

NVIDIA Corporation (NVDA)

\$493.48 (As of 08/17/20)

Price Target (6-12 Months): **\$518.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 02/12/20)

Prior Recommendation: Outperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

2-Buy

Zacks Style Scores:

VGM:F

Value: F

Growth: D

Momentum: F

Summary

NVIDIA is benefiting from the coronavirus-induced work from home and learn-at-home wave. The company is also benefiting from strong growth in GeForce desktop and notebook GPUs, which is boosting gaming revenues. Moreover, a surge in Hyperscale demand remains a tailwind for the company's Data Center business. The company expanded NVIDIA GeForce NOW in the last quarter, which is expected to drive user base. Further, the solid uptake of AI-based smart cockpit infotainment solutions is a boon. Additionally, its latest collaboration with Mercedes-Benz is expected to further strengthen NVIDIA's presence in the autonomous vehicles and other automotive electronics space. However, in the near term, management expects a \$100-million negative impact of the coronavirus menace on revenues. Moreover, the U.S.-China trade war remains a key concern.

Data Overview

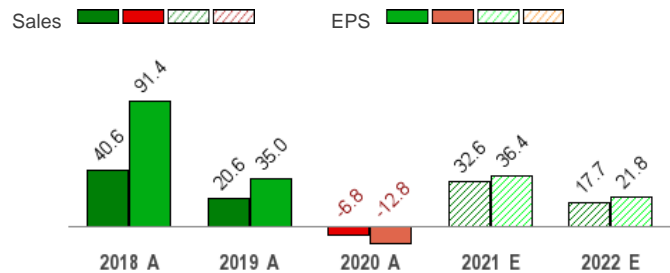
52 Week High-Low	\$496.39 - \$159.00
20 Day Average Volume (sh)	9,053,278
Market Cap	\$303.5 B
YTD Price Change	109.7%
Beta	1.35
Dividend / Div Yld	\$0.64 / 0.1%
Industry	Semiconductor - General
Zacks Industry Rank	Top 13% (33 out of 252)

Last EPS Surprise	6.5%
Last Sales Surprise	2.8%
EPS F1 Est- 4 week change	0.0%
Expected Report Date	08/19/2020
Earnings ESP	0.0%
P/E TTM	73.5
P/E F1	62.5
PEG F1	6.7
P/S TTM	25.8

Price, Consensus & Surprise



Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2022	3,828 E	4,178 E	4,528 E	4,476 E	17,043 E
2021	3,080 A	3,655 E	3,889 E	3,847 E	14,474 E
2020	2,220 A	2,579 A	3,014 A	3,105 A	10,918 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2022	\$1.99 E	\$2.30 E	\$2.62 E	\$2.59 E	\$9.62 E
2021	\$1.80 A	\$1.94 E	\$2.06 E	\$1.98 E	\$7.90 E
2020	\$0.88 A	\$1.24 A	\$1.78 A	\$1.89 A	\$5.79 A

*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 08/17/2020. The reports text is as of 08/18/2020.

Overview

NVIDIA Corporation is the worldwide leader in visual computing technologies and the inventor of the graphic processing unit, or GPU. Over the years, the company's focus has evolved from PC graphics to artificial intelligence (AI) based solutions that now support high performance computing (HPC), gaming and virtual reality (VR) platforms.

NVIDIA's GPU success can be attributed to its parallel processing capabilities supported by thousands of computing cores, which are necessary to run deep learning algorithms. The company's GPU platforms are playing a major role in developing multi-billion-dollar end-markets like robotics and self-driving vehicles.

NVIDIA is a dominant name in the Data Center, professional visualization and gaming markets where Intel and Advanced Micro Devices are playing a catch-up role. The company's partnership with almost all major cloud service providers (CSPs) and server vendors is a key catalyst.

NVIDIA's GPUs are also getting rapid adoption in diverse fields ranging from radiology to precision agriculture. The company's GPUs power the top two supercomputers in the world, located at Oak Ridge and Lawrence Livermore National Laboratories in the United States, as well as the top supercomputers in Europe and Japan. In all, NVIDIA powers 136 of the TOP500 supercomputers.

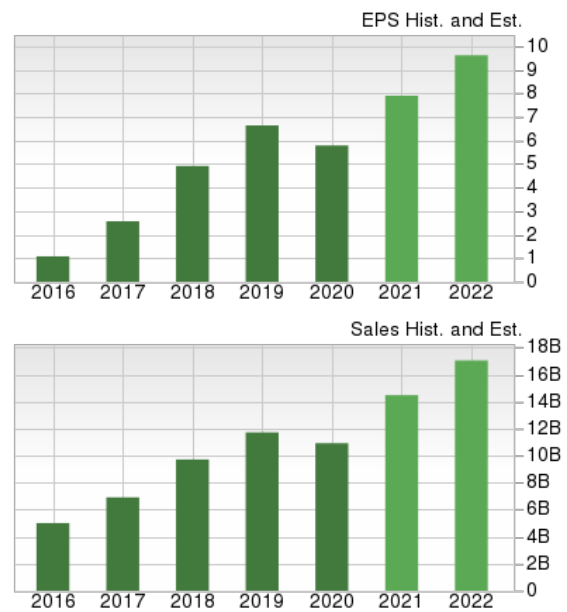
Santa Clara, CA-based, NVIDIA reported revenues of \$10.92 billion in fiscal 2020, down approximately 7% from fiscal 2019.

Beginning first-quarter, NVIDIA started reporting revenues under two segments – Graphics and Compute & Networking.

Graphics includes GeForce GPUs for gaming and PCs, the GeForce NOW game streaming service and related infrastructure, and solutions for gaming platforms; Quadro GPUs for enterprise design; GRID software for cloud-based visual and virtual computing; and automotive platforms for infotainment systems.

Compute & Networking comprises Data Center platforms and systems for AI, HPC, and accelerated computing; DRIVE for autonomous vehicles; and Jetson for robotics and other embedded platforms. Mellanox revenues will also be included in this segment beginning second-quarter fiscal 2021.

Graphics and Compute & Networking accounted for 61.9% and 38.1% of first-quarter fiscal 2021 adjusted revenues, respectively.



Reasons To Buy:

- ▲ NVIDIA is gaining a decent market share among the gaming service providers. The strong line-up of advanced graphics cards has made it a favorite graphics card provider among the PC makers. A strong uptick in PC gamers, esports players and higher spending on the gaming GPUs are key catalysts. Further, NVIDIA's Turing GPU and its real-time ray tracing technology are witnessing a massive adoption. To propel wider embracement, NVIDIA is enabling ray tracing backup to several GeForce GTX GPUs, which is likely to lend developers a massive installed base of gamers. Moreover, the launch of GeForce RTX SUPER GPUs is expected to strengthen its leadership in the high end of the market. The company announced that the increasing number of blockbuster AAA titles have pledged support for NVIDIA RTX ray tracing technology. Notably, Microsoft teamed up with NVIDIA to add real-time ray tracing technology to *Minecraft*. Moreover, Activision Blizzard's *Call of Duty: Modern Warfare*, Ubisoft Toronto's *Watch Dogs: Legion* and Tencent NEXT Studios' *Synced: Off Planet* have also adopted RTX.
- ▲ Datacenter presents a solid growth opportunity for the company. As more and more businesses are shifting toward cloud, the need for datacenters is increasing. To cater to this huge demand, datacenter operators like Amazon, Microsoft and Alphabet are expanding their operations across the world, which is driving demand for the GPUs. This bodes well for NVIDIA's uptrend as well. Further, the company intends to focus on new growth boosters for its data center business, such as inference, data science and machine learning techniques to consolidate its presence in this niche market. NVIDIA anticipates datacenter TAM to more than double to \$50 billion by 2023. Considered most preferred by the datacenter operators, NVIDIA's GPUs are likely to help the company grab a larger market space. The company's recently announced acquisition of Mellanox is a key catalyst in this regard.
- ▲ NVIDIA's GPUs are rapidly benefiting from the proliferation of AI. By applying its GPUs in AI models, the company is expanding its base in the other untapped markets like automotive, healthcare and manufacturing, which will support its earnings and revenues. The company is engaged with a number of organizations including the top cloud server companies like Amazon, Baidu and Facebook, which are infusing AI in various applications. NVIDIA has also partnered with the industry biggies — IBM, Microsoft and SAP in order to bring AI to the enterprise users' table. The company recently collaborated with the top-ranked OEMs including Dell, HP and Lenovo to deliver powerful workstations inclusive of Quadro RTX GPUs and its new CUDAX AI accelerated software. Moreover, a steady ramp-up of the new products is enabling the company to gain a competitive edge over the likes of AMD and Intel, and also widen its market share.
- ▲ NVIDIA's foray into the autonomous vehicles and other automotive electronics space is a positive. The company currently is on a firmer footing in the autonomous vehicle market. It is working with more than 320 automakers, tier-one suppliers, automotive research institutions, HD mapping companies and start-ups to develop and deploy AI systems for self-driving vehicles. Notably, NVIDIA's focus on incorporating AI into the cockpit for infotainment systems is allowing it to grow its autonomous driving revenues. The company expects its automotive TAM to be \$30 billion by 2025, which comprises \$25 billion for driving, \$3 billion for training/development of deep neural networks and \$2 billion for validation and testing.
- ▲ NVIDIA is a cash rich company with a strong balance sheet. As of Apr 26, 2020, the company had cash and cash equivalents of nearly \$16.35 billion, which is significantly higher than its total debt of \$6.96 billion. Since it has net cash available on its balance sheet, the existing cash can be used for pursuing strategic acquisitions, investment in growth initiatives and distribution to shareholders.
- ▲ NVIDIA boasts a sturdy cash-flow generating ability. The company's accelerated revenue growth along with improving operating efficiency is bringing in higher cash flows. The higher cash flow generating ability lends NVIDIA flexibility to invest in the long-term growth prospects and return money to its shareholders. Notably, NVIDIA returned approximately \$6 billion to shareholders through dividend payments and share buybacks in the last five fiscals. In 2019, the company committed to return \$3 billion to shareholders. In the first quarter of fiscal 2021, NVIDIA paid dividends of \$98 million. Moreover, NVIDIA is evaluating the timing of resuming share repurchases. The company is currently authorized to repurchase up to \$7.24 billion in shares through December 2022.

Growth opportunities in ray-traced gaming, rendering, high-performance computing, AI and self-driving cars are encouraging.

Reasons To Sell:

- ▼ Although datacenter has a tremendous growth scope in the long run, the near-term headwinds make us anxious, due to a temporary pause in spending by data center customers. Increasingly watchful behavior of customers across the broad-based vertical markets and geographies due to coronavirus-led economic volatility poses a threat to NVIDIA, at least in the near term..
- ▼ Recent developments like the suspension of test drives for all its driverless vehicles and the absence of demand from cryptocurrency miners make us slightly alert about the company's short-term functions. The discontinuation of mid-range Pascal GPU shipments for stabilizing the channel-inventory levels is a major headwind to its gaming revenues. Moreover, coronavirus outbreak has negatively impacted demand for automobile infotainment system. Autonomous development infrastructure builds have also declined and the negative impact is expected to continue for the next several quarters, which is a concern..
- ▼ The competition between NVIDIA and AMD has taken a meaningful turn. Previously, NVIDIA and ATI made graphics chips for the PC market. Later AMD acquired ATI and combined the CPU and parallel graphics chip into a single component. AMD is now making an effort to strengthen its position in the commodity graphics segment and CPUs for console gaming systems. AMD chips have made an entry into Sony Corp.'s PS4. Nintendo's Wii U and Microsoft's Xbox One will also be going with AMD. NVIDIA also has limited scope for growth in the apps processor market as it is dominated by Apple, Samsung and Qualcomm. We believe that competitive pressure from two CPU vendors, Intel and AMD, who are planning to integrate graphics cores into their chips can negatively impact NVIDIA's revenues in the long haul.
- ▼ Further, a substantial portion of the company's sales is derived from outside the United States. Notably, sales revenues to customers outside the United States accounted for 87% of the total revenue for each of the last three fiscal years. Hence, we believe that any unfavorable currency fluctuation and an uncertain macroeconomic environment may moderate the company's growth.

Adverse impact of coronavirus outbreak on economy, bleak demand for automobile infotainment system, forex headwinds and stiff competition from AMD are major headwinds.

Last Earnings Report

NVIDIA Q1 Earnings & Revenues Beat Estimates, Up Y/Y

NVIDIA reported first-quarter fiscal 2021 non-GAAP earnings of \$1.80 per share that beat the Zacks Consensus Estimate by 6.5% and surged a whopping 104.5% year over year. However, the bottom line declined 4.8% sequentially.

Adjusted revenues of \$3.08 billion beat the consensus mark by 2.8% and surged 38.7% year over year. The top line, however, declined 0.8% sequentially.

Similar to peers like Intel and AMD, coronavirus outbreak negatively impacted NVIDIA's first-quarter earnings results.

Supply-chain disruption as well as lower demand affected NVIDIA's top-line. Shelter-in-place guidelines resulted in closure of retail outlets and China iCafes, which adversely affected sales of NVIDIA's gaming products.

Moreover, demand for automobile infotainment system has been negatively impacted. Autonomous development infrastructure builds have also declined. NVIDIA expects the negative impact to continue for the next several quarters.

Notably, Intel also did not provided any guidance for 2020, citing business uncertainty and "limited visibility" pertaining to coronavirus crisis. Further, AMD noted weak demand environment induced by the coronavirus crisis.

Nevertheless, work from home, learn at home, and gaming drove a surge in e-tail demand, thereby benefiting NVIDIA.

Segment Details

Beginning first-quarter, NVIDIA started reporting revenues under two segments – Graphics and Compute & Networking.

Graphics includes GeForce GPUs for gaming and PCs, the GeForce NOW game streaming service and related infrastructure, and solutions for gaming platforms; Quadro GPUs for enterprise design; GRID software for cloud-based visual and virtual computing; and automotive platforms for infotainment systems.

Graphics accounted for 61.9% of adjusted revenues. The segment top-line figure increased 24.9% year over year but fell 8.5% sequentially.

Compute & Networking represented 38.1% of first-quarter fiscal 2021 adjusted revenues. The segment comprises Data Center platforms and systems for AI, HPC, and accelerated computing; DRIVE for autonomous vehicles; and Jetson for robotics and other embedded platforms. Mellanox revenues will also be included in this segment beginning second-quarter fiscal 2021.

Compute & Networking revenues jumped 69.2% from the year-ago quarter and 15% sequentially.

Market Platform Top-Line Details

Based on market platform, Gaming revenues (43.5% of adjusted revenues) were up 26.9% year over year to \$1.34 billion owing to higher sales across the company's major gaming products.

However, Gaming revenues were down 10.2% sequentially due to seasonally lower sales of GeForce desktop GPUs for gaming.

Per NVIDIA, stay-at-home is driving more than 50% increase in hours played on GeForce platform. The company expanded NVIDIA GeForce NOW during the quarter, which provides access to 650 games, with 1,500 more waiting to get on board. NVIDIA has added 2 million users since going live in February.

Revenues from Data Center (37% of adjusted revenues) soared 80% year over year and 17.9% sequentially to \$1.14 billion. Growth was driven by strong demand from hyperscale and vertical industry end customers.

Professional Visualization revenues (10% of adjusted revenues) climbed 15.4% year over year but declined 7.3% sequentially to \$307 million. Strength in desktop and notebook workstations drove year-over-year growth. Meanwhile, the sequential decline was attributed to lower sales of desktop workstations.

Automotive revenues (5% of adjusted revenues) in the reported quarter totaled \$155 million, down 6.6% on a year-over-year basis and 4.9% sequentially, primarily due to lower legacy infotainment revenues.

OEM and Other revenues soared 39.4% year over year but declined 9.2% sequentially to \$138 million. The year-over-year growth was primarily due to higher demand for entry-level laptop GPUs from PC OEMs. However, the sequential decrease was primarily attributed to seasonally lower sales of entry-level GPUs for PC OEMs.

Quarter Highlights

During the quarter, NVIDIA launched Minecraft with RDX as an open beta on Windows 10, bringing real-time ray tracing, more realistic materials and DLSS 2.0, the second generation of its deep learning neural network.

Additionally, more than 100 new laptop models powered by NVIDIA GeForce GPUs, were announced in the quarter. The company brought the RTX 2080 SUPER and RTX 2070 SUPER high-end GPUs to laptops for the first time.

Quarter Ending **04/2020**

Report Date	May 21, 2020
Sales Surprise	2.83%
EPS Surprise	6.51%
Quarterly EPS	1.80
Annual EPS (TTM)	6.71

For the Data Center end-market, the company introduced NVIDIA A100 data center GPU, the first based on the new NVIDIA Ampere architecture. Moreover, it introduced two products for the NVIDIA EGX Edge AI platform and the EGX Jetson Xavier NX.

The company also launched the NVIDIA DGX A100 - a 5-petaflops AI system that delivers elastic, software-defined data center infrastructure for the most demanding workloads.

Additionally, the company announced the release of NVIDIA Jarvis, a GPU-accelerated application framework that allows companies to use video and speech data to build advanced conversational AI services customized for their own industry, products and customers.

Moreover, the company supported Autodesk's latest 3D visualization software, VRED 2021, with NVIDIA Quadro RTX. Additionally, NVIDIA introduced Quadro professional graphics to HP's ZBook Create and ZBook Studio mobile workstation lineup.

Operating Details

NVIDIA's non-GAAP gross margin expanded 680 basis points (bps) from the year-ago quarter to 65.8%, reflecting higher Data Center products and favorable GeForce GPU product mix. Higher Data center sales also helped the gross margin expand 40 bps sequentially.

Non-GAAP operating expenses grew 9% year over year and 1.4% sequentially to \$821 million, driven by increased headcount, employee compensation and infrastructure costs.

Non-GAAP operating income surged 116.3% year over year to \$1.21 billion. However, the figure declined 1.2% sequentially.

Balance Sheet and Cash Flow

As of Apr 26, 2020, NVIDIA's cash, cash equivalents and marketable securities were \$16.35 billion, up from \$10.90 billion as of Jan 26.

Total debt, as of Apr 26, was \$6.96 billion compared with \$1.99 billion as of Jan 26.

Cash flow from operating activities increased 26.3% year over year but fell 38% sequentially to \$909 million.

Free cash flow was \$754 million, up 27.4% year over year but down 42.9% sequentially.

In the first quarter of fiscal 2021, NVIDIA paid dividends of \$98 million. The company remains committed to paying its quarterly dividend.

Moreover, NVIDIA is evaluating the timing of resuming share repurchases and will remain nimble based on market conditions. The company is currently authorized to repurchase up to \$7.24 billion in shares through December 2022.

Further, on Apr 27, NVIDIA announced the completion of its previously announced acquisition of Mellanox Technologies for a transaction value of \$7 billion.

Guidance

For the second quarter of fiscal 2021, NVIDIA anticipates revenues of \$3.65 billion (+/-2%), which includes low-teens percentage contribution from the Mellanox acquisition.

Non-GAAP gross margin is projected to be 58.6-66% (+/-50 bps). Non-GAAP operating expenses are expected to be \$1.04 billion.

Capital expenditures are expected to be approximately \$225 million to \$250 million.

For fiscal 2021, non-GAAP operating expenses including Mellanox are expected to be \$4.1 billion.

Recent News

On Jun 23, NVIDIA announced collaborating with Daimler-owned Mercedes-Benz to develop an in-vehicle computing system and AI-computing infrastructure. The partnership is expected to boost NVIDIA's presence in the self-driving vehicle market.

On Jun 22, NVIDIA introduced NVIDIA Mellanox UFM Cyber-AI platform. The platform minimizes downtime in InfiniBand data centers by harnessing AI-powered analytics to detect security threats and operational issues, as well as predict network failures.

On the same day, NVIDIA revealed that world's top server makers including HPE, Cisco, Dell, Lenovo, and Asus are expected to launch over 50 NVIDIA A100-powered systems.

On May 22, NVIDIA announced that it will pay out a quarterly cash dividend of 16 cents per share on Jun 26 to its shareholders of record Jun 5.

On May 14, NVIDIA announced major expansion to its NVIDIA Clara healthcare platform, aimed at providing new capabilities to the medical community to better track, test and treat coronavirus.

NVIDIA also announced that BMW Group has selected the new NVIDIA Isaac robotics platform to enhance its automotive factories.

Moreover, NVIDIA announced two powerful products for its EGX Edge AI platform, the EGX A100 for larger commercial off-the-shelf servers and the tiny EGX Jetson Xavier NX for micro-edge servers.

Additionally, the company announced the release of NVIDIA Jarvis, a GPU-accelerated application framework that allows companies to use video and speech data to build advanced conversational AI services customized for their own industry, products and customers.

On Apr 27, NVIDIA announced the completion of its previously announced acquisition of Mellanox Technologies for a transaction value of \$7 billion.

On Apr 2, 2020, NVIDIA launched notebook versions of its high-end RTX 2080 Super and RTX 2070 Super GPUs, based on the Turing architecture, which leverages hardware RT Cores to process ray tracing and AI in real time, enhancing visual fidelity. The company also revealed that PC OEMs are deploying more than 100 new laptop models featuring its GeForce GPUs, including the RTX 2080 Super or RTX 2070 Super.

On Mar 26, 2020, NVIDIA announced that coronavirus researchers would get a 90-day free access to its GPU-accelerated genome analysis toolkit — Parabricks.

Valuation

NVIDIA shares are up 109.7% in the year-to-date period and 189% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Technology sector increased 23% and 21.2% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and the sector gained 53.1% and 35.8%, respectively.

The S&P 500 Index is up 4.5% in the year-to-date period and gained 15.4% in the past year.

The stock is currently trading at 55.8X forward 12-month earnings, which compares to 21.23X for the Zacks sub-industry, 26.33X for the Zacks sector and 22.85X for the S&P 500 index.

Over the past five years, the stock has traded as high as 62.21X and as low as 18.78X, with a 5-year median of 35.89X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$518 price target reflects 58.59X forward 12-months earnings.

The table below shows summary valuation data for NVDA

Valuation Multiples - NVDA					
		Stock	Sub-Industry	Sector	S&P 500
P/E F 12M	Current	55.80	21.23	26.33	22.85
	5-Year High	62.21	21.23	26.33	22.85
	5-Year Low	18.78	12.86	16.72	15.25
	5-Year Median	35.89	16.37	19.61	17.58
P/S F12M	Current	19.11	5.72	4.05	3.70
	5-Year High	19.11	5.72	4.05	3.70
	5-Year Low	2.25	2.40	2.32	2.53
	5-Year Median	9.01	4.04	3.14	3.05
P/B TTM	Current	23.17	5.39	5.40	4.52
	5-Year High	23.55	5.60	5.84	4.56
	5-Year Low	2.61	2.15	3.16	2.83
	5-Year Median	11.10	3.87	4.44	3.74

As of 08/17/2020

Industry Analysis Zacks Industry Rank: Top 13% (33 out of 252)



Top Peers

Company (Ticker)	Rec	Rank
Texas Instruments Incorporated (TXN)	Outperform	1
Ambarella, Inc. (AMBA)	Neutral	3
Advanced Micro Devices, Inc. (AMD)	Neutral	3
Broadcom Inc. (AVGO)	Neutral	2
Intel Corporation (INTC)	Neutral	3
Marvell Technology Group Ltd. (MRVL)	Neutral	3
QUALCOMM Incorporated (QCOM)	Neutral	2
Xilinx, Inc. (XLNX)	Neutral	3

Industry Comparison Industry: Semiconductor - General				Industry Peers		
	NVDA	X Industry	S&P 500	AMD	INTC	TXN
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Outperform
Zacks Rank (Short Term)	2	-	-	3	3	1
VGM Score	F	-	-	B	A	D
Market Cap	303.49 B	15.60 B	23.75 B	96.77 B	208.10 B	126.66 B
# of Analysts	13	3	14	12	13	12
Dividend Yield	0.13%	0.38%	1.62%	0.00%	2.70%	2.60%
Value Score	F	-	-	D	A	F
Cash/Price	0.06	0.12	0.07	0.02	0.12	0.04
EV/EBITDA	86.57	7.22	13.49	126.63	6.26	18.41
PEG Ratio	6.66	3.32	3.03	1.63	1.34	2.93
Price/Book (P/B)	23.17	1.94	3.18	29.28	2.54	16.57
Price/Cash Flow (P/CF)	93.94	12.13	12.85	108.36	6.44	21.31
P/E (F1)	62.47	27.37	22.17	74.76	10.08	27.37
Price/Sales (P/S)	25.77	2.64	2.49	12.66	2.64	9.25
Earnings Yield	1.60%	3.26%	4.32%	1.33%	9.91%	3.65%
Debt/Equity	0.57	0.31	0.77	0.15	0.44	0.82
Cash Flow (\$/share)	5.25	4.89	6.94	0.76	7.60	6.49
Growth Score	D	-	-	A	A	C
Hist. EPS Growth (3-5 yrs)	40.62%	22.01%	10.44%	80.17%	22.01%	18.71%
Proj. EPS Growth (F1/F0)	36.48%	-5.25%	-5.97%	72.27%	-0.33%	-3.58%
Curr. Cash Flow Growth	-20.70%	-14.35%	5.22%	44.79%	6.53%	-4.66%
Hist. Cash Flow Growth (3-5 yrs)	28.68%	12.14%	8.52%	27.24%	9.99%	8.82%
Current Ratio	10.29	3.52	1.33	2.10	1.97	3.92
Debt/Capital	36.34%	23.47%	44.59%	12.91%	30.56%	44.96%
Net Margin	28.17%	10.14%	10.13%	7.96%	29.97%	36.83%
Return on Equity	28.59%	13.98%	14.51%	28.66%	31.55%	60.61%
Sales/Assets	0.66	0.62	0.51	1.29	0.55	0.77
Proj. Sales Growth (F1/F0)	32.57%	-1.98%	-1.67%	32.03%	4.34%	-7.80%
Momentum Score	F	-	-	C	C	F
Daily Price Chg	6.68%	0.54%	-0.02%	1.38%	0.08%	0.68%
1 Week Price Chg	3.25%	2.21%	1.09%	-4.18%	1.79%	2.84%
4 Week Price Chg	17.38%	-1.40%	4.83%	43.44%	-19.98%	1.24%
12 Week Price Chg	36.68%	0.90%	13.09%	49.39%	-21.40%	21.91%
52 Week Price Chg	188.96%	7.84%	2.77%	161.82%	3.60%	10.98%
20 Day Average Volume	9,053,278	1,475,180	1,932,479	86,591,192	45,131,612	4,759,716
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	0.00%	0.00%	1.80%	9.71%	0.76%	25.14%
(F1) EPS Est 12 week change	4.41%	0.79%	2.88%	10.51%	0.97%	26.52%
(Q1) EPS Est Mthly Chg	0.00%	0.00%	0.80%	16.78%	-5.10%	37.31%

Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we have an excellent balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

Value Score	F
Growth Score	D
Momentum Score	F
VGM Score	F

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

Disclosures

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