ITEM 6. SELECTED FINANCIAL DATA

Years Ended (Dollars in Millions, Except Per Share Amounts)	Dec 31, 2016	Dec 26, 2015	Dec 27, 2014	Dec 28, 2013	Dec 29, 2012
Net revenue	$ 59,387	$ 55,355	$ 55,870	$ 52,708	$ 53,341
Gross margin	$ 36,191	$ 34,679	$ 35,609	$ 31,521	$ 33,151
Gross margin percentage	60.9%	62.6%	63.7%	59.8%	62.1%
Research and development (R&D)	$ 12,740	$ 12,128	$ 11,537	$ 10,611	$ 10,148
Marketing, general and administrative (MG&A)	$ 8,397	$ 7,930	$ 8,136	$ 8,088	$ 8,057
R&D and MG&A as percentage of revenue	35.6%	36.2%	35.2%	35.5%	34.1%
Operating income	$ 12,874	$ 14,002	$ 15,347	$ 12,291	$ 14,638
Net income	$ 10,316	$ 11,420	$ 11,704	$ 9,620	$ 11,005
Effective tax rate	20.3%	19.6%	25.9%	23.7%	26.0%
Earnings per share of common stock					
Basic	$ 2.18	$ 2.41	$ 2.39	$ 1.94	$ 2.20
Diluted	$ 2.12	$ 2.33	$ 2.31	$ 1.89	$ 2.13
Weighted average diluted shares of common stock outstanding	4,875	4,894	5,056	5,097	5,160
Dividends per share of common stock, declared and paid	$ 1.04	$ 0.96	$ 0.90	$ 0.90	$ 0.87
Net cash provided by operating activities	$ 21,808	$ 19,017	$ 20,418	$ 20,776	$ 18,884
Additions to property, plant and equipment	$ 9,625	$ 7,326	$ 10,105	$ 10,771	$ 11,027
Repurchase of common stock	$ 2,587	$ 3,001	$ 10,792	$ 2,147	$ 4,765
Payment of dividends to stockholders	$ 4,925	$ 4,556	$ 4,409	$ 4,479	$ 4,350

(Dollars in Millions)	Dec 31, 2016	Dec 26, 2015	Dec 27, 2014	Dec 28, 2013	Dec 29, 2012
Property, plant and equipment, net	$ 36,171	$ 31,858	$ 33,238	$ 31,428	$ 27,983
Total assets [1]	$ 113,327	$ 101,459	$ 90,012	$ 89,789	$ 82,228
Debt	$ 25,283	$ 22,670	$ 13,655	$ 13,385	$ 13,382
Stockholders' equity	$ 66,226	$ 61,085	$ 55,865	$ 58,256	$ 51,203
Employees (in thousands)	106.0	107.3	106.7	107.6	105.0

[1] *In Q1 2016, we elected to early adopt an amended standard requiring that we classify all deferred tax assets and liabilities as non-current on the consolidated balance sheet. The amended standard was adopted on a retrospective basis. As a result of the adoption, total assets in the preceding table have been restated for all years presented.*

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Our Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is provided in addition to the accompanying consolidated financial statements and notes to assist readers in understanding our results of operations, financial condition, and cash flows. MD&A is organized as follows:

- *Overview*. Discussion of our business and overall analysis of financial and other highlights affecting the company in order to provide context for the remainder of MD&A.
- *Critical Accounting Estimates*. Accounting estimates that we believe are most important to understanding the assumptions and judgments incorporated in our reported financial results and forecasts.
- *Results of Operations*. Analysis of our financial results comparing 2016 to 2015 and comparing 2015 to 2014.
- *Liquidity and Capital Resources*. Analysis of changes in our balance sheets and cash flows, and discussion of our financial condition and potential sources of liquidity.
- *Contractual Obligations and Off-Balance-Sheet Arrangements*. Overview of contractual obligations, contingent liabilities, commitments, and off-balance-sheet arrangements outstanding as of December 31, 2016, including expected payment schedule.

Overview

(Dollars in Billions, Except Per Share Amounts)

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a10kdocument_chart-13718.jpg	a10kdocument_chart-14805.jpg	a10kdocument_chart-15681.jpg
a10kdocument_chart-16558.jpg		

We achieved record revenue of $59.4 billion in 2016, up $4.0 billion, or 7%, from 2015. The increase was driven by the inclusion of PSG and growth in the DCG, CCG, and IOTG businesses. Net income for 2016 was $10.3 billion, and cash flow from operations was $21.8 billion.

- CCG revenue was $32.9 billion, up 2%, with platform volume down 10% and platform average selling prices up 11%. DCG revenue was $17.2 billion, up 8%, with platform volume up 8% and platform average selling prices down 1%.
- Gross margin dollars were $36.2 billion, up $1.5 billion from 2015. Gross margin of 60.9% was down 1.7 points from 2015. The gross margin percentage point decrease was driven primarily by Altera and other amortization of acquisition-related charges, lower NSG gross margin, higher factory start-up costs (primarily on 10nm), higher product warranty and intellectual property charges, and CCG non-platform products. The decrease was partially offset by lower platform unit costs, platform volume, and higher platform average selling prices.
- R&D and MG&A totaled $21.1 billion, up 5% from a year ago. R&D and MG&A were 35.6% of revenue in 2016, down approximately 1 point from 2015.
- Restructuring and other charges were $1.9 billion, primarily driven by our 2016 Restructuring Program.
- Earnings per share of $2.12 were down 21 cents, or 9% from a year ago. This decrease was primarily driven by higher restructuring and other charges, higher spending, and higher amortization of acquisition-related intangibles. The decrease was partially offset by platform volume and higher platform average selling prices.
- Record cash flow from operations in 2016 was approximately $21.8 billion. During 2016, we acquired Altera and other smaller acquisitions for $15.5 billion. We purchased $9.6 billion in capital assets, paid $4.9 billion in dividends, and repurchased $2.6 billion in stock. We issued $2.8 billion of long-term debt and assumed $1.5 billion as part of the Altera acquisition.

2016 has been a transformative year for Intel. We have made strides to move from a PC centric company to one that is powering the cloud and billions of smart, connected devices.

We are building on our strong position in client computing and are investing for growth in the data center, Internet of Things market segments, and disruptive differentiated memory technology. To accelerate our transformation, in Q2 2016, we announced the 2016 Restructuring Program, which is on track to reduce our headcount and generate savings. We are reallocating these savings to our growth segments, such as the data center and Internet of Things, and are continuing to invest in areas that extend our leadership in Moore's Law and expand market opportunities in areas such as memory and autonomous driving.

In Q1 2016, we completed the acquisition of Altera, a global semiconductor company that designs and sells programmable semiconductors and related products, and subsequently formed PSG. We have worked to integrate Altera throughout 2016 and the business continues to deliver new products and to grow. In September 2016, to further accelerate our transformation and focus our business on core strategic areas, we announced the planned divestiture of ISecG.

Our Business Outlook for Q1 2017 and full year 2017 includes, where applicable, our current expectations for revenue, gross margin percentage, spending (R&D plus MG&A), and capital expenditures. We publish our Business Outlook in our quarterly earnings release. Our Business Outlook and any updates thereto are publicly available on our Investor Relations website, *www.intc.com*. This Business Outlook is not incorporated by reference in this Form 10-K. We expect that our corporate representatives will, from time to time, meet publicly or privately with investors and others, and may reiterate the forward-looking statements contained in the Business Outlook or in this Form 10-K. The statements in the Business Outlook and forward-looking statements in this Form 10-K are subject to revision during the course of the year in our quarterly earnings releases and SEC filings and at other times. The forward-looking statements in the Business Outlook will be effective through the close of business on March 17, 2017, unless updated earlier. From the close of business on March 17, 2017 until our quarterly earnings release is published, currently scheduled for April 27, 2017, we will observe a "quiet period." During the quiet period, the Business Outlook and other forward-looking statements first published in our Form 8-K filed on January 26, 2017, and other forward-looking statements disclosed in the company's news releases and filings with the SEC, as reiterated or updated as applicable in this Form 10-K, should be considered historical, speaking as of prior to the quiet period only and not subject to update. During the quiet period, our representatives will not comment on our Business Outlook or our financial results or expectations. The exact timing and duration of the routine quiet period, and any others that we utilize from time to time, may vary at our discretion.

Critical Accounting Estimates

The methods, estimates, and judgments that we use in applying our accounting policies have a significant impact on our financial position and the results that we report in our consolidated financial statements. Some of these policies require us to make subjective estimates and apply judgment regarding matters that are inherently uncertain.

Our most critical accounting estimates include:

- the valuation of inventory, which impacts gross margin;
- the determination of useful lives for our property, plant and equipment and the timing of when depreciation should begin, which impacts our gross margin, R&D expenses, and to a lesser extent MG&A expenses;
- the determination of other-than-temporary impairments for non-marketable equity investments requires the use of estimates about their valuations, which impacts gains or losses on equity investments, net;
- the valuation and the allocation of purchase price paid for assets acquired and liabilities assumed in connection with our acquisitions, which impacts our gross margin and operating expenses in periods subsequent to the acquisition;
- the evaluation of recoverability of long-lived assets (property, plant and equipment; identified intangibles; and goodwill), which impacts gross margin or operating expenses when we record impairments or accelerate their depreciation or amortization;
- the recognition and measurement of current and deferred income taxes (including the measurement of uncertain tax positions), which impact our provision for taxes as well as tax-related assets and liabilities; and
- the recognition and measurement of loss contingencies, which impact gross margin or operating expenses when we recognize a loss contingency, revise the estimate for a loss contingency, or record an asset impairment.

Refer to "Note 2: Accounting Policies" in Part II, Item 8 of this Form 10-K for further information on our critical accounting estimates and policies.

Results of Operations

Years Ended (In Millions, Except Per Share Amounts)	December 31, 2016 Dollars	December 31, 2016 % of Net Revenue	December 26, 2015 Dollars	December 26, 2015 % of Net Revenue	December 27, 2014 Dollars	December 27, 2014 % of Net Revenue
Net revenue	**$ 59,387**	**100.0 %**	**$ 55,355**	**100.0 %**	**$ 55,870**	**100.0%**
Cost of sales	23,196	39.1 %	20,676	37.4 %	20,261	36.3%
Gross margin	**36,191**	**60.9 %**	**34,679**	**62.6 %**	**35,609**	**63.7%**
Research and development	12,740	21.5 %	12,128	21.9 %	11,537	20.6%
Marketing, general and administrative	8,397	14.0 %	7,930	14.3 %	8,136	14.6%
Restructuring and other charges	1,886	3.2 %	354	0.6 %	295	0.5%
Amortization of acquisition-related intangibles	294	0.5 %	265	0.5 %	294	0.5%
Operating income	**12,874**	**21.7 %**	**14,002**	**25.3 %**	**15,347**	**27.5%**
Gains (losses) on equity investments, net	506	0.9 %	315	0.6 %	411	0.7%
Interest and other, net	(444)	(0.8)%	(105)	(0.2)%	43	0.1%
Income before taxes	**12,936**	**21.8 %**	**14,212**	**25.7 %**	**15,801**	**28.3%**
Provision for taxes	2,620	4.4 %	2,792	5.1 %	4,097	7.4%
Net income	**$ 10,316**	**17.4 %**	**$ 11,420**	**20.6 %**	**$ 11,704**	**20.9%**
Diluted earnings per share of common stock	**$ 2.12**		**$ 2.33**		**$ 2.31**	

Our net revenue in 2016 increased by $4.0 billion, or 7%, compared to 2015. Our results in 2016 reflected the inclusion of PSG from the newly acquired Altera and an extra work week, compared to 2015. The higher revenue was also driven by higher unit sales from our DCG platform and higher average selling prices from our notebook and desktop platforms.

Our net revenue in 2015 decreased by $515 million, or 1%, compared to 2014. The decrease in revenue was due to challenging macroeconomic conditions, particularly in the first half of the year, and higher PC demand in 2014 driven by the Microsoft Windows XP* refresh. The decrease in revenue was partially offset by higher platform average selling prices on desktop and DCG platforms, higher DCG platform unit sales, along with higher NSG revenue.

Our overall gross margin percentage was 60.9% in 2016, down from 62.6% in 2015, and down from 63.7% in 2014. We derived most of our overall gross margin dollars from the sale of platforms in the CCG and DCG operating segments. Our overall gross margin dollars in 2016 increased by $1.5 billion, or 4%, compared to 2015, and in 2015 decreased by $930 million, or 3%, compared to 2014. The following results drove the change in gross margin by approximately the amounts indicated:

(In Millions)		Gross Margin Reconciliation
$	36,191	**2016 Gross Margin**
	1,830	Higher gross margin from platform revenue
	1,150	PSG gross margin from acquisition of Altera
	935	Lower platform unit cost
	(1,045)	Altera and other acquisition-related charges
	(690)	Lower NSG gross margin
	(645)	Higher factory start-up costs, primarily driven by the ramp of our 10nm process technology
	(315)	Period charges associated with product warranty and intellectual property agreements
	292	Other
$	34,679	**2015 Gross Margin**
	(1,965)	Higher platform unit cost, primarily driven by the ramp of our 14nm process technology
	400	Lower factory start-up costs, primarily driven by the ramp of our 14nm process technology
	205	Lower production costs primarily on our 14nm products, which were treated as period charges in 2014, partially offset by higher pre-qualification product costs on 14nm products
	430	Other
$	35,609	**2014 Gross Margin**

Client Computing Group

Segment Product Overview

The CCG operating segment is responsible for all aspects of the client computing continuum, which includes platforms that are incorporated in notebook, 2 in 1 systems, desktop computers for consumers and businesses, tablets, and phones. These platforms may be further enhanced by features such as Intel® vPro™ technology, a solution designed for better manageability, security, and business and consumer user experiences. In addition, CCG offers home gateway products and set-top box components, and focuses on a broad range of wireless connectivity options that combine Intel® WiFi technology with our cellular mobile communication technologies. We have an array of innovative wired solutions such as Thunderbolt™ technology and client Ethernet solutions.

In 2016, we released the 7th generation Intel Core processor family for use in notebooks and desktops. These processors use 14nm transistors and our Tri-Gate transistor technology. Our Tri-Gate transistor technology extends Moore's Law, providing improved performance and energy efficiency. In combination, these enhancements can provide significant power savings and performance gains when compared to previous-generation processors.

Notebook. Our strategy for the notebook computing market segment is to offer notebook technologies designed to bring exciting new user experiences to life and improve performance, battery life, wireless connectivity, manageability, and security. In addition, we design for innovative smaller, lighter, and thinner form factors.

We have worked to help our customers develop advancements of personal computing devices, which include 2 in 1 systems. These computers combine the energy-efficient performance and capabilities of today's notebooks and tablets with enhanced graphics and improved user interfaces such as touch and voice in thin, light form factors that are highly responsive and secure, and that can seamlessly connect to the Internet. We believe the renewed innovation in the PC industry that we fostered will continue with the further enhancements and capabilities of 2 in 1 systems.

Desktop. Our strategy for the desktop computing market segment is to offer exciting new user experiences and products that provide increased manageability, security, and energy-efficient performance. We also focus on lowering the total cost of ownership for businesses. The desktop computing market segment includes all-in-one products, which combine traditionally separate desktop components into one form factor. Additionally, all-in-one computers have transformed into portable and flexible form factors that offer users increased portability and new multi-user applications and uses. For desktop consumers, we also focus on the design of products for high-end enthusiast PCs and mainstream PCs with rapidly increasing audio and media capabilities.

Operating Results

Years Ended (In Millions)	Dec 31, 2016	Dec 26, 2015	Dec 27, 2014	2016 compared to 2015 % Change	2015 compared to 2014 % Change
Platform revenue	$ 30,751	$ 30,680	$ 33,235	— %	(8)%
Other revenue	2,157	1,539	1,637	40 %	(6)%
Net revenue	**$ 32,908**	**$ 32,219**	**$ 34,872**	**2 %**	**(8)%**
Operating income	**$ 10,646**	**$ 8,166**	**$ 10,327**	**30 %**	**(21)%**
CCG platform unit sales				(10)%	(11)%
CCG platform average selling prices				11 %	4 %

Our CCG platform average selling prices increased in 2016 compared to 2015, driven by a richer mix of our high-performance notebook and desktop platforms, while our CCG platform unit sales decreased due to lower demand in the PC market. In 2015 compared to 2014, our CCG platform unit sales decreased due to challenging macroeconomic conditions in the first half of the year and higher PC demand in 2014 driven by the Microsoft Windows XP refresh. The following results drove the changes in CCG revenue:

(In Millions)	Revenue Reconciliation
$ 32,908	**2016 CCG Revenue**
618	Higher CCG non-platform revenue
389	Higher notebook platform average selling prices, up 2%
279	Higher desktop platform average selling prices, up 2%
222	Higher mobile platform revenue, primarily from reduction of cash consideration to our customers
(663)	Lower desktop platform unit sales, down 6%
(156)	Other
$ 32,219	**2015 CCG Revenue**
(2,304)	Lower desktop platform unit sales, down 16%
(1,695)	Lower notebook platform unit sales, down 9%
760	Higher desktop platform average selling prices, up 6%
300	Higher notebook platform average selling prices, up 2%
272	Higher tablet platform average selling prices
14	Other
$ 34,872	**2014 CCG Revenue**

The following results drove changes in CCG operating income by approximately the amounts indicated:

(In Millions)	Operating Income Reconciliation
$ 10,646	**2016 CCG Operating Income**
1,250	Lower CCG platform unit cost
905	Lower CCG operating expense
625	Higher gross margin from CCG platform revenue [1]
(645)	Higher factory start-up costs, primarily driven by the ramp of our 10nm process technology
345	Other
$ 8,166	**2015 CCG Operating Income**
(2,060)	Higher CCG platform unit costs
(1,565)	Lower gross margin from CCG platform revenue [2]
435	Lower factory start-up costs, primarily driven by the ramp of our 14nm process technology
430	Lower production costs primarily on our 14nm products, treated as period charges in 2014
375	Lower operating expense
224	Other
$ 10,327	**2014 CCG Operating Income**

[1] *Higher gross margin from higher CCG platform revenue was driven by higher average selling prices on notebook and desktop platforms, offset by lower desktop and notebook platform unit sales.*

[2] *Lower gross margin from lower CCG platform revenue was driven by lower desktop and notebook platform unit sales, partially offset by higher average selling prices on desktop, notebook, and tablet platforms.*

Data Center Group

Segment Product Overview

The DCG operating segment offers platforms designed to provide leading energy-efficient performance for all server, network, and storage applications. In addition, DCG focuses on lowering the total cost of ownership on other specific workload-optimizations for the enterprise, cloud service providers, and communications service provider market segments. In 2016, we launched the following platforms with an array of functionalities and advancements:

- Intel® Xeon® processor E5 v4 family, the foundation for high performing clouds and delivers energy-efficient performance for server, network, and storage workloads.
- Intel Xeon processor E7 v4 family, targeted at platforms requiring four or more CPUs; this processor family delivers high performance and is optimized for real-time analytics and in-memory computing, along with industry-leading reliability, availability, and serviceability.
- Intel® Xeon Phi™ product family, formerly code-named Knights Landing, with up to 72 high-performance Intel processor cores, integrated memory and fabric, and a common software programming model with Intel Xeon processors. The Intel Xeon Phi product family is designed for highly parallel compute and memory bandwidth-intensive workloads. Intel Xeon Phi processors are positioned to increase the performance of supercomputers, enabling trillions of calculations per second, and to address emerging data analytics and artificial intelligence solutions.

In 2017, we expect to release our next generation of Intel Xeon processors for compute, storage, and network; a next-generation Intel Xeon Phi processor optimized for deep learning; and a suite of single-socket products, including next-generation Intel Xeon E3 processors, next-generation Intel Atom processors, and next-generation Intel Xeon-D processors for dense solutions.

Operating Results

Years Ended (In Millions)	Dec 31, 2016	Dec 26, 2015	Dec 27, 2014	2016 compared to 2015 % Change	2015 compared to 2014 % Change
Platform revenue	$ 15,895	$ 14,856	13,341	7 %	11%
Other revenue	1,341	1,125	1,055	19 %	7%
Net revenue	**$ 17,236**	**$ 15,981**	**14,396**	**8 %**	**11%**
Operating income	**$ 7,520**	**$ 7,847**	**7,380**	**(4)%**	**6%**
DCG platform unit sales				8 %	8%
DCG platform average selling prices				(1)%	3%

Our DCG platform revenue increased, primarily due to growth in the cloud service provider and communication service provider market segments. The following results drove the changes in DCG revenue:

(In Millions)	Revenue Reconciliation
$ 17,236	**2016 DCG Revenue**
1,149	Higher DCG platform unit sales
106	Other
$ 15,981	**2015 DCG Revenue**
1,023	Higher DCG platform unit sales
493	Higher DCG platform average selling prices
69	Other
$ 14,396	**2014 DCG Revenue**

The following results drove the changes in DCG operating income by approximately the amounts indicated:

(In Millions)	Operating Income Reconciliation
$ 7,520	**2016 DCG Operating Income**
930	Higher gross margin from DCG platform revenue
(655)	Higher DCG operating expense
(335)	Higher DCG platform unit costs
(215)	Period charges associated with product warranty and intellectual property agreements
(52)	Other
$ 7,847	**2015 DCG Operating Income**
1,415	Higher gross margin from DCG platform revenue
(725)	Higher DCG operating expense
(223)	Other
$ 7,380	**2014 DCG Operating Income**

Internet of Things Group

Segment Product Overview

The IOTG operating segment offers platforms designed for retail, transportation, industrial, video, buildings and smart cities, and a broad range of other market segments. In addition, IOTG focuses on establishing an end-to-end manageable architecture that captures actionable information resulting from connected "things." In 2016, we announced the following platforms:

- SoFIA 3G-R SoC, the first IOTG product with an integrated modem and connectivity;
- Next-generation Intel Atom processor family, formerly code-named Apollo Lake; and
- 7th generation Intel Core processor family, formerly code-named Kaby Lake.

Operating Results

Years Ended (In Millions)	Dec 31, 2016	Dec 26, 2015	Dec 27, 2014	2016 compared to 2015 % Change	2015 compared to 2014 % Change
Platform revenue	$ 2,290	$ 1,976	$ 1,814	16%	9 %
Other revenue	348	322	328	8%	(2)%
Net revenue	**$ 2,638**	**$ 2,298**	**$ 2,142**	**15%**	**7 %**
Operating income	**$ 585**	**$ 515**	**$ 583**	**14%**	**(12)%**

The operating income for the IOTG operating segment increased by $70 million in 2016 compared to 2015, driven by higher gross margin from IOTG revenue primarily due to higher IOTG platform unit sales and higher IOTG platform average selling prices. The increase in revenue was partially offset by higher IOTG operating expense.

The operating income for the IOTG operating segment decreased by $68 million in 2015 compared to 2014, driven by higher IOTG operating expenses, partially offset by higher gross margin from IOTG revenue. The higher revenue was primarily due to higher IOTG platform unit sales, partially offset by lower IOTG platform average selling prices.

Non-Volatile Memory Solutions Group

Segment Product Overview

The NSG operating segment offers NAND flash memory primarily used in solid-state drives. NAND flash memory products are manufactured by IMFT and Micron. Our 3D NAND products are manufactured in our Dalian, China fabrication facility utilizing 16nm process technology. In 2017, we expect to release our jointly developed 3D XPoint technology, which combines the performance, density, power, non-volatility, and cost advantages of existing NAND with conventional memories like DRAM.

Operating Results

Years Ended (In Millions)	Dec 31, 2016	Dec 26, 2015	Dec 27, 2014	2016 compared to 2015 % Change	2015 compared to 2014 % Change
Net revenue	**$ 2,576**	**$ 2,597**	**2,146**	**(1)%**	**21 %**
Operating income (loss)	**$ (544)**	**$ 239**	**255**	**(328)%**	**(6)%**

The operating income for the NSG operating segment decreased by $783 million in 2016 to an operating loss compared to 2015, driven by lower revenue resulting from lower average selling prices on competitive pricing pressures, offset by higher volume. Decrease in operating income was also impacted by higher costs on the ramp of our 3D NAND flash memory in our Dalian, China facility, and higher spending on 3D XPoint technology, and partially offset by lower unit costs.

The operating income for the NSG operating segment decreased by $16 million in 2015 compared to 2014, driven by higher volume on market growth and improved unit cost, offset by lower average selling prices on competitive pricing pressures.

Intel Security Group

Segment Product Overview

The ISecG operating segment offers McAfee® software security products designed to deliver innovative solutions that secure computers, mobile devices, and networks around the world from the latest malware and emerging online threats. These products are designed for the protection of consumers, small businesses, and enterprise market segment customers. In 2016, we launched our next generation of converged endpoint suites, which include cloud-based workloads and further enable new architecture for greater effectiveness.

During Q3 2016, we announced our decision to divest ISecG. The operating results of ISecG will be reported as continued operations until the close of the transaction. For further information, see "Note 10: Acquisitions and Divestitures."

Operating Results

Years Ended (In Millions)	Dec 31, 2016	Dec 26, 2015	Dec 27, 2014	2016 compared to 2015 % Change	2015 compared to 2014 % Change
Net revenue	$ 2,161	$ 1,985	$ 2,010	9%	(1)%
Operating income	$ 400	$ 213	$ 164	88%	30 %

The operating income for the ISecG operating segment increased in 2016 compared to 2015, driven by higher revenue and lower operating expenses.

Programmable Solutions Group

Segment Product Overview

The PSG operating segment was created in Q1 2016, subsequent to the acquisition of Altera. PSG offers Altera® products and consists of FPGAs—including SoC FPGAs, which incorporate hard embedded processor cores—and complex programmable logic devices (CPLDs) for a broad range of market segments including communications, data center, industrial, military, and automotive. FPGAs and CPLDs are standard semiconductor integrated circuits, or chips, that our customers program to desired logic and processing functions in their electronic systems. In 2016, PSG launched the Intel® Stratix® 10 FPGA product.

Operating Results

Years Ended (In Millions)	Dec 31, 2016	Dec 26, 2015	2016 compared to 2015 % Change
Net revenue	$ 1,669	$ —	—%
Operating loss	$ (104)	$ —	—%

The operating loss for the PSG operating segment was driven by acquisition-related charges, primarily deferred revenue write-down and inventory valuation adjustment. Due to the revaluation of deferred revenue to fair value, we excluded revenue of $99 million and associated costs that would have created $64 million of operating income in 2016. Additionally, we incurred approximately $387 million of additional cost of sales charges during the period that would have been excluded from the operating results in 2016 if the acquired inventory had not been remeasured to fair value upon acquisition and then sold to end customers, resulting in zero margin on that inventory for the period.

Operating Expenses

Years Ended (In Millions)	Dec 31, 2016	Dec 26, 2015	Dec 27, 2014
Research and development (R&D)	$ 12,740	$ 12,128	$ 11,537
Marketing, general and administrative (MG&A)	$ 8,397	$ 7,930	$ 8,136
R&D and MG&A as percentage of net revenue	35.6%	36.2%	35.2%
Restructuring and other charges	$ 1,886	$ 354	$ 295
Amortization of acquisition-related intangibles	$ 294	$ 265	$ 294

Research and Development

R&D spending increased by $612 million, or 5%, in 2016 compared to 2015. The increase was driven by the addition of PSG expenses from the acquisition of Altera, higher investment, net of 2016 restructuring program savings, in strategically important areas such as servers, Internet of Things, new devices, and memory, as well as higher process development costs for our new 7nm process technology. These increases were partially offset by lower depreciation expense due to a change at the beginning of fiscal year 2016 to the estimated useful life of our machinery and equipment in our wafer fabrication facilities.

R&D spending increased by $591 million, or 5%, in 2015 compared to 2014. The increase was due to higher investment in our products—primarily server, Internet of Things, and new devices—as well as expenses of newly acquired entities and higher process development costs for our 10nm process technology. This increase was partially offset by lower profit-dependent compensation and savings from the implementation of efficiencies within our CCG operating segment.

Marketing, General and Administrative

MG&A expenses increased by $467 million, or 6%, in 2016 compared to 2015. This increase was primarily due to PSG expenses from the acquisition of Altera.

MG&A expenses decreased by $206 million in 2015 compared to 2014. This decrease was due to lower profit-dependent compensation as well as lower expenses from businesses that have been divested.

Restructuring and Other Charges

Years Ended (In Millions)	Dec 31, 2016	Dec 26, 2015	Dec 27, 2014
2016 Restructuring Program	$ 1,823	$ —	$ —
2015 Restructuring Program	—	264	—
2013 Restructuring Program	—	90	295
Other charges	63	—	—
Total restructuring and other charges	**$ 1,886**	**$ 354**	**$ 295**

2016 Restructuring Program. In Q2 2016, our management approved and commenced the 2016 Restructuring Program to accelerate our transformation from a PC company to one that powers the cloud and billions of smart, connected computing devices. Under this program, we are in the process of closing certain facilities and reducing headcount globally to align our operations with evolving business needs by investing in our growth businesses and improving efficiencies. We expect these actions to be substantially completed by Q2 2017.

Restructuring actions related to this program that were approved in 2016 are expected to impact approximately 15,000 employees. We estimate that the charges incurred to date as part of the 2016 restructuring program will result in net annual headcount savings of approximately $1.6 billion as we re-balance our workforce. On an annual basis, we expect $1.4 billion of these savings will reduce our R&D and MG&A spending, and the remainder will reduce our cost of sales. We began to realize these savings in Q2 2016 and expect to fully realize these savings by Q2 2017. We are reallocating these savings to our growth segments, such as the data center and Internet of Things, and are continuing to invest in areas that extend our leadership in Moore's Law and expand market opportunities in areas such as memory and autonomous driving.

For further information on the 2016 Restructuring Program, see " Note 7: Restructuring and Other Charges" in Part II, Item 8 of this Form 10-K.

2015 Restructuring Program. During 2015, management approved and commenced implementation of restructuring actions, primarily targeted workforce reductions, as we adjusted resources from areas of disinvestment to areas of investment. This program was completed in 2015.

2013 Restructuring Program. During 2013, management approved and commenced implementation of several restructuring actions, including targeted workforce reductions and the exit of certain businesses and facilities. These actions included the wind down of our 200mm wafer fabrication facility in Massachusetts and the closure of our assembly and test facility in Costa Rica . This program was completed in 2015.

Other Charges. Other charges consist primarily of expenses associated with the planned divestiture of ISecG that was announced in Q3 2016.

Share-Based Compensation

Share-based compensation totaled $1.4 billion in 2016 ($1.3 billion in 2015 and $1.1 billion in 2014). Share-based compensation was included in cost of sales and operating expenses.

As of December 31, 2016, unrecognized share-based compensation costs and the weighted average periods over which the costs are expected to be recognized were as follows:

(Dollars in Millions)	Unrecognized Share-Based Compensation Costs	Weighted Average Period
Restricted stock units	$ 1,903	1.2 years
Stock Purchase Plan	$ 13	2 months

Gains (Losses) on Equity Investments and Interest and Other, Net

Years Ended (In Millions)	Dec 31, 2016	Dec 26, 2015	Dec 27, 2014
Gains (losses) on equity investments, net	$ 506	$ 315	$ 411
Interest and other, net	$ (444)	$ (105)	$ 43

We recognized higher net gains on equity investments in 2016 compared to 2015 primarily due to gains of $407 million related to sales of a portion of our interest in ASML.

We recognized lower net gains on equity investments in 2015 compared to 2014 due to lower gains on sales of equity investments partially offset by higher gains on third-party merger transactions.

We recognized a higher interest and other, net loss in 2016 compared to 2015 primarily due to higher interest expense from debt issued or acquired in 2015 and 2016 as well as lower capitalized interest due to lower eligible capital expenditures in 2016.

We recognized an interest and other, net loss in 2015 compared to a net gain in 2014 primarily due to higher interest expense, which resulted from the issuance of senior unsecured notes during 2015. For further information on these transactions, see "Note 14: Borrowings" in part II, Item 8 of this Form 10-K.

Provision for Taxes

Years Ended (Dollars in Millions)	Dec 31, 2016	Dec 26, 2015	Dec 27, 2014
Income before taxes	$ 12,936	$ 14,212	$ 15,801
Provision for taxes	$ 2,620	$ 2,792	$ 4,097
Effective tax rate	20.3%	19.6%	25.9%

The majority of the increase in our effective tax rate in 2016 compared to 2015 was driven by one-time items and our 2015 decision to indefinitely reinvest some of our prior years' non-U.S. earnings, partially offset by higher proportion of our income in lower tax jurisdictions.

Most of the decrease in our effective tax rate in 2015 compared to 2014 was driven by one-time items, a higher proportion of our income from lower tax jurisdictions, and our decision to indefinitely reinvest certain prior years' non-U.S. earnings, which positively impacted our effective income tax rate.

Liquidity and Capital Resources

We consider the following when assessing our liquidity and capital resources:

(Dollars in Millions)	Dec 31, 2016	Dec 26, 2015
Cash and cash equivalents, short-term investments, and trading assets	$ 17,099	$ 25,313
Other long-term investments	$ 4,716	$ 1,891
Loans receivable and other	$ 996	$ 1,170
Reverse repurchase agreements with original maturities greater than three months	$ 250	$ 1,000
Unsettled trade liabilities and other	$ 119	$ 99
Short-term and long-term debt	$ 25,283	$ 22,670
Temporary equity	$ 882	$ 897
Debt as percentage of permanent stockholders' equity	38.2%	37.1%

Sources and Uses of Cash
(In Millions)

cashutilization2016a04.jpg

In summary, our cash flows for each period were as follows:

Years Ended (In Millions)	Dec 31, 2016	Dec 26, 2015	Dec 27, 2014
Net cash provided by operating activities	$ 21,808	$ 19,017	$ 20,418
Net cash used for investing activities	(25,817)	(8,183)	(9,905)
Net cash provided by (used for) financing activities	(5,739)	1,912	(13,611)
Effect of exchange rate fluctuations on cash and cash equivalents	—	1	(15)
Net increase (decrease) in cash and cash equivalents	**$ (9,748)**	**$ 12,747**	**$ (3,113)**

Operating Activities

Cash provided by operating activities is net income adjusted for certain non-cash items and changes in assets and liabilities.

For 2016 compared to 2015, the $2.8 billion increase in cash provided by operating activities was due to adjustments for non-cash items and changes in working capital, partially offset by lower net income. The adjustments for non-cash items were higher in 2016 primarily due to restructuring and other charges and the change in deferred taxes, partially offset by lower depreciation expense. Income taxes paid, net of refunds, in 2016 compared to 2015 were $2.6 billion lower due to bonus depreciation on capital assets placed in service, as well as timing of certain tax payments and refunds.

For 2015 compared to 2014, the $1.4 billion decrease in cash provided by operating activities was due to changes in working capital, adjustments for non-cash items, and lower net income. The adjustments for non-cash items were lower due primarily to deferred taxes, partially offset by higher depreciation.

Investing Activities

Investing cash flows consist primarily of capital expenditures; investment purchases, sales, maturities, and disposals; and proceeds from divestitures and cash used for acquisitions. Our capital expenditures were $9.6 billion in 2016 ($7.3 billion in 2015 and $10.1 billion in 2014).

The increase in cash used for investing activities in 2016 compared to 2015 was primarily due to our completed acquisition of Altera, net purchases of trading assets in 2016 compared to net sales of trading assets in 2015, and higher capital expenditures in 2016. This increase was partially offset by lower investments in non-marketable equity investments and collection of loans receivable and reverse repurchase agreements.

The decrease in cash used for investing activities in 2015 compared to 2014 was primarily due to cash generated by net trading asset activity and lower capital expenditures during 2015. This activity was partially offset by net available-for-sale activity (which was cash flow neutral in 2015 compared to a source of cash in 2014) and higher investments in non-marketable equity investments during 2015.

Financing Activities

Financing cash flows consist primarily of repurchases of common stock, payment of dividends to stockholders, issuance and repayment of short-term and long-term debt, and proceeds from the sale of shares of common stock through employee equity incentive plans.

Cash was used for financing activities in 2016 compared to cash provided by financing activities in 2015, primarily due to lower proceeds from debt issuances and the repayment of $1.5 billion of debt in 2016. These amounts were partially offset by repayment of commercial paper in 2015 and fewer repurchases of common stock under our authorized stock repurchase program. We have an ongoing authorization, originally approved by our Board of Directors in 2005, and subsequently amended, to repurchase up to $65.0 billion in shares of our common stock in the open market or negotiated transactions. During 2016, we repurchased $2.6 billion of common stock under our authorized common stock repurchase program, compared to $3.0 billion in 2015. As of December 31, 2016, $6.8 billion remained available for repurchasing common stock under the existing repurchase authorization limit. We base our level of common stock repurchases on internal cash management decisions, and this level may fluctuate. Proceeds from the sale of common stock through employee equity incentive plans totaled $1.1 billion in 2016 compared to $866 million in 2015. Our total dividend payments were $4.9 billion in 2016 compared to $4.6 billion in 2015. We have paid a cash dividend in each of the past 97 quarters. In January 2017, our Board of Directors declared a cash dividend of $0.26 per share of common stock for Q1 2017. The dividend is payable on March 1, 2017 to stockholders of record on February 7, 2017.

Cash was provided by financing activities in 2015 compared to cash used by financing activities in 2014, primarily due to the issuance of long-term debt in 2015 and fewer repurchases of common stock under our authorized stock repurchase program in 2015 compared to 2014. This activity was partially offset by lower proceeds from the sales of common stock in 2015 and repayments of short-term debt in 2015 compared to borrowings in 2014.

Liquidity

Cash generated by operations is our primary source of liquidity. We maintain a diverse investment portfolio that we continually analyze based on issuer, industry, and country. When assessing our sources of liquidity we include investments as shown in the Liquidity and Capital Resources table. Substantially all of our investments in debt instruments and financing receivables are in investment-grade securities.

Other potential sources of liquidity include our commercial paper program and our automatic shelf registration statement on file with the SEC, pursuant to which we may offer an unspecified amount of debt, equity, and other securities. Under our commercial paper program, we have an ongoing authorization from our Board of Directors to borrow up to $5.0 billion. No commercial paper remained outstanding as of December 31, 2016. On December 21, 2015, we entered into a short-term credit facility to borrow up to $5.0 billion to facilitate the settlement of our acquisition of Altera. Under this credit facility we borrowed $4.0 billion, and the facility was closed in January 2016. In Q2 2016, we issued $2.8 billion aggregate principal amount of senior unsecured notes to refinance existing indebtedness, including our 1.95% senior notes due 2016 and a portion of our 1.35% senior notes due 2017.

As of December 31, 2016, $13.6 billion of our $17.1 billion of cash and cash equivalents, short-term investments, and trading assets was held by our non-U.S. subsidiaries. Of the $13.6 billion held by our non-U.S. subsidiaries, approximately $1.5 billion was available for use in the U.S. without incurring additional U.S. income taxes in excess of the amounts already accrued in our financial statements as of December 31, 2016. The remaining amount of non-U.S. cash and cash equivalents, short-term investments, and trading assets has been indefinitely reinvested and, therefore, no U.S. current or deferred taxes have been accrued. This amount is earmarked for near-term investment in our operations outside the U.S. and future acquisitions of non-U.S. entities. We believe our U.S. sources of cash and liquidity are sufficient to meet our business needs in the U.S., and do not expect that we will need to repatriate the funds we have designated as indefinitely reinvested outside the U.S. Under current tax laws, should our plans change and we were to choose to repatriate some or all of the funds we have designated as indefinitely reinvested outside the U.S., such amounts would be subject to U.S. income taxes and applicable non-U.S. income and withholding taxes.

We believe we have sufficient financial resources to meet our business requirements in the next 12 months, including capital expenditures for worldwide manufacturing and assembly and test; working capital requirements; and potential dividends, common stock repurchases, acquisitions, and strategic investments.

Contractual Obligations

Significant contractual obligations as of December 31, 2016 were as follows:

	Payments Due by Period				
(In Millions)	Total	Less Than 1 Year	1–3 Years	3–5 Years	More Than 5 Years
Operating lease obligations	$ 1,226	$ 229	$ 342	$ 233	$ 422
Capital purchase obligations[1]	7,529	5,646	1,882	1	—
Other purchase obligations and commitments[2]	3,038	1,825	1,154	59	—
Long-term debt obligations[3]	42,020	4,391	2,459	5,854	29,316
Other long-term liabilities[4, 5]	1,763	841	707	114	101
Total[6]	**$ 55,576**	**$ 12,932**	**$ 6,544**	**$ 6,261**	**$ 29,839**

[1] *Capital purchase obligations represent commitments for the construction or purchase of property, plant and equipment. They were not recorded as liabilities on our consolidated balance sheets as of December 31, 2016, as we had not yet received the related goods or taken title to the property.*

[2] *Other purchase obligations and commitments include payments due under various types of licenses and agreements to purchase goods or services, as well as payments due under non-contingent funding obligations.*

[3] *Amounts represent principal and interest cash payments over the life of the debt obligations, including anticipated interest payments that are not recorded on our consolidated balance sheets. Debt obligations are classified based on their stated maturity date, regardless of their classification on the consolidated balance sheets. Any future settlement of convertible debt would impact our cash payments.*

[4] *We are unable to reliably estimate the timing of future payments related to uncertain tax positions; therefore, $125 million of long-term income taxes payable has been excluded from the preceding table. However, long-term income taxes payable, recorded on our consolidated balance sheets, included these uncertain tax positions, reduced by the associated federal deduction for state taxes and U.S. tax credits arising from non-U.S. income taxes.*

[5] *Amounts represent future cash payments to satisfy other long-term liabilities recorded on our consolidated balance sheets, including the short-term portion of these long-term liabilities. Expected required contributions to our U.S. and non-U.S. pension plans and other postretirement benefit plans of $36 million to be made during 2017 are also included; however, funding projections beyond 2017 are not practicable to estimate. Derivative instruments are excluded from the preceding table, as they do not represent the amounts that may ultimately be paid.*

[6] *Total excludes contractual obligations already recorded on our consolidated balance sheets as current liabilities, except for the short-term portions of long-term debt obligations and other long-term liabilities.*

The expected timing of payments of the obligations in the preceding table is estimated based on current information. Timing of payments and actual amounts paid may be different, depending on the time of receipt of goods or services, or changes to agreed-upon amounts for some obligations.

Contractual obligations for purchases of goods or services included in "Other purchase obligations and commitments" in the preceding table include agreements that are enforceable and legally binding on Intel 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. For obligations with cancellation provisions, the amounts included in the preceding table were limited to the non-cancelable portion of the agreement terms or the minimum cancellation fee.

We have entered into certain agreements for the purchase of raw materials that specify minimum prices and quantities based on a percentage of the total available market or based on a percentage of our future purchasing requirements. Due to the uncertainty of the future market and our future purchasing requirements, as well as the non-binding nature of these agreements, obligations under these agreements have been excluded from the preceding table. Our purchase orders for other products are based on our current manufacturing needs and are fulfilled by our vendors within short time horizons. In addition, some of our purchase orders represent authorizations to purchase rather than binding agreements.

Contractual obligations that are contingent upon the achievement of certain milestones have been excluded from the preceding table. These obligations include milestone-based co-marketing agreements, contingent funding or payment obligations, and milestone-based equity investment funding (excluding investment funding that is pending regulatory approval). These arrangements are not considered contractual obligations until the milestone is met by the counterparty. As of December 31, 2016, assuming that all future milestones are met, excluding the ASML milestones mentioned below, the additional required payments would be approximately $694 million. During 2012, we entered into a series of agreements with ASML intended to accelerate the development of EUV lithography, certain of which were amended in 2014. Under the amended agreements, Intel agreed to provide R&D funding totaling €829 million over five years and committed to advance purchase orders for a specified number of tools from ASML. Our remaining obligation, contingent upon ASML achieving certain milestones, is approximately €193 million, or $202 million, as of December 31, 2016. As our obligation is contingent upon ASML achieving certain milestones, we have excluded this obligation from the preceding table.

For the majority of RSUs granted, the number of shares of common stock issued on the date the RSUs vest is net of the minimum statutory withholding requirements that we pay in cash to the appropriate taxing authorities on behalf of our employees. The obligation to pay the relevant taxing authority is excluded from the preceding table, as the amount is contingent upon continued employment. In addition, the amount of the obligation is unknown, as it is based in part on the market price of our common stock when the awards vest.

During 2014, we entered into a series of agreements with Tsinghua Unigroup Ltd. (Tsinghua Unigroup), an operating subsidiary of Tsinghua Holdings Co. Ltd., to, among other things, jointly develop Intel architecture- and communications-based solutions for phones. Subject to regulatory approvals and other closing conditions, we have also agreed to invest up to 9.0 billion Chinese yuan (approximately $1.5 billion as of the date of the agreement) for a minority stake of approximately 20% of Beijing UniSpreadtrum Technology Ltd. (UniSpreadtrum). During 2015, we invested $966 million to complete the first phase of the equity investment. The second phase of the investment will require additional funding of approximately $500 million; however, as our obligation is contingent upon regulatory approvals and other closing conditions, it has been excluded from the preceding table.

Off-Balance-Sheet Arrangements

As of December 31, 2016, we did not have any significant off-balance-sheet arrangements, as defined in Item 303(a)(4)(ii) of SEC Regulation S-K.