# Silicon Motion (SIMO)

**$52.56** (As of 01/13/20)

Price Target (6-12 Months): **$60.00**

| | | |
|---|---|---|
| Long Term: 6-12 Months | **Zacks Recommendation:** (Since: 01/14/20) Prior Recommendation: Neutral | **Outperform** |
| Short Term: 1-3 Months | **Zacks Rank:** (1-5) | **1-Strong Buy** |
| | Zacks Style Scores: | VGM:D |
| | Value: D \| Growth: F | Momentum: A |

## Summary

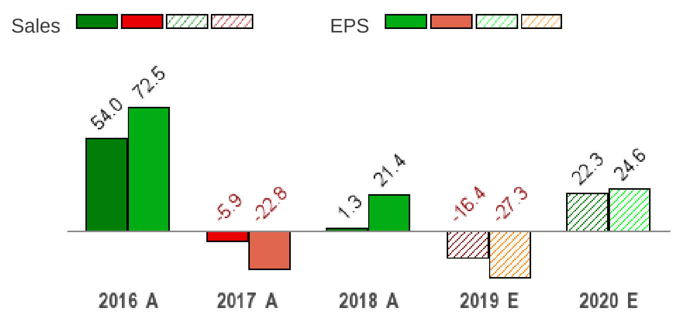
Silicon Motion is anticipated to benefit from adoption of its enterprise and industrial SSD offerings. Notably, the company's Open-Channel Shannon SSDs are being commercially deployed in data centers of Alibaba and another "B-A-T customer," which is a significant milestone. Improving demand for UFS mobile embedded memory products in smartphones and improving adoption of eMMC by module makers holds promise. Notably, shares of the company have outperformed the industry in the past year. However, higher sales of lower margined SSD solutions are likely to weigh on margins. Furthermore, uncertain macroeconomic conditions and imposition of tariff owing to the U.S.-China trade war has kept the company's OEM customers and NAND flash vendors on tenterhooks for quite some time now, which remains a concern.

## Price, Consensus & Surprise


## Data Overview

| | |
|---|---|
| 52 Week High-Low | **$52.95 - $30.86** |
| 20 Day Average Volume (sh) | **195,292** |
| Market Cap | **$1.9 B** |
| YTD Price Change | **3.7%** |
| Beta | **1.14** |
| Dividend / Div Yld | **$1.39 / 2.6%** |
| Industry | **Electronics - Semiconductors** |
| Zacks Industry Rank | **Top 15% (38 out of 254)** |
| Last EPS Surprise | **25.5%** |
| Last Sales Surprise | **-0.9%** |
| EPS F1 Est- 4 week change | **2.4%** |
| Expected Report Date | **02/06/2020** |
| Earnings ESP | **7.4%** |
| P/E TTM | **25.9** |
| P/E F1 | **17.0** |
| PEG F1 | **3.4** |
| P/S TTM | **4.4** |

## Sales and EPS Growth Rates (Y/Y %)




## Sales Estimates (millions of $)

| | Q1 | Q2 | Q3 | Q4 | Annual* |
|---|---|---|---|---|---|
| 2020 | 124 E | 133 E | 142 E | 146 E | 542 E |
| 2019 | 95 A | 99 A | 111 A | 143 E | 443 E |
| 2018 | 130 A | 138 A | 139 A | 123 A | 530 A |

## EPS Estimates

| | Q1 | Q2 | Q3 | Q4 | Annual* |
|---|---|---|---|---|---|
| 2020 | $0.70 E | $0.77 E | $0.85 E | $0.91 E | $3.09 E |
| 2019 | $0.42 A | $0.52 A | $0.69 A | $0.84 E | $2.48 E |
| 2018 | $0.71 A | $0.92 A | $0.95 A | $0.83 A | $3.41 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 01/13/2020. The reports text is as of 01/14/2020.

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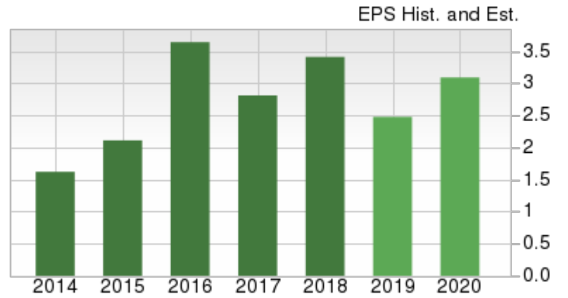
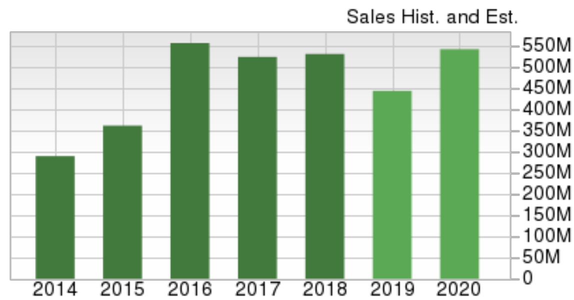
## Overview

Founded in 1995, Silicon Motion Technology Corporation is a leading developer of microcontroller ICs for NAND flash storage devices.




The semiconductor company also designs, develops and markets high-performance, low-power semiconductor solutions for original equipment manufacturers ("OEM") and other customers.

On May 31, 2019, Silicon Motion announced that it has concluded the sale of mobile communications business (FCI product line) to Dialog Semiconductor Plc. for $45 million.

Post the divestiture, the company's product portfolio is primarily aimed at SSD controllers in the mobile storage market.

Mobile storage: The main offerings of the market are Embedded memory controllers, SSD controllers & solutions, Flash memory card controllers and USB flash drive controllers.

Embedded memory controllers product offering includes controllers for eMMC and its derivative multi-chip package ("MCP") embedded memory, which combine NAND flash and mobile DRAM in an integrated solution; controllers for other embedded memory solutions and commercial-grade and industrial-grade products.

On the other hand, SSD controllers and solutions comprises SATA 6Gb/s SSD controllers for both NAND-cache SSDs and full-size client SSDs; controllers for single-chip SSDs and IDE/PATA disk-on-modules ("DOMs"); Ferri single-package SSD solutions, small single-chip SSDs.

Shannon enterprise SSD solutions aimed at enterprise and hyperscale data centers offer high storage capacity, low latency, higher input/output operations per second (IOPS), and high performance capabilities.

Flash memory card controllers offers an extensive line of high-performance controllers for all major flash memory card formats, including Compact Flash ("CF"), SD and Memory Stick ("MS").

USB flash drive controllers include USB flash drives that are popular in computing and consumer electronics markets for portable storage of files.

In 2018, non-GAAP revenues of $530.3 million inched up 1% over 2017.

## Reasons To Buy:

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- Silicon Motion has established itself as the leading merchant supplier of client SSD controller to module makers, including most market leaders in the U.S., Taiwan and China. Most of the company's clients are ditching MLC flash for TLC flash. This has made the company focus on manufacturing SSD controllers that can manage TLC flash. Going forward, Silicon Motion believes the market will be dominated by SSDs that use TLC flash, which will further bolster their use in PC's, thereby displacing mechanical HDDs. As TLC SSD offers higher performance and competitive advantage over HDDs, PCs are increasingly adopting them. Furthermore, the company believes a majority of its client SSD controller will be used for managing 3D flash, going forward. Silicon Motion believes it is well-equipped to adapt to industry changes as it has collaborated with flash vendors for nearly two years for developing proprietary controller technology to overcome existing weakness of 3D NAND and outshine peers. The company has commenced initial sales of 3D SSD controllers to flash partners and expect this controller to be a significant SSD controller growth driver for the next year, as NAND Flash partners' 3D capacity expands. Also, it commenced mass production of PCIe NVMe client SSD controller for flash partners. We believe accelerated product sales – along with favorable industry trends – signals bright prospects forward for Silicon Motion. In fact, Silicon Motion concluded the sale of mobile communications business (FCI product line) to Dialog Semiconductor Plc. to focus on SSD controllers domain. The company has also rolled out SM3282, a single chip flash controller, featuring accelerated performance and high storage capacity capabilities for cost-efficient external SSDs. Backed by pipeline expansion, Silicon Motion is banking on robust growth in SSD controllers for 2020. Further, management projects SSD solutions sales to rebound in 2020.

- Silicon Motion's eMMC is showing strong signals of rebound, thereby adding to the strength of its overall embedded storage market that comprises both SSD controllers and eMMC embedded memory. As market trends suggest the balance is tilting from transitioning of eMMC 4.5 toward that of eMMC 5.0, the company foresees lucrative prospects for eMMC 5.1 controller sales. We believe an expanding customer base and innovative products will likely act as tailwinds for the company's top-line growth, going forward. As a matter of fact, over the last 10 years, Silicon Motion has shipped over five billion controllers cumulatively – more than any other company in the world. On a yearly basis, Silicon Motion ships over 750 million NAND controllers.

- Silicon Motion has a keen eye for acquisitions that supplement its growth initiatives. In 2015, the company completed the acquisition of China's leading enterprise grade PCIe SSD and storage array vendor, Shannon Systems. The growing clout of Shannon products among leading Internet and e-commerce companies to utilities, telcos and other state-owned enterprises including government agencies, bodes well. Silicon Motion, expecting the high-end enterprise market of China to grow at least 15% for the next few years, has positioned itself well for catering to these needs. Shannon's strong leadership position, robust business pipeline and market opportunity in China will help it to achieve targeted growth in the long haul. Notably, the company's Open-Channel Shannon SSDs are being commercially deployed in data centers of Alibaba and another "B-A-T customer," which is a significant milestone. In addition, Ferri SSD controllers, also a part of the enterprise and industrial SSD offerings, is focusing on customized solution for industrial applications and gaining solid popularity among Japanese OEMs. Silicon Motion is expected to benefit from adoption of its enterprise and industrial SSD offerings.

- Silicon Motion directs considerable resources toward research and development in order to outshine its peers on that front. The company has an expert engineering team with profound knowledge in system architecture, digital, mixed-signal and RF IC design, and software engineering. For instance, in order to address the issue of affordability and to capture the higher-density equipment market, the company has planned to design its USF2 controllers such that they can be deployed in cheap versions of TLC NAND flash as well as futuristic high-density 3D NAND. Apart from this, the company's robust liquidity position allows it to undertake diligent capital deployment initiatives that supplements long-term growth. As of Mar 31, 2019, the company had 1,456 patents (and 1,281 in pending applications) globally.

## Risks

- The semiconductor industry, in general, is highly competitive which subjects Silicon Motion to stiff rivalry from peers. In the mobile storage market, the company encounters major competitors like Alcor Micro, ASolid, Marvell and Phison. Of late, intensifying competition in the company's card and USB flash drive controller markets are proving to be major headwinds. Apart from this, the semiconductor industry is highly dynamic as it is prone to quick technological changes, competition from evolving industry standards and declining average selling prices. Also, customers sometimes develop their own products which reduce the need of the products supplied by the company. These factors may pose as threats.

- Silicon Motion also faces macroeconomic risks like political, economic and social instability and certain industry-specific regulations in geographies where the company operates. The tense political condition between Taiwan and People's Republic of China increases the extent of political risk for the company. Moreover, North Korea's nuclear and ballistic missile testing programs, deteriorating relationship with South Korea, leadership woes and strained relations with the U.S. are likely to affect the nation's economic conditions that will, in turn, be harmful for the company's business. Sluggishness in the global economy is likely to weigh on the company's wireless and broader semiconductor market. Uncertain macroeconomic conditions and imposition of tariff owing to trade war between the United States and China has kept the company's OEM customers and NAND flash vendors on tenterhooks for quite some time now, which is a concern.

- Silicon Motion continues to acquire a large number of companies. While this improves revenue opportunities, business mix and profitability, it also adds to integration risks. Moreover, frequent acquisitions are a distraction for management, which could impact organic growth, going forward. We note that the buyouts negatively impacted the company's balance sheet in the form of high level of goodwill and net intangible assets. Notably, on May 15, 2019, Silicon Motion had revealed in annual filing that it is trimming Shannon sales forecast for 2019 "meaningfully." The declining operating performance of Shannon led to approximately $5.0 million in inventory write-down in the second quarter. The company completed further write-down of goodwill and intangible assets in the third quarter of 2019 by $16 million.

## Last Earnings Report

**Silicon Motion Q3 Earnings Top Estimates**

| Quarter Ending | 09/2019 |
|---|---|
| Report Date | **Oct 29, 2019** |
| Sales Surprise | **-0.91%** |
| EPS Surprise | **25.45%** |
| Quarterly EPS | **0.69** |
| Annual EPS (TTM) | **2.46** |

Silicon Motion Technology Corporation reported third-quarter 2019 non-GAAP earnings of 69 cents per American Depositary Share (ADS), which surpassed the Zacks Consensus Estimate by 25.5% and improved 32.7% sequentially. However, the figure declined 28.1% from the year-ago quarter.

Net sales (non-GAAP) declined 14% from the year-ago quarter but improved 20% sequentially to reach $113.2 million. On a GAAP basis, net sales declined 20% from the year-ago figure but improved 12% sequentially to $110.5 million.

The Zacks Consensus Estimate for revenues was pegged at $110 million.

Notably, non-GAAP revenues include SSD solutions restructuring charges of approximately $2.7 million.

**Quarter in Detail**

Sales of SSD controllers to flash partners surged 15% sequentially, on improving adoption of SSD in client devices from PC OEMs.

Moreover, revenues from eMMC and UFS controllers increased 40% sequentially, on account of demand for UFS mobile embedded memory products in smartphones and improving adoption of eMMC by module makers. Notably, revenues from SSD solutions improved 45% sequentially on improving demand for Shannon and Ferri products.

Moreover, the company's  Open-Channel Shannon SSDs are into commercial deployment in data center of Alibaba and another "B-A-T customer," which is a significant milestone.

**Margins**

Non-GAAP gross margin of 49.8% contracted 120 bps on a year-over-year basis and 170 bps sequentially, primarily on higher sales of lower margined SSD solutions.

Non-GAAP operating expenses as a percentage of revenues came in at 27.7%, expanding 560 bps year over year. The figure contracted 530 bps sequentially.

Consequently, non-GAAP operating margin contracted 680 bps on year-over-year basis to 22.1%. Nonetheless, the figure expanded 370 bps sequentially.

**Balance Sheet & Cash Flow**

Silicon Motion ended the third quarter with cash, cash equivalents, restricted cash and short-term investments of $333.3 million, compared with $368.1 million reported in the previous quarter.

The company generated $29.5 million cash from operations during the reported quarter compared with $40.1 million in the previous quarter.

On Oct 29, 2018, the company's  board declared a new annual dividend of $1.20 per ADS. Quarterly installments to be paid by the company were 30 cents per ADS. On Aug 22, 2019, the company paid out $10 million as annual dividend to shareholders, which marked its fourth installment.

On Oct 25, 2019, the company's  board declared a new annual dividend of $1.40 per ADS, up from $1.20 in the past year. Quarterly installments to be paid by the company are 35 cents per ADS. Notably, the first installment, per the revised dividend, is payable on Nov 21, 2019.

Further, on Nov 21, 2018, Silicon Motion announced a new buyback program spread over a two-year period. According to terms of the program, the company will repurchase approximately $200 million per ADS. In the reported quarter, the company repurchased shares worth $25 million. Under the buyback program, the company has repurchased shares worth $59.8 million.

On May 15, 2019, Silicon Motion had revealed in annual filing that it is trimming Shannon sales forecast for 2019 "meaningfully."   The declining operating performance of Shannon led to approximately $5.0 million in inventory write-down in the second quarter. The company completed further write-down of goodwill and intangible assets in the reported quarter by $16 million.

**Guidance**

Silicon Motion expects non-GAAP revenues to be in the range of $133 million to $139 million (indicating sequential growth of 17.5-22.5%).

For fourth-quarter 2019, non-GAAP gross margin is anticipated within 48.5-50.5%. Non-GAAP operating margin is anticipated to lie in the range of 21.6% to 24.6%.

## Recent News

On **Jan 7, 2020**, Silicon Motion announced preliminary fourth quarter 2019 results. The company expects non-GAAP revenues within 10% greater than the higher end of the prior guided range of $133-$139 million. Non-GAAP gross margin is projected to come in near the lower-end of the prior guided range of 48.5%-50.5%.

On **Oct 25, 2019**, Silicon Motion declared a new annual dividend of $1.40 per ADS, up from $1.20 in the past year. Quarterly installments to be paid by the company are 35 cents per ADS. Notably, the first installment, per the revised dividend, is payable on Nov 21, 2019.

On **Oct 7, 2019**, Silicon Motion announced preliminary third quarter 2019 results. The company expects non-GAAP revenues within 5% greater than the higher end of the prior guided range of $104-$108 million. Non-GAAP gross margin is projected to come in near the high-end of the prior guided range of 48%-50%.

## Valuation

Silicon Motion shares are up 25.5% in the past six-month period and 56.3% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 18.9% and 13.7% in the past six-month period, respectively. Over the past year, the Zacks sub-industry and the sector are up 45.5% and 33.8%, respectively.

The S&P 500 index is up 10% in the past six-month period and 26.9% in the past year.

The stock is currently trading at 16.98X forward 12-month earnings, which compares to 13.75X for the Zacks sub-industry, 22.94X for the Zacks sector and 19.00X for the S&P 500 index.

Over the past five years, the stock has traded as high as 30.43X and as low as 10.59X, with a 5-year median of 16.13X. Our Outperform recommendation indicates that the stock will perform better than the market. Our $60 price target reflects 19.38X forward 12-month earnings.

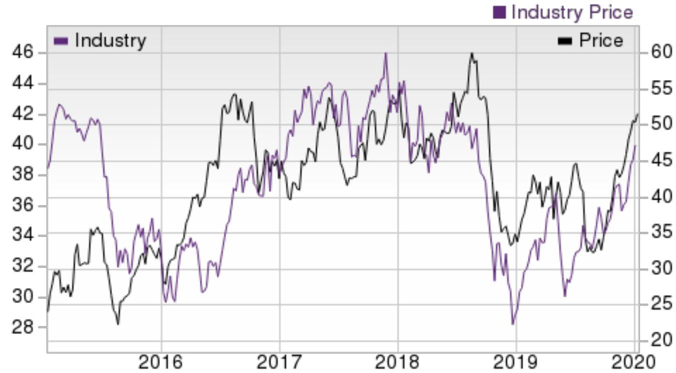
The table below shows summary valuation data for SIMO

**Valuation Multiples - SIMO**

| | | Stock | Sub-Industry | Sector | S&P 500 |
|---|---|---|---|---|---|
| P/E F12M | Current | 16.98 | 13.75 | 22.94 | 19.00 |
| | 5-Year High | 30.43 | 27.50 | 22.94 | 19.34 |
| | 5-Year Low | 10.59 | 5.74 | 16.87 | 15.17 |
| | 5-Year Median | 16.13 | 11.42 | 19.24 | 17.44 |
| P/S F12M | Current | 3.49 | 6.87 | 3.70 | 3.52 |
| | 5-Year High | 4.23 | 6.87 | 3.70 | 3.52 |
| | 5-Year Low | 1.89 | 2.58 | 2.30 | 2.54 |
| | 5-Year Median | 2.80 | 5.84 | 3.01 | 3.00 |
| EV/Sales TTM | Current | 3.71 | 6.79 | 4.35 | 3.29 |
| | 5-Year High | 3.92 | 6.90 | 4.35 | 3.30 |
| | 5-Year Low | 1.57 | 2.69 | 2.56 | 2.16 |
| | 5-Year Median | 2.58 | 5.29 | 3.44 | 2.80 |

As of 01/13/2020

## Industry Analysis **Zacks Industry Rank:** Top 15% (38 out of 254)




## Top Peers

| | |
|---|---|
| Cyclacel Pharmaceuticals, Inc. **(CYCC)** | Outperform |
| Broadcom Inc. **(AVGO)** | Neutral |
| Microchip Technology Incorporated **(MCHP)** | Neutral |
| Marvell Technology Group Ltd. **(MRVL)** | Neutral |
| Micron Technology, Inc. **(MU)** | Neutral |
| Netlist, Inc. **(NLST)** | Neutral |
| ON Semiconductor Corporation **(ON)** | Neutral |
| QUALCOMM Incorporated **(QCOM)** | Neutral |

## Industry Comparison Industry: Electronics - Semiconductors

Industry Peers

| | SIMO Outperform | X Industry | S&P 500 | MRVL Neutral | MU Neutral | ON Neutral |
|---|---|---|---|---|---|---|
| **VGM Score** | D | - | - | F | D | C |
| Market Cap | 1.90 B | 695.09 M | 24.31 B | 18.46 B | 63.67 B | 10.40 B |
| # of Analysts | 6 | 2 | 13 | 12 | 7 | 10 |
| Dividend Yield | 2.64% | 0.00% | 1.76% | 0.87% | 0.00% | 0.00% |
| **Value Score** | D | - | - | F | B | B |
| Cash/Price | 0.17 | 0.18 | 0.04 | 0.02 | 0.12 | 0.09 |
| EV/EBITDA | 12.68 | 8.49 | 14.12 | 33.52 | 4.88 | 8.75 |
| PEG Ratio | 3.40 | 2.19 | 2.05 | 5.58 | NA | 1.59 |
| Price/Book (P/B) | 3.43 | 3.03 | 3.34 | 2.58 | 1.74 | 3.21 |
| Price/Cash Flow (P/CF) | 13.72 | 12.94 | 13.66 | 17.05 | 5.06 | 7.80 |
| P/E (F1) | 17.01 | 24.48 | 18.82 | 42.39 | 24.07 | 15.94 |
| Price/Sales (P/S) | 4.44 | 2.97 | 2.64 | 6.77 | 3.09 | 1.85 |
| Earnings Yield | 5.88% | 3.20% | 5.29% | 2.36% | 4.16% | 6.28% |
| Debt/Equity | 0.00 | 0.08 | 0.72 | 0.28 | 0.16 | 0.89 |
| Cash Flow ($/share) | 3.83 | 0.73 | 6.94 | 1.61 | 11.36 | 3.25 |
| **Growth Score** | F | - | - | F | D | D |
| Hist. EPS Growth (3-5 yrs) | 10.74% | 3.58% | 10.56% | 7.93% | 68.56% | 25.92% |
| Proj. EPS Growth (F1/F0) | 24.85% | 21.57% | 7.49% | -45.45% | -62.41% | 5.31% |
| Curr. Cash Flow Growth | 56.89% | 0.75% | 14.83% | 70.60% | -35.35% | 20.30% |
| Hist. Cash Flow Growth (3-5 yrs) | 33.74% | 12.15% | 9.00% | 14.93% | 15.84% | 24.07% |
| Current Ratio | 6.50 | 2.96 | 1.23 | 2.88 | 2.56 | 1.54 |
| Debt/Capital | 0.00% | 9.10% | 42.99% | 22.13% | 13.70% | 47.05% |
| Net Margin | 13.16% | 1.09% | 11.08% | -16.47% | 17.01% | 5.71% |
| Return on Equity | 13.22% | 2.76% | 17.16% | 3.59% | 11.36% | 21.95% |
| Sales/Assets | 0.63 | 0.69 | 0.55 | 0.27 | 0.43 | 0.70 |
| Proj. Sales Growth (F1/F0) | 22.16% | 8.24% | 4.23% | -6.04% | -13.28% | 3.66% |
| **Momentum Score** | A | - | - | C | F | F |
| Daily Price Chg | 2.06% | 1.10% | 0.73% | 3.85% | 1.38% | 3.01% |
| 1 Week Price Chg | 2.39% | 1.46% | 0.39% | -0.64% | 3.92% | -0.45% |
| 4 Week Price Chg | 8.60% | 5.49% | 1.84% | 6.13% | 8.52% | 7.93% |
| 12 Week Price Chg | 35.12% | 17.58% | 6.48% | 14.57% | 27.05% | 29.98% |
| 52 Week Price Chg | 52.70% | 35.31% | 23.15% | 61.50% | 65.71% | 42.97% |
| 20 Day Average Volume | 195,292 | 218,668 | 1,578,594 | 6,493,117 | 22,692,220 | 4,191,499 |
| (F1) EPS Est 1 week change | 2.40% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| (F1) EPS Est 4 week change | 2.40% | 0.00% | 0.00% | 0.00% | -2.58% | -0.25% |
| (F1) EPS Est 12 week change | 11.42% | 0.00% | -0.48% | -18.28% | -9.78% | -3.11% |
| (Q1) EPS Est Mthly Chg | 9.82% | 0.00% | 0.00% | 0.00% | -16.20% | 0.00% |

## 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 | D |
| Growth Score | F |
| Momentum Score | A |
| VGM Score | D |

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.

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