# ACTG 2301 Financial and Managerial Accounting

Spring 2017
Project Report
Intel v/s AMD

Aman Simhar (W1266471) Ekta Ratanpara (W1275326) Tanushree Chaudhary (W1361677)

Introduction	3
Intel Corp	3
Key Facts	3
Key Competitors	4
Key Drivers	4
Key Challenges	4
Timeline of Salient Information - Intel	5
AMD Inc	7
Key Facts	7
Key Competitors	7
Key Drivers	8
Key Challenges	8
Timeline of Salient Information - AMD	8
Streets Position	Error! Bookmark not defined.
Intel	9
AMD	12
Business Segmentation	14
Business Risk Intel	14
Business Risk AMD	14
Intel Summary of Earning's Call	14
AMD Summary of Earning's Call	15
Intel Compensation Table	
AMD Compensation Table	18
Horizontal and Vertical Analysis	19
Horizontal Analysis:	19
Vertical Analysis:	30
Key Financial Ratios	36
Profitability Ratios:	36
Liquidity Ratios:	37
Efficiency Ratios:	38
Investors Decision	42
EPS	42
Creditor's Decision	43
Conclusion	44
References	45

### Introduction

### INTEL CORP.

Intel is the biggest computer chip company, controlling 80% of the market for microprocessors that act as the brains of desktop, notebook, and server computers. The company was established in 1968 by Robert Noyce and Gordon Moore, former engineers of the Fairchild Semiconductor Company. Its first product was a computer processor named with 8080 and after that in every decade Intel launched many versions of the processor named in number terminology i.e. 8084, 8085 and many more. The company also makes chips for smartphones, and tablets we well as embedded semiconductors for the industrial, medical, and automotive markets. The company's chips start in its research labs around the world and they are made in one of the industry's biggest manufacturing systems. As PC sales have declined, Intel has shifted focus and resources to develop and make chips for the data centers that power cloud computing. A small portion of revenue comes from security software. The biggest customers for Intel's chips are computer and device makers based in Asia. Today Intel is world's only company that produces more than 8 hardware devices for the computer with world's best rated technology.

Highlighted Processors products of Intel are:











### **Key Facts for Intel**

Head Office	2200 Mission College Blvd. Santa Clara CA, USA
Phone	408-765-8080
Web Address	https://www.intel.com
Revenue / Turnover (USD 2016)	59.38 billion
Fiscal Year End	January
Employees (2016)	106,000
Gross Margin (Dec 2016)	60.94%

### **Key Competitors for Intel**

Competitors in PC chip sets include Advanced Micro Devices, VIA Technologies, Silicon Integrated Systems, and Nvidia. Intel's competitors in networking include NXP Semiconductors, Infineon, Broadcom Limited, Marvell Technology Group and Applied Micro Circuits Corporation, and competitors in Flash memory include Spansion, Samsung, Qimonda, Toshiba, STMicroelectronics, and SK Hynix.

The only major competitor in the x86 processor market is Advanced Micro Devices (AMD), with which Intel has had full cross-licensing agreements since 1976: each partner can use the other's patented technological innovations without charge after a certain time. However, the cross-licensing agreement is canceled in the event of an AMD bankruptcy or takeover.

Some smaller competitors such as VIA Technologies produce low-power x86 processors for small factor computers and portable equipment.

### **Key Drivers for Intel**

### Product features and competitiveness

Indeed, Intel's personal computer and server/data center processor products usually offer best-in-class performance and power efficiency. Furthermore, Intel has done an excellent job over the years of continuing to integrate additional features and technologies that previously required separate chips, allowing the company to capture additional value with its offerings.

### Product cost structure

Gross profit margin is a function of both the amount that a company can charge per-unit and the manufacturing costs per-unit of a given product. Having competitive features and performance enables Intel to command relatively high prices for its products. However, if the company can only achieve that product competitiveness by blowing up its cost structure, then its margins see no improvement.

What Intel has worked to do for quite some time is to develop different variants of its products targeted at different price and performance points. More expensive, higher-performance chips tend to be larger -- as they usually pack in additional processor cores, graphics, and so on -- while lower-cost, lower-performance chips tend to be smaller.

Intel owns and operates its own chip manufacturing plants and spends significantly to develop the manufacturing processes to actually build those chips. The yield rates that Intel achieves with these manufacturing technologies directly affect a chip's cost structure.

### **Key Challenges for Intel**

### Catching up in mobile

It has been well documented that Intel came late to the mobile game, and it's cost the company the pole position in a booming sector where low-power chips for smartphones and tablets are in demand. Intel's focus for years, and where it has invested heavily, is in higher-power PC chips. For Intel, the challenge is to, in effect, find ways to downsize what it's done for years, which is much more difficult than scaling up.

### Settling on a foundry business strategy

Intel decided long ago to differentiate itself from competitors with its manufacturing capabilities. The Portland region has benefitted greatly from this strategy with Intel pouring billions of dollars into its Hillsboro fabs. The competitive advantage has come at a cost. Upgrading those fabs has become almost exponentially more expensive.

### Keeping the innovation pipeline flush

While this issue will likely be a much lower priority than mobile or the foundry business, keeping fresh ideas flowing at Intel is important. Investing in smaller projects with major market potential, such as the Intel Media unit that's developing the company's pay-TV streaming technology, could pay off in the future. Diversification is important, and so too is keeping the creative minds of Intel focused on what could be the next big thing.

### **Timeline of Salient Information – Intel**

Year	Event
1968	Intel is founded by Robert Noyce and Gordon Moore, both who left Fairchild Semiconductor
1969	Advanced Micro Devices is founded by Jerry Sanders. This company would become the second-largest supplier and only significant rival to Intel in the market for x86-based microprocessors.
1970	Intel comes out with its 3rd product, the Intel 1103, which put Intel on the map.
1971	Intel goes IPO at a price of \$23.50 a share. At 350,000 shares, this sums to a total of \$8.225M.
1971	Intel launches its first microprocessor, the 4004.
1972	Intel announces the first 8-bit microprocessor, the 8008.
1974	Intel launches the Intel 8080 microprocessor, the first general-purpose microprocessor, featuring 4,500 transistors. This finally kickstarts computer development.
1978	Intel introduces the 8086 16-bit microprocessor, which becomes the industry standard (for the x86 instruction set).
1982	Intel launches the 16-bit Intel 286 microprocessor, which features 134,000 transistors and is built into many PCs.
1984	Intel announces the world's first CHMOS DRAMs, which have densities as high as 256K
1985	Intel enters the parallel supercomputer business and introduces the iPSC/1.
1989	Intel introduces the 80486 microprocessor, which it sole-sources for 4 years. This offers backwards compatibility.
1990	Intel loses its suit against AMD. This loss allows AMD to create clones of the 386 processor.
1992	Intel becomes the top-ranked seller for semiconductor sales. It has retained its top ranking ever since.

Intel launches the Pentium Pro processor, a high-performance chip targeted for 32-bit workstations.  Intel launches the Pentium III generation of microprocessors, which features the addition of the SSE instruction set (to accelerate floating point and parallel calculations).  Intel launches Intel Research.  Intel introduces the Pentium 4 processor, with an initial speed of 1.5 GHz.  Intel and Advanced Micro Devices make a patent cross-license agreement between the companies.  Intel introduces Centrino processor technology for laptop PCs, which made wireless compatibility a standard for laptop computers.  Intel announces that it will implement its first 64-bit processor, and releases the Nocona on June 2004.  AMD files lawsuit against Intel, claiming that Intel engaged in unfair competition by offering rebates to Japanese PC manufacturers who agreed to eliminate or limit purchases of microprocessors made by AMD or a smaller manufacturer, Transmeta. On November 2009, Intel agrees to pay AMD \$1.25 billion in a settlement.  Intel announces the Intel Atom, a line of low-power, low-cost and low-performance x86 and x86-64 microprocessors that can be used for smartphones and tablets.  Intel pays Advanced Micro Devices \$1.25 billion in a settlement over AMD's assertion that Intel rewarded computer makers that used only Intel chips and punished those who bought from AMD.  Intel announces that it will put the first 3D transistors. into high-volume production (the structure it invented is called "Tri-Gate").  Intel releases the next-generation lineup of desktop and mobile processors in the Core i3, i5, and i7 family - known as Haswell.  Thomas Sohmers, a 2013 Thiel Fellow, announces that his Rex Systems has scored \$1.25 million in venture funding to develop an alternative way to architect chips that use I/20th of the power that Intel's chips use. He plans by starting at the high-end supercomputers market.	1994	Intel suffers a public relations disaster when the CNN publicized the story that there was a flaw in the way that the Pentium chip did division. Intel argued that the flaw was irrelevant, but then IBM halted shipments of Pentium-based computers, forcing Intel to reverse course and offer a no-questions-asked return policy.
addition of the SSE instruction set (to accelerate floating point and parallel calculations).  Intel launches Intel Research.  Intel introduces the Pentium 4 processor, with an initial speed of 1.5 GHz.  Intel and Advanced Micro Devices make a patent cross-license agreement between the companies.  Intel introduces Centrino processor technology for laptop PCs, which made wireless compatibility a standard for laptop computers.  Intel announces that it will implement its first 64-bit processor, and releases the Nocona on June 2004.  AMD files lawsuit against Intel, claiming that Intel engaged in unfair competition by offering rebates to Japanese PC manufacturers who agreed to eliminate or limit purchases of microprocessors made by AMD or a smaller manufacturer, Transmeta. On November 2009, Intel agrees to pay AMD \$1.25 billion in a settlement.  Intel announces the Intel Atom, a line of low-power, low-cost and low-performance x86 and x86-64 microprocessors that can be used for smartphones and tablets.  Intel pays Advanced Micro Devices \$1.25 billion in a settlement over AMD's assertion that Intel rewarded computer makers that used only Intel chips and punished those who bought from AMD.  Intel announces that it will put the first 3D transistors. into high-volume production (the structure it invented is called "Tri-Gate").  Intel releases the next-generation lineup of desktop and mobile processors in the Core i3, i5, and i7 family - known as Haswell.  Thomas Sohmers, a 2013 Thiel Fellow, announces that his Rex Systems has scored \$1.25 million in venture funding to develop an alternative way to architect chips that use 1/20th of the power that Intel's chips use. He plans by starting at the high-end supercomputers market.	1995	· · · · · · · · · · · · · · · · · · ·
Intel introduces the Pentium 4 processor, with an initial speed of 1.5 GHz.  Intel and Advanced Micro Devices make a patent cross-license agreement between the companies.  Intel introduces Centrino processor technology for laptop PCs, which made wireless compatibility a standard for laptop computers.  Intel announces that it will implement its first 64-bit processor, and releases the Nocona on June 2004.  AMD files lawsuit against Intel, claiming that Intel engaged in unfair competition by offering rebates to Japanese PC manufacturers who agreed to eliminate or limit purchases of microprocessors made by AMD or a smaller manufacturer, Transmeta. On November 2009, Intel agrees to pay AMD \$1.25 billion in a settlement.  Intel announces the Intel Atom, a line of low-power, low-cost and low-performance x86 and x86-64 microprocessors that can be used for smartphones and tablets.  Intel pays Advanced Micro Devices \$1.25 billion in a settlement over AMD's assertion that Intel rewarded computer makers that used only Intel chips and punished those who bought from AMD.  Intel announces that it will put the first 3D transistors. into high-volume production (the structure it invented is called "Tri-Gate").  Intel releases the next-generation lineup of desktop and mobile processors in the Core i3, i5, and i7 family - known as Haswell.  Thomas Sohmers, a 2013 Thiel Fellow, announces that his Rex Systems has scored \$1.25 million in venture funding to develop an alternative way to architect chips that use 1/20th of the power that Intel's chips use. He plans by starting at the high-end supercomputers market.	1999	addition of the SSE instruction set (to accelerate floating point and parallel
Intel and Advanced Micro Devices make a patent cross-license agreement between the companies.  Intel introduces Centrino processor technology for laptop PCs, which made wireless compatibility a standard for laptop computers.  Intel announces that it will implement its first 64-bit processor, and releases the Nocona on June 2004.  AMD files lawsuit against Intel, claiming that Intel engaged in unfair competition by offering rebates to Japanese PC manufacturers who agreed to eliminate or limit purchases of microprocessors made by AMD or a smaller manufacturer, Transmeta. On November 2009, Intel agrees to pay AMD \$1.25 billion in a settlement.  Intel announces the Intel Atom, a line of low-power, low-cost and low-performance x86 and x86-64 microprocessors that can be used for smartphones and tablets.  Intel pays Advanced Micro Devices \$1.25 billion in a settlement over AMD's assertion that Intel rewarded computer makers that used only Intel chips and punished those who bought from AMD.  Intel announces that it will put the first 3D transistors. into high-volume production (the structure it invented is called "Tri-Gate").  Intel releases the next-generation lineup of desktop and mobile processors in the Core i3, i5, and i7 family - known as Haswell.  Thomas Sohmers, a 2013 Thiel Fellow, announces that his Rex Systems has scored \$1.25 million in venture funding to develop an alternative way to architect chips that use 1/20th of the power that Intel's chips use. He plans by starting at the high-end supercomputers market.	2000	Intel launches Intel Research.
Intel and Advanced Micro Devices make a patent cross-license agreement between the companies.  Intel introduces Centrino processor technology for laptop PCs, which made wireless compatibility a standard for laptop computers.  Intel announces that it will implement its first 64-bit processor, and releases the Nocona on June 2004.  AMD files lawsuit against Intel, claiming that Intel engaged in unfair competition by offering rebates to Japanese PC manufacturers who agreed to eliminate or limit purchases of microprocessors made by AMD or a smaller manufacturer, Transmeta. On November 2009, Intel agrees to pay AMD \$1.25 billion in a settlement.  Intel announces the Intel Atom, a line of low-power, low-cost and low-performance x86 and x86-64 microprocessors that can be used for smartphones and tablets.  Intel pays Advanced Micro Devices \$1.25 billion in a settlement over AMD's assertion that Intel rewarded computer makers that used only Intel chips and punished those who bought from AMD.  Intel announces that it will put the first 3D transistors. into high-volume production (the structure it invented is called "Tri-Gate").  Intel releases the next-generation lineup of desktop and mobile processors in the Core i3, i5, and i7 family - known as Haswell.  Thomas Sohmers, a 2013 Thiel Fellow, announces that his Rex Systems has scored \$1.25 million in venture funding to develop an alternative way to architect chips that use 1/20th of the power that Intel's chips use. He plans by starting at the high-end supercomputers market.	2000	Intel introduces the Pentium 4 processor, with an initial speed of 1.5 GHz.
2003 wireless compatibility a standard for laptop computers.  Intel announces that it will implement its first 64-bit processor, and releases the Nocona on June 2004.  AMD files lawsuit against Intel, claiming that Intel engaged in unfair competition by offering rebates to Japanese PC manufacturers who agreed to eliminate or limit purchases of microprocessors made by AMD or a smaller manufacturer, Transmeta. On November 2009, Intel agrees to pay AMD \$1.25 billion in a settlement.  Intel announces the Intel Atom, a line of low-power, low-cost and low-performance x86 and x86-64 microprocessors that can be used for smartphones and tablets.  Intel pays Advanced Micro Devices \$1.25 billion in a settlement over AMD's assertion that Intel rewarded computer makers that used only Intel chips and punished those who bought from AMD.  Intel announces that it will put the first 3D transistors. into high-volume production (the structure it invented is called "Tri-Gate").  Intel releases the next-generation lineup of desktop and mobile processors in the Core i3, i5, and i7 family - known as Haswell.  Thomas Sohmers, a 2013 Thiel Fellow, announces that his Rex Systems has scored \$1.25 million in venture funding to develop an alternative way to architect chips that use 1/20th of the power that Intel's chips use. He plans by starting at the high-end supercomputers market.	2001	Intel and Advanced Micro Devices make a patent cross-license agreement
the Nocona on June 2004.  AMD files lawsuit against Intel, claiming that Intel engaged in unfair competition by offering rebates to Japanese PC manufacturers who agreed to eliminate or limit purchases of microprocessors made by AMD or a smaller manufacturer, Transmeta. On November 2009, Intel agrees to pay AMD \$1.25 billion in a settlement.  Intel announces the Intel Atom, a line of low-power, low-cost and low-performance x86 and x86-64 microprocessors that can be used for smartphones and tablets.  Intel pays Advanced Micro Devices \$1.25 billion in a settlement over AMD's assertion that Intel rewarded computer makers that used only Intel chips and punished those who bought from AMD.  Intel announces that it will put the first 3D transistors, into high-volume production (the structure it invented is called "Tri-Gate").  Intel releases the next-generation lineup of desktop and mobile processors in the Core i3, i5, and i7 family - known as Haswell.  Thomas Sohmers, a 2013 Thiel Fellow, announces that his Rex Systems has scored \$1.25 million in venture funding to develop an alternative way to architect chips that use 1/20th of the power that Intel's chips use. He plans by starting at the high-end supercomputers market.	2003	
by offering rebates to Japanese PC manufacturers who agreed to eliminate or limit purchases of microprocessors made by AMD or a smaller manufacturer, Transmeta. On November 2009, Intel agrees to pay AMD \$1.25 billion in a settlement.  Intel announces the Intel Atom, a line of low-power, low-cost and low-performance x86 and x86-64 microprocessors that can be used for smartphones and tablets.  Intel pays Advanced Micro Devices \$1.25 billion in a settlement over AMD's assertion that Intel rewarded computer makers that used only Intel chips and punished those who bought from AMD.  Intel announces that it will put the first 3D transistors. into high-volume production (the structure it invented is called "Tri-Gate").  Intel releases the next-generation lineup of desktop and mobile processors in the Core i3, i5, and i7 family - known as Haswell.  Thomas Sohmers, a 2013 Thiel Fellow, announces that his Rex Systems has scored \$1.25 million in venture funding to develop an alternative way to architect chips that use 1/20th of the power that Intel's chips use. He plans by starting at the high-end supercomputers market.	2004	·
performance x86 and x86-64 microprocessors that can be used for smartphones and tablets.  Intel pays Advanced Micro Devices \$1.25 billion in a settlement over AMD's assertion that Intel rewarded computer makers that used only Intel chips and punished those who bought from AMD.  Intel announces that it will put the first 3D transistors. into high-volume production (the structure it invented is called "Tri-Gate").  Intel releases the next-generation lineup of desktop and mobile processors in the Core i3, i5, and i7 family - known as Haswell.  Thomas Sohmers, a 2013 Thiel Fellow, announces that his Rex Systems has scored \$1.25 million in venture funding to develop an alternative way to architect chips that use 1/20th of the power that Intel's chips use. He plans by starting at the high-end supercomputers market.	2005	by offering rebates to Japanese PC manufacturers who agreed to eliminate or limit purchases of microprocessors made by AMD or a smaller manufacturer, Transmeta. On November 2009, Intel agrees to pay AMD \$1.25 billion in a
assertion that Intel rewarded computer makers that used only Intel chips and punished those who bought from AMD.  Intel announces that it will put the first 3D transistors. into high-volume production (the structure it invented is called "Tri-Gate").  Intel releases the next-generation lineup of desktop and mobile processors in the Core i3, i5, and i7 family - known as Haswell.  Thomas Sohmers, a 2013 Thiel Fellow, announces that his Rex Systems has scored \$1.25 million in venture funding to develop an alternative way to architect chips that use 1/20th of the power that Intel's chips use. He plans by starting at the high-end supercomputers market.	2008	performance x86 and x86-64 microprocessors that can be used for smartphones
Intel announces that it will put the first 3D transistors. into high-volume production (the structure it invented is called "Tri-Gate").  Intel releases the next-generation lineup of desktop and mobile processors in the Core i3, i5, and i7 family - known as Haswell.  Thomas Sohmers, a 2013 Thiel Fellow, announces that his Rex Systems has scored \$1.25 million in venture funding to develop an alternative way to architect chips that use 1/20th of the power that Intel's chips use. He plans by starting at the high-end supercomputers market.	2009	assertion that Intel rewarded computer makers that used only Intel chips and
2013 Core i3, i5, and i7 family - known as Haswell.  Thomas Sohmers, a 2013 Thiel Fellow, announces that his Rex Systems has scored \$1.25 million in venture funding to develop an alternative way to architect chips that use 1/20th of the power that Intel's chips use. He plans by starting at the high-end supercomputers market.	2011	Intel announces that it will put the first 3D transistors. into high-volume production
scored \$1.25 million in venture funding to develop an alternative way to architect chips that use 1/20th of the power that Intel's chips use. He plans by starting at the high-end supercomputers market.	2013	
	2015	scored \$1.25 million in venture funding to develop an alternative way to architect chips that use 1/20th of the power that Intel's chips use. He plans by starting at

### AMD INC.

Founded in 1969 by Jerry Sanders based in Sunnyvale, California, AMD provides microprocessors, Flash memory devices, and silicon-based solutions for the customers in the communications and computer industries worldwide. However, the company's focus goes beyond integrated circuits and transistors. AMD is committed to helping customers — and their customers — take advantage of the phenomenal capacity of silicon to add value and help differentiate their offerings. To that end, AMD products are always developed keeping in mind the customer needs and not for the sake of innovation alone. Stated more plainly, it means that AMD exists to provide real solutions for real customer problems that exist in the real world today. AMD refer to this philosophy as "customer-centric innovation" and it represents the quiding principle behind everything.

Highlighted Processors products of AMD are:











### **Key Facts for AMD**

Head Office	AMD Headquarters One AMD Place Sunnyvale, CA, USA
Phone	408-749-4000
Web Address	https://www.amd.com
Revenue / Turnover (USD 2016)	4.27 billion
Fiscal Year End	January
Employees (2016)	9,100
Gross Margin (Dec 2016)	23.36%

### **Key Competitors for AMD**

Intel Corp, IBM, NVIDIA Corporation, Analog devices Inc.

### **Key Drivers for AMD**

- AMD is looking to gain market share in the high-end CPU and GPU space which drives revenue and the earnings increases.
- Introduction of new products.
- Higher products performance in comparison to its competitors which stimulates greater enthusiasm for end products and support.

### **Key Challenges for AMD**

- Severe price competition which results in shrinking profit margins
- Failure to keep up with technology and at the same time not increasing costs too much, increasing chip complexity requires more advanced processes to keep costs under control
- Threat of new entrants
- Availability of substitutes

### **Timeline of Salient Information - AMD**

Year	Event
1969	Co-founder Jerry Sanders named AMD's first president and CEO.
1970	AMD introduces its first proprietary device: the Am2501 logic counter.
1972	AMD goes public.
1979	AMD debuts on the New York Stock Exchange.
1982	At IBM's request, AMD signs an agreement to serve as a second source to Intel for IBM PC microprocessors.
1984	AMD is listed in "The 100 Best Companies to Work for in America.
1985	ATI incorporates. ATI develops its first graphics controller and first graphics board product
1991	AMD's Am386® microprocessor family debuts.
1993	AMD Am486® microprocessor family debuts.
1994	AMD and Compaq Computer Corp. form long-term alliance to power Compaq computers with Am486 microprocessors.
1995	AMD introduces AMD-K5® microprocessor: first independently-designed, socket-compatible x86 microprocessor.
1996	AMD acquires NexGen, a microprocessor company.AMD acquires NexGen, a microprocessor company.
2000	AMD is first to break the historic 1GHz (one billion clock cycles per second) with the AMD Athlon™ processor.
2002	Hector Ruiz appointed president and CEO. AMD acquires Alchemy Semiconductor for low-power, embedded processor technology

2003	AMD and IBM sign joint manufacturing technology development agreement to develop future generation manufacturing technologies.
2004	AMD demonstrates world's first x86 dual-core processor.
2006	AMD acquires ATI to create a new, innovative processing powerhouse.
2009	AMD and Intel announce a settlement of all antitrust and IP disputes, with Intel paying AMD \$1.25 billion and agreeing to abide by a set of business practice provisions.
2010	AMD announces the AMD Opteron <sup>™</sup> 4000 Series platform, the first true server platform designed from the beginning to meet the needs of cloud, hyperscale and SMB data centers.
2011	AMD launches the AMD Fusion Family of APUs – which consist of both a CPU and powerful GPU on a single die
2012	Became the first company to announce plans to design and offer both 64-bit ARM® technology-based and x86 processors for multiple markets, starting with server and embedded processors
2014	AMD announced two new confidential semi-custom design wins, including its first 64-bit ARM® based design win and diversification beyond gaming.
2015	AMD announced the GPUOpen initiative to help address the evolving demands of graphics and unlock game and application development through open source software.
2016	AMD launched its fastest APU released to date, the AMD A10-7890K

### **INTEL-STREET POSITION AND EXPECTATIONS**

Earnings Estimate	Current Qtr. (Jun 2017)	Next Qtr. (Sep 2017)	Current Year (2017)	Next Year (2018)
No. of Analysts	31	31	35	36
Avg. Estimate	0.68	0.74	2.86	2.97
Low Estimate	0.67	0.7	2.8	2.66
High Estimate	0.69	0.77	2.95	3.34
Year Ago EPS	0.59	0.8	2.72	2.86
Sales Growth	6.50%	-3.00%	1.10%	2.60%
(year/est)				

- 31 analysts are tracking the Intel progress for the current quarter and 35 analysts are tracking it for the current year.
- Sale is expected to decline by 3% in the next quarter.
- Debt –to-equity ratio is low at .38 and is below the industry average. This implies that the company has been successful in managing the debt levels.

- The company has quick ratio of 1.04, which illustrates the company's ability to avoid short term cash problems.
- Intel's quarterly revenue growth (yoy) is 8%, which is higher than the industry average of 6.8%.

INTC BUSINESS DESCRIPTION Intel Corporation designs, manufactures, and sells computer, networking, and communications platforms worldwide.					
	1 Vr	3 Yr (Ann)			
		9.75			
0.02	14.00	5.70			
Last Qtr	12 Mo.	3 Yr CAGR			
7.98	7.47	4.57			
44.86	-2.10	5.73			
45.23	-2.13	7.33			
RETURN ON EQUITY (%)					
INTC	Ind Avg	S&P 500			
16.58	16.21	12.81			
18.48	15.28	11.95			
21.07	21.34	14.20			
	signs, mang, and coo.  ICE (%) 3 Mo. 0.52  Last Otr 7.98 44.86 45.23  (%) INTC 16.58 18.48	signs, manufactures, ag, and communication.  ICE (%)  3 Mo. 1 Yr.  0.52 14.08  Last Otr 12 Mo.  7.98 7.47  44.86 -2.10  45.23 -2.13  (%)  INTC Ind Avg  16.58 16.21  18.48 15.28			

- Intel gross profit margin for the first quarter of 2017 has remained unchanged as compared to the same period last year.
- Current Ratio increased from 1.58 to 1.69 which is a good sign because current ration shows a company's capability to pay off short term debt.

DEBT		
	Q1 FY17	Q1 FY16
Current Ratio	1.69	1.56
Debt/Capital	0.28	0.29
Interest Expense	213.00	230.00
Interest Coverage	17.19	12.58

- Debt/Capital ratio also came down from .28 in Q1 FY 16 to .28 in Q1 FY 17.
- Sales and net income have grown and even though growth in revenue has outpaced the competitors, the growth in net income has not.
- The company's liquidity has decreased from that of last year indicating deteriorating

cash flows.

- The stock holder's equity has increased by approximately 9% from that of same quarter last year.
- The semiconductor industry's global market share in chip production has deteriorated in the last year due to various reasons like environmental concerns.
- The stock of Intel is trading at a higher value than it was trading a year or two ago, this means that the company's revenue growth is robust.
- By looking at company's finances, one can conclude that the company has the tendency to borrow quickly.

### **Shares held by Institutions**

• In total, there are 2028 institutional holders with a total of 3,243,866,608 shares among them. Vanguard group Inc holds the maximum number of shares. Following are top 15 institutional holders.

Owner Name	Date	Shared Held	Change (Shares)	Change (%)	Value (in 1,000s)
VANGUARD GROUP INC	03/31/2017	325,412,771	10,291,660	3.27	11,620,490
BLACKROCK INC.	03/31/2017	290,256,342	(7,557,957)	(2.54)	10,365,054
STATE STREET CORP	03/31/2017	203,155,099	4,185,120	2.10	7,254,669
CAPITAL WORLD INVESTORS	03/31/2017	187,493,101	18,243,491	10.78	6,695,379
CAPITAL RESEARCH GLOBAL INVESTORS	03/31/2017	117,836,868	6,751,371	6.08	4,207,955
WELLINGTON MANAGEMENT GROUP LLP	03/31/2017	111,452,936	(11,493,169)	(9.35)	3,979,984
BANK OF AMERICA CORP /DE/	03/31/2017	87,195,987	1,224,659	1.42	3,113,769
INVESCO LTD.	03/31/2017	59,967,814	98,731	.17	2,141,451
NORTHERN TRUST CORP	03/31/2017	58,853,182	316,872	.54	2,101,647
GEODE CAPITAL MANAGEMENT, LLC	03/31/2017	53,942,204	4,182,603	8.41	1,926,276
DIMENSIONAL FUND ADVISORS LP	03/31/2017	50,423,380	2,141,570	4.44	1,800,619
NORGES BANK	12/31/2016	46,451,321	(182,989)	(0.39)	1,658,777
BANK OF NEW YORK MELLON CORP	03/31/2017	45,687,007	(1,763,014)	(3.72)	1,631,483
SCHRODER INVESTMENT MANAGEMENT GROUP	03/31/2017	39,116,776	16,911,360	76.16	1,396,860
FMR LLC	03/31/2017	37,445,784	17,139,450	84.40	1,337,189

### **AMD-STREET POSITION AND EXPECTATIONS**

Earnings Estimate	Current Qtr. (Jun 2017)	Next Qtr. (Sep 2017)	Current Year (2017)	Next Year (2018)
No. of Analysts	21	21	23	23
Avg. Estimate	N/A	0.07	0.07	0.3
Low Estimate	-0.01	0.04	0.01	0.15
High Estimate	0.01	0.1	0.14	0.58
Year Ago EPS	-0.05	0.03	-0.14	0.07
Sales Growth (year/est)	12.40%	6.30%	12.70%	10.60%

- 21 analysts are tracking the AMD share for the current quarter and 23 in total.
- The sales have increased by 12.40% in the current quarter and it is expected that it will increase by 6.30%.
- Earnings per share decreased by .05 and it is expected to decrease by a total of .14.
- The sale for the current quarter is estimated to be as high as 1.2 bn and at least 1.15 bn.
- The quick ration is 1.05, which shows that the company has the ability to cover short term cash needs.
- The stock holder's equity has increased by approx 181% from that of same quarter last year.
- The liquidity measurements indicate that it is unlikely that the company will face any financial difficulty at any time.

STOCK PERFORMANCE (%)					
	3 Mo.	1 Yr.	3 Yr (Ann)		
Price Change	-26.94	146.72	39.80		
GROWTH (%)					
	Last Qtr	12 Mo.	3 Yr CAGR		
Revenues	18.26	16.63	-7.60		
Net Income	33.03	21.74	NA		
EPS	42.86	25.34	NA		
RETURN ON EQ	UITY (%)				
	AMD	Ind Avg	S&P 500		
Q1 2017	-112.71	16.21	12.81		
Q1 2016	NM	15.28	11.95		
Q1 2015	-3,311.76	21.34	14.20		

• Sales and net income have grown, and although the growth in revenue outpaced the

competitors in the industry, the net income has not.

- The debt-to-equity ratio is very high at 3.44, implying that the company is not managing debt well.
- Net operating cash flow has significantly decreased when compared to the same period in last quarter.
- Even though the gross profit margin is very strong, net profit margin is still at the industry average.

### **Shares held by Institutions**

In total, there are 468 institutional holders with a total of 539,062,691 total shares among them. Vanguard group Inc holds the maximum number of shares. Following are top 15 institutional holders.

Owner Name	Date	Shared Held	Change (Shares)	Change (%)	Value (in 1,000s)
VANGUARD GROUP INC	03/31/2017	87,294,800	15,661,774	21.86	1,071,980
BLACKROCK INC.	03/31/2017	69,668,257	(12,115,819)	(14.81)	855,526
STATE STREET CORP	03/31/2017	35,913,442	11,428,988	46.68	441,017
OPPENHEIMERFUNDS, INC.	03/31/2017	20,053,065	(26,864)	(0.13)	246,252
FMR LLC	03/31/2017	15,392,803	(15,856,898)	(50.74)	189,024
WELLINGTON MANAGEMENT GROUP LLP	03/31/2017	14,181,305	13,939,494	5,764.62	174,146
NORTHERN TRUST CORP	03/31/2017	13,043,426	2,092,500	19.11	160,173
DISCOVERY CAPITAL MANAGEMENT, LLC / CT	03/31/2017	11,315,000	11,315,000	New	138,948
GEODE CAPITAL MANAGEMENT, LLC	03/31/2017	9,210,323	2,215,111	31.67	113,103
JPMORGAN CHASE & CO	03/31/2017	9,141,666	6,355,896	228.16	112,260
TIAA CREF INVESTMENT MANAGEMENT LLC	03/31/2017	9,094,409	(6,027,907)	(39.86)	111,679
OLD MUTUAL GLOBAL INVESTORS (UK) LTD.	03/31/2017	8,868,705	8,868,705	New	108,908
VOLORIDGE INVESTMENT MANAGEMENT, LLC	03/31/2017	8,075,249	4,447,168	122.58	99,164
RENAISSANCE TECHNOLOGIES LLC	03/31/2017	8,023,026	(3,507,300)	(30.42)	98,523
GOLDMAN SACHS GROUP INC	03/31/2017	6,887,359	4,197,446	156.04	84,577

### **Business Risk Intel**

- Changes in business and economic conditions, including downturns in the semiconductor industry economy
- Changes in consumer confidence caused by changes in market conditions, including changes in the credit market, expectations for inflation, unemployment levels, and energy or other commodity prices
- Competitive pressures, including pricing pressures, from companies that have competing products, chip architectures, manufacturing technologies, and marketing programs
- Changes in the level of customers' components inventories
- Changes in customer product needs
- Strategic actions taken by our competitors

#### **Business Risk AMD**

- Despite the stock increasing over 70%, nothing has materially changed in AMD's business.
- 2016 promises many obstacles, including an aggressive Intel.
- AMD competes with Intel in PC and server processors but has been bleeding share in both markets
- AMD does not have the resources to battle either Intel or NVIDIA
- AMD is sacrificing top-line revenue to explore new markets
- Consistent negative revenues and cash flow, it is difficult for AMD to maintain operations.
- Revenues and net income have been negative for the past few years, which affect all of its financial ratios.

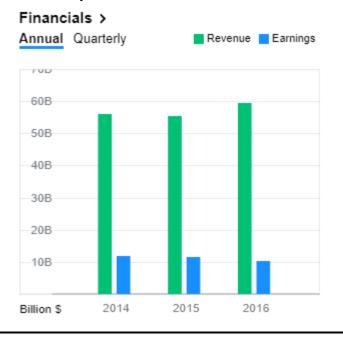
### **Earning's Call Summary of INTEL**

 Net sales of Intel increased by 1.09 billion dollars and net income increased by 946 million dollars.

INCOME STATEMENT		
	Q1 FY17	Q1 FY16
Net Sales (\$mil)	14,796.00	13,702.00
EBITDA (\$mil)	5,607.00	4,909.00
EBIT (\$mil)	3,661.00	2,894.00
Net Income (\$mil)	2,964.00	2,046.00
BALANCE SHEET		
	Q1 FY17	Q1 FY16
Cash & Equiv. (\$mil)	17,295.00	15,091.00
Total Assets (\$mil)	115,648.00	105,467.00
Total Debt (\$mil)	25,751.00	25,294.00
Equity (\$mil)	67,722.00	62,068.00

Total assets increased by 10.18 million ie almost 9.2%.

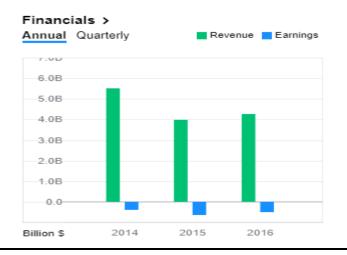
• The revenue has grown by 7.47 % in year 2016 as compared to year 2015 but the net income has decreased by 2.1%.



- Cash and equity has grown from 15,091 in 2016 Q1 to 17,295 in 2017 Q1.
- Total debt has also increased by 460 million in the same period.
- Intel has improved Earnings per share by 45.2% as compared to the same quarter a year ago.

### **Earning's Call Summary of AMD**

• The gross profit margin of the AMD is very strong at 37.09%.



- The revenue has dropped considerably from 2014 but it has still improved from year 2015 which is a good sign.
- The net income of the company is still in negative but it came down from -109 million dollars to -73 million dollar.

INCOME STATEMENT		
	Q1 FY17	Q1 FY16
Net Sales (\$mil)	984.00	832.00
EBITDA (\$mil)	-22.00	-45.00
EBIT (\$mil)	-56.00	-78.00
Net Income (\$mil)	-73.00	-109.00

• The net sales have increased from 832 mil in Q1 FY 16 to 984 mil in Q1FY 17.

BALANCE SHEET		
	Q1 FY17	Q1 FY16
Cash & Equiv. (\$mil)	945.00	716.00
Total Assets (\$mil)	3,299.00	2,981.00
Total Debt (\$mil)	1,408.00	2,236.00
Equity (\$mil)	409.00	-503.00
PROFITABILITY		
	Q1 FY17	Q1 FY16
Gross Profit Margin	37.09%	36.30%
EBITDA Margin	-2.23%	-5.40%
Operating Margin	-5.69%	-9.38%
Sales Turnover	1.34	1.27
Return on Assets	-13.97%	-19.75%
Return on Equity	-112.71%	NM

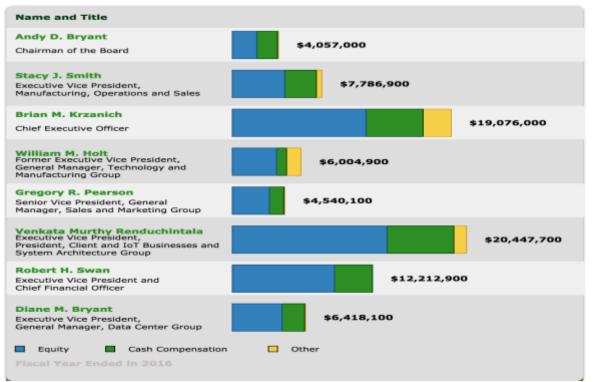
- Cash and equity has grown from 716 mil in 2016 Q1 to 945 mil in 2017 Q1.
- The total debt has come down from 2236 mil in 2016 Q1 to 409 mil in 2017 Q1 which is a good sign for the company.
- Return on asset is still negative but it has come down considerably from -19.75% in Q1 2016 to -13.97% in Q1 2017 which shows that the company's assets are giving more return.
- The sales turnover has also increased which shows that the company is generating more sales.

### **INTEL Compensation Table**

#### **INTEL CORP**

#### Compensation by Company

For its 2016 fiscal year, INTEL CORP, listed the following executives on its annual proxy statement to the SEC



Name	Title	Total Cash	Total Compensation
Andy D. Bryant	Chairman of the Board	\$1,839,600	\$4,057,000
Stacy J. Smith	Executive Vice President, Manufacturing, Operations and Sales	\$2,712,400	\$7,786,900
Brian M. Krzanich	Chief Executive Officer	\$4,949,200	\$19,076,000
William M. Holt	Former Executive Vice President, General Manager, Technology and Manufacturing Group	\$920,400	\$6,004,900
Gregory R. Pearson	Senior Vice President, General Manager, Sales and Marketing Group	\$1,258,600	\$4,540,100
Venkata Murthy Renduchintala	Executive Vice President, President, Client and IoT Businesses and System Architecture Group	\$5,828,400	\$20,447,700

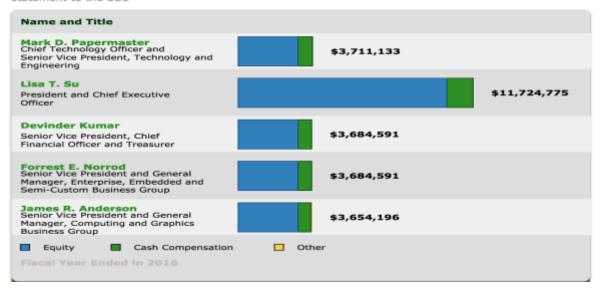
Robert H. Swan	Executive Vice President and Chief Financial Officer	\$3,258,700	\$12,212,900
Diane M. Bryant	Executive Vice President, General Manager, Data Center Group	\$1,961,500	\$6,418,100

### **AMD Compensation table**

#### **ADVANCED MICRO DEVICES INC**

#### **Compensation by Company**

For its 2016 fiscal year, ADVANCED MICRO DEVICES INC, listed the following executives on its annual proxy statement to the SEC



Name	Title	Total Cash	Total Compensation
Mark D. Papermaster	Chief Technology Officer and Senior Vice President, Technology and Engineering	\$728,744	\$3,711,133
Lisa T. Su	President and Chief Executive Officer	\$1,318,996	\$11,724,775
Devinder Kumar	Senior Vice President, Chief Financial Officer and Treasurer	\$702,255	\$3,684,591
Forrest E. Norrod	Senior Vice President and General Manager, Enterprise, Embedded and Semi-Custom Business Group	\$702,255	\$3,684,591

James R. Anderson Senior Vice President and General Manager, Computing and Graphics Business Group	\$662,490	\$3,654,196	Ì
--	-----------	-------------	---

### **Horizontal and Vertical Analysis**

### **Horizontal Analysis:**

**Also** called as trend analysis, is a technique for evaluating a series of financial statement data over a period of time. Its purpose is to determine the increase or decrease that has taken place. This change may be expressed as either an amount or a percentage.

## Change Since Base Period = (Current Year Amount – Base Year Amount) / Base Year Amount

Intel (INTC) Horizontal analysis of Balance Sheet					
	January 30,2016 and 31,2015				
	USD in tl	nousands			
Accounts	2016	2015	Increase/Decrease		
Current Assets					
Short Term Investments	11539000	10005000	0.153323338		
Net Receivables	4690000	4787000	-0.020263213		
Inventory	5553000	5167000	0.074704858		
Other Current Assets	8166000	3053000	1.674746151		
Total Current Assets	35508000	38320000	-0.073382046		
Long Term Investments	10896000	7851000	0.387848682		
Property Plant and Equipment	36171000	31858000	0.135382008		
Goodwill	14099000	11332000	0.244175785		
Intangible Assets	9494000	3933000	1.413933384		
Other Assets	7159000	8165000	-0.123208818		
Total Assets	113327000	101459000	0.116973359		
Current Liabilities					
Accounts Payable	12030000	10768000	0.117199108		
Short/Current Long Term Debt	4634000	2634000	0.759301443		
Other Current Liabilities	3638000	2244000	0.621212121		
Total Current Liabilities	20302000	15646000	0.297584047		
Long Term Debt	20649000	20036000	0.030594929		

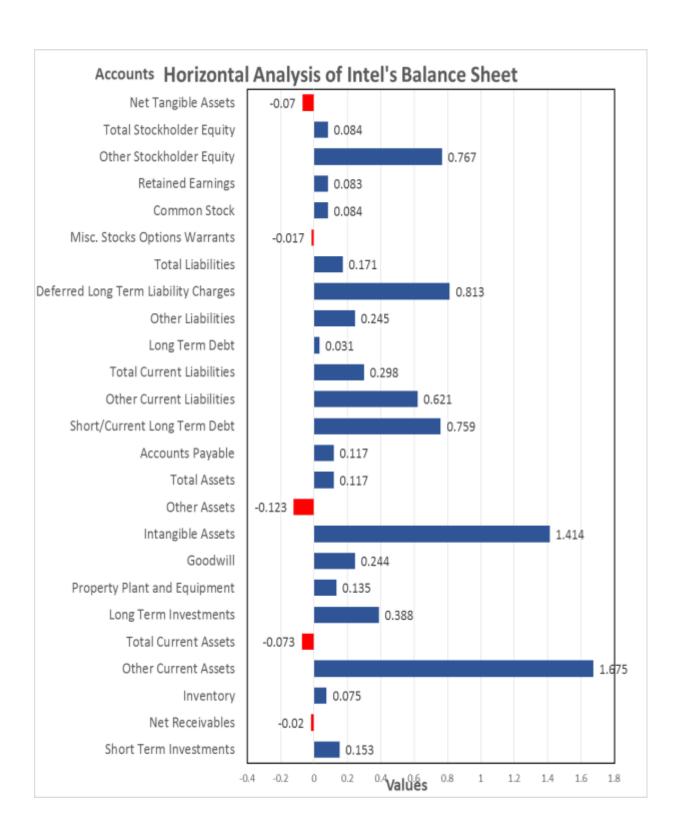
Other Liabilities	3538000	2841000	0.245336149
Deferred Long Term Liability Charges	1730000	954000	0.813417191
Total Liabilities	46219000	39477000	0.170782988
Stockholders' Equity			
Misc. Stocks Options Warrants	882000	897000	-0.016722408
Common Stock	25373000	23411000	0.083806758
Retained Earnings	40747000	37614000	0.083293455
Other Stockholder Equity	106000	60000	0.766666667
Total Stockholder Equity	66226000	61085000	0.084161414
Net Tangible Assets	42633000	45820000	-0.06955478

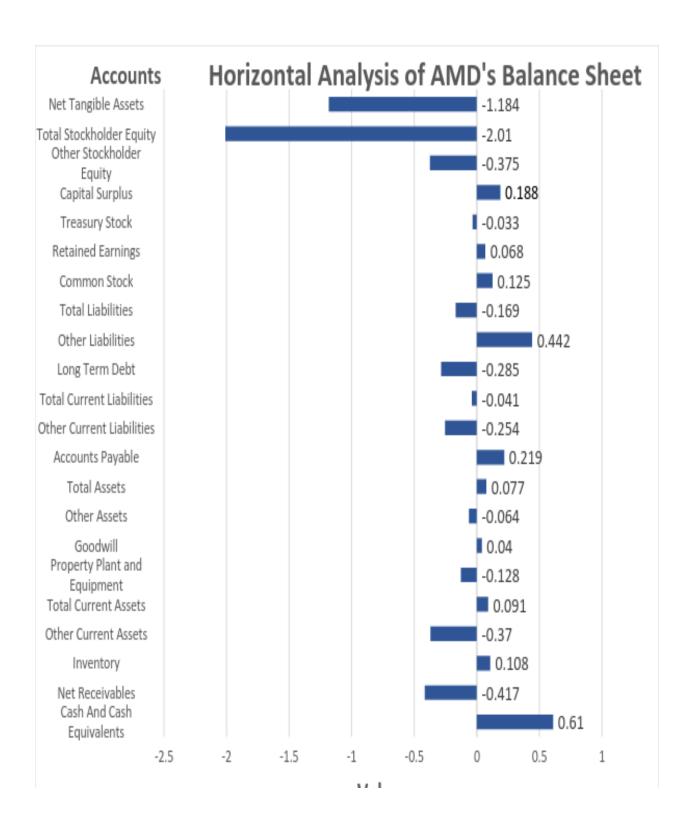
AMD Inc (AMD) Horizontal analysis of Balance Sheet					
January 30,2016 and 31,2015					
	USD in tho	usands			
Accounts 2016 2015 Increase/Decrease					
Current Assets					
Cash And Cash Equivalents	1264000	785000	0.610191083		
Short Term Investments	-	-			
Net Receivables	311000	533000	-0.416510319		
Inventory	751000	678000	0.107669617		
Other Current Assets	204000	324000	-0.37037037		
Total Current Assets	2530000	2320000	0.090517241		
Long Term Investments	59000	59000	0		
Property Plant and Equipment	164000	188000	-0.127659574		
Goodwill	289000	278000	0.039568345		
Other Assets	279000	298000	-0.063758389		
Total Assets	3321000	3084000	0.076848249		
Current Liabilities					
Accounts Payable	1214000	996000	0.218875502		
Other Current Liabilities	132000	177000	-0.254237288		
Total Current Liabilities	1346000	1403000	-0.040627227		
Long Term Debt	1435000	2007000	-0.285002491		
Other Liabilities	124000	86000	0.441860465		
Total Liabilities	2905000	3496000	-0.169050343		
Stockholders' Equity					

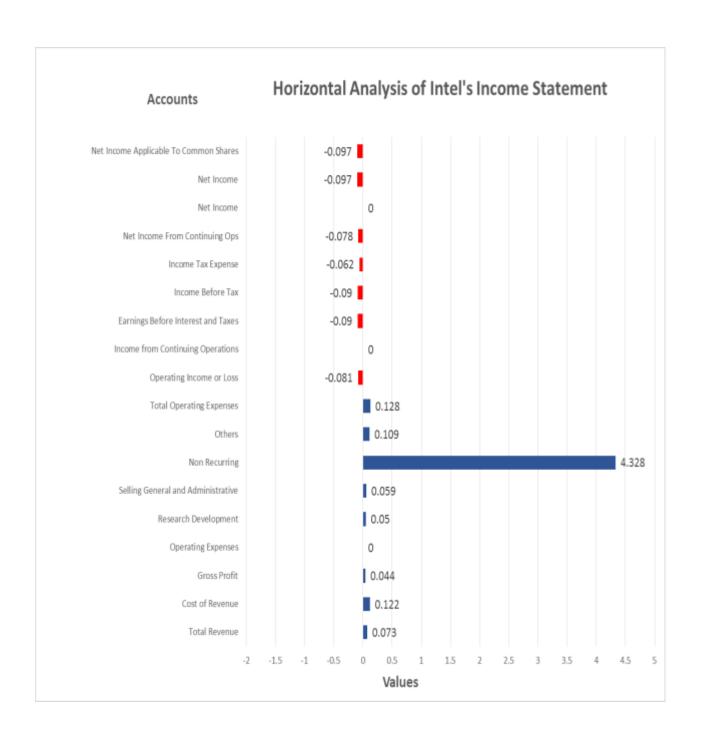
Common Stock	9000	8000	0.125
Retained Earnings	-7803000	-7306000	0.06802628
Treasury Stock	-119000	-123000	-0.032520325
Capital Surplus	8334000	7017000	0.187687046
Other Stockholder Equity	-5000	-8000	-0.375
Total Stockholder Equity	416000	-412000	-2.009708738
Net Tangible Assets	127000	-690000	-1.184057971

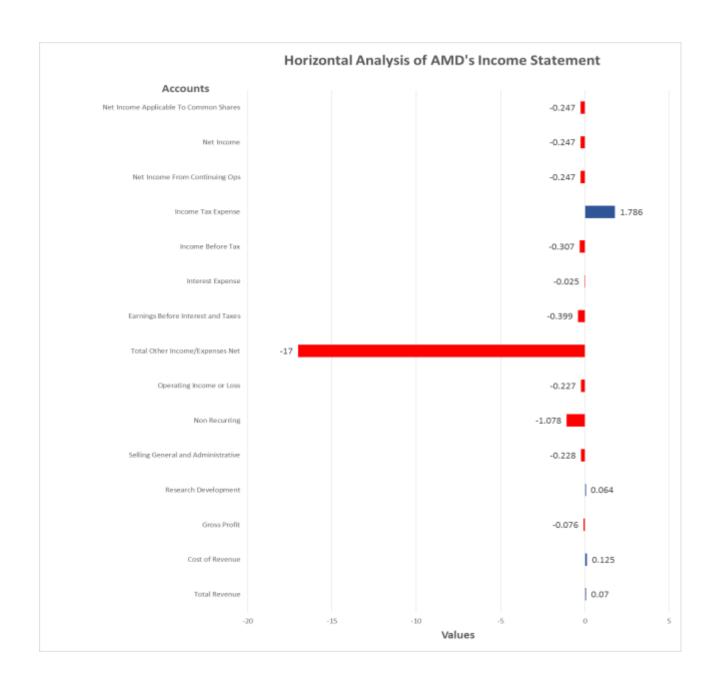
Intel (INTC) Horizontal analysis of Income Statement						
January 30,2016 and 31,2015						
U	JSD in thous	sands				
Accounts 2016 2015 Increase/Decrease						
Revenue						
Total Revenue	59387000	55355000	0.072838949			
Cost of Revenue	23196000	20676000	0.121880441			
Gross Profit	36191000	34679000	0.043599873			
Operating Expenses						
Research Development	12740000	12128000	0.050461741			
Selling General and Administrative	8397000	7930000	0.05889029			
Non Recurring	1886000	354000	4.327683616			
Others	294000	265000	0.109433962			
Total Operating Expenses	23317000	20677000	0.127678096			
Operating Income or Loss	12874000	14002000	-0.08055992			
Income from Continuing Operations						
Earnings Before Interest and Taxes	12936000	14212000	-0.089783282			
Income Before Tax	12936000	14212000	-0.089783282			
Income Tax Expense	2620000	2792000	-0.061604585			
Net Income From Continuing Ops	10822000	11735000	-0.077801449			
Net Income						
Net Income	10316000	11420000	-0.096672504			
Net Income Applicable To Common Shares	10316000	11420000	-0.096672504			

#### AMD Inc. (AMD) Horizontal analysis of Income Statement January 30,2016 and 31,2015 **USD** in thousands Accounts 2016 2015 Increase/Decrease Revenue Total Revenue 4272000 3991000 0.070408419 Cost of Revenue 3274000 2911000 0.124699416 **Gross Profit** 998000 1080000 -0.075925926 **Operating Expenses** Research Development 1008000 947000 0.064413939 Selling General and Administrative 372000 482000 -0.228215768 -10000 Non Recurring 129000 -1.07751938 **Operating Income or Loss** -372000 -481000 -0.226611227 **Income from Continuing Operations** Total Other Income/Expenses Net 80000 -5000 -17 Earnings Before Interest and Taxes -292000 -486000 -0.399176955 160000 -0.025 Interest Expense 156000 Income Before Tax -448000 -646000 -0.306501548 Income Tax Expense 39000 14000 1.785714286 **Net Income From Continuing Ops** -497000 -660000 -0.246969697 **Net Income Net Income** -497000 -660000 -0.246969697 **Net Income Applicable To** -497000 -660000 -0.246969697 **Common Shares**









### **Vertical Analysis**

Intel (INTC) Vertical Analysis of Balance Sheet						
	Jan	uary 30,2016 and 31,2	2015			
		<b>USD</b> in thousands				
Accounts	Accounts 2016 Increase/Decreas e 2015 Increase/Decreas e 2015					
Short Term Investments	11539000	0.101820396	10005000	0.098611262		
Net Receivables	4690000	0.041384666	4787000	0.04718162		

Inventory	5553000	0.048999797	5167000	0.050926975
Other Current Assets	8166000	0.072056968	3053000	0.030090973
Total Current Assets	35508000	0.313323392	38320000	0.37768951
Long Term Investments	10896000	0.096146549	7851000	0.077381011
Property Plant and Equipment	36171000	0.319173719	31858000	0.313998758
Goodwill	14099000	0.124409893	11332000	0.111690437
Intangible Assets	9494000	0.08377527	3933000	0.038764427
Other Assets	7159000	0.063171177	8165000	0.080475857
Total Assets	113327000	1	101459000	1
Current Liabilities				
Accounts Payable	12030000	0.106152991	10768000	0.106131541
Short/Current Long-Term Debt	4634000	0.04089052	2634000	0.025961226
Other Current Liabilities	3638000	0.032101794	2244000	0.022117308
Total Current Liabilities	20302000	0.179145305	15646000	0.154210075
Long Term Debt	20649000	0.182207241	20036000	0.197478785
Other Liabilities	3538000	0.031219392	2841000	0.028001459
Deferred Long Term Liability Charges	1730000	0.015265559	954000	0.009402813
Total Liabilities	46219000	0.407837497	39477000	0.389093131
Stockholders' Equity				
Misc. Stocks Options Warrants	882000	0.007782788	897000	0.00884101
Common Stock	25373000	0.223891923	23411000	0.230743453
Retained Earnings	40747000	0.359552446	37614000	0.370731034
Other Stockholder Equity	106000	0.000935346	60000	0.000591372
Total Stockholder Equity	66226000	0.584379715	61085000	0.602065859
Net Tangible Assets	42633000	0.376194552	45820000	0.451610996

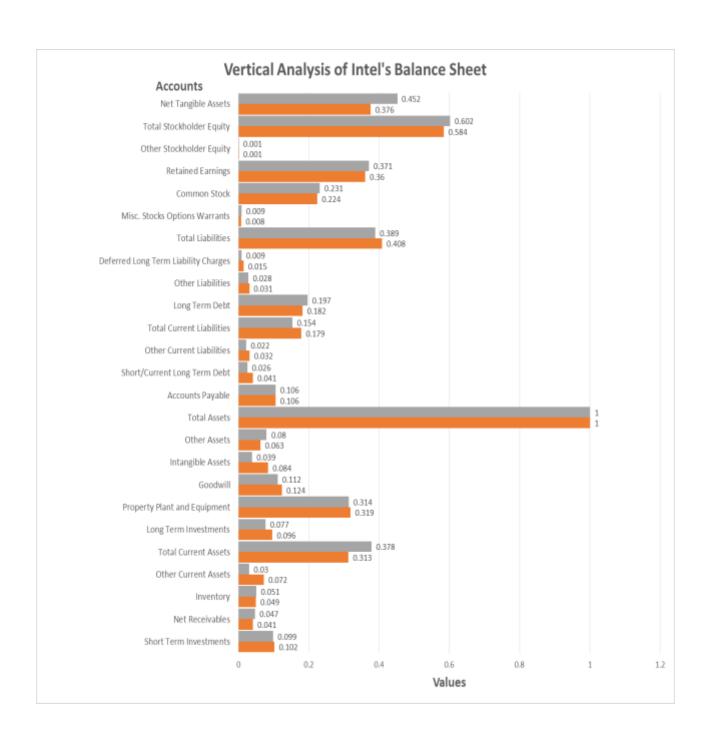
#### AMD Inc (AMD) Vertical Analysis of Balance Sheet January 30,2016 and 31,2015 **USD** in thousands **Accounts** 2016 Increase/Decreas Increase/Decreas Increase/Decreas e 2016 e 2016 e 2015 Short Term Investments Net 311000 0.093646492 533000 0.172827497 Receivables Inventory 751000 0.226136706 678000 0.219844358 Other Current 204000 0.061427281 324000 0.105058366 Assets **Total Current** 2530000 0.761818729 2320000 0.75226978 **Assets** Long Term 59000 0.019130999 0.017765733 59000 Investments Property Plant 164000 0.049382716 188000 0.060959792 and Equipment Goodwill 289000 0.087021981 278000 0.090142672 Other Assets 279000 0.08401084 298000 0.096627756 **Total Assets** 3321000 3084000 1 Current Liabilities 1214000 0.365552544 996000 0.322957198 Accounts Payable Other Current 132000 0.039747064 177000 0.057392996 Liabilities **Total Current** 0.405299609 1403000 0.454928664 1346000 Liabilities Long Term 1435000 0.432098765 2007000 0.65077821 Debt Other 124000 0.037338151 86000 0.027885863 Liabilities Total 0.874736525 1.133592737 2905000 3496000 Liabilities Stockholders' **Equity** 9000 Common 0.002710027 0008 0.002594034 Stock -7306000 -2.369001297 Retained -2.349593496 7803000 Earnings -119000 -0.035832581 -123000 -0.039883268 Treasury Stock

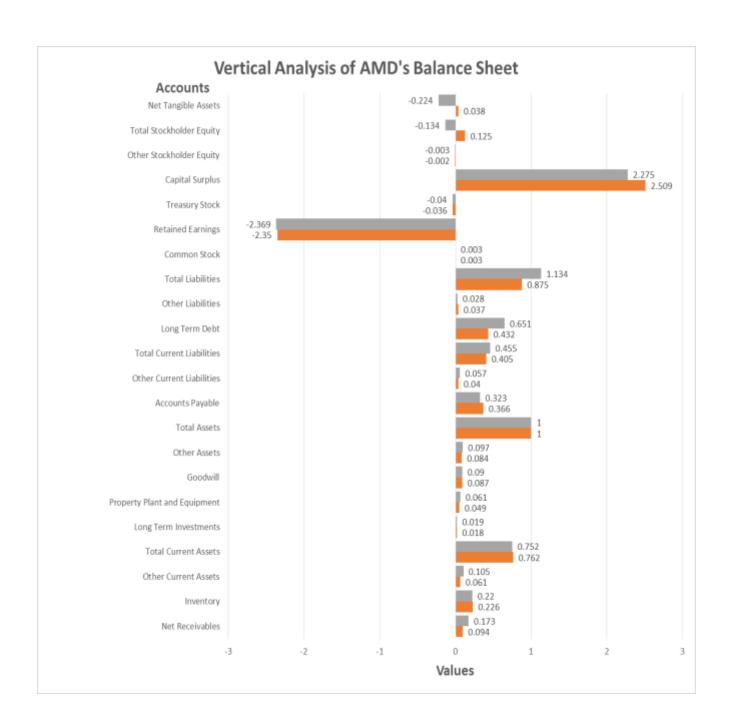
Capital Surplus	8334000	2.509485095	7017000	2.275291829
Other Stockholder Equity	-5000	-0.001505571	-8000	-0.002594034
Total Stockholder Equity	416000	0.125263475	-412000	-0.133592737
Net Tangible Assets	127000	0.038241494	-690000	-0.223735409

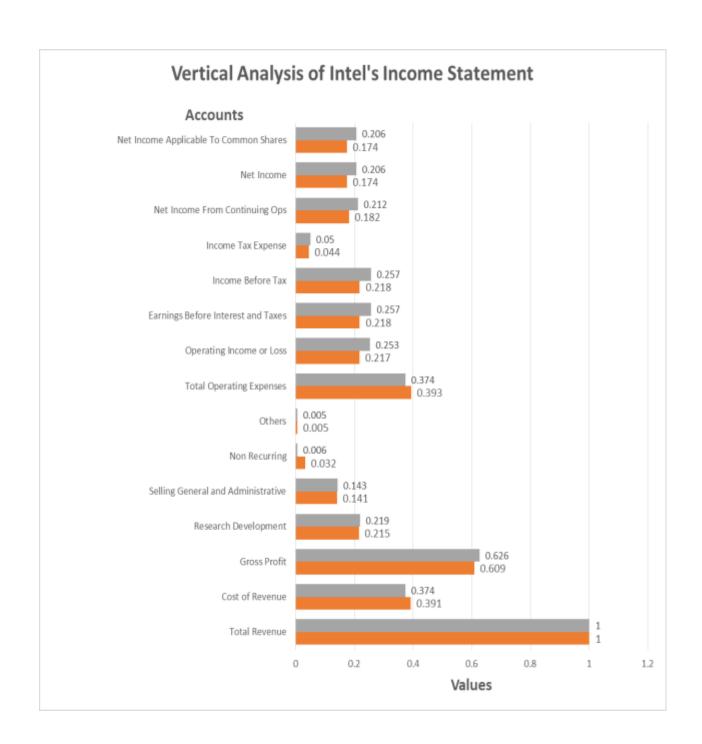
Intel (INTC) Vertical Analysis of Income Statement						
	January 30,2016 and 31,2015					
		USD in thousands	_	-		
Accounts	2016	Increase/Decreas e 2016	2015	Increase/Decreas e 2015		
Revenue						
Total Revenue	59387000	1	55355000	1		
Cost of Revenue	23196000	0.390590533	20676000	0.373516394		
Gross Profit	36191000	0.609409467	34679000	0.626483606		
Operating Expenses		0		0		
Research Development	12740000	0.214525064	12128000	0.219094933		
Selling General and Administrative	8397000	0.141394581	7930000	0.143257158		
Non Recurring	1886000	0.031757792	354000	0.006395086		
Others	294000	0.004950578	265000	0.004787282		
Total Operating Expenses	23317000	0.392628016	20677000	0.373534459		
Operating Income or Loss	12874000	0.21678145	14002000	0.252949146		
Income from Continuing Operations		0		0		
Earnings Before Interest and Taxes	12936000	0.21782545	14212000	0.256742842		
Income Before Tax	12936000	0.21782545	14212000	0.256742842		
Income Tax Expense	2620000	0.044117399	2792000	0.050438081		

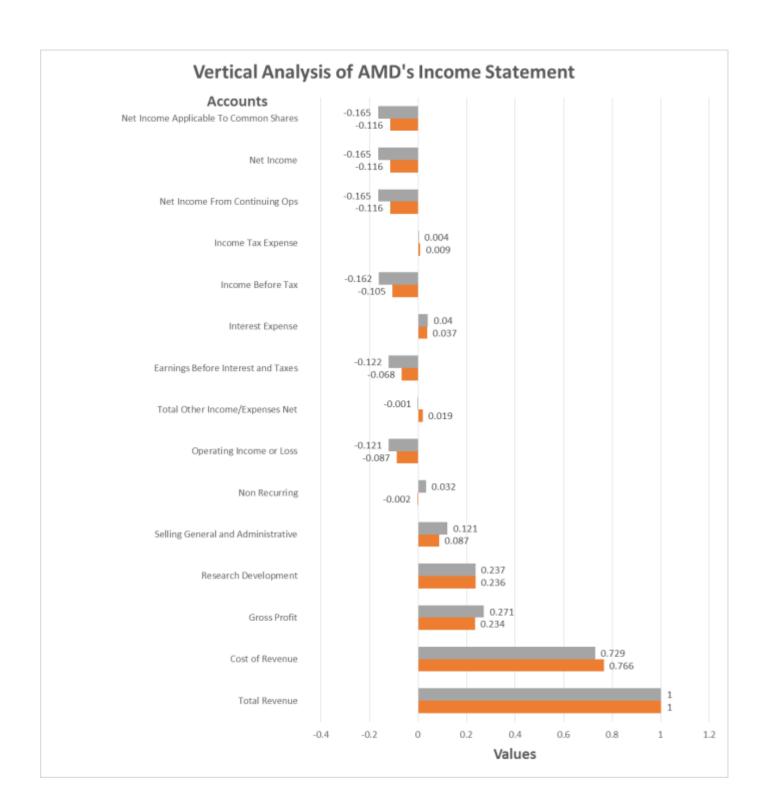
Net Income From Continuing Ops	10822000	0.182228434	11735000	0.211995303
Net Income		0		0
Net Income	10316000	0.173708051	11420000	0.20630476
Net Income Applicable To Common Shares	10316000	0.173708051	11420000	0.20630476

#### AMD Inc (AMD) Vertical Analysis of Income Statement January 30,2016 and 31,2015 **USD** in thousands Accounts 2016 Increase/Decreas 2015 Increase/Decreas e 2016 e 2015 Revenue 4272000 3991000 1 1 Total Revenue 3274000 0.766385768 2911000 0.72939113 Cost of Revenue 998000 0.233614232 1080000 0.27060887 **Gross Profit** 0 Operating Expenses 1008000 0.235955056 947000 0.237283889 Research Development Selling General and 372000 0.087078652 482000 0.120771736 Administrative -10000 -0.002340824 129000 0.032322726 Non Recurring **Operating Income or** -372000 -0.120521173 -0.087078652 -481000 Loss Income from 0 **Continuing Operations Total Other** 80000 -0.001252819 0.018726592 -5000 Income/Expenses Net Earnings Before Interest -292000 -0.121773991 -0.06835206 -486000 and Taxes **Interest Expense** 156000 0.036516854 160000 0.040090203 -448000 -0.161864194 Income Before Tax -0.104868914 -646000 39000 0.003507893 Income Tax Expense 0.009129213 14000 Net Income From -497000 -0.116338951 -660000 -0.165372087 **Continuing Ops** 0 0 **Net Income** -497000 -0.165372087 -0.116338951 -660000 **Net Income Net Income Applicable** -497000 -0.116338951 -660000 -0.165372087 **To Common Shares**









#### **KEY FINANCIAL RATIOS**

The key ratios are calculated using data taken from 2015-2016 and 2014-2015 financial statements.

### **Profitability Ratios:**

### 1. Return on Equity (ROE) = Net Income / Shareholder's Equity

ROE measures a company's ability to generate profits from its shareholders investments. ROE ratio indicates the profit each dollar of common stockholders' equity generates. ROE is also an indicator of how effective management is at using equity financing to fund operations and grow the company.

For both Intel and AMD, the ROE has marginally decreased in fiscal year 2016 as compared to the previous year. Intel's ROE decreased from 19.53 to 16.21 while AMD's decreased from 0 to -24850. AMD's losses in the last 4 - 5 years has shook investor confidence while INTEL's profits have been declining for last 7 quarters. Lower Net Income has resulted in declining ROE.

Company	Year	Ratio	Ratio Value
Intel Inc.	2015 - 2016	Return on Equity = Net Income / Average Shareholders' Equity	16.21
Intel Inc.	2014 - 2015		19.53
AMD	2015 - 2016		-24850.0
AMD	2014 - 2015		0.00

### 2. Return on Assets (ROA) = Net Income / Average Total Assets

The ROA ratio measures how efficiently a company manages its assets to produce profits during a period. A positive ROA ratio usually indicates an upward profit trend.

For Intel, the ROA has marginally decreased in fiscal year 2016 as compared to the previous year. Intel's ROA decreased from 11.81 to 9.61 while AMD's marginally increased from -19.27 to -15.52. Although Intel's ROA has decreased it is still better in utilizing its assets as compared to AMD, though AMD has become significantly better at managing its assets over the last 4 years.

Company	Year	Ratio	Ratio Value
Intel Inc.	2015 - 2016		9.61

Intel Inc.	2014 - 2015	Return on Assets =	11.81
AMD	2015 - 2016	Net Income / Average Total Assets	-15.52
AMD	2014 - 2015		-19.27

### 3. Financial Leverage = Return on Equity - Return on Assets

The financial leverage ratio measures the overall debt load of a company and compare it with the assets or equity. This shows how much of the company assets belong to the shareholders rather than creditors. When shareholders own a majority of the assets, the company is said to be less leveraged. When creditors own a majority of the assets, the company is considered highly leveraged.

The Financial Leverage ratio for Intel has marginally decreased from 7.72 to 6.60, and for AMD it has decreased to a great extent from 19.27 to -24834.48 for the fiscal year 2016 as compared to the previous year. AMD's Financial Leverage ratio is very much lower than INTEL because it utilizes comparatively less debt in its capital structure. This ratio is important for investors to understand how risky the capital structure of a company and if it is worth investing in.

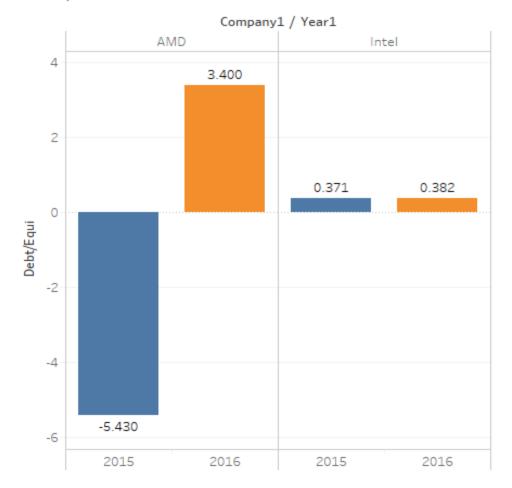
Company	Year	Ratio	Ratio Value
Intel Inc.	2015 - 2016	Financial Leverage = Return on Equity – Return on Assets	6.60
Intel Inc.	2014 - 2015		7.72
AMD	2015 - 2016		-24834.48
AMD	2014 - 2015		19.27

### **Liquidity Ratios:**

### 1. Debt/Equity Ratio = Total Liabilities/Total Equity

This is a financial, liquidity ratio that compares a company's total debt to total equity. It shows percentage of company's financing that comes from creditors and investors. A high ratio indicates that more creditor financing has been used than investor financing. A lower ratio is desirable.

### DEBT/EQUITY



The Debt/equity ratio of Intel is lower which means that the company is managing its finances well. The AMD's ratio was initially negative it is because the equity was negative for AMD in 2015. It has improved considerably after that.

### **Efficiency Ratios:**

### 2. Asset Turnover Ratio = Net sales / Average Total Assets

The asset turnover ratio is an efficiency ratio that measures a company's ability to generate sales from its assets by comparing net sales with average total assets. In other words, this ratio shows how efficiently a company can use its assets to generate sales.

For Intel, the Asset turnover ratio has marginally decreased in fiscal year 2016 as compared to the previous year. Intel's Asset Turnover ratio decreased from 0.57 to 0.55 while AMD's marginally increased from 1.17 to 1.33. AMD has higher asset turnover ratio as compared to Intel which suggests that AMD's efficiency in deploying its assets in generating revenue.

Company	Year	Ratio	Ratio Value
Intel Inc.	2015 - 2016		0.55
Intel Inc.	2014 - 2015	Asset Turnover Ratio	0.57
AMD	2015 - 2016	= Net sales / Average Total Assets	1.33
AMD	2014 - 2015		1.17

### 3. Receivable Turnover Ratio = Net credit sales / Average accounts receivables

Accounts receivable turnover is an efficiency ratio or activity ratio that measures how many times a business can turn its accounts receivable into cash during a period. In other words, the accounts receivable turnover ratio measures how many times a business can collect its average accounts receivable during the year.

This ratio shows how efficient a company is at collecting its credit sales from customers. Some companies collect their receivables from customers in 90 days while other take up to 6 months to collect from customers.

For Intel, the Asset turnover ratio has marginally increased in fiscal year 2016 as compared to the previous year. Intel's Receivable Turnover ratio increased from 9.81 to 12.53. Also for AMD, Receivable turnover ratio marginally increased from 5.91 to 10.12. Although, Intel has higher Receivable turnover ratio as compared to AMD which indicates it is more effective in its credit-granting and collection activities.

Company	Year	Ratio	Ratio Value
Intel Inc.	2015 - 2016		12.53
Intel Inc.	2014 - 2015	Receivable Turnover Ratio = Net credit	9.91
AMD	2015 - 2016	sales / Average accounts receivables	10.12
AMD	2014 - 2015		5.91

### 4. Inventory Turnover Ratio = Cost of Goods Sold / Average Inventory

Inventory turnover ratio measures how many times average inventory is "turned" or sold during a period. This ratio is important because it shows how efficiently a company can manage its

merchandise and also reflects how liquid a company's inventory is. Creditors are particularly interested in this because inventory is often put up as collateral for loans.

The Inventory turnover ratio for Intel's has marginally decreased from 4.38 to 4.33, while for AMD it has increased from 4.27 to 4.58 for the fiscal year 2016 as compared to the previous year. The ratio values indicate that AMD is improving on managing its merchandise and is now able to liquidate the inventory in less number of days as compared to earlier. AMD's improved inventory management will reduce a lot of risks and costs like saving on storage cost, managing product obsolescence etc.

Company	Year	Ratio	Ratio Value
Intel Inc.	2015 - 2016	Inventory Turnover Ratio = Cost of Goods Sold / Average Inventory	4.33
Intel Inc.	2014 - 2015		4.38
AMD	2015 - 2016		4.58
AMD	2014 - 2015		4.27

### 5. Days Sales Outstanding = (Accounts Receivables / Net credit sales) \* 365

The days sales outstanding calculation, also called the average collection period or days' sales in receivables, measures the number of days it takes a company to collect cash from its credit sales. This calculation shows the liquidity and efficiency of a company's collections department.

In other words, it shows how well a company can collect cash from its customers. The sooner cash can be collected, the sooner this cash can be used for other operations. Both liquidity and cash flows increase with a lower days sales outstanding measurement.

The Days sales Outstanding for Intel's has marginally decreased from 31.56 to 28.83, also for AMD it has decreased from 48.75 to 26.57 for the fiscal year 2016 as compared to the previous year. AMD has lower DSO lower ratio which is more favorable because it means companies collect cash earlier from customers and can use this cash for other operations. It also shows that the accounts receivables are good and won't be written off as bad debts.

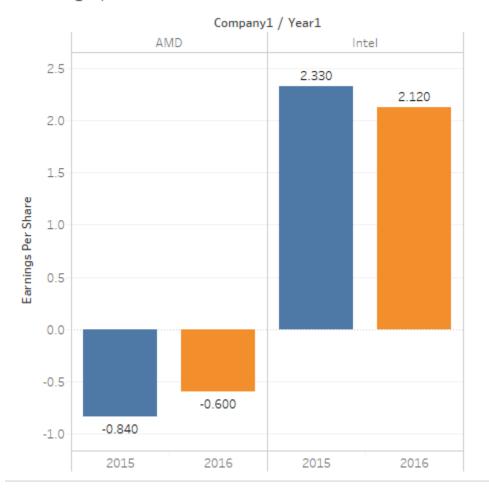
Company	Year	Ratio	Ratio Value
Intel Inc.	2015 - 2016		28.33

Intel Inc.	2014 - 2015		31.56
AMD	2015 - 2016	Days Sales Outstanding = (Accounts	26.57
AMD	2014 - 2015	Receivables / Net credit sales) * 365	48.75

### **Earnings per share Ratio**

This metrics gives the idea that how much earnings has been made by the company for each share. It is desirable to be higher.

### Earnings per share



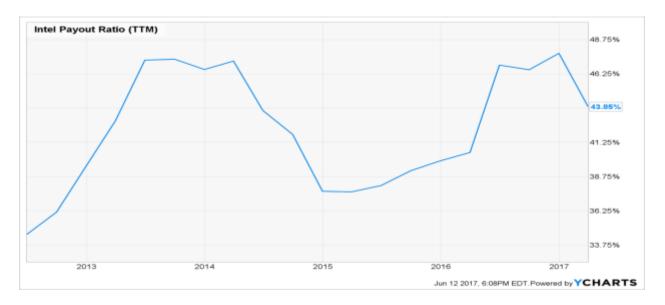
• Earnings per share is negative for AMD but it has improved over the year. Intel's earning per share has decreased but it's still solid.

### Our Stand. Would we Invest

As a investor, we will be concerned whether the company is making any money or not ie how much profit it is registering. By looking at the some key ratio's one can get an idea whether to invest or not. The basic ratios to look for that as follows.

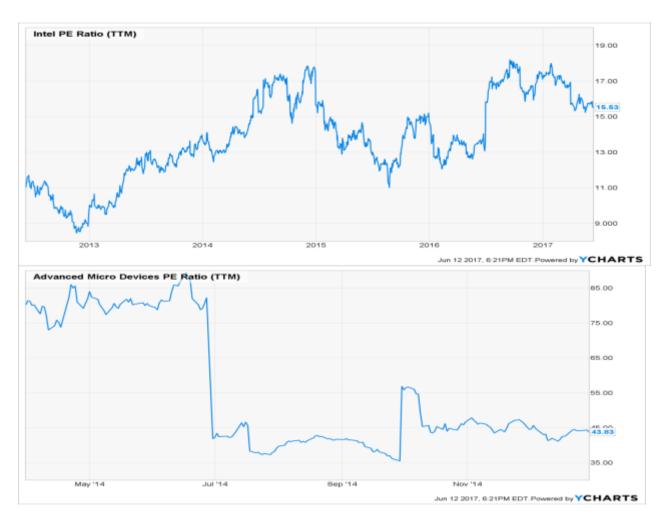
- Earnings per share
- (P/E ratio), it tells the company's market position.
- What is the payout ratio= Total dividends paid/ Net income

As we have seen above the Earning per share of AMD is still negative which makes it little less favourable to invest into. On the other hand the earning per share of Intel is good enough to invest.



While Intel's payout ratio is pretty solid, AMD's payout ratio is 0 because it has not paid dividends yet.

The price to earnings ratio (PE Ratio) is the measure of the share price relative to the annual net income earned by the firm per share. PE ratio shows current investor demand for a company share. A high PE ratio generally indicates increased demand because investors anticipate earnings growth in the future.



AMD's PE ratio is more than that of Intel. It means that the market thinks that the company will be earning money in the future and one can invest in it.

Overall, Intel is a stable company which pays its investors and its debt/equity ratio is also good, hence as an investor we will invest in the Intel.

### Our Stand would we lend?

As a creditor, we are looking for whether we will get our money back or not and how quickly. For this purpose we will be looking for the following ratio's.

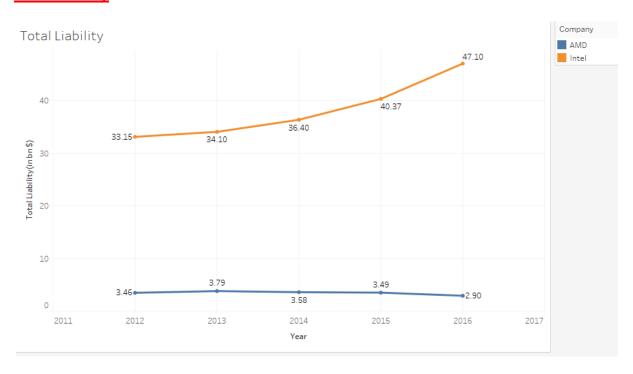
- Previous Liabilities
- How quickly the company pays its creditors
- How quickly the assets can be liquidated.

### **Return on Assets**



The above figure shows that the return on assets is considerable good for Intel as compared to AMD. AMD return on assets is negative which means that the assets are still not making any money.

### **Total Liability**



Total liability of Intel has been steadily increasing for the last 5 years whereas the AMD has been very good on this front, its total liability has been steadily decreasing over the years meaning the company is doing well.

Intel is a stable company so even if the total liability is increasing, the company its revenue is considerably higher.

### Conclusion

Intel is the industry leader but AMD has also been growing steadily. AMD's high price to earnings ratio suggests that the market has faith in the company. Also AMD's share has grown almost 4 times in the last 1 year. AMD's share was trading at \$3 in Jan 16 compared to 12.08 in June 17. In the same period Intel's share has grown just by a dollar from 34.45 to 35.50. In our opinion AMD is the underdog and everyone cheers for the underdog because they challenge the mighty. Intel has been the industry leader since its beginning and will remain so for sometime but AMD is catching up fast. Intel's better Efficiency Ratios – lower DSO, high receivables turnover, higher inventory turnover suggests that the company is better at using its assets and managing its liabilities than AMD. The growth of Intel has been stable but AMD is still growing. Intel will be a safe bet with assured but limited return whereas returns can be huge for AMD but it comes with risk.

#### References:

https://ycharts.com/companies/AMD

https://www.thestreet.com/files/r/ratings/equities/INTC\_weiss.pdf

https://www.thestreet.com/files/r/ratings/equities/AMD\_weiss.pdf

https://www.fool.com/investing/2017/02/22/analyst-advises-forget-intel-buy-texas-

instruments.aspx

https://finance.yahoo.com/quote/INTC/

https://finance.yahoo.com/quote/amd?ltr=1

http://www.amd.com/en-us/who-we-are/corporate-information/history

https://www.scribd.com/doc/101336886/Timeline-AMD

http://www.pcmag.com/article2/0.2817.2325968.00.asp

https://www.crunchbase.com/organization/intel/timeline#/timeline/index

http://web.bryant.edu/~ehu/h364proj/sprg\_98/calismth/timeline.htm

https://finance.yahoo.com/quote/INTC/balance-sheet?p=INTC

https://finance.vahoo.com/quote/AMD/cash-flow?p=AMD

Intel Business Drivers: http://www.investopedia.com/stock-analysis/060115/3-key-numbers-

intel-investors-need-know-intc.aspx

http://www.investopedia.com/features/industryhandbook/semiconductor.asphttp://www.investopedia.com/articles/markets/041816/who-are-advanced-micro-devices-main-competitors-amd.asphttp://marketrealist.com/2017/02/inside-amds-key-drivers-in-2017/