

Company: NVIDIA Corporation	Ticker: NVDA	Current Price: \$ 194.59	Industry: Semiconductor - Specialized
Target Price: \$ 240	TTM P/E: 55.96	Beta: 1.47	Market Cap: \$116.8b
Stop Loss: \$165 (15%)	Forward P/E: 66.11	Credit Rating: BBB+ (S&P)	Avg Vol (12 M): 16.35m
52 Week High/ Low: \$195 / \$ 65.52	EPS: \$3.08	Rating Outlook: Positive	Dividend Yield: 1.83%

Company Background:

NVIDIA Corporation designs, develops, and markets three-dimensional (3D) graphics processors and related software. The company's products provide interactive 3D graphics to the mainstream personal computer. They are aiming to extend technology leadership in AI, revolutionize computing with the GPU's parallel processing capability, extend technology leadership in visual computing, extend visual computing leadership into mobile and cloud-computing platforms, and enable GPU computing platforms in key focus areas.

Industry Outlook:

NVIDIA's business covers several markets, Gaming, Professional Visualization, Data Center, and Automotive. As technology continues to develop, the future video games will become more and more complex with vivid frames. Combine with the advent of Virtual Reality, the demand for graphics processing will be much higher in the foreseeable future. Moreover, GPU- powered deep learning is being rapidly adopted by thousands of enterprises to deliver services and features that would have been impossible with traditional coding. In another word, GPUs excel at parallel workloads, speeding applications by 10-75x compared with CPUs. Therefore, NVIDIA not only strengthened its competitiveness in the market, but also firmly seized the future.

Investment Thesis:

We give a buy rating with a target price of \$240 (23% upside), which implies PE 68.94x of 2017 EPS. But with positive estimation in its sales, we do anticipate strong growth in its EPS, which will compensate the high P/E ratio in turn. With plenty cash & ST investment vs. light debt in its structure, the financial status is more than strong. After the turnaround of its revenue in 2011, NVIDIA exceeded the revenue expectation every now and then and became the most specialized GPU producer in the market. Moreover, with strong expectations in the developments of VR, AI, and automotive driving, we expect NVIDIA will continue meet the demand of its customers from all over the world, especially in Asia Pacific area. Last but not least, with its light debt structure, NVIDIA does not need to worry about the expectations that Federal Reserve will increase the interest rate.

Investment Risks:

- Since most NVIDIA's revenues come from Asia Pacific area, the deteriorating global trade environment may play a critical impact
- The production of Tensor Processing Unit (TPU) will accelerate the neural network computations behind the scenes. If TPU can be generally applied to the AI companies, it will become a major threat for the existing GPU producers (but only limited in AI computation, not graphics processing)
- The consistent surplus of earning forecast propped up the stock prices for the past years. If NVIDIA miss the earning estimation in the future, the stock price will be easily adjusted to prior level
- Material revolution of semi-products will completely turn the whole industry. But we do not expect it to happen in the near future

Most recent quarter financial highlights (July- Sept 2017):

- NVIDIA reported in August the record revenue for the second quarter ended July 30, 2017, of \$2.23 billion, up 56 percent from \$1.43 billion a year earlier, and up 15 percent from \$1.94 billion in the previous quarter.
- Record revenue of \$2.23 billion, up 56 percent from a year ago
- GAAP EPS of \$0.92, up 124 percent from a year ago
- Non-GAAP EPS of \$1.01, up 91 percent from a year ago
- Broad growth across all platforms

Financial Performance:

In Millions of USD	2012	2013	2014	2015	2016	2017 Est	2018 Est
Revenue	3,997.9	4,280.2	4,130.2	4,681.5	5,010.0	6,910.0	8,983.5
Operating Profit	648.3	648.2	496.2	759.0	747.0	1,934.0	3255.1
Net Income	581.1	562.5	440.0	630.6	614.0	1,666.0	2,297.0
Revenue Growth %	5.43%	0.87%	3.82%	7.07%	7.17%	11.57%	15.0%
EBITDA%	8.73%	-2.04%	45.10%	58.55%	16.35%	20.00%	25.0%
Operating Profit %	16.22%	15.15%	12.01%	16.21%	14.91%	27.99%	20.7%
Net Income Margin	14.53%	13.14%	10.65%	13.47%	12.26%	24.11%	13.7%
D/E	0.25	0.25	0.39	0.39	0.39	0.41	0.40
EPS	0.96	0.91	0.75	1.14	1.13	3.08	3.63
PE Ratio	15.25	13.41	21.27	14.13	21.34	42.21	60.00
Current Ratio	4.20	4.89	5.95	6.38	2.57	4.77	5.00
ROE	15.86	12.54	9.48	14.21	13.82	32.57	45.0
ROA	11.57	9.40	6.44	8.73	8.43	19.36	25.0
Dividend Per share	0.00	0.08	0.31	0.34	0.40	0.49	0.57
FCF	770.4	640.9	580.0	783.3	1,089.0	1,496.0	2,109.1

Discounted Cash Flow

	2012-17	2018-22
Avg Revenue growth	6.47%	15%
Avg EBITDA Margin	24.4%	26%
Avg Net Income Margin	14.69%	16%
Avg Debt/Equity	34.68%	40%
Avg FCF / Margin	18.84%	25%
Cost of Debt		2.27%
Tax Rate		15.89%
Cost of Equity		10.75%
WACC		10.6%
Perpetuity growth rate		4.0%

Analyst Opinion

Buy:22	Hold: 12	Sell:1
Target Price Range	75.00~250.00	Avg. 166.73

Source: Yahoo Finance

Relative Valuation

	AMD	Intel	Broadcom	Microchip	Industry Avg.*
P/E	n.a	15.26	n.a	42.83	39.88
P/B	25.49	2.56	3.57	5.17	7.23
Dividend Yield	n.a	2.87%	1.15%	1.95%	1.8%
Revn Grth	7.04%	7.28%	92.5%	56.8%	34.83%
NI Grth	24.7%	-9.67	n.a	-49.21%	29.15%
Operating Margin	-0.98%	25.02%	7.4%	17.8%	15.82%
Debt / Equity	3.4	0.38	0.62	0.90	0.7
Market Cap	13.5B	186.41B	101.1 B	21.4 B	50.5B
Revenue TTM	4619	61711	16928	3581	12060
Net Income TTM	-128	16010	1760	514	2560
FCF TTM	-229	11790	4915	1102	2280

* Resource: Bloomberg. AMD and Broadcom operate at loss. AMD does not pay dividend at this time.

Total Return

	NVIDIA	Semiproduct	S&P 500
YTD	85.90%	32.99%	13.08%
2016	198.96%	78.47%	11.24%
Last 3 Years	1070%	237.76%	36.37%
Last 5 Years	1660%	397.78%	77.29%

CSR Characteristics

	NVIDIA	Industry
Governance Disclosure Score	62.50	58.16
ESG Disclosure:	50.83	38.25
Social Disclosure Score	52.63	35.59
Environmental Disclosure Score	44.96	35.92

Data: Bloomberg data of FY 2016 (CSR)