

Advanced Micro Devices

NASDAQ: AMD

Analyst: Mark Gruber

Sector: Technology

Short on AMD

Price Target: \$2.30

Key Statistics as of 3/20/2016

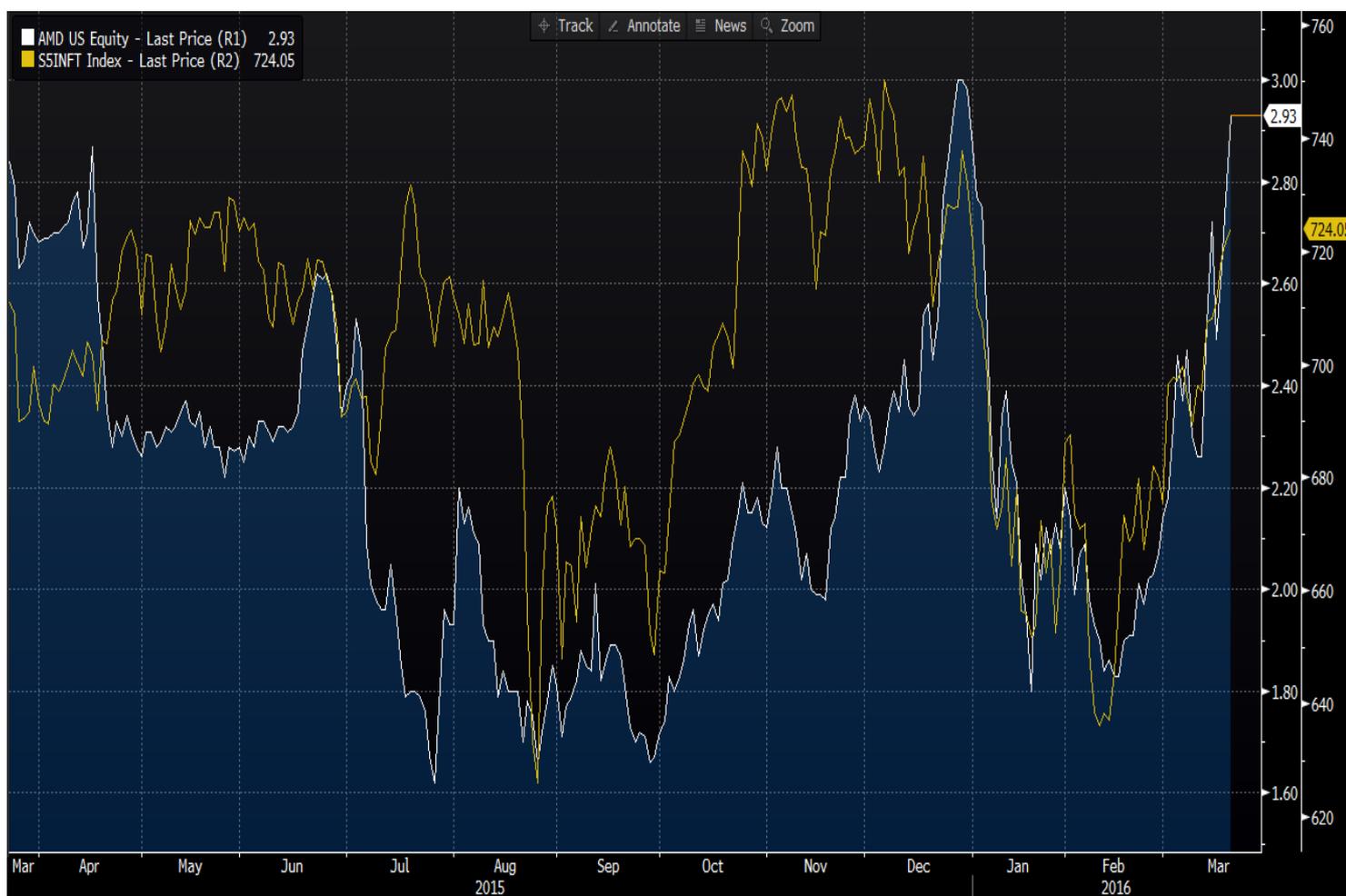
Market Price:	\$2.93
Industry:	Semiconductor
Market Cap:	2.32B
52-Week Range:	\$1.61-\$3.06
1 Year Beta:	1.65

Thesis Points:

- Overreaction due to prospect of the Intel Signing
- 27.5% decrease in revenue from 2014 to 2015
- Shrinking CPU market share compiled with decreases in the personal computer industry

Company Description:

Advanced Micro Devices (AMD) is a semiconductor company that designs and integrates technology that powers intelligent devices. Some products that Advanced Micro Devices have include personal computers, game consoles, and cloud servers. They are the commanding leader in the virtual reality world with about 83% market share in the industry. Some companies they work with include Sony and Microsoft. They are headquartered in Sunnyvale, California and were founded in 1969.



Thesis

Advanced Micro Devices is in the semiconductor industry, with reported revenues of \$3,991 million in 2015. It is being reported that Intel is going to ink a deal to work with Advanced Micro Devices in the coming months, for AMD's patents. Intel currently has a deal with Advanced Micro Devices' rival, Nvidia, but the contract is set to expire on March 17, 2017. AMD has a competitive product at a cheaper cost than Nvidia, which makes it an attractive option for Intel. Nvidia has been reporting \$66 million in licensing revenue per quarter from Nvidia. This is a big reason why the stock price has gone up over 30% over the last few months. Even though it is likely that Intel will sign AMD, there is still a chance that they decide to stay with Nvidia, which will lead to the stock being severely overvalued. Also, the move wouldn't happen until March 17, 2017 when the contract is set to expire with Nvidia, which means for the next year they will see their revenue growth grow only slightly if at all. Although they have the possibility to increase their revenue if the Intel signing goes through, they have seen a drastic decrease in their revenue from 2014 to 2015. In 2014 they reported revenue of \$5,506 million to only \$3,991 million in 2015. This is a decrease of over 27.5% from year to year. This is due to the fact that the personal computer industry is declining along with the fact that they are losing market share to Intel. In 2006, they had about 50% market share of the CPU industry, while in 2016 they had only about 20% of the market share. This is due to the fact that there are many competitors, mainly Intel who is taking away market share from Advanced Micro Devices, and thus leading to reduced levels of revenue.

Industry Outlook

The semiconductor industry is an industry with steadily increasing demand. Last year alone the Semi-conductor industry reported revenues of \$336 billion, whereas reported revenues were at \$304 billion in 2010. The World Semiconductor Trade Statistics predicts that demand will grow at a rate of about 3% over the next couple of

years. The fact that technology is constantly changing, and businesses have to stay up to date on the newest technologies means that there are no signs of demand slowing down in the future. Although the semiconductor industry is growing, the personal computer industry is slowly declining over the past few years. This is a big deal for Advanced Micro Devices as they gain significant revenue from that market.

Financials

Advanced Micro Devices has seen their revenues decrease significantly since 2014. In 2014, they reported revenues of \$5,506 million, compared to only \$3,991 million in 2015. This is a 27.5% decrease in revenue from year to year. The biggest reason for the significant decrease in revenue is the decline in the personal computer market, along with losing market share in the CPU market. Advanced Micro Devices has seen their Free Cash Flow decrease over the last few years. It went from -193 million in 2014 to -322 million in 2015.

Year	2011	2012	2013	2014	2015
FCF(In Millions)	132	-471	-232	-193	-322

The ROIC/WACC has also drastically decreased. In 2014 they reported ROIC/WACC at -0.78 followed by -3.30 in 2015. This means that they are not creating additional value for their shareholders.

Year	2011	2012	2013	2014	2015	2016
ROIC/WACC	2.27	-4.73	0.38	-0.78	-3.3	-2.94

The eps has also declined significantly over the last year. In 2014 they reported eps as -0.53, compared to 2015 when they reported it as -0.84.

Year	2011	2012	2013	2014	2015
EPS	0.68	-1.6	-0.11	-0.53	-0.84

Management

Advanced Micro Devices is led by their President and CEO Dr. Lisa Su. She joined the company in 2012 after she was senior vice-president and general manager at Freescale Semiconductor Inc. She was named “2014 Executive of the Year” by EETimes. Chekib Akrouf, the Senior Vice President of the Infrastructure and Engineering joined AMD in 2008. Before joining he worked at Freescale Semiconductor where he had the same position. Jim Anderson, Senior Vice President and General Manager of the computing and graphics business group brings with him 20 years in the industry. Prior to Advanced Micro Devices he developed extended expertise in the industry by working at Intel Corporation. There he completed the acquisition where he successfully integrated the Axxia processor. Prior to the acquisition he worked at Avago Technologies. Lastly, James A Clifford, Senior Vice President of Global Operations, is responsible for the leading and executing design enablement. Prior to that, Jim worked at RF Micro Devices where he was Senior Vice President of Global Sourcing.

Porters Five Forces

As with all technology there is great competition in the industry. There are very low barriers to enter in the industry, which means that there is always a chance of new competition. The Bargaining power of suppliers is also high meaning that there are many substitutes. The bargaining power of customers is high because also competition is high, so companies can't charge a premium for their product. The intensity of existing rivalry is also very high in the industry. Lastly the threat of substitutes is very high, because once again there is very low barriers in the industry, so there is also great competition.

Conclusion

Although the prospect of signing a deal with Intel is very compelling, the fact that Advanced

Micro Devices has seen their revenue drastically decrease along with the slowing demand of the personal computer industry makes AMD overvalued. The stock has risen over 30% in the last month due to the fact that they may get a deal with Intel. During that time they showed drastic decreases in revenue along with a decrease of ROIC/WACC. Combine that with the fact that they are in a highly competitive industry will make it very hard for Advanced Micro Devices to validate their current price in the market.

Advanced Micro Devices, Inc. (AMD)

CENTER FOR GLOBAL FINANCIAL STUDIES

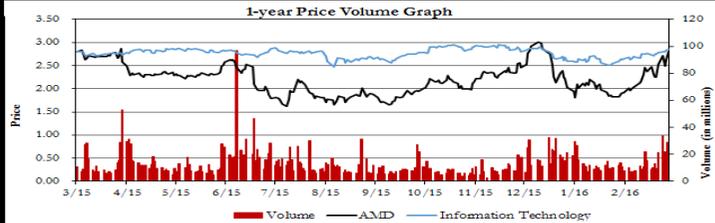
BEARISH

Analysis by Mark Gruber
3/20/2016

Current Price: **\$2.93**
Dividend Yield: **0.0%**

Intrinsic Value: **\$2.00**
Target Price: **\$2.30**

Target 1 year Return: **-21.5%**
Probability of Price Increase: **19.6%**

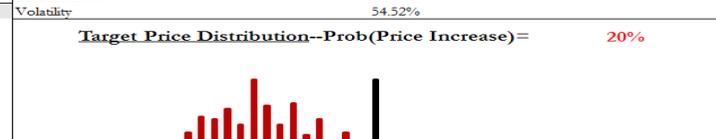


Description	
Advanced Micro Devices, Inc. operates as a semiconductor company worldwide.	
General Information	
Sector	Information Technology
Industry	Semiconductors and Semiconductor Equipment
Last Guidance	November 3, 2015
Next earnings date	NM
Estimated Country Risk Premium	8.62%
Effective Tax rate	35%
Effective Operating Tax rate	34%

Market Data	
Market Capitalization	\$2,324.22
Daily volume (mil)	26.33
Shares outstanding (mil)	793.25
Diluted shares outstanding (mil)	783.00
% shares held by institutions	16%
% shares held by investments Managers	35%
% shares held by hedge funds	3%
% shares held by insiders	0.61%
Short interest	16.19%
Days to cover short interest	8.52
52-week high	\$3.06
52-week low	\$1.61
Levered Beta	1.65
Volatility	54.52%

Past Earning Surprises		
Quarter ending	Revenue	EBITDA
12/27/2014	-0.31%	-91.28%
3/28/2015	-2.06%	-109.68%
6/27/2015	-0.67%	-309.91%
9/26/2015	6.55%	-262.47%
12/26/2015	0.34%	-344.72%
Mean	0.77%	-223.61%
Standard error	1.5%	52.0%

Peers	
Maxim Integrated Products, Inc.	7.81% per annum over 2y
NVIDIA Corporation	7.81% per annum over 2y
Xilinx Inc.	-23.08% per annum over 3y
Texas Instruments Inc.	0% per annum over 0y
Analog Devices, Inc.	N/M
ON Semiconductor Corp.	N/M
QUALCOMM Incorporated	N/M



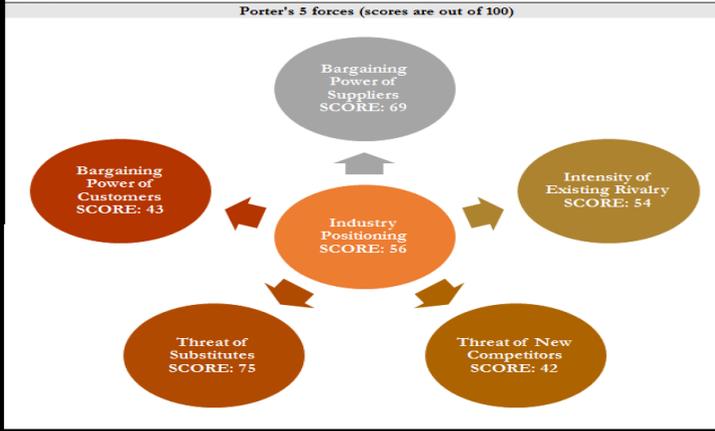
Management		
Su, Lisa	Position	Total compensations growth
Kumar, Devinder	Chief Executive Officer, Pre	39.8% per annum over 2y
Papermaster, Mark	Chief Financial Officer, Sen	56.33% per annum over 2y
Norrod, Forrest	Chief Technology Officer and	2.72% per annum over 3y
Clifford, James	Senior Vice President and Ge	N/M
Anh, Dinh	Senior Vice President of Glo	N/M
	Chief Accountant	N/M

Profitability		
ROIC	AMD (LTM)	AMD (5 years historical average)
NOPAT Margin	-15.0%	5.95%
Revenue/Invested Capital	-17%	2.58%
ROE	0.88	2.30
Adjusted net margin	-37.2%	0.41%
Revenue/Adjusted Book Value	-20%	0.37%
	1.86	1.11

Invested Funds		
Total Cash/Total Capital	AMD (LTM)	AMD (5 years historical average)
Estimated Operating Cash/Total Capital	19.9%	23.0%
Non-cash working Capital/Total Capital	12.7%	11.4%
Invested Capital/Total Capital	9.2%	4.3%
	93.4%	86.0%

Capital Structure		
Total Debt/Common Equity (LTM)	AMD (LTM)	AMD (5 years historical average)
Cost of Existing Debt	1.16	1.03
Estimated Cost of new Borrowing	7.02%	8.29%
CGFS Risk Rating	2.33%	1.42%
Unlevered Beta (LTM)	7.02%	AAA
WACC	7.15%	1.30
	7.02%	13.65%

Sensitivity Analysis		
Operating costs	-49.7%	
Operating Cash	-3.7%	
Non-cash working capital spending	1.8%	
Common dividends	3.3%	
Capital expenditures	-17.0%	
Revenue from operations	84.8%	



Period	Revenue growth
Base Year	-27.5%
12/26/2016	2.0%
12/26/2017	30.0%
12/26/2018	5.0%
12/26/2019	4.0%
12/26/2020	2.0%
12/26/2021	0.5%
12/26/2022	0.8%
12/26/2023	1.1%
12/26/2024	1.4%
12/26/2025	1.7%
Continuing Period	2.0%

Period	Invested Capital
Base Year	\$3,927.11
1/0/1900	\$4,421.83
1/0/1900	\$4,300.92
1/0/1900	\$4,382.67
1/0/1900	\$4,520.69
1/0/1900	\$3,691.19
1/0/1900	\$3,515.41
1/0/1900	\$3,745.00
1/0/1900	\$3,601.89
1/0/1900	\$3,635.88
1/0/1900	\$3,529.57
1/0/1900	

Valuation	ROIC/WACC
NOPAT margin	-1.48
	-0.68
	0.61
	-0.89
	-0.45
	-0.60
	-0.21
	0.29
	0.91
	1.55
	2.03
	2.68
	2.68

Net Claims	Price per share
	\$2.03
	\$2.27
	\$2.87
	\$3.51
	\$4.14
	\$4.73
	\$5.35
	\$6.02
	\$6.75
	\$7.57
	\$8.50

