



الجامعة الإسلامية العالمية شيتاغونغ
International Islamic University Chittagong



Department of Computer Science and Engineering

ASSIGNMENT SUBMISSION

Assignment No : 02
Assignment Title : Selected Company Profile
Selected Company : Intel Corporation

Course Code : ECON-3501
Course Title : Principles of Economics

Submitted By:

Name : Nayeem Mahmood
Semester : 3rd
Matric ID : C161026
Section : 3AM

Submitted To:

A. B. M. Yasir Arafat
Lecturer,
Dept. of CSE, IIUC

Date of Submission : August 11, 2017

Introduction

Intel Corporation is the dominant in Microprocessor market especially for Desktops, Laptops, Servers and Workstations. Though, there is no factory or official dealership of Intel Corporation in Bangladesh, few importers import Intel's processors. Some mentionable importers are:

- **Computer Source, Bangladesh**
- **Ryans Computers Limited, Bangladesh**
- **Computer Village, Bangladesh**
- **Smart Technologies Ltd, Bangladesh**

They are running several branches and outlets throughout whole country.

Intel's most powerful processor for Desktop namely **Intel® Core™ i7-7800X** costs approximately **32,339.20 BDT***. Most powerful processor for Server namely **Intel® Xeon® E5-2695 v4** costs approximately **1,81,912.50 BDT***.

** See Product Venture below*

Executive Summary

Intel Corporation is an American multinational corporation and technology company headquartered in Santa Clara, California, USA that was founded by Gordon Moore and Robert Noyce on July 18, 1968.

The present CEO of Intel Corporation is Brian Krzanich conducting since May 16, 2013.

The main products they manufacture are listed below:

- **Microprocessors**
- **Desktop Computers**
- **Compute Sticks**
- **Mini PCs**
- **Board & Kits**
- **Optane Memory**

According to market's current condition, their main competitor is AMD which manufactures Graphics Card and Microprocessors for both Desktops and Servers. Though Intel is dominant in this field, either they can't dominate or they don't want to dominate the field of Microprocessors for Smart Phones and Tablets. In this field, their absence is noticeable where Qualcomm and MediaTek are dominating this field.

The Vision of Intel Corporation is ***"If it's smart and connected, it's best with Intel."***

Keeping this tagline in head, they emphasis on **6** key values. They are:

- **Customer Orientation**
- **Discipline**
- **Quality**
- **Risk Taking**
- **Great Place to Work**
- **Result Orientation**

Intel's Quality Management System consists of four key elements. They are:

- **Plan**
- **Organize**
- **Execute**
- **Monitor**

At present, their market position is ranked 54th according to Forbes' website.

Key factors from SWOT Analysis are stated below.

➤ **Strengths**

- **Strong partnership with Microsoft**
- **High-efficiency fabrication processes**
- **Economies of scale**

➤ **Weaknesses**

- **Insignificant presence in the mobile market**
- **Dependence on Windows machines**
- **Limited business diversification**

➤ **Opportunities**

- **Business diversification**
- **Product development for the mobile market**
- **Flexibility of processors**

➤ **Threats**

- **Rapid market shift to mobile computing**
- **Competition with ARM in the mobile processor**
- **Competition with AMD and ARM in the PC market**

Intel Corporation reported annual 2016 earnings of 2.72 per share on Jan 26, 2017. On Jul 27, 2017, Intel Corporation reported 2nd quarter 2017 earnings of 0.72 per share. This result exceeded the 0.68 consensus of the 33 analysts covering the company and exceeded last year's 2nd quarter results by 22.03%.

Intel Corporation had 2nd quarter 2017 revenues of \$14.76 B. This bettered the \$14.41 B consensus of the 35 analysts covering the company. This was 9.09% above the prior year's 2nd quarter results.

Intel Corporation had revenues for the full year 2016 of \$59.49 B. This was 7.46% above the prior year's results.

Product Venture

Besides Microprocessor, Intel Corporation produce various kinds of products. Here, some of them are listed with their respective price range.

Product Item	Price*
1. Desktop Computers	Starting from 2,993.30 BDT up to 16,07,483.81 BDT
2. Compute Sticks	Starting from 2,993.30 BDT up to 37,618.50 BDT
3. Mini PCs	Starting from 12,197.30 BDT up to 1,61,799.20 BDT
4. Boards & Kits	Starting from 4041.00 BDT up to 25,888.00 BDT
5. Intel Optane Memory	Starting from 3643.75 BDT up to 6,478.40 BDT

*** Prices are up to date till Aug 11, 2017 from Intel Corporation's website (<https://www.intel.com>). Prices are excluding related taxes.**

*** According to Currency Exchange Update – August 11, 2017
(1 US Dollar = 80.90 BDT)**

Price Comparison with other Competitor

There are several Processor manufacturer companies. Among them, we'll choose **AMD**, **Qualcomm** and **Samsung** to compare their products with **Intel**'s.

Companies	Model & Price	
	Most Powerful Server Processor	Most Powerful Desktop Processor
Intel Source: www.intel.com	Model: Intel® Xeon® E5-2695 v4 18 Core 2.1 GHz 45MB Smart Cache Price: 1,81,912.50 BDT	Model: Intel® Core™ i7-6950X 10 Core 3.0 GHz 25MB Cache Price: 1,13,259.20 BDT
AMD Source: www.amd.com	Model: AMD Opteron 6380 16 Core 2.5 GHz 16MB Cache Price: 1,34,697.70 BDT	Model: AMD Ryzen Threadripper 1950X 16 Core 3.4 GHz 8MB Cache Price: 80,899.20 BDT
Qualcomm Source: www.qualcomm.com	<i>(Actually this company doesn't manufacture desktop processors. They produce processors mainly for Smart Phones and Tablets.)</i> Model: Snapdragon 835 8 Core 2.45 GHz Price: Not included in respective website.	
Samsung Source: www.samsung.com	<i>(Actually this company doesn't manufacture desktop processors. They produce processors mainly for Smart Phones and Tablets.)</i> Model: EXYNOS 7 OCTA 7420 8 Core 2.1 GHz Price: Not included in respective website.	

Quality Assurance Strategy

Intel Corporation has made a program to assure their products quality named Quality Management System (QMS) Framework. Intel established the Quality Management System (QMS) as the foundation for customer satisfaction and continuous improvements in all aspects of their business. The quality management system is based on the customer-supplier relationship and provides a framework for managing the activities used to develop and deliver quality products that consistently satisfy customer and other external requirements. QMS is deeply rooted in Intel's culture, their corporate mission and values, business principles, actions, and results. Improving QMS is an ongoing process throughout Intel organizations.

Intel's corporate values and supporting behaviors provide employees with effective ways to create a work culture that strongly supports Operational Excellence.

Values	Supporting Behavior
Customer Orientation	<ul style="list-style-type: none">• Listen and respond to their customers, suppliers and stakeholders• Clearly communicate mutual intentions and expectations• Deliver innovative and competitive products and services• Make it easy to work with them• Be vendor of choice
Discipline	<ul style="list-style-type: none">• Conduct business with uncompromising integrity and professionalism• Ensure a safe, clean and injury-free work place• Make and meet commitments• Properly plan, fund and staff people• Pay attention to detail
Quality	<ul style="list-style-type: none">• Achieve the highest standards of excellence• Do the right things right• Continuously learn, develop and improve• Take pride in their work
Risk Taking	<ul style="list-style-type: none">• Foster innovation and creative thinking• Embrace change and challenge the status quo• Listen to all ideas and viewpoints

Great Place to Work

- Learn from their successes and mistakes
- Encourage and reward informed risk-taking
- Be open and direct
- Promote a challenging work environment that develops their workforce
- Work as a team with respect and trust for each other
- Win and have fun
- Recognize and reward accomplishments
- Manage performance fairly and firmly
- Be an asset to their communities worldwide

Result Orientation

- Set challenge and competitive goals
- Focus on output
- Assume responsibility
- Constructively confront and solve problems
- Execute flawlessly

Through these values and the behaviors, Intel seeks to:

- **Continuously improve the customer-perceived value of their products, processes and people**
- **Continuously improve their efficiency and performance of all activities**
- **Continuously reduce their total cost of doing business**

Intel's Quality Management System consists of four key elements. They are:

- **Plan**
- **Organize**
- **Execute**
- **Monitor**

Intel uses these elements to achieve customer satisfaction by driving their management processes and providing a framework for ensuring predictable and consistent planning, development, quality, and service support.

Intel's QMS promotes customer focus, clear management responsibility, a process approach to doing work, and continuous improvement of the system. The figure attached below summarizes the complete process.

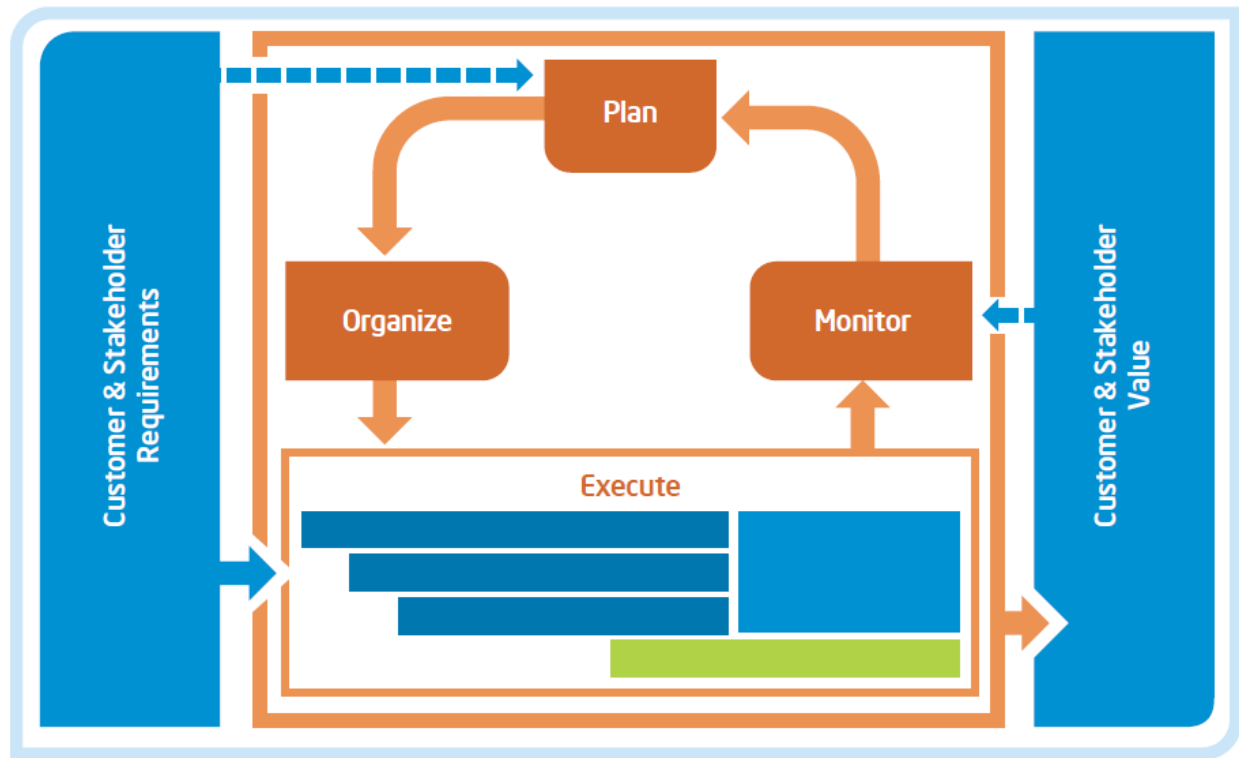


Fig: Quality Management System Diagram

Market Position

According to Forbes' (www.forbes.com) latest report, market position of Intel Corporation is stated.

Category	Value
Forbes's World Wide Rank	54
Industry	Semiconductors
Market Capital	\$170.3 Billion
Ticker	INTC \$36.59 ↓ \$-0.47 (-0.013%)
Employees	106,000
Sales	\$59.39 B

SWOT Analysis

Intel Corporation's successful semiconductor business strategically addresses the **Strengths, Weaknesses, Opportunities and Threats (SWOT)** in the organization and the external environment. The SWOT analysis model is a tool used to determine the most significant internal strategic factors (strengths and weaknesses) and external strategic factors (opportunities and threats) that affect the performance of the firm. Intel's performance is subject to the impacts of these factors. As a leader in the global desktop microprocessor market, the company must overcome its weaknesses and the threats to its business. Intel must also develop its strengths and exploit its opportunities to stay ahead of competitors like AMD in the desktop market, and ARM and Apple in the mobile device market.

This SWOT analysis of Intel shows that the company is in a comfortable position where it is easy to maintain market dominance. Nonetheless, the company must address the critical issues shown in the SWOT analysis, to ensure long-term success, considering rising competition from other technology firms.

➤ Intel's Strengths (Internal Strategic Factors)

Intel Corporation is the strongest competitor in the global market for semiconductors. This part of the SWOT analysis identifies the company's main strengths or internal strategic factors that have an enabling effect for business success. The following are Intel's strengths:

- **Strong partnership with Microsoft**

Intel has an enduring partnership with Microsoft Corporation, which dominates the market for desktop operating systems. This partnership is partly responsible for the success of the two companies. For example, Intel continues to benefit from the wide profit margins of its processors developed for market-dominant Windows systems. On the other hand, Microsoft benefits from the partnership through the satisfactory performance of Windows systems based on the processing power of Intel's products. Both companies use this strength as a barrier to counteract the effects of new entry.

- **High-efficiency fabrication processes**

The high efficiency of fabrication processes is a major strength that Intel uses to build competitive advantage. Such efficiency allows the company to supply processors to equipment manufacturers on time and at adequate amounts.

- **Economies of scale**

Also, the company's long history of focus on semiconductor fabrication has led to economies of scale that competitors find difficult to match. In this part of the SWOT analysis of Intel, organizational capabilities and strategic alliance strengthen the business.

➤ **Intel's Weaknesses (Internal Strategic Factors)**

Intel remains the industry leader, but continuing this leadership requires addressing the company's weaknesses. This part of the SWOT analysis specifies the organization's weaknesses or internal strategic factors that impose challenges or limits on performance. Intel has the following weaknesses:

- **Insignificant presence in the mobile market**

Intel has a mutually beneficial partnership with Microsoft. However, this partnership leads to a weakness because it compels Intel to focus on the design and fabrication of microprocessors for Windows systems. As a result, the company lacks comparably extensive business processes for other products. For example, Intel remains unsuccessful in developing competitive and profitable processors for mobile devices.

- **Dependence on Windows machines**

Also, the partnership makes the company susceptible to declines in desktop/PC sales.

- **Limited business diversification**

Another weakness is Intel's minimal business diversification. Diversification shields the organization from market-based risks. Intel needs to implement major strategic changes to address the weaknesses specified in this part of the SWOT analysis.

➤ **Opportunities for Intel Corporation (External Strategic Factors)**

Major opportunities are available to improve Intel's performance. This part of the SWOT analysis identifies business opportunities or external strategic factors that facilitate growth. The following opportunities are available in Intel's external environment:

- **Business diversification**

Business diversification is an opportunity for Intel to improve its performance. For example, the company can develop semiconductor products to target new segments in the household appliance market. Acquisition of other firms can also diversify the business. Diversification remains a significant opportunity that has not been fully exploited, considering Intel's generic strategy and intensive growth strategies.

- **Product development for the mobile market**

In addition, the company has the opportunity to develop products for the mobile market, considering the lack of successful Intel processors for mobile devices.

- **Flexibility of processors**

Also, the company can increase the flexibility of its processors to widen their potential use. In this part of the SWOT analysis of Intel Corporation, the opportunities point to increased effort outside of developing microprocessors for Windows systems.

➤ **Threats Facing Intel (External Strategic Factors)**

Intel's business could potentially decline as a result of unaddressed threats in the external environment. This part of the SWOT analysis specifies the threats or external strategic factors that reduce or end businesses. In this case, Intel faces the following threats in its business environment:

- **Rapid market shift to mobile computing**

Intel leads in the PC processor market, especially because of the dominance of Windows systems. However, the rapid market shift to mobile computing is a

growing threat against the company. For example, as PC sales decline, mobile device sales increase. This condition threatens Intel, which has failed to capture the mobile device processor market.

- **Competition with ARM in the mobile processor**

In relation, competition with ARM devices is a major threat against the company. ARM Holdings develops processor architectures used by the majority of companies in the mobile device market.

- **Competition with AMD and ARM in the PC market**

Moreover, in the PC market, minor competitor AMD has potential to capture a bigger market share, and ARM Holdings has potential to succeed with its enhanced processors for desktop systems. Intel must ensure competitive advantage in the PC market and develop a competitive product for the mobile device market to address the threats specified in this part of the SWOT analysis.

Improvement Recommendation

This SWOT analysis of Intel indicates current stability based on business strengths. A dominant industry position shows that the company has what it takes to withstand the effects of competition and new entry. However, weaknesses make the company vulnerable to threats in its business environment. For example, because of its insignificant presence in the mobile market, Intel is vulnerable to the threat of the rapid market shift to mobile computing. Also, the company is dependent on Windows machines, making it vulnerable to the threat of competition with AMD and ARM. Nonetheless, Intel has opportunities to address these issues.

Based on the results of this SWOT analysis, a recommendation is to improve Intel's position in the semiconductor industry through increased efforts to develop competitive and profitable processors for mobile devices. It is also recommended that the company should establish new partnerships to reduce its dependence on Microsoft. Another recommendation is to diversify Intel's business, such as through new acquisitions in other industries, for the purpose of reducing market risks and the potential impact of declining PC sales.

The main competitor of Intel, AMD has recently released a new processor series named Ryzen. This series is promising in the Microprocessor Industry. Ryzen is

capable to compete with Intel's latest 7th Generation Core-i7 processors. But Ryzen is cheaper than Core-i7. The SWOT analysis recommends that Intel should keep their products price within more reasonable ranges.

Moreover, it is seen that Intel doesn't emphasis on manufacturing ARM (Mobile) processors. Qualcomm and MediaTek are in the leading position in manufacturing mobile processors. But Intel has vast opportunities to conquer this industry.

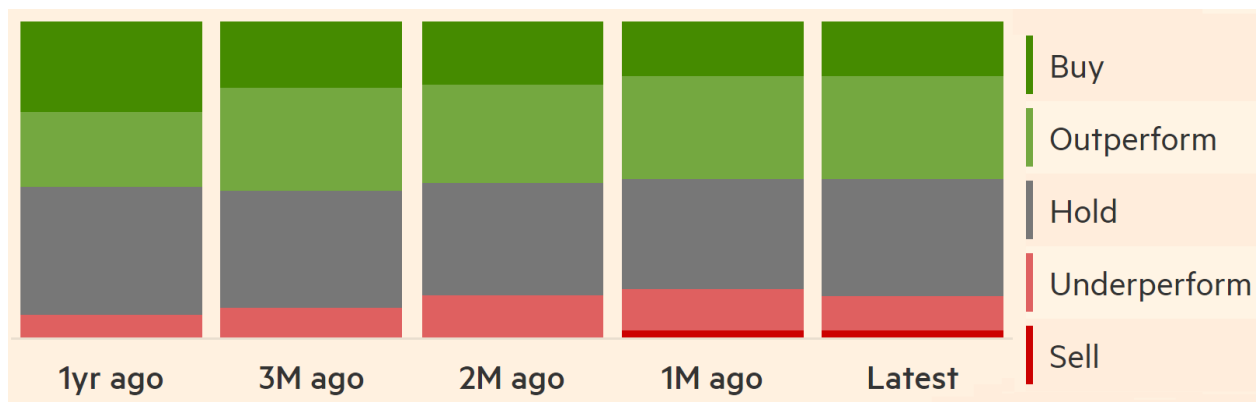
Financial Statement

According to Financial Times (markets.ft.com), current Financial Statement is given below.

PRICE (USD)	TODAY'S CHANGE	SHARES TRADED	1 YEAR CHANGE	BETA
36.14	↓ -0.45 / -1.23%	22.69m	↑ 4.66%	0.9942
Data delayed at least 15 minutes, as of Aug 10 2017 21:15 BST.				

As of Aug 10, 2017, the consensus forecast amongst 46 polled investment analysts covering Intel Corporation advises that the company will outperform the market. This has been the consensus forecast since the sentiment of investment analysts improved on Aug 31, 2015. The previous consensus forecast advised investors to hold their position in Intel Corporation.

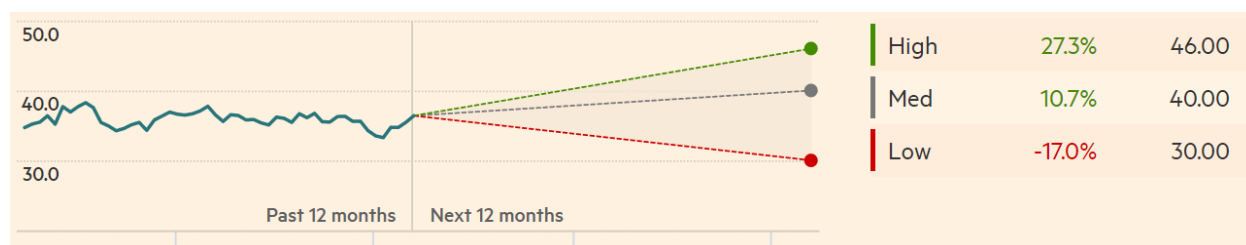
• Previous recommendations comparison



Recommendations	1yr ago	3M ago	2M ago	1M ago	Latest
Buy	12	9	9	8	8
Outperform	10	14	14	15	15
Hold	17	16	16	16	17
Underperform	3	4	6	6	5
Sell	0	0	0	1	1

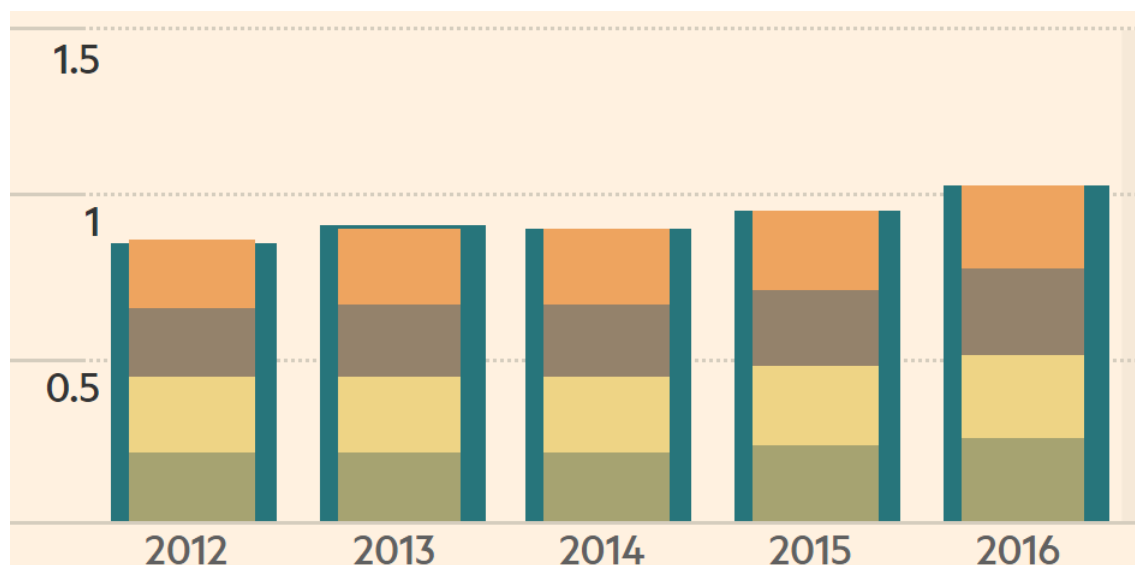
• Share Price Forecast

The 34 analysts offering 12 month price targets for Intel Corporation have a median target of 40.00, with a high estimate of 46.00 and a low estimate of 30.00. The median estimate represents a 10.68% increase from the last price of 36.14.



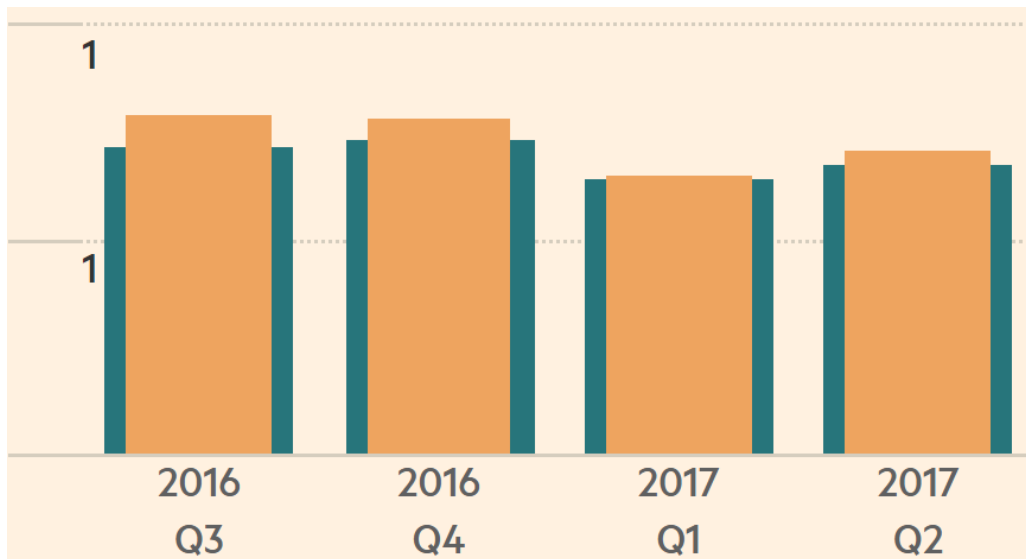
• Dividends

In 2016, Intel Corp reported a dividend of 1.04 USD, which represents a 8.33% increase over last year. The 14 analysts covering the company expect dividends of 1.08 USD for the upcoming fiscal year, an increase of 3.85%.



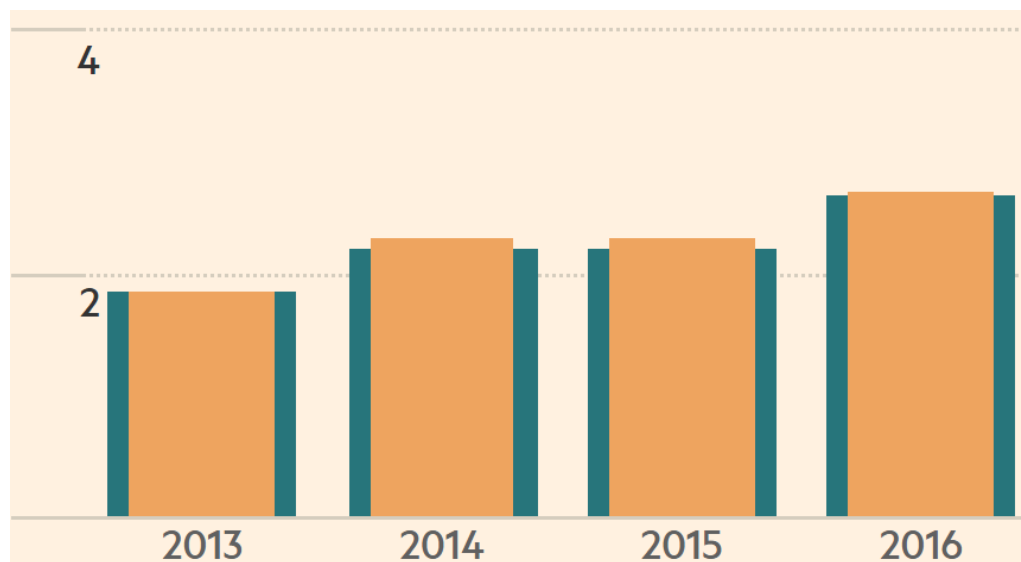
- **Earnings History & Estimates**

On Jul 27, 2017, Intel Corporation reported 2nd quarter 2017 earnings of 0.72 per share. This result exceeded the 0.68 consensus of the 33 analysts covering the company and exceeded last year's 2nd quarter results by 22.03%. The next earnings announcement is expected on Oct 16, 2017.



Average growth rate +6.74%

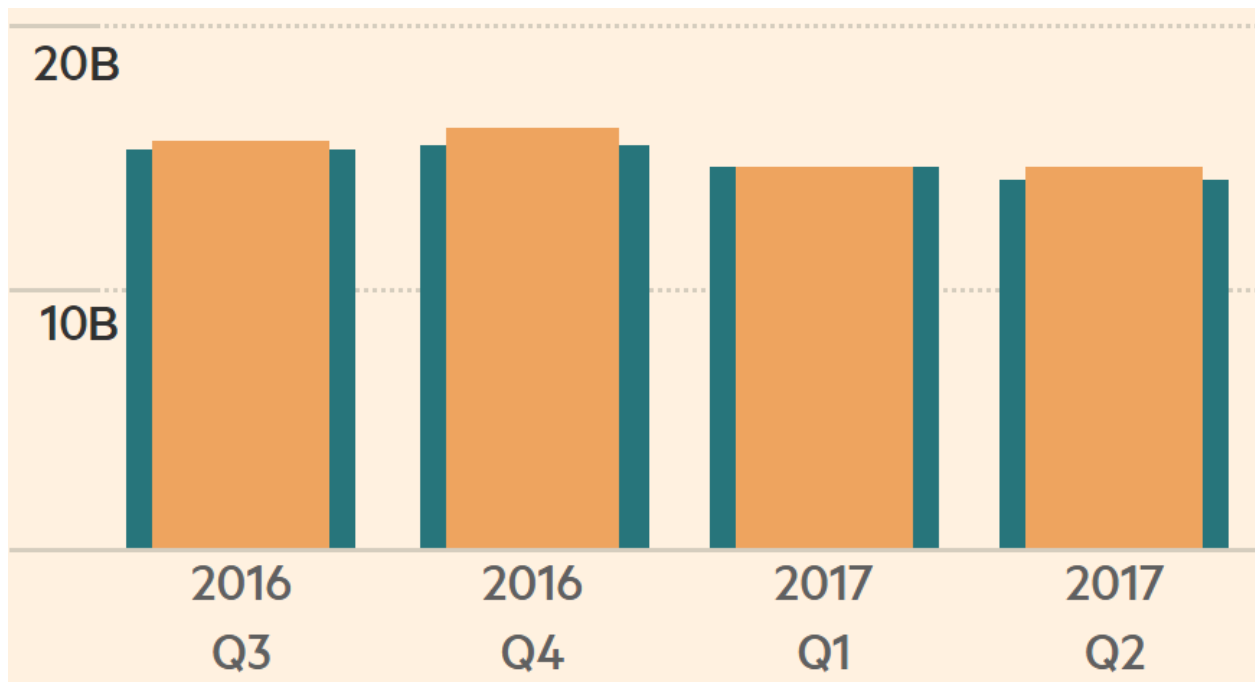
Intel Corporation reported annual 2016 earnings of 2.72 per share on Jan 26, 2017.



Average growth rate **+7.14%**

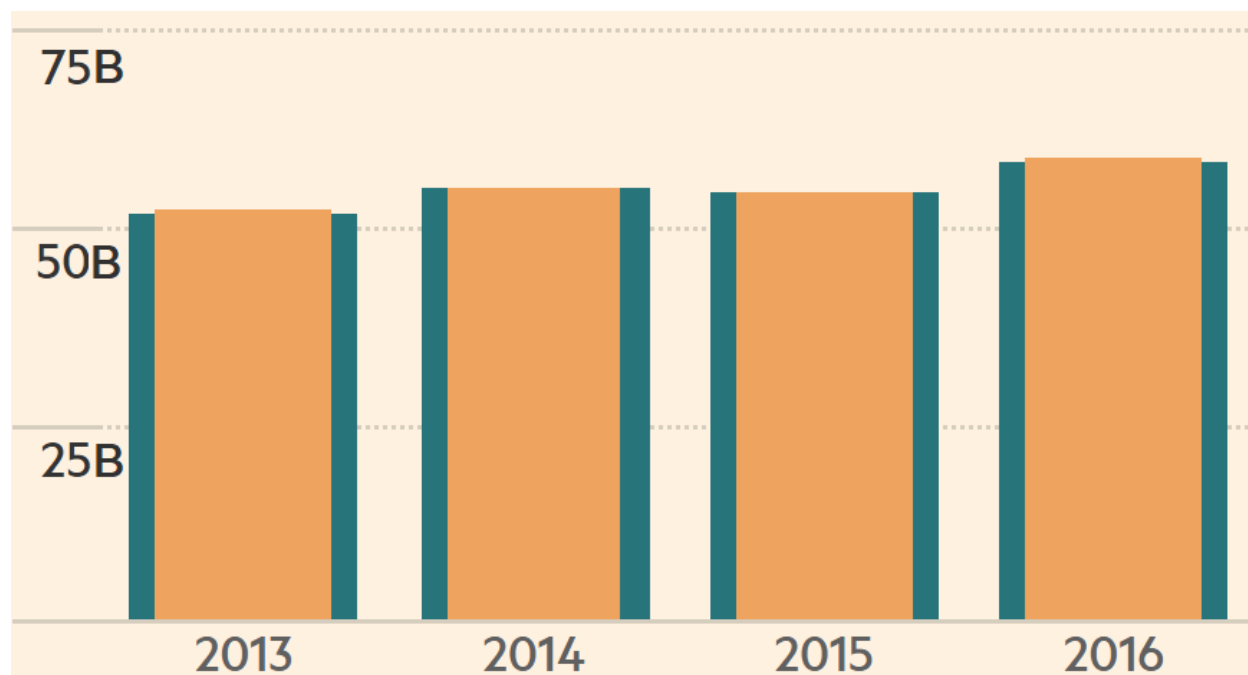
- **Revenue History & Estimates**

Intel Corporation had 2nd quarter 2017 revenues of \$14.76 B. This bettered the \$14.41 B consensus of the 35 analysts covering the company. This was 9.09% above the prior year's 2nd quarter results.










Average growth rate **+2.63%**

Intel Corporation had revenues for the full year 2016 of \$59.49 B. This was 7.46% above the prior year's results.



Average growth rate +2.84%











Period Ending:	Trend	12/31/2016	12/26/2015	12/27/2014	12/28/2013
Current Assets					
Cash and Cash Equivalents		\$5,560,000	\$15,308,000	\$2,561,000	\$5,674,000
Short-Term Investments		\$11,539,000	\$10,005,000	\$11,493,000	\$14,413,000
Net Receivables		\$4,690,000	\$4,787,000	\$6,385,000	\$6,176,000
Inventory		\$5,553,000	\$5,167,000	\$4,273,000	\$4,172,000
Other Current Assets		\$8,166,000	\$3,053,000	\$3,018,000	\$1,649,000
Total Current Assets		\$35,508,000	\$38,320,000	\$27,730,000	\$32,084,000








Period Ending:	Trend	12/31/2016	12/26/2015	12/27/2014	12/28/2013
Long-Term Assets					
Long-Term Investments		\$10,896,000	\$7,851,000	\$9,120,000	\$7,694,000
Fixed Assets		\$36,171,000	\$31,858,000	\$33,238,000	\$31,428,000
Goodwill		\$14,099,000	\$11,332,000	\$10,861,000	\$10,513,000
Intangible Assets		\$9,494,000	\$3,933,000	\$4,446,000	\$5,150,000
Other Assets		\$7,159,000	\$8,165,000	\$6,505,000	\$5,489,000
Deferred Asset Charges		\$0	\$0	\$0	\$0
Total Assets		\$113,327,000	\$101,459,000	\$91,900,000	\$92,358,000

Liability Assessments

The statement of financial position provides creditors, investors, and analysts with information on company's resources (assets) and its sources of capital (its equity and liabilities). It normally also provides information about the future earnings capacity of a company's assets as well as an indication of cash flows that may come from receivables and inventories.

Liabilities represent obligations of a company arising from past events, the settlement of which is expected to result in an outflow of economic benefits from the entity.

Period Ending:	Trend	12/31/2016	12/26/2015	12/27/2014	12/28/2013
Current Liabilities					
Accounts Payable		\$12,030,000	\$10,768,000	\$12,210,000	\$11,191,000
Short-Term Debt / Current Portion of Long-Term Debt		\$4,634,000	\$2,634,000	\$1,596,000	\$281,000
Other Current Liabilities		\$3,638,000	\$2,244,000	\$2,205,000	\$2,096,000
Total Current Liabilities		\$20,302,000	\$15,646,000	\$16,011,000	\$13,568,000
Long-Term Debt		\$20,649,000	\$20,036,000	\$12,059,000	\$13,165,000
Other Liabilities		\$3,538,000	\$2,841,000	\$3,278,000	\$2,972,000
Deferred Liability Charges		\$1,730,000	\$954,000	\$3,775,000	\$4,397,000
Misc. Stocks		\$882,000	\$897,000	\$912,000	\$0
Minority Interest		\$0	\$0	\$0	\$0
Total Liabilities		\$47,101,000	\$40,374,000	\$36,035,000	\$34,102,000

Period Ending:	Trend	12/31/2016	12/26/2015	12/27/2014	12/28/2013
Stock Holders Equity					
Common Stocks		\$25,373,000	\$23,411,000	\$21,781,000	\$21,536,000
Capital Surplus		\$0	\$0	\$0	\$0
Retained Earnings		\$40,747,000	\$37,614,000	\$33,418,000	\$35,477,000
Treasury Stock		\$0	\$0	\$0	\$0
Other Equity		\$106,000	\$60,000	\$666,000	\$1,243,000
Total Equity		\$66,226,000	\$61,085,000	\$55,865,000	\$58,256,000
Total Liabilities & Equity		\$113,327,000	\$101,459,000	\$91,900,000	\$92,358,000

Conclusion

At present, it can be said that Intel Corporation is the leading Microprocessor manufacturer without doubt. Their products are durable. They have announced that a new series of Microprocessor family namely Core-i9 will be available soon. The specification of this upcoming series seems promising though its price may not be within reasonable range for the average class people of a developing country like Bangladesh.

References

1. <http://www.intel.com>
2. <http://www.amd.com>
3. <http://www.qualcomm.com>
4. <http://www.samsung.com>
5. <http://www.forbes.com>
6. <http://www.panmore.com>
7. <http://market.ft.com>
8. <http://www.nasdaq.com>