds are difficult to forecast, resulting from several factors which are outside our control. We believe that such proceeds will remain an important secondary source of cash after cash flow from operating activities.

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 26, 2014.

Contractual Obligations

Presented below is a summary of our contractual obligations as of January 26, 2014.

(in thousands)	Less than 1 year	1-3 years	4-5 years	After 5 years	Total
Long-term debt	$ 18,750	$ 37,500	$ 236,375	$ —	$ 292,625
Operating leases	7,898	11,419	8,037	8,780	36,134
Open capital purchase commitments	4,108	—	—	—	4,108
Other open purchase commitments	36,661	6,876	—	—	43,537
Other vendor commitments	3,798	1,000	—	—	4,798
Deferred compensation	1,478	727	923	13,915	17,043
Cycleo-deferred compensation	—	929	—	—	929
Stock-based compensation	855	4,369	—	—	5,224
Total contractual cash obligations	$ 73,548	$ 62,820	$ 245,335	$ 22,695	$ 404,398

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 26, 2014, as we have not yet received the related goods or taken title to the property. Other vendor commitments include $2.5 million of purchase commitments which are recorded as liabilities on our balance sheet as of January 26, 2014 since we have impaired the related asset or service.

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 $17.0 million and $13.9 million as of January 26, 2014 and January 27, 2013, 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.

During fiscal year 2014, we recorded a$1.8 million reduction to the Cycleo earn-out liability as the year 1 performance milestone was not achieved and we do not expect the year 2 performance milestone to be achieved. For the earn-outs related to performance milestones for years 3 and 4, we have reduced the earn-out liability to reflect a minimum level payout. See Note 15 to our audited consolidated financial statements included in Item 8 of this report.

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 $14.4 million and $10.0 million as of January 26, 2014 and January 27, 2013, respectively.

We have accrued $12.3 million for uncertain tax positions. Depending on the results of an IRS examination that may close in fiscal year 2015, it is reasonably possible that the amount of unrecognized tax benefits will decrease by $3.8 million within twelve months.

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.

Allowance for Doubtful Accounts

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.

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 is recognized during the period in which services are performed. 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 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 2014 or fiscal year 2013.

The following table summarizes the deferred net revenue balance:

(in thousands)	January 26, 2014	January 27, 2013
Deferred revenues	$ 7,179	$ 4,467
Deferred cost of revenues	1,698	1,099
Deferred revenue, net	5,481	3,368
Deferred product design and engineering recoveries	1,786	377
Total deferred revenue	$ 7,267	$ 3,745

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 analyses 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.

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 a valuation model, which considers, among other things, estimates and assumptions on the rate of forfeiture, expected life of options and stock price volatility. 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 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 carry 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, 2013, our reporting units with assigned goodwill were as follows:

(in thousands)		Balance as of November 30, 2013
Advanced Communications Products	$	116,686
Gennum Products		261,891
Wireless and Sensing Products		15,007
Total	$	393,584

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.

In the fourth quarter of fiscal year 2014, we completed our quantitative assessment of any potential goodwill impairment and concluded that the fair value of the Gennum Products group exceeded its carrying value by 25% and the fair value of the Wireless and Sensing Products group exceeded its carrying value by over 300%. The fair value of the Advanced Communications Product group was determined to be lower than its carrying value, which failed Step 1. We performed Step 2 of the impairment test to measure the amount of impairment. The calculated loss was allocated pro-rata to the long-lived depreciable or amortizable assets of the asset group, based on the relative carrying amounts of those assets. We did not allocate losses for any impairment that would have resulted in the adjusted asset value being lower than its fair value. Based on a comparison of the adjusted carrying value of the long-lived assets and the fair value of the reporting unit, the goodwill associated with the Advanced Communication Product group was determined to be fully impaired.

Before determining the extent to which goodwill was impaired, we evaluated whether impaired assets existed within the Advanced Communications reporting unit. Accordingly, we assessed whether current assets, such as inventories, were impaired and then whether long-lived assets, including property, equipment and intangible assets, were impaired. To perform this test, we determined that the long-lived asset group is the Advanced Communications reporting unit, which provides the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. Since the asset group is at the reporting unit level, goodwill before considering the effects of possible impairment is included in the recoverability test. For purposes of testing recoverability for an asset group, we identified core technology as the primary asset within the long-lived asset group and used its remaining useful life of five years over which we estimated undiscounted future cash flows. The result of the recoverability test indicated that undiscounted cash flows were less than the carrying value of the asset group, which required us to determine the fair value of the asset group. We considered the principles behind the highest and best use of the asset group and determined that a market participant would determine the fair value of the individual long-lived assets in the asset group in combination with the other assets and liabilities within the asset group. The asset group's fair value was determined using an income approach, which serves as the basis for recognizing and measuring the impairment loss. To allocate the impairment loss, we also considered the individual long-lived assets fair values in order to ensure the carrying values of these assets were not reduced below its fair values.

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. Based on our analysis, we recognized and allocated to long-lived assets an impairment loss of $6.8 million, 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. Based on our analysis, we recognized an impairment loss of $32.2 million, which reduced the cost basis in the corresponding intangible assets. Also, we reassessed the estimated remaining useful lives of these finite-lived intangible assets and adjusted accordingly our estimates of future amortization expense.

Based on a comparison of the fair value of long-lived assets to the carrying amount, we recoded an impairment of $39.0 million which consisted of the following:

- Core technology intangibles - $23.8 million
- Customer relationships - $6.1 million
- Property, plant and equipment - $6.8 million
- Licensed intangibles - $2.3 million

Accounting for Income Taxes
As part of the process of preparing our consolidated financial statements, we are required to estimate our income taxes in each of the jurisdictions in which we operate. This process involves estimating our actual current tax liability together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within our consolidated balance sheet.

We must assess the likelihood that our deferred tax assets will be recovered from future taxable income and to the extent we believe that recovery is not likely, we must establish a valuation allowance. Generally, to the extent we change a valuation allowance, the change is recorded through the tax provision in the statements of operations. Management periodically evaluates our deferred tax assets to assess whether it is likely that the deferred tax assets will be realized. 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. To the extent we experience a cumulative world-wide pre-tax loss for the current year and the two preceding years, we consider this significant negative evidence and evaluate additional facts to determine if there are factors that provide offsetting positive evidence to support continued use of taxable income projections.

We are subject to income taxes in both the United States and numerous foreign jurisdictions. Significant management estimates are required in determining our worldwide provision for income taxes. In the ordinary course of our business, there are many transactions and calculations where the ultimate tax impact is uncertain. The calculation of tax liabilities involves dealing with uncertainties in the application of complex tax laws. We recognize liabilities for uncertain tax positions based on a two-step process. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step requires us to estimate and measure the tax benefit as the largest amount that is more than 50% likely of being realized upon ultimate settlement. It is inherently difficult and subjective to estimate such amounts, as this requires us to determine the probability of various possible outcomes. We reevaluate these uncertain tax positions on a quarterly basis. This evaluation is based on factors including, but not limited to, changes in facts or circumstances, changes in tax law, effectively settled issues under audit, and new audit activity. Such a change in recognition or measurement would result in the recognition of a tax benefit or an additional charge to the tax provision in the period of change. Although we believe the estimates are reasonable, no assurance can be given that the final outcome of these matters will not be different than what is reflected in the historical income tax provisions and accruals. Should additional taxes be assessed as a result of an audit or litigation, a material effect on our income tax provision and net income in the period or periods for which that determination is made could result.

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 July 2013, the Financial Accounting Standards Board ("FASB") issued an accounting standards update requiring companies to present an unrecognized tax benefit, or a portion of an unrecognized tax benefit, as a reduction to deferred tax assets in the financial statements for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward. This update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2013. We do not expect the adoption of this guidance to have a material impact on our financial condition, results of operations, cash flows, or disclosures.