

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

You should read the following discussion and analysis in conjunction with our Consolidated Financial Statements and related Notes thereto included in Part IV, Item 15 of this Report and the "Risk Factors" included in Part I, Item 1A of this Report, as well as other cautionary statements and risks described elsewhere in this Report, before deciding to purchase, hold or sell our common stock.

Overview

Broadcom Corporation (including our subsidiaries, referred to collectively in this Report as "Broadcom," "we," "our" and "us") is a global leader and innovator in semiconductor solutions for wired and wireless communications. Broadcom products seamlessly deliver voice, video, data and multimedia connectivity in the home, office and mobile environments. We provide the industry's broadest portfolio of state-of-the-art system-on-a-chip solutions, or SoC's.

We sell our products to leading wired and wireless communications manufacturers that are structured around three core platforms: Broadband Communications (Home), Mobile and Wireless (Hand), and Infrastructure and Networking (Infrastructure). Because we leverage our technologies across different markets, certain of our integrated circuits may be incorporated into products used in multiple markets. We utilize independent foundries and third-party subcontractors to manufacture, assemble and test all of our semiconductor products.

Operating Results for the Year Ended December 31, 2013

In 2013 our net income was \$424 million as compared to net income of \$719 million in 2012. The resulting decrease in profitability was primarily the result of charges for the impairment of purchased intangibles assets of \$511 million and an increase in research and development expenses associated with our acquisition of LTE-related assets from affiliates of Renesas Electronics Corporation, or the Renesas Transaction, in October 2013, with no associated revenue, offset in part by (i) a 3.7% increase in total net revenue, (ii) higher gross margins due in part to product mix and the reduction of inventory valuation step-up expense, (iii) a decrease in settlement costs of \$73 million, and (iv) a one-time settlement gain of \$75 million.

Reportable Segments

The following table presents details of our reportable segments and the "All Other" category:

	Reportable Segments					
	Broadband Communications	Mobile and Wireless	Infrastructure and Networking	All Other	Consolidated	
	(In millions)					
Year Ended December 31, 2013						
Net revenue	\$ 2,220	\$ 3,919	\$ 2,080	\$ 86	\$ 8,305	
Operating income (loss)	538	365	655	(1,086)	472	
Year Ended December 31, 2012						
Net revenue	\$ 2,156	\$ 3,809	\$ 1,855	\$ 186	\$ 8,006	
Operating income (loss)	504	561	484	(873)	676	
Year Ended December 31, 2011						
Net revenue	\$ 2,039	\$ 3,484	\$ 1,659	\$ 207	\$ 7,389	
Operating income (loss)	391	572	545	(555)	953	

Broadband Communications. The increase in operating income from 2011 to 2013 resulted from the reduced investment in digital television and Blu-Ray Disc products; improved gross margin from the deployment of optimized solutions for developing markets; and an increased customer base, primarily with STBs. There were no material negative trends in the operating results in the above table for our Broadband Communications reportable segment.

Mobile and Wireless. The decrease in operating income from 2011 to 2013 resulted primarily from a significant increase in research and development expense in cellular baseband technologies, including LTE, partially offset by increased operating income related to wireless connectivity products and other technologies incorporated into handheld devices. Due to the lengthy product development and sales cycle for LTE products, our ongoing investment in LTE-related technologies, including the Renesas Transaction, negatively impacted our operating income and is expected to continue to do so until we realize significant revenue.

Infrastructure and Networking. The decrease in operating income from 2011 to 2012 was driven primarily by a decrease in revenue in Ethernet Switch and PHY. The increase in operating income from 2012 to 2013 was driven primarily by moderating growth in research and development spending as compared to revenue growth. There were no material negative trends in the operating results in the above table for our Infrastructure and Networking reportable segment.

For additional information about our business enterprise segments and the "All Other" category (including revenue and expense items reported under the "All Other" category), see further discussion in Note 12 of Notes to Consolidated Financial Statements, as well as "Net Revenue By Reportable Segments" discussion below.

Other highlights during 2013 include the following:

- Our cash and cash equivalents and marketable securities were \$4.37 billion at December 31, 2013, compared with \$3.72 billion at December 31, 2012. We generated cash flow from operations of \$1.79 billion during 2013 as compared to \$1.93 billion in 2012.
- In January 2013 our Board of Directors adopted an amendment to our existing dividend policy pursuant to which we increased our quarterly cash dividend by 10.0% to \$0.11 per share (\$0.44 per share on an annual basis) payable to holders of our common stock.
- We repurchased 20.2 million shares of our Class A common stock at a weighted average price of \$29.59.
- In June 2013 we recorded purchased intangible impairment charges of \$501 million, primarily related to our acquisition of NetLogic and, to a lesser extent, our acquisition of Provigent, Inc.
- In July 2013 we received a settlement payment of \$75 million and recorded a one-time settlement gain.
- In September 2013 we contributed \$25 million to the Broadcom Foundation.
- In September 2013 our Board of Directors approved and we initiated a global restructuring plan to reduce our expenses and better align our resources to areas of strategic focus. We recorded net restructuring costs of \$29 million in 2013, and expect to record additional costs of approximately \$5 million in the three months ending March 31, 2014.
- On October 1, 2013 we completed the Renesas Transaction. In connection with the transaction we paid approximately \$142 million in net cash.

See Note 13 of Notes to Consolidated Financial Statements for details of our quarterly financial data.

Our product revenue consists principally of sales of semiconductor devices and, to a lesser extent, licensing of our intellectual property, software licenses and royalties, development, support and maintenance agreements, data services and cancellation fees. The majority of our product sales occur through the efforts of our direct sales force. The remaining balance of our product sales occurs through distributors. Income from the Qualcomm Agreement was derived from our April 2009 agreement with Qualcomm Incorporated, or the Qualcomm Agreement, which provided for the the licensing of our intellectual property to Qualcomm. The income from the Qualcomm Agreement terminated in April 2013. It is unlikely that we will be able to enter into similar arrangements of this magnitude in the future.

Factors That May Impact Net Income

Our net income has been affected in the past, and may continue to be affected in the future, by various factors, including, but not limited to, the following:

- our product mix and volume of product sales and corresponding gross margin (see further discussion below under ‘*Factors That May Impact Net Revenue*’ and ‘*Factors That May Impact Product Gross Margin*’);
- levels of research and development and other operating costs (organic or acquired);
- stock-based compensation expense;
- licensing and income from intellectual property;
- impairment of goodwill and other long-lived assets;
- deferral of revenue and costs under multiple-element arrangements;
- amortization of purchased intangible assets;
- settlement costs or gains;
- cash-based incentive compensation expense;
- litigation costs and insurance recoveries;
- changes in tax laws, adjustments to tax reserves and the results of income tax audits;
- the loss of interest income resulting from lower average interest rates and investment balance reductions resulting from expenditures on repurchases of our Class A common stock, dividends and acquisitions of businesses;
- restructuring costs;
- other-than-temporary impairment of marketable securities; and
- charitable contributions.

Product Cycles. The cycle for test, evaluation and adoption of our products by customers can range from three to more than nine months, with an additional three to more than twelve months before a customer commences volume production of equipment or devices incorporating our products. Due to this lengthy sales cycle, we may experience significant delays from the time we incur expenses for research and development, selling, general and administrative efforts, and investments in inventory, to the time we generate corresponding revenue, if any. The rate of new orders may vary significantly from month to month and quarter to quarter. If anticipated sales or shipments in any quarter do not occur when expected, expenses and inventory levels could be disproportionately high, and our results of operations for that quarter, and potentially for future quarters, would be materially and adversely affected.

Acquisition Strategy. An element of our business strategy involves the acquisition of businesses, assets, products or technologies that allow us to reduce the time or costs required to develop new technologies and products and bring them to market, incorporate enhanced functionality into and complement our existing product offerings, augment our engineering workforce, and enhance our technological capabilities. From 2011 through 2013, we made acquisitions totaling \$4.07 billion in net cash consideration, of which \$185 million, \$189 million and \$3.70 billion related to our Broadband Communications, Mobile and Wireless, and Infrastructure and Networking reportable segments, respectively. We plan to continue to evaluate strategic opportunities as they arise, including acquisitions and other business combination transactions, strategic relationships, capital infusions and the purchase or sale of assets.

The accompanying Consolidated Financial Statements include the results of operations of our acquired companies commencing on their respective acquisition dates. See Note 3 of Notes to Consolidated Financial Statements for additional information related to these acquisitions.

Critical Accounting Policies and Estimates

The preparation of financial statements in accordance with U.S. generally accepted accounting principles, or GAAP, requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of net revenue and expenses in the reporting period. We

regularly evaluate our estimates and assumptions related to revenue recognition, rebates, allowances for doubtful accounts, sales returns and allowances, warranty obligations, inventory valuation, stock-based compensation expense, goodwill and purchased intangible asset recoverability, strategic investments, deferred income tax asset valuation allowances, uncertain tax positions, tax contingencies, self-insurance liabilities, restructuring costs, litigation and other loss contingencies. We base our estimates and assumptions on current facts, historical experience and various other factors that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities and the recording of revenue, costs and expenses that are not readily apparent from other sources. The actual results experienced by us may differ materially and adversely from our estimates. To the extent there are material differences between our estimates and the actual results, our future results of operations will be affected.

We believe the following are critical accounting policies that require us to make significant estimates, assumptions or judgments:

- *Net Revenue.* We recognize product revenue when all of the following criteria are met: (i) persuasive evidence of an arrangement exists, (ii) delivery has occurred, (iii) our price to the customer is fixed or determinable and (iv) collection of the resulting accounts receivable is reasonably assured. These criteria are usually met at the time of product shipment.

In arrangements that include a combination of semiconductor products and other elements, judgment is required to properly identify the accounting units of the multiple deliverable transactions and to determine the manner in which the amount of revenue should be allocated among the accounting units. We allocate the arrangement consideration based on each element's relative fair value using vendor-specific objective evidence, or VSOE, third-party evidence, or estimated selling prices, as the basis of fair value. Revenue is recognized for the accounting units when the basic revenue recognition criteria are met.

A portion of our sales is made through distributors under agreements allowing for pricing credits and/or rights of return. These pricing credits and/or rights of return provisions prevent us from being able to reasonably estimate the final price of the inventory to be sold and the amount of inventory that could be returned pursuant to these agreements. As a result, we have concluded the price to the customer is not fixed or determinable at the time we deliver products to our distributors, which is a judgment that impacts the timing of revenue recognition. Accordingly, product revenue from sales made through these distributors is not recognized until the distributors ship the product to their customers. In addition, distributors provide us with periodic data regarding product, price, quantity, and customers when products are shipped to their customers, as well as the quantities of our products that they still have in stock. For specialized shipping terms we may rely on data provided by our freight forwarding providers. For our licensing revenue we rely on data provided by the licensee. Any error in the data provided to us by customers, distributors or other third parties could lead to inaccurate reporting of our total net revenue and net income.

- *Sales Returns and Pricing Adjustments.* Establishing accruals for sales returns and pricing adjustments requires the use of judgment and estimates that impact the amount and timing of revenue recognition. We record reductions of revenue for estimated product returns and pricing adjustments, such as competitive pricing programs and rebates, in the same period that the related revenue is recorded. The amount of these reductions is based on historical sales returns, analysis of credit memo data, specific criteria included in rebate agreements, and other factors known at the time. We accrue 100% of potential rebates at the time of sale and do not apply a breakage factor. We reverse the accrual of unclaimed rebate amounts as specific rebate programs contractually end and when we believe unclaimed rebates are no longer subject to payment and will not be paid. Thus the reversal of unclaimed rebates may have a positive impact on our net revenue and net income in subsequent periods. Additional reductions of revenue would result if actual product returns or pricing adjustments exceed our estimates.
- *Inventory Write-Downs and Warranty Reserves.* We write down the carrying value of our inventory to net realizable value for estimated obsolescence or unmarketable inventory in an amount equal to the difference between the cost of inventory and its estimated realizable value based upon assumptions about future

demand and market conditions. If our judgments about actual demand and market conditions are less favorable than those projected at the time we issue our financial statements, additional inventory write-downs could be required. Our products typically carry a one to three year warranty. We establish reserves for estimated product warranty costs at the time revenue is recognized. Determining the amount of the warranty charges related to warranty issues requires management to make estimates and judgments based on historical experience, test data and various other assumptions that we believe to be reasonable under the circumstances. The results of these judgments form the basis for our estimate of the total charge to cover anticipated customer warranty, repair, return and replacement and other associated costs. However, if actual repair, return, replacement and other associated costs exceed our estimates, we may be required to record additional reserves, which would increase our cost of revenue and reduce our product gross margins.

- *Stock-Based Compensation Expense.* All share-based payments are recognized in our financial statements based upon their respective grant date fair values. Beginning in 2011, we stopped granting stock options. We currently issue restricted stock units and maintain an employee stock purchase plan. The fair value of our restricted stock units is based on the closing market price of our Class A common stock on the date of grant less our expected dividend yield. If there are any modifications or cancellations of the underlying unvested securities, we may be required to accelerate, increase or cancel any remaining unearned stock-based compensation expense.
- *Goodwill and Purchased Intangible Assets.* We evaluate goodwill by reporting unit either on an annual basis in the fourth quarter or more frequently if we believe indicators of impairment exist that would more likely than not reduce the fair value of a reporting unit below its carrying value or for other purchased intangible assets whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. Significant management judgment is required in performing these tests and in the creation of the forecasts of future operating results that are used in the discounted cash flow method of valuation, including (i) estimation of future cash flows, which is dependent on internal forecasts, (ii) estimation of the long-term rate of growth for our business, (iii) estimation of the useful life over which cash flows will occur, (iv) terminal values, if applicable, and (v) the determination of our weighted average cost of capital, which helps determine the discount rate. It is possible that these forecasts may change and our performance projections included in our forecasts of future results prove to be inaccurate. If our actual results, or the forecasts and estimates used in future impairment analyses, are lower than the original estimates used to assess the recoverability of these assets, we could incur additional impairment charges. The value of our goodwill and purchased intangible assets could also be impacted by future adverse changes such as: (i) a decline in the valuation of technology company stocks, including the valuation of our common stock, (ii) a significant slowdown in the worldwide economy or the semiconductor industry, or (iii) the abandonment of any of our acquired in-process research and development, or IPR&D, projects.

In light of the reduction in estimated future cash flows that resulted in the significant impairment of purchased intangible assets related to our Infrastructure and Networking reporting unit in the three months ended June 30, 2013, and as a result of our stock price decline during the three months ended September 30, 2013, we determined our goodwill had potentially been impaired. Accordingly, we performed the first step of the quantitative goodwill impairment assessment for each of our reporting units for recoverability of goodwill at August 31, 2013 but determined no impairment was indicated as the estimated fair value of each of the reporting units exceeded its respective carrying value by greater than 20%.

- *Deferred Taxes and Uncertain Tax Positions.* We utilize the asset and liability method of accounting for income taxes. We record a valuation allowance to reduce our deferred tax assets to the amount that we believe is more likely than not to be realized. In assessing the need for a valuation allowance, we consider all positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax planning strategies, and recent financial performance. Forming a conclusion that a valuation allowance is not required is difficult when there is negative evidence such as cumulative losses in recent years. As a result of our cumulative losses in the U.S. and certain foreign jurisdictions, our U.S. tax losses after tax deductions for stock-based compensation, and the full utilization of our loss carryback opportunities, we have concluded that a full valuation allowance against our net deferred tax assets is

appropriate in the U.S. and certain foreign jurisdictions. In certain other foreign jurisdictions where we do not have cumulative losses, we record valuation allowances to reduce our net deferred tax assets to the amount we believe is more likely than not to be realized. In the future, if we realize a deferred tax asset that currently carries a valuation allowance, we may record a reduction of income tax expense in the period of such realization. Income tax positions must meet a more-likely-than-not recognition threshold to be recognized. Income tax positions that previously failed to meet the more-likely-than-not threshold are recognized in the first subsequent financial reporting period in which that threshold is met. Previously recognized tax positions that no longer meet the more-likely-than-not threshold are derecognized in the first subsequent financial reporting period in which that threshold is no longer met. As a multinational corporation, we are subject to taxation in many jurisdictions, and the calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax laws and regulations in various taxing jurisdictions. If we ultimately determine that the payment of these liabilities will be unnecessary, we reverse the liability and recognize a tax benefit during the period in which we determine the liability no longer applies. Conversely, we record additional tax charges in a period in which we determine that a recorded tax liability is less than we expect the ultimate assessment to be. The application of tax laws and regulations is subject to legal and factual interpretation, judgment and uncertainty. Tax laws and regulations themselves are subject to change as a result of changes in fiscal policy, changes in legislation, the evolution of regulations and court rulings. Therefore, the actual liability for U.S. or foreign taxes may be materially different from our estimates, which could result in the need to record additional tax liabilities or potentially reverse previously recorded tax liabilities.

- *Litigation and Settlement Costs.* We are involved in disputes, litigation and other legal proceedings. We prosecute and defend these matters aggressively. However, there are many uncertainties associated with any litigation, and we cannot provide assurance that these actions or other third party claims against us will be resolved without costly litigation and/or substantial settlement costs. In addition, the resolution of intellectual property litigation may require us to pay damages for past alleged infringement or to obtain a license under the other party's intellectual property rights that could require one-time license fees or running royalties, which could adversely impact product gross margins in future periods, or could prevent us from manufacturing or selling some of our products or limit or restrict the type of work that employees involved in such litigation may perform for Broadcom. If any of those events were to occur, our business, financial condition and results of operations could be materially and adversely affected.

We account for intellectual property settlement agreements as multiple element arrangements and allocate the consideration to the identifiable elements based on relative fair value. Generally the identifiable elements are (i) the licensing of intellectual property for future use and (ii) payments related to alleged prior infringement. We continually evaluate the uncertainties associated with litigation and record a liability when it is probable that a loss has been incurred and the amount is reasonably estimable. There is significant judgment required in both the probability determination and as to whether a liability can be reasonably estimated. Accordingly, the outcomes of legal proceedings and/or our ability to settle disputes on terms acceptable to us are subject to significant uncertainty. Should we choose to pay significant sums in settling a dispute or should material legal matters be resolved against us, the operating results of a particular reporting period could be materially adversely affected. Given the complexity of evaluating the probability and range of potential litigation losses and appropriately allocating the consideration in multiple element arrangements relating to settlements of intellectual property litigation, we frequently use third-party valuation and law firms to assist us in this regard.

See Notes 1 and 10 of Notes to Consolidated Financial Statements for additional information regarding our critical and significant accounting policies, as well as a detailed analysis of goodwill and purchased intangible assets.

Results of Operations

The following table sets forth certain Consolidated Statements of Income data expressed as a percentage of net revenue for the periods indicated:

	Year Ended December 31,		
	2013	2012	2011
Net revenue:			
Product revenue	99.0 %	97.7 %	97.2 %
Income from Qualcomm Agreement	1.0	2.3	2.8
Total net revenue	100.0	100.0	100.0
Costs and expenses:			
Cost of product revenue	49.2	50.3	49.1
Research and development	29.9	29.0	26.9
Selling, general and administrative	8.5	8.7	9.2
Amortization of purchased intangible assets	0.7	1.4	0.4
Impairments of long-lived assets	6.2	1.1	1.2
Restructuring costs	0.3	0.1	0.2
Settlement costs (gains)	(0.8)	1.0	(0.2)
Charitable contribution	0.3	—	0.3
Total operating costs and expenses	94.3	91.6	87.1
Income from operations	5.7	8.4	12.9
Interest expense, net	(0.4)	(0.4)	(0.1)
Other income, net	0.1	0.2	0.1
Income before income taxes	5.4	8.2	12.9
Provision for (benefit of) income taxes	0.3	(0.8)	0.4
Net income	5.1 %	9.0 %	12.5 %

The following table presents supplementary financial data as a percentage of net revenue:

	Year Ended December 31,		
	2013	2012	2011
Net Revenue By Reportable Segment			
Broadband Communications	26.7%	26.9%	27.6%
Mobile and Wireless	47.3	47.6	47.1
Infrastructure and Networking	25.0	23.2	22.5
All Other (1)	1.0	2.3	2.8
Gross Margin Data			
Product gross margin	50.3%	48.5%	49.5%
Total gross margin	50.8	49.7	50.9
Stock-Based Compensation Expense (included in each functional line item)			
Cost of product revenue	0.3%	0.3%	0.3%
Research and development	4.4	4.6	4.9
Selling, general and administrative	1.6	1.8	1.7

(1) Income from the Qualcomm Agreement.

Net Revenue By Reportable Segments

The following tables present net revenue from each of our reportable segments:

	Year Ended December 31,			2013 vs 2012		2012 vs 2011	
	2013	2012	2011	\$ Change	% Change	\$ Change	% Change
(In millions, except percentages)							
Broadband Communications	\$ 2,220	\$ 2,156	\$ 2,039	\$ 64	3.0 %	\$ 117	5.7 %
Mobile and Wireless	3,919	3,809	3,484	110	2.9	325	9.3
Infrastructure and Networking	2,080	1,855	1,659	225	12.1	196	11.8
All Other ⁽¹⁾	86	186	207	(100)	(53.8)	(21)	(10.1)
Total net revenue	<u>\$ 8,305</u>	<u>\$ 8,006</u>	<u>\$ 7,389</u>	<u>\$ 299</u>	<u>3.7</u>	<u>\$ 617</u>	<u>8.4</u>

- (1) Income from the Qualcomm Agreement.

Broadband Communications. The increase in 2013 net revenue resulted primarily from an increase in sales of our set-top box (STB) solutions of \$132 million, partially offset by a reduction in sales of our digital television and Blu-ray Disc products of \$44 million and a decrease in sales of our broadband modem products of \$24 million. The increase in 2012 net revenue resulted primarily from an increase in sales of our broadband modems of \$157 million and STB solutions of \$39 million, partially offset by a reduction in sales of our digital television and Blu-ray Disc products of \$79 million. Revenue growth for our STB solutions is generally driven by global subscriber growth, the adoption of new communication features (including multi-stream transcoding and MoCA 2.0), market share gains, geographic expansion, particularly in developing markets, and the roll-out of more highly integrated platforms by global service providers. The decrease in sales of our digital television and Blu-ray Disc products was the result of our decision to exit from those particular consumer electronic markets and reallocate resources to more attractive opportunities. Growth in sales of broadband modem solutions is generally driven by new and faster technology standards, such as the transition from DOCSIS 2.0 to DOCSIS 3.0, share gains, subscriber growth, and momentum in emerging areas, such as small cells.

Mobile and Wireless. The increase in 2013 net revenue resulted primarily from an increase in sales of both our wireless connectivity products of \$78 million and cellular SoCs of \$47 million, partially offset by a decrease in our discrete multimedia co-processor products of \$36 million. In addition, we also saw an increase in sales of other technologies incorporated primarily into handheld devices of \$21 million in 2013, as growth in sales of touch controllers and VoIP products was partially offset by a decrease in sales of WiMAX products. The increase in 2012 net revenue resulted primarily from an increase in sales of our wireless connectivity products of \$250 million, other wireless technology products of \$141 million and cellular SoCs of \$63 million, partially offset by a decrease in sales of our discrete multimedia co-processors of \$129 million. Growth in our wireless connectivity business is generally driven by increased demand for higher-end end-devices which require Wi-Fi, Bluetooth and near field communication (NFC) connectivity. The ramp of new connectivity technologies and devices with richer features also contributed to growth. For example, in connectivity, we are seeing the transition from single to dual-band Wi-Fi and from 802.11n to 802.11ac. The increase in revenue for our cellular SoCs has been generally driven by (i) growth in sales of SoCs; and (ii) increased SoC feature richness (including the migration from 2G to 3G), which tends to drive higher average selling prices. This trend has been partially offset by intense price competition for 3G SoCs. The decrease in sales of our discrete multimedia co-processors was driven by the end of life of certain customer products incorporating that technology.

Infrastructure and Networking. The increase in 2013 net revenue resulted primarily from an increase in sales of our Ethernet switches, PHYs and controllers of \$182 million and communication processor and wireless infrastructure of \$43 million. The increase in 2012 net revenue resulted primarily from sales of our communication processors of \$264 million, partially offset by softness in sales of Ethernet switches, PHYs and controllers of \$68 million. Growth in Ethernet switches and PHYs is generally driven by continued build outs of packet-based networks to support the delivery of video and mobile data over the Internet, an increase in hosted services and cloud

computing, and the ongoing growth in unified communications in the enterprise. The increase in sales of our communication processors in 2012 resulted from our acquisition of NetLogic in February 2012.

Concentration of Net Revenue

Sales to our significant customers, including sales to their manufacturing subcontractors, as a percentage of net revenue were as follows:

	Year Ended December 31,		
	2013	2012	2011
Samsung	21.3%	17.3%	10.0%
Apple	13.3	14.6	13.1
Five largest customers as a group	48.3	46.9	42.3

No other customer represented more than 10% of our annual net revenue in these years.

We expect that our largest customers will continue to account for a substantial portion of our total net revenue for the foreseeable future. Our largest customers and their respective contributions to our total net revenue have varied and will likely continue to vary from period to period. For additional information about geographical information of our net revenue, see further discussion in Note 12 of Notes to Consolidated Financial Statements.

Factors That May Impact Net Revenue

The demand for our products and the subsequent recognition of net revenue has been affected in the past, and may continue to be affected in the future, by various factors, including, but not limited to, the following:

- general economic and specific conditions in the markets we address, including the continuing volatility in the technology sector and semiconductor industry, and trends in the wired and wireless communications markets in various geographic regions, including seasonality in sales of consumer products into which our products are incorporated;
- the timing, rescheduling or cancellation of significant customer orders and our ability, as well as the ability of our customers and distributors, to manage inventory;
- the timing of our distributors' shipments to their customers or when products are taken by our customers under hubbing arrangements;
- our ability to specify, develop or acquire, complete, introduce, market and transition to volume production new products and technologies in a cost effective and timely manner;
- our ability to successfully ramp cellular SoC's;
- the rate at which our present and future customers and end-users adopt and ramp our products and technologies;
- the qualification, availability and pricing of competing products and technologies and the resulting effects on sales and pricing of our products; and
- the availability of credit and financing, which may lead certain of our customers to reduce their level of purchases or to seek credit or other accommodations from us.

Rebates. We recorded rebates to certain customers of \$888 million, or 10.7% of net revenue, \$727 million, or 9.1% of net revenue and \$643 million, or 8.7% of net revenue, in 2013, 2012 and 2011, respectively. The increase in rebates as a percent of net revenue was attributable to a change in the mix of sales to customers that participate in rebate programs, primarily in the Mobile and Wireless reportable segment. We reverse the accrual of unclaimed rebate amounts as specific rebate programs contractually end or when we believe unclaimed rebates are no longer subject to payment and will not be paid. We reversed accrued rebates of \$21 million, \$18 million and \$13 million, in 2013, 2012 and 2011, respectively. We anticipate that accrued rebates will vary in future periods based upon the level of overall sales to customers that participate in our rebate programs.

From time to time, our key customers place large orders causing our quarterly net revenue to fluctuate significantly. We expect that these fluctuations will continue and that they may be exaggerated by the seasonal variations in consumer products and changes in the overall economic environment. For these and other reasons, our total net revenue and results of operations for the year ended December 31, 2013 and prior periods may not necessarily be indicative of future net revenue and results of operations.

Net Revenue, Cost of Product Revenue, Product Gross Margin, and Total Gross Margin

	Year Ended December 31,			2013 vs 2012		2012 vs 2011	
	2013	2012	2011	\$ Change	% Change	\$ Change	% Change
(In millions, except percentages)							
Product revenue	\$ 8,219	\$ 7,820	\$ 7,182	\$ 399	5.1 %	\$ 638	8.9 %
Income from Qualcomm Agreement	86	186	207	(100)	(53.8)	(21)	(10.1)
Total net revenue	\$ 8,305	\$ 8,006	\$ 7,389	\$ 299	3.7	\$ 617	8.4
Cost of product revenue	\$ 4,088	\$ 4,027	\$ 3,626	\$ 61	1.5	\$ 401	11.1
Product gross margin	50.3%	48.5%	49.5%				
Total gross margin	50.8%	49.7%	50.9%				

Cost of Product Revenue and Product Gross Margin. Cost of product revenue comprises the cost of our semiconductor devices, which consists of the cost of purchasing finished silicon wafers manufactured by independent foundries, costs associated with our purchase of assembly, test and quality assurance services and packaging materials for semiconductor products, as well as royalties and license fees paid to vendors and to non-practicing entities, or NPEs. Also included in cost of product revenue is the amortization of purchased technology and inventory valuation step-up, and manufacturing overhead, including costs of personnel and equipment associated with manufacturing support, product warranty costs, provisions for excess and obsolete inventories, and stock-based compensation expense for personnel engaged in manufacturing support. Product gross margin is product revenue less cost of product revenue divided by product revenue and does not include income from the Qualcomm Agreement. Total gross margin is total net revenue less cost of product revenue divided by total net revenue.

Product gross margin in 2013 increased to 50.3% primarily due to a reduction of inventory valuation step-up of \$71 million and a decrease in amortization of purchased intangibles of \$27 million, offset in part by an increase in excess and obsolete inventory expense of \$20 million and a decrease in cancellation fees of \$7 million. The decrease in 2013 amortization of purchased intangible assets primarily related to completed technology and customer relationships no longer being expensed due to the asset impairment charges taken during the year (see discussion below) and other assets becoming fully amortized in 2012. The decrease in the inventory valuation step-up was primarily the result of the sell through of inventory acquired from the acquisitions of NetLogic and BroadLight, Inc., or BroadLight, in 2012. Product gross margin in 2012 decreased to 48.5% primarily because of increases in amortization of purchased intangibles and inventory valuation step-up of \$144 million and \$48 million, respectively, offset in part by revenue generated by our acquisition of NetLogic (which business generally has higher product gross margins), and increases in cancellation fees received of \$11 million. The increase in the amortization of purchased intangibles and inventory valuation step-up were primarily the result of our acquisitions of NetLogic and BroadLight. Product gross margin includes \$39 million, \$27 million and \$23 million of licensing revenue related to our intellectual property in 2013, 2012 and 2011, respectively. Product gross margin also includes \$27 million, \$27 million and \$8 million of licensing costs related to NPEs in 2013, 2012, and 2011, respectively.

Factors That May Impact Product Gross Margin

Our product gross margin has been affected in the past, and may continue to be affected in the future, by various factors, including, but not limited to, the following:

- our product mix and volume of product sales (including sales to high volume customers);
- introduction of products with lower margins;
- the positions of our products in their respective life cycles;
- the effects of competition;
- the effects of competitive pricing programs and rebates;
- provisions for excess and obsolete inventories and their relationship to demand volatility;
- manufacturing cost efficiencies and inefficiencies;
- our ability to create cost advantages through successful integration and convergence;
- fluctuations in direct product costs such as silicon wafer costs and assembly, packaging and testing costs;
- our ability to advance to the next technology node faster than our competitors;
- licensing royalties payable by us, including licensing fees paid to NPEs;
- the consolidation of foundry subcontractors that could potentially drive increased wafer prices;
- product warranty costs;
- fair value and related amortization of acquired tangible and intangible assets; and
- amortization of acquired inventory valuation step-up.

Our product and total gross margin may also be impacted by additional stock-based compensation expense, as discussed below, and the amortization of purchased intangible assets related to future acquisitions.

Research and Development Expense

Research and development expense consists primarily of salaries and related costs of employees engaged in research, design and development activities, including stock-based compensation expense. Development and design costs consist primarily of costs related to engineering design tools, mask and prototyping costs, testing and subcontracting costs. In addition, we incur costs related to facilities and equipment expense, among other items.

The following table presents details of research and development expense:

	Year Ended December 31,			2013 vs 2012		2012 vs 2011	
	2013	2012	2011	\$ Change	% Change	\$ Change	% Change
(In millions, except percentages)							
Salaries and benefits	\$ 1,420	\$ 1,293	\$ 1,096	\$ 127	9.8 %	\$ 197	18.0 %
Stock-based compensation	363	368	363	(5)	(1.4)	5	1.4
Development and design costs	373	351	278	22	6.3	73	26.3
Other	330	306	246	24	7.8	60	24.4
Research and development	<u>\$ 2,486</u>	<u>\$ 2,318</u>	<u>\$ 1,983</u>	<u>\$ 168</u>	<u>7.2</u>	<u>\$ 335</u>	<u>16.9</u>

The increase in 2013 salaries and benefits was primarily attributable to an increase in headcount of approximately 1,100 personnel, bringing headcount to over 9,800 at December 31, 2013, which represents a 12.6% increase from our December 31, 2012 levels. Approximately 80% of the increase in headcount was the result of the Renesas Transaction in October 2013. This increase was offset by lower incentive compensation. See below for discussion of stock-based compensation. The increase in development and design costs in 2013 was primarily due to an increase in engineering design tool expenses. The increase in 2012 salaries and benefits and stock-based compensation were primarily attributable to an increase in headcount of approximately 1,450 personnel, bringing headcount to approximately 8,700 at December 31, 2012, which represents a 20.0% increase from our December 31, 2011 levels. Approximately 40% of the increase in headcount was the result of our acquisitions of NetLogic and

BroadLight. Development and design costs increased in 2012 due to increases in prototyping costs, engineering design tool expenses and licensing fees. Development and design costs vary from period to period depending on the timing of development and tape-out of various products. As we transition to 40 nanometers and 28 nanometers products, tape-out costs could increase. The increases in the *Other* line item in the above table are primarily attributable to increases in depreciation and facility expenses.

We remain committed to significant research and development efforts to extend our technology leadership in the wired and wireless communications markets in which we operate. Factors that may impact research and development costs include the diversification of the markets we serve, new product opportunities, the number of design wins that go into production, changes in our compensation policies, and any expansion into new markets and technologies, including acquisitions. In 2013, approximately 35% of our products were manufactured in 40 nanometers and 45% in 65 nanometers. We are designing most new products in 40 nanometers and 28 nanometers, and are beginning to evaluate FinFET technologies. We currently hold more than 9,000 U.S. and more than 3,850 foreign patents and more than 9,000 additional U.S. and foreign pending patent applications. We maintain an active program of filing for and acquiring additional U.S. and foreign patents in wired and wireless communications and other fields.

Selling, General and Administrative Expense

Selling, general and administrative expense consists primarily of personnel-related expenses, including stock-based compensation expense, legal and other professional fees, facilities expenses and communications expenses.

The following table presents details of selling, general and administrative expense:

	Year Ended December 31,			2013 vs 2012		2012 vs 2011	
	2013	2012	2011	\$ Change	% Change	\$ Change	% Change
(In millions, except percentages)							
Salaries and benefits	\$ 343	\$ 344	\$ 293	\$ (1)	(0.3)%	\$ 51	17.4 %
Stock-based compensation	130	148	126	(18)	(12.2)	22	17.5
Legal and accounting fees	98	84	149	14	16.7	(65)	(43.6)
Other	135	120	114	15	12.5	6	5.3
Selling, general and administrative	\$ 706	\$ 696	\$ 682	\$ 10	1.4	\$ 14	2.1

The decrease in 2013 salaries and benefits was primarily attributable to lower incentive compensation, offset by an increase in headcount of approximately 100 personnel, bringing headcount to over 2,000 at December 31, 2013, which represents a 5.3% increase from our December 31, 2012 level. Approximately 50% of the increase in headcount was the result of the Renesas Transaction in October 2013. See below for discussion of stock-based compensation. The increase in 2012 salaries and benefits and stock-based compensation were primarily attributable to an increase in headcount of approximately 150 personnel, bringing headcount to approximately 1,900 at December 31, 2012, which represents an 8.6% increase from our December 31, 2011 levels. Approximately 90% of the increase in headcount was the result of our acquisitions of NetLogic and BroadLight. The decreases in 2012 legal and accounting fees was primarily driven by the conclusion of several outstanding legal matters, including the settlement of a shareholder derivative action in 2011 and certain patent infringement claims. In 2011 legal and accounting fees included a final \$25 million payment to the plaintiffs' counsel for attorneys' fees, expenses and costs. Legal fees consist primarily of attorneys' fees and expenses related to our outstanding intellectual property and prior years' securities litigation, patent prosecution and filings and various other transactions. Legal fees fluctuate from period to period due to the nature, scope, timing and costs of the matters in litigation. See Note 9 of Notes to the Consolidated Financial Statements for further information. The increases in the *Other* line item in the above table are primarily attributable to increases in facilities expenses in 2013 and increases in travel expenses in 2012.

Stock-Based Compensation Expense

The following table presents details of total stock-based compensation expense that is *included* in each functional line item in our consolidated statements of income:

	Year Ended December 31,			2013 vs 2012		2012 vs 2011	
	2013	2012	2011	\$ Change	% Change	\$ Change	% Change
(In millions, except percentages)							
Cost of product revenue	\$ 25	\$ 27	\$ 24	\$ (2)	(7.4)%	\$ 3	12.5%
Research and development	363	368	363	(5)	(1.4)	5	1.4
Selling, general and administrative	130	148	126	(18)	(12.2)	22	17.5
	<u>\$ 518</u>	<u>\$ 543</u>	<u>\$ 513</u>	<u>\$ (25)</u>	<u>(4.6)</u>	<u>\$ 30</u>	<u>5.8</u>

In 2013, 2012 and 2011, we granted equity awards with a fair value of \$478 million, \$453 million and \$458 million, respectively, primarily related to our regular annual equity compensation review program. In 2012 we assumed equity awards that had originally been granted by NetLogic and BroadLight, which awards had a fair value of \$215 million. The decrease in 2013 from 2012 expense related primarily to non-recurring accelerated vesting of equity awards in 2012 upon the termination of certain employees with change in control agreements in connection with our acquisition of NetLogic.

The following table presents details of unearned stock-based compensation currently estimated to be expensed in 2014 through 2018 related to unvested share-based payment awards:

	2014	2015	2016	2017	2018	Total
(In millions)						
Unearned stock-based compensation	\$ 399	\$ 249	\$ 125	\$ 23	\$ —	\$ 796

If there are any modifications or cancellations of the underlying unvested awards, we may be required to accelerate, increase or cancel any remaining unearned stock-based compensation expense. Future stock-based compensation expense and unearned stock-based compensation will increase to the extent that we grant additional equity awards to employees or assume unvested equity awards in connection with acquisitions.

It is our long-term objective that total stock-based compensation approximates 5% of total net revenue. See Note 8 of Notes to Consolidated Financial Statements for a discussion of activity related to share-based awards.

Amortization of Purchased Intangible Assets

The following table presents details of the amortization of purchased intangible assets *included* in the cost of product revenue and other operating expense categories:

	Year Ended December 31,			2013 vs 2012		2012 vs 2011	
	2013	2012	2011	\$ Change	% Change	\$ Change	% Change
(In millions, except percentages)							
Cost of product revenue	\$ 171	\$ 198	\$ 54	\$ (27)	(13.6)%	\$ 144	266.7%
Other operating expenses	57	113	30	(56)	(49.6)	83	276.7
	<u>\$ 228</u>	<u>\$ 311</u>	<u>\$ 84</u>	<u>\$ (83)</u>	<u>(26.7)</u>	<u>\$ 227</u>	<u>270.2</u>

The decrease in 2013 amortization of purchased intangible assets primarily related to completed technology and customer relationships no longer being expensed due to the asset impairments charges taken during the year (see discussion below) and other assets becoming fully amortized in 2012. In 2012 we recorded purchased intangible

assets of \$1.78 billion primarily related to our acquisitions of NetLogic and BroadLight, which resulted in an increase in amortization of purchased intangible assets in 2012.

The following table presents details of the amortization of existing purchased intangible assets (including IPR&D), which is currently estimated to be expensed in 2014 and thereafter:

	Purchased Intangible Asset Amortization by Year						
	2014	2015	2016	2017	2018	Thereafter	Total
	(In millions)						
Cost of product revenue	\$ 197	\$ 180	\$ 159	\$ 137	\$ 116	\$ 294	\$ 1,083
Other operating expenses	34	14	5	3	2	3	61
	<u>\$ 231</u>	<u>\$ 194</u>	<u>\$ 164</u>	<u>\$ 140</u>	<u>\$ 118</u>	<u>\$ 297</u>	<u>\$ 1,144</u>

We amortize our intangible assets with definitive lives using a method that reflects the pattern in which the economic benefits of the intangible asset are consumed or otherwise used or, if that pattern cannot be reliably determined, using a straight-line method. In addition, based on our current assumptions, IPR&D assets will be reclassified to development technology through 2016 and amortized over their estimated useful lives. If we acquire additional purchased intangible assets in the future, our cost of product revenue or operating expenses will be increased by the amortization of those assets.

In-Process Research and Development

We capitalized IPR&D of \$267 million for NetLogic and \$45 million for Provigent, in 2012 and 2011, respectively. For a description of our valuation techniques and significant assumptions underlying the valuation of the ongoing development projects that were in process at the date of acquisition and were capitalized as IPR&D, see the discussion in Note 3 of Notes to the Consolidated Financial Statements. In 2013 we reclassified \$83 million of IPR&D costs to developed technology primarily related to digital front end (DFE) processors from our acquisition of NetLogic. These purchased intangible assets were subsequently impaired as discussed below.

Impairment of Goodwill and Other Long-Lived Assets

We performed annual impairment assessments of the carrying value of goodwill in October 2013, 2012 and 2011. Upon completion of these assessments, we determined no impairment was indicated as the estimated fair value of each of the reporting units exceeded its respective carrying value.

During the six months ended June 30, 2013 we had a steady reduction in near-term sales forecasts for NetLogic products included in the Infrastructure and Networking reportable segment, sold into the service provider market, which caused us to review our long-term forecasts. In addition, we reduced our longer-term expectations of the size of the addressable market for these products. As a result of these triggering events, we performed a detailed impairment analysis of the long-lived assets associated with these products during the three months ended June 30, 2013. Based on our analysis, we determined certain assets acquired from NetLogic were not recoverable, requiring us to reduce the associated carrying value to fair value. Specifically, we impaired \$238 million of completed technology, \$88 million of IPR&D and \$48 million of customer relationships related to our embedded and knowledge-based processor products. We also impaired \$87 million of completed technology related to our DFE processor products. For DFE, one of our smaller product lines, our customers indicated that they prefer custom solutions as opposed to standard merchant solutions. In response, we have decided to redirect our efforts by focusing on developing customized solutions and have consequently fully impaired the assets related to the acquired DFE merchant product line.

In 2013 and 2012 we recorded impairment charges of \$41 million and \$49 million, respectively, each related to our acquisition of Provigent, Inc. included in the Infrastructure and Networking reportable segment. The primary factor contributing to these impairment charges was the continued reduction in revenue outlook for certain products and the resulting decrease in the estimated cash flows identified with impaired assets over those respective years.

In 2011 we recorded impairment charges of \$74 million, related to our 2010 acquisition of Beceem Communications, Inc., or Beceem, included in our Mobile and Wireless reportable segment. The primary factor contributing to this impairment charge was the continued reduction in the forecasted cash flows derived from the acquired WiMAX products as wireless service providers have accelerated their adoption of Long Term Evolution (LTE) products.

In 2012 we recorded impairment charges of \$38 million related to six other acquisitions and \$3 million related to certain computer software and equipment. In 2011 we recorded other impairment charges of \$18 million, primary relating to the reduction in revenue outlook for certain products and the resulting decrease in the estimated cash flows identified with the impaired assets.

For the carrying balances of our goodwill by reporting segment and a description of our valuation techniques and significant assumptions as well as details of our other long-lived assets and related impairment charges taken, see the discussion in Note 10 of Notes to the Consolidated Financial Statements.

Settlement Costs (Gains)

In 2013 we received a payment of \$75 million, net of contingent legal fees, and recorded this as a gain on settlement. In addition, we recorded settlement costs of \$6 million related to patent infringement claims in 2013.

In 2012 we recorded net settlement costs of \$79 million, which was comprised of \$88 million of settlement costs related to patent infringement claims, offset by settlement gains of \$9 million (primarily related to the resolution of certain employment tax matters). In 2012 we received a payment of \$58 million related to a partial settlement and license agreement. We accounted for this transaction as a multiple element arrangement and immediately recognized a \$2 million gain on settlement of litigation and allocated the remaining \$56 million to the licensing of intellectual property. The licensing portion will be recorded as net revenue over the ten year term of the license.

In 2011 we recorded net settlement gains of \$18 million, which was comprised of \$55 million of settlement gains (primarily related to the settlement of a shareholder derivative action), offset by settlement costs of \$37 million related to the settlement of patent infringement claims.

For a further discussion of our settlement costs and litigation matters, see Note 9 of Notes to the Consolidated Financial Statements.

Restructuring Costs, Net

In September 2013 our Board of Directors approved and we initiated a global restructuring plan to reduce our expenses and better align our resources to areas of strategic focus. We recorded net restructuring costs of \$29 million in 2013 and expect to record additional costs of approximately \$5 million in the three months ending March 31, 2014. Excluding the simultaneous integration actions to synergize our research and development efforts in conjunction with the Renesas Transaction, we currently believe the actions that we have taken should result in a reduction of our anticipated growth in operating expenses of approximately \$50 million in 2014.

In 2012 we incurred \$7 million in restructuring costs primarily associated with additional costs for retention bonuses and facilities relating to the restructuring plan noted below, and severance and facility charges associated with synergies identified during the integration of our acquisition of NetLogic. These restructuring plans were completed in 2012.

As part of our regular portfolio management review process and in light of our decision to significantly reduce our investment in our digital television and Blu-ray Disc product lines within our Broadband Communications operating segment, in September 2011 we implemented a restructuring plan to reduce our worldwide headcount by approximately 300 employees. In connection with this plan, in 2011 we recorded \$16 million in net restructuring

costs, of which \$12 million was related to severance and other charges associated with our reduction in workforce across multiple locations and functions, and \$4 million was related to the closure of three of our facilities. We did not realize any net cost savings from this restructuring plan as we allocated resources to higher return opportunities.

See Note 11 of Notes to the Consolidated Financial Statements.

Charitable Contribution

In 2009 we established the Broadcom Foundation, or the Foundation, to support science, technology, engineering and mathematics programs, as well as a broad range of community services and contributed \$50 million to the Foundation. In June 2011 we contributed an additional \$25 million to the Foundation. Approximately \$2 million of the \$25 million contribution came from Dr. Henry Samueli, our Chairman of the Board of Directors and Chief Technical Officer, who made such payment to Broadcom in connection with the settlement of a shareholder derivative action as further described in Note 9 of Notes to the Consolidated Financial Statements. In September 2013 we contributed an additional \$25 million to the Broadcom Foundation. These payments were recorded as an operating expense in our consolidated statements of income in 2011 and 2013, respectively.

Interest Expense and Other Income, Net

The following table presents interest expense and other income, net:

	Year Ended December 31,			2013 vs 2012	2012 vs 2011
	2013	2012	2011	\$ Change	
	(In millions)				
Interest expense, net	\$ (30)	\$ (30)	\$ (5)	\$ —	\$ (25)
Other income, net	3	10	8	(7)	2
	\$ (27)	\$ (20)	\$ 3	\$ (7)	\$ (23)

Interest expense, net, reflects interest expense on our senior unsecured notes with an outstanding principal balance at December 31, 2013 of \$1.40 billion, offset by interest income earned on cash, cash equivalents and marketable securities balances. Other income, net, primarily includes gains and losses on foreign currency transactions, asset disposals and strategic investments.

The increases in interest expense from 2011 through 2013 was driven primarily by interest expense related to our senior unsecured notes of \$700 million issued in November 2010, \$500 million issued in November 2011, and \$500 million issued in August 2012.

Provision for (Benefit of) Income Taxes

	Year Ended December 31,		
	2013	2012	2011
	(In millions, except percentages)		
Provision for (benefit of) income taxes	\$ 21	\$ (63)	\$ 29
Effective tax rates	4.7%	(9.6)%	3.0%

The federal statutory rate was 35% for 2013, 2012 and 2011. The differences between our effective tax rates and the federal statutory tax rate primarily relate to foreign earnings taxed at substantially lower rates than the federal statutory rate due principally to our tax incentives in Singapore and domestic tax losses recorded without tax benefits. During 2013, we recorded tax benefits resulting from the reduction of certain foreign deferred tax liabilities of \$10 million and tax benefits resulting from the expiration of statutes of limitations for the assessment of taxes primarily in various foreign jurisdictions of \$9 million. We also recorded a tax provision of \$3 million in 2013 resulting from tax legislation enacted in

Israel on August 5, 2013. During 2012 we recorded tax benefits resulting from the reduction of certain foreign deferred tax liabilities of \$12 million and tax benefits resulting from reductions in our U.S. valuation allowance on certain deferred tax assets due to recording net deferred tax liabilities for identifiable intangible assets under purchasing accounting of \$51 million for certain acquisitions. We realized tax benefits resulting from the reversal of certain prior period tax accruals of \$13 million and \$9 million in 2012 and 2011, respectively. These reversals resulted primarily from the expiration of the statutes of limitations for the assessment of taxes related to certain foreign subsidiaries. We recorded a tax provision of \$13 million in 2011 resulting from legislation enacted in Israel on December 5, 2011, which increased tax rates for 2012 and later years applicable to our Israel net deferred tax liabilities, principally related to purchased intangible assets.

We operate under tax incentives in Singapore, which are effective through March 2014. The tax incentives are conditional upon our meeting certain employment and investment thresholds. The impact of the Singapore tax incentives decreased Singapore taxes by \$423 million, \$399 million and \$368 million for 2013, 2012 and 2011, respectively. The benefit of the tax incentives on net income per share (diluted) was \$0.73, \$0.69 and \$0.65 for 2013, 2012 and 2011, respectively. For periods after March 31, 2014, we expect to utilize our Irish trading company for certain foreign operations, which we believe would result in a similar foreign tax provision as our current Singapore tax incentive.

Subsequent Events

In January 2014 our Board of Directors adopted an amendment to our existing dividend policy pursuant to which we intend to increase the quarterly cash dividend by 9% to \$0.12 per share (\$0.48 per share on an annual basis) and declared a quarterly cash dividend of \$0.12 per share payable to holders of our common stock.

Liquidity and Capital Resources

Working Capital and Cash and Marketable Securities.

The following table presents working capital, cash and cash equivalents, and marketable securities:

	December 31,		\$ Change
	2013	2012	
	(In millions)		
Working capital	\$ 2,419	\$ 2,099	\$ 320
Cash and cash equivalents	\$ 1,657	\$ 1,617	40
Short-term marketable securities	775	757	18
Long-term marketable securities	1,939	1,348	591
Total cash and cash equivalents and marketable securities	\$ 4,371	\$ 3,722	\$ 649

See the summary of cash, cash equivalents, short and long-term marketable securities by major security type and discussion of market risk that follows in Item 7A. *Quantitative and Qualitative Disclosures about Market Risk.*

Cash Provided and Used in 2013, 2012 and 2011.

The following table presents cash provided and used:

	Year Ended December 31,		
	2013	2012	2011
	(In millions)		
Net cash provided by operating activities	\$ 1,785	\$ 1,931	\$ 1,838
Net cash provided by (used in) investing activities	(996)	(4,796)	863
Net cash provided by (used in) financing activities	(749)	336	(177)
Increase (decrease) in cash and cash equivalents	40	(2,529)	2,524
Cash and cash equivalents at beginning of period	1,617	4,146	1,622
Cash and cash equivalents at end of period	\$ 1,657	\$ 1,617	\$ 4,146

Operating Activities

In 2013 our operating activities provided \$1.79 billion in cash. This was primarily the result of net income of \$424 million and net non-cash operating expenses of \$1.43 billion, offset in part by changes in operating assets and liabilities of \$67 million. In 2012 our operating activities provided \$1.93 billion in cash. This was primarily the result of net income of \$719 million, net non-cash operating expenses of \$1.06 billion and changes in operating assets and liabilities of \$152 million. In 2011 our operating activities provided \$1.84 billion in cash. This was primarily the result of net income of \$927 million, net non-cash operating expenses of \$782 million and changes in operating assets and liabilities of \$129 million.

Our days sales outstanding increased from 32 days at December 31, 2012 to 35 days at December 31, 2013. We typically bill customers on an open account basis subject to our standard net thirty day payment terms. If, in the longer term, our revenue increases, it is likely that our accounts receivable balance will also increase. Our accounts receivable could also increase if customers delay their payments or if we grant extended payment terms to customers, both of which are more likely to occur during challenging economic times when our customers may have difficulty gaining access to sufficient credit on a timely basis.

Our inventory days on hand at December 31, 2013 remained flat at 47 days. In the future, our inventory levels will continue to be determined by the level of purchase orders we receive and the stage at which our products are in their respective product life cycles, our ability, and the ability of our customers, to manage inventory under hubbing arrangements, and competitive situations in the marketplace. Such considerations are balanced against the risk of obsolescence or potentially excess inventory levels.

Investing Activities

Investing activities used \$996 million in cash in 2013, which was primarily the result of \$611 million in net purchases of marketable securities, \$228 million of capital equipment purchases mostly to support our research and development efforts, \$142 million in net cash paid for the Renesas Transaction and \$15 million of purchases of strategic investments.

Investing activities used \$4.80 billion in cash in 2012, which was primarily the result of \$3.58 billion in net cash paid for our acquisitions, primarily NetLogic and BroadLight, \$244 million of capital equipment purchases mostly to support our research and development efforts and \$997 million in net purchases of marketable securities, offset in part by \$27 million of proceeds from the sale of strategic investments.

Investing activities provided \$863 million in cash in 2011, which was primarily the result of \$1.38 billion in net proceeds from sales and maturities of marketable securities, offset in part by \$347 million in net cash paid primarily for the acquisitions of Provigent and SC Square Ltd. and \$163 million of capital equipment purchases, mostly to support our research and development efforts.

Financing Activities

Our financing activities used \$749 million in cash in 2013, which was primarily the result of \$597 million in repurchases of our Class A common stock, the repayment of long-term debt of \$300 million, dividends paid of \$254 million and \$130 million in minimum tax withholding paid on behalf of employees for shares issued pursuant to restricted stock units, offset in part by \$532 million in proceeds received from issuances of common stock upon the exercise of stock options and pursuant to our employee stock purchase plan.

Our financing activities provided \$336 million in cash in 2012, which was primarily the result of \$492 million in proceeds from the issuance of long-term debt and \$311 million in proceeds received from issuances of common stock upon the exercise of stock options and pursuant to our employee stock purchase plan, offset in part dividends paid of \$224 million, \$153 million in minimum tax withholding paid on behalf of employees for shares issued pursuant to restricted stock units, \$57 million in payments of contingent consideration and debt assumed from certain acquisitions, and \$33 million in repurchases of shares of our Class A common stock.

Our financing activities used \$177 million in cash in 2011, which was primarily the result of \$670 million in repurchases of shares of our Class A common stock, dividends paid of \$194 million and \$155 million in minimum tax withholding paid on behalf of employees for shares issued pursuant to restricted stock units, offset in part by \$494 million in proceeds from the issuance of our long-term debt and \$348 million in proceeds received from issuances of common stock upon exercise of stock options and pursuant to our employee stock purchase plan.

The timing and number of stock option exercises and employee stock purchases and the amount of cash proceeds we receive from these equity awards are not within our control. As it is now our general practice to issue restricted stock units, or RSUs, instead of stock options we will likely not generate as much cash from the exercise of stock options as we have in the past. Unlike the exercise of stock options, the issuance of shares upon vesting of RSUs does not result in any cash proceeds to Broadcom and in fact requires the use of cash, as we currently allow employees to have a portion of the shares issued upon vesting of RSUs withheld to satisfy minimum statutory withholding taxes. This withholding procedure requires that we pay cash to the appropriate tax authorities on each participating employee's behalf.

Short and Long-Term Financing Arrangements

At December 31, 2013, we had the following resources available to obtain short-term or long-term financings if we need additional liquidity:

Registration Statement

We have a Form S-4 acquisition shelf registration statement on file with the SEC. The registration statement on Form S-4 enables us to issue up to 30 million shares of our Class A common stock in one or more acquisition transactions. These transactions may include the acquisition of assets, businesses or securities by any form of business combination. To date no securities have been issued pursuant to the S-4 registration statement, which does not have an expiration date mandated by SEC rules.

Credit Facility

In November 2010 we entered into a credit facility, with certain institutional lenders that provides for unsecured revolving facility loans, swing line loans and letters of credit in an aggregate amount of up to \$500 million. This credit facility, which was amended in October 2011, has a maturity date of November 19, 2016, at which time all outstanding revolving facility loans (if any) and accrued and unpaid interest must be repaid. We have not drawn on the credit facility since its inception.

The credit facility contains customary representations, warranties and covenants. Financial covenants require us to maintain a consolidated leverage ratio of no more than 3.25 to 1.00 and a consolidated interest coverage ratio of no less than 3.00 to 1.00. We were in compliance with all credit facility debt covenants as of December 31, 2013.

Senior Notes

The following table summarizes details of our senior unsecured notes, or Notes:

Date Issued	Maturity Date	Interest Rate	Effective Yield	Original Issue Discount	December 31,		\$ Change
					2013	2012	
(In millions)							
November 2010	November 2013	1.500%	1.605%	99.694%	\$ —	\$ 300	\$ (300)
November 2010	November 2015	2.375	2.494	99.444	400	400	—
November 2011	November 2018	2.700	2.762	99.609	500	500	—
August 2012	August 2022	2.500	2.585	99.255	500	500	—
					\$ 1,400	\$ 1,700	\$ (300)
Unaccreted discount					(6)	(7)	1
Less current portion of long-term debt					—	(300)	300
Long-term debt					\$ 1,394	\$ 1,393	\$ 1

Proceeds from the issuance of the 2022 Notes are being utilized for general corporate purposes, which included the repayment of our 1.500% 2013 Notes. Proceeds from the issuance of the 2018 Notes were utilized to help fund the acquisition of NetLogic. Proceeds from the issuance of the 2013 Notes and the 2015 Notes were utilized for general corporate purposes.

The outstanding Notes described above contain a number of restrictive covenants, including, but not limited to, restrictions on our ability to grant liens on assets; enter into sale and lease-back transactions; or merge, consolidate or sell assets. Failure to comply with these covenants, or any other event of default, could result in acceleration of the principal amount and accrued and unpaid interest on the Notes. We were in compliance with all senior unsecured notes debt covenants as of December 31, 2013.

Other Notes and Borrowings

We had no other significant notes or borrowings as of December 31, 2013.

Commitments and Other Contractual Obligations

The following table presents details of our commitments and other contractual obligations, which are currently estimated to be paid in 2014 and thereafter:

	Payment Obligations by Year						
	2014	2015	2016	2017	2018	Thereafter	Total
(In millions)							
Operating leases	\$ 170	\$ 143	\$ 100	\$ 58	\$ 42	\$ 43	\$ 556
Inventory and related purchase obligations	724	—	—	—	—	—	724
Other obligations	206	41	24	3	—	—	274
Long-term debt and related interest	36	435	26	26	526	550	1,599
	\$ 1,136	\$ 619	\$ 150	\$ 87	\$ 568	\$ 593	\$ 3,153

We lease our facilities and certain engineering design tools and information systems equipment under operating lease agreements. Our leased facilities comprise an aggregate of 4.4 million square feet. Our principal facilities in Irvine have lease terms that expire at various dates through 2017 with an aggregate rent of \$88 million (included in the table above).

Inventory and related purchase obligations represent purchase commitments for silicon wafers and assembly and test services. We depend upon third party subcontractors to manufacture our silicon wafers and provide assembly and test services. Due to lengthy subcontractor lead times, we must order these materials and services from subcontractors well in advance. We expect to receive and pay for these materials and services within the ensuing six months. Our subcontractor relationships typically allow for the cancellation of outstanding purchase orders but require payment of all expenses incurred through the date of cancellation.

Other obligations represent purchase commitments for lab test equipment, computer hardware, information systems infrastructure, mask and prototyping costs, intellectual property licensing arrangements and other commitments made in the ordinary course of business.

For purposes of the table above, obligations for the purchase of goods or services are defined as agreements that are enforceable and legally binding and that specify all significant terms, including: fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transaction. Our purchase orders are based on current manufacturing needs and are typically fulfilled by our vendors within a relatively short time horizon. We have additional purchase orders (not included in the table above) that represent authorizations to purchase rather than binding agreements. We do not have significant agreements for the purchase of inventories or other goods specifying minimum quantities or set prices that exceed our expected requirements.

Unrecognized tax benefits were \$403 million, of which \$57 million would result in potential cash payment of taxes and \$346 million would result in a reduction in certain net operating loss and tax credit carryforwards. We are not including any amount related to uncertain tax positions in the table presented above because of the difficulty in making reasonably reliable estimates of the timing of settlements with the respective taxing authorities. In addition to the unrecognized tax benefits, we have also recorded a liability for potential tax penalties and interest of \$30 million and \$6 million, respectively, at December 31, 2013.

Prospective Capital Needs

We believe that our existing cash, cash equivalents and marketable securities, together with cash generated from operations and from the issuance of common stock through our employee stock option and purchase plans, will be sufficient to cover our working capital needs, capital expenditures, investment requirements, commitments, repurchases of our Class A common stock and quarterly dividends for at least the next 12 months. However, it is possible that we may choose to raise additional funds or draw on our existing credit facility to finance our activities beyond the next 12 months or to consummate acquisitions of other businesses, assets, products or technologies. If needed, we may be able to raise such funds by selling equity or debt securities to the public or to selected investors or by borrowing money from financial institutions. We could also reduce certain expenditures, such as repurchases of our Class A common stock and payments of our quarterly dividends.

We earn a significant amount of our operating income outside the U.S., which is deemed to be permanently reinvested in foreign jurisdictions. For at least the next 12 months, we have sufficient cash in the U.S. and expect domestic cash flow to sustain our operating activities and cash commitments for investing and financing activities, such as acquisitions, quarterly dividends, share buy-backs and repayment of debt. In addition, we expect existing foreign cash, cash equivalents, short-term investments, and cash flows from operations to continue to be sufficient to fund our foreign operating activities and cash commitments for investing activities, such as material capital expenditures, for at least the next 12 months. If we were to repatriate our foreign earnings, which are permanently reinvested, it would not result in a significant tax liability because the amounts would be offset by our remaining net operating loss and tax credit carryforwards. As of December 31, 2013 we had approximately \$2.39 billion of cash, cash equivalents, and marketable securities held by our foreign subsidiaries.

In addition, even though we may not need additional funds, we may still elect to sell additional equity or debt securities or utilize or increase our existing credit facilities for other reasons. However, we may not be able to obtain additional funds on a timely basis at acceptable terms, if at all. If we raise additional funds by issuing additional equity or convertible debt securities, the ownership percentages of existing shareholders would be reduced. In

addition, the equity or debt securities that we issue may have rights, preferences or privileges senior to those of our Class A common stock.

Although we believe that we have sufficient capital to fund our activities for at least the next 12 months, our future capital requirements may vary materially from those now planned. We anticipate that the amount of capital we will need in the future will depend on many factors, including:

- general economic and specific conditions in the markets we address, including the continuing volatility in the technology sector and semiconductor industry, and trends in the wired and wireless communications markets in various geographic regions, including seasonality in sales of consumer products into which our products are incorporated;
- the overall levels of sales of our semiconductor products, licensing revenue, and product gross margins;
- our business, product, capital expenditure and research and development plans, and product and technology roadmaps;
- the market acceptance of our products;
- acquisitions of businesses, assets, products or technologies;
- the unavailability of credit and financing, which may lead certain of our customers to reduce their levels of purchases or to seek credit or other accommodations from us;
- litigation expenses, settlements and judgments, customer indemnification claims and other types of litigation risks;
- payment of cash dividends;
- required levels of research and development and other operating costs;
- volume price discounts and customer rebates;
- the levels of inventory and accounts receivable that we maintain;
- licensing royalties payable by us, including licensing fees paid to NPEs;
- capital improvements for new and existing facilities;
- changes in our compensation policies;
- the issuance of restricted stock units and the related cash payments we make for withholding taxes due from employees;
- repurchases of our Class A common stock;
- changes in tax laws;
- technological upgrades and improvements in our infrastructure technology systems;
- our competitors' responses to our products and our anticipation of and responses to their products;
- our relationships with suppliers and customers;
- the availability and cost of sufficient foundry, assembly and test capacity and packaging materials; and
- the level of exercises of stock options and stock purchases under our employee stock purchase plan.

In addition, we may require additional capital to accommodate planned future long-term growth, hiring, infrastructure and facility needs.

Off-Balance Sheet Arrangements

At December 31, 2013 we had no material off-balance sheet arrangements, other than our facility operating leases.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Interest Rate Risk

We manage our total portfolio to encompass a diversified pool of investment-grade securities to preserve principal and maintain liquidity. The average credit rating of our marketable securities portfolio by major credit rating agencies was Aa3/AA-. Investments in both fixed rate and floating rate instruments carry a degree of interest rate risk. Fixed rate securities may have their market value adversely impacted due to an increase in interest rates, while floating rate securities may produce less income than expected if interest rates fall. Due in part to these