Jan 15, 2021

Silicon Motion (SIMO)

$49.97 (As of 01/14/21)

Price Target (6-12 Months): **$58.00**

Long Term: 6-12 Months	**Zacks Recommendation:** (Since: 01/15/21) Prior Recommendation: Neutral	**Outperform**
Short Term: 1-3 Months	**Zacks Rank:** (1-5) Zacks Style Scores: Value: D | Growth: C | Momentum: A	**1-Strong Buy** VGM:C

Summary

Silicon Motion is benefiting from robust demand for its solid state drive (SSD) controllers. Growing adoption of embedded memory controllers amid uptick in smartphone sales, is a positive. Increased PC sales triggered by online learning and work-from-home wave, hold promise. New design wins for PCIe Gen4 SSD controllers, from NAND makers, also bode well. Recently, the company announced upbeat preliminary results for Q4. Fourth-quarter revenues are likely to reflect gains from recovery in sales of eMMC and UFS controllers and continued momentum in SSD controller sales. Although the company's shares have underperformed in the past year, these factors are expected to help it grow in 2021. However, COVID-19 crisis-led production delays and supply chain constraints along with stiff competition in the USB flash drive controller market remain concerns.

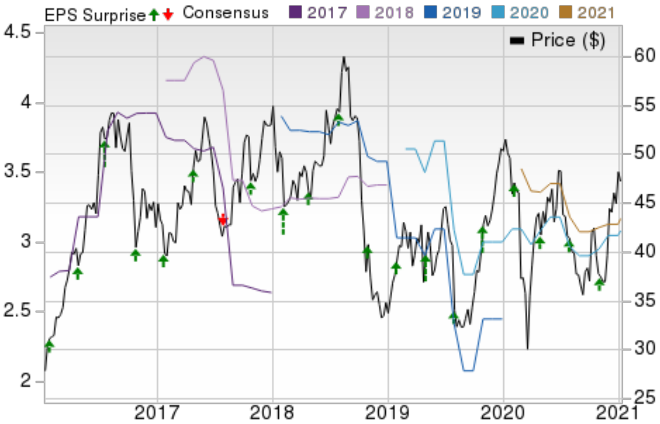
Data Overview

52-Week High-Low	**$52.46 - $26.72**
20-Day Average Volume (Shares)	**280,543**
Market Cap	**$1.8 B**
Year-To-Date Price Change	**3.8%**
Beta	**1.06**
Dividend / Dividend Yield	**$1.40 / 2.8%**
Industry	**Electronics - Semiconductors**
Zacks Industry Rank	**Top 42% (107 out of 253)**

Last EPS Surprise	**11.8%**
Last Sales Surprise	**0.0%**
EPS F1 Estimate 4-Week Change	**8.8%**
Expected Report Date	**02/03/2021**
Earnings ESP	**2.0%**

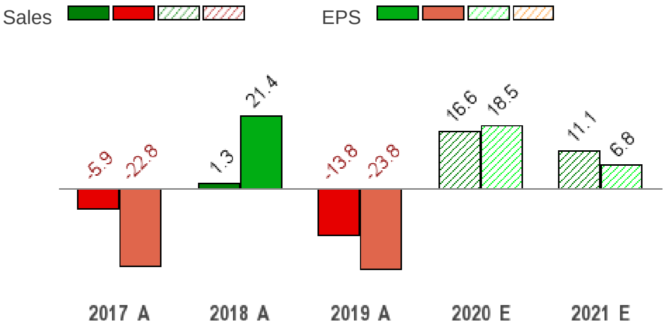
P/E TTM	**15.0**
P/E F1	**15.2**
PEG F1	**3.0**
P/S TTM	**3.3**

Price, Consensus & Surprise



Source: Zacks Investment Research

Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of $)

	Q1	Q2	Q3	Q4	Annual*
2021	134 E	141 E	153 E	154 E	592 E
2020	133 A	137 A	126 A	140 E	533 E
2019	95 A	99 A	111 A	153 A	457 A

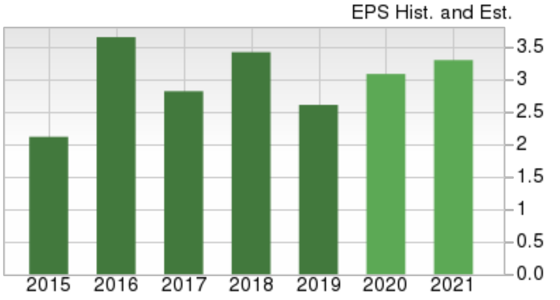
EPS Estimates

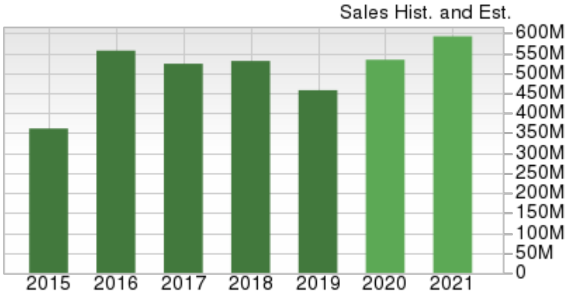
	Q1	Q2	Q3	Q4	Annual*
2021	$0.68 E	$0.78 E	$0.91 E	$0.93 E	$3.29 E
2020	$0.80 A	$0.81 A	$0.76 A	$0.70 E	$3.08 E
2019	$0.42 A	$0.52 A	$0.69 A	$0.96 A	$2.60 A

*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 01/14/2021. The reports text is as of 01/15/2021.

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.

Silicon Motion directs considerable resources toward research and development. As of Mar 31, 2019, the company had 1,456 patents (and 1,281 in pending applications) globally.

In 2019, Silicon Motion reported non-GAAP revenues of $449.4 million.

Source: Zacks Investment Research

Reasons To Buy:

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.

- ▲ 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 hard disk drives (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.

- ▲ Silicon Motion has a strong balance sheet with ample liquidity position and no debt obligations. As of Sep 30, 2020, Silicon Motion had cash, cash equivalents, restricted cash and short-term investments of $368.4 million. The company generated $30.2 million cash from operations during the third quarter compared with $25.7 million in the second quarter. Efforts to reward shareholders through dividend payouts deserve a special mention. Silicon Motion paid out dividends of $12.3 million during the third quarter. The increasing liquidity and cash flow trend reflect that the company is making investments in the right direction. Moreover, since it carries no long-term debt, the cash is available for pursuing strategic acquisitions, investment in growth initiatives and distribution to shareholders. The company's ability to generate solid free cash flow is expected to help it sustain current dividend payout (0.47) level at least in the near term.

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 Micron, Microchip, Marvell and ON Semiconductor. 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. In the third quarter of 2020, the company incurred SSD solutions restructuring charges worth $2.7 million, owing to underperforming Shannon and Bigtera product lines.

Last Earnings Report

Silicon Motion Q3 Earnings Top Estimates, Revenues Up Y/Y

Quarter Ending	**09/2020**
Report Date	**Nov 02, 2020**
Sales Surprise	**0.03%**
EPS Surprise	**11.76%**
Quarterly EPS	**0.76**
Annual EPS (TTM)	**3.33**

Silicon Motion Technology Corporation reported third-quarter 2020 non-GAAP earnings of 76 cents per American Depositary Share (ADS), which surpassed the Zacks Consensus Estimate by 11.8% and improved 10.1% from the year-ago quarter. However, the bottom line declined 6.2% sequentially.

Net sales (non-GAAP) increased 11% from the year-ago quarter to $126 million, outpacing the Zacks Consensus Estimate by 0.03%. Growth was driven by robust uptake of SSD controllers. However, the figure slumped 8% sequentially.

Quarter in Detail

Sales of SSD controllers surged 20% both, year over year and sequentially. During the reported quarter, the company's PCIe Gen4 SSD controllers raked in new design wins from more than 10 customers, out of which five are NAND flash makers.

Notably, revenues from SSD solutions improved 50% year over year but declined 10% sequentially.

However, as anticipated, revenues from eMMC and UFS controllers fell 10% year over year and 50% sequentially, owing to "temporary customer inventory adjustment." Management noted that revenues from SSD solutions were lower than projected.

Margins

Non-GAAP gross margin of 49.1% contracted 70 basis points (bps) on a year-over-year basis and 90 bps sequentially.

Non-GAAP operating expenses, as a percentage of revenues, came in at 26.1%, contracting 160 bps year over year. Further, the figure contracted 170 bps sequentially.

Non-GAAP operating margin expanded 90 bps on a year-over-year basis and 80 bps sequentially to 23%.

Balance Sheet & Cash Flow

As of Sep 30, 2020, Silicon Motion had cash, cash equivalents, restricted cash and short-term investments of $368.4 million, compared with $379.7 million as of Jun 30, 2020.

The company generated $30.2 million cash from operations during the reported quarter compared with $25.7 million in the second quarter.

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, on Aug 20, 2020, the company paid out $12.3 million as annual dividend to shareholders, which marked its fourth installment.

Markedly, on Oct 26, 2020, the company's board of directors approved $1.40 per ADS of annual dividend, slated to be paid in quarterly installments of 35 cents per ADS — the first installment of which is scheduled to be paid on Nov 25, 2020.

Further, on Nov 21, 2018, Silicon Motion announced a new buyback program spread over a two-year period. Per the program, the company will repurchase approximately $200 million per ADS. In the reported quarter, the company repurchased $25 million of ADSs at an average price of $39.91 per ADS.

Under the buyback program, the company has repurchased shares worth $84.8 million of ADSs, with $115.2 million remaining untapped under the program. On Oct 26, 2020, the board of directors approved the extension of the conclusion of the program to Nov 21, 2021.

Recent News

On Jan 7, Silicon Motion announced preliminary fourth-quarter 2020 results. The company now expects revenues to be nearly 3% above the high-end of the previous guidance of $130-$139 million (mid-point of $134.5 million) issued on Nov 3, 2020. Further, Silicon Motion now projects non-GAAP gross margin near the mid-point of the previously mentioned guidance of 48-50%.

However, the company did not provide any update on its non-GAAP operating margin metrics. It formerly guided non-GAAP operating margin of 19.5-20.5%.

On Nov 17, Silicon Motion unveiled an enterprise-grade PCIe 4.0 NVMe hardware and firmware turnkey solid state drive (SSD) controller solution — SM8266. The offering will enable manufacturers to accelerate time taken to introduce new enterprise SSD products (especially for data centers) in the market.

On Oct 26, Silicon Motion confirmed annual dividend of $1.4 per ADS to be paid in four equal quarterly installments. The company also extended the time limit by another 12 months for the existing share repurchases authorization.

On Oct 23, Silicon Motion rolled out latest PCIe 4.0 NVMe 1.4 controller solutions which carry up to 7,400 MB/s sequential read speeds and 6,800 MB/s write speeds.

On Jun 10, Silicon Motion introduced SM768 graphics display SoC integrated with InstantView Driverless Docking technology to enable users to mirror the screen of any Android phone or laptop to display presentations without the need of downloading a driver.

Valuation

Silicon Motion shares are up 12.6% in the past six-month period but down 1.1% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 56.6% and 24.4% in the past six-month period, respectively. In the past year, the Zacks sub-industry and the sector are up 61.5% and 34.5%, respectively.

The S&P 500 index is up 19.3% in the past six-month period and 16.7% in the past year.

The stock is currently trading at 15.68X forward 12-month earnings, which compares to 18.41X for the Zacks sub-industry, 28.48X for the Zacks sector and 23.13X 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 15.78X. Our Outperform recommendation indicates that the stock will perform better than the market. Our $58 price target reflects 18.2X 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	15.68	18.41	28.48	23.13
	5-Year High	30.43	29.47	28.48	23.79
	5-Year Low	10.59	5.61	16.94	15.3
	5-Year Median	15.78	11.4	19.93	17.83
P/S F12M	Current	3.13	8.97	4.85	4.53
	5-Year High	4.23	8.97	4.85	4.53
	5-Year Low	1.9	4.65	2.77	3.2
	5-Year Median	2.84	5.81	3.47	3.68
EV/Sales TTM	Current	2.7	8.69	5.45	4.52
	5-Year High	3.92	8.69	5.46	4.52
	5-Year Low	1.57	2.8	2.85	2.62
	5-Year Median	2.51	5.46	3.9	3.59

As of 01/14/2021 *Source: Zacks Investment Research*

Industry Analysis **Zacks Industry Rank:** Top 42% (107 out of 253)

Source: Zacks Investment Research

Top Peers

Company (Ticker)	Rec	Rank
Micron Technology, Inc. **(MU)**	Outperform	1
Broadcom Inc. **(AVGO)**	Neutral	2
Cyclacel Pharmaceuticals, Inc. **(CYCC)**	Neutral	3
Microchip Technology Incorporated **(MCHP)**	Neutral	2
Marvell Technology Group Ltd. **(MRVL)**	Neutral	3
Netlist, Inc. **(NLST)**	Neutral	3
ON Semiconductor Corporation **(ON)**	Neutral	3
QUALCOMM Incorporated **(QCOM)**	Neutral	2

The positions listed should not be deemed a recommendation to buy, hold or sell.

Industry Comparison Industry: Electronics - Semiconductors

				Industry Peers		
	SIMO	**X Industry**	**S&P 500**	**MRVL**	**MU**	**ON**
Zacks Recommendation (Long Term)	Outperform	-	-	Neutral	Outperform	Neutral
Zacks Rank (Short Term)	1	-	-	3	1	3
VGM Score	C	-	-	C	C	C
Market Cap	1.82 B	1.31 B	27.40 B	34.47 B	90.95 B	15.59 B
# of Analysts	6	2.5	13	13	9	11
Dividend Yield	2.78%	0.00%	1.42%	0.47%	0.00%	0.00%
Value Score	D	-	-	D	C	C
Cash/Price	0.20	0.13	0.06	0.03	0.08	0.11
EV/EBITDA	17.37	10.10	14.74	23.54	10.20	16.92
PEG F1	3.02	1.47	2.60	2.84	1.67	5.80
P/B	3.06	3.37	3.77	4.11	2.28	4.52
P/CF	23.25	21.96	14.43	42.61	10.52	12.75
P/E F1	15.12	23.42	20.63	55.35	21.07	27.28
P/S TTM	3.33	3.83	3.02	11.93	4.12	2.99
Earnings Yield	6.58%	1.90%	4.73%	1.81%	4.75%	3.67%
Debt/Equity	0.00	0.08	0.70	0.12	0.16	1.03
Cash Flow ($/share)	2.15	0.57	6.92	1.20	7.73	2.97
Growth Score	C	-	-	C	C	C
Historical EPS Growth (3-5 Years)	0.39%	2.41%	9.72%	2.20%	68.10%	11.16%
Projected EPS Growth (F1/F0)	6.94%	40.26%	12.26%	40.44%	36.32%	80.42%
Current Cash Flow Growth	-43.89%	-0.89%	5.20%	-24.70%	-31.58%	-10.63%
Historical Cash Flow Growth (3-5 Years)	8.57%	9.57%	8.37%	6.05%	7.44%	14.73%
Current Ratio	5.48	2.53	1.38	1.42	2.91	2.11
Debt/Capital	0.00%	8.84%	41.97%	10.58%	13.74%	50.65%
Net Margin	18.92%	3.83%	10.44%	51.19%	13.59%	3.87%
Return on Equity	18.13%	4.00%	15.40%	3.76%	8.46%	9.92%
Sales/Assets	0.76	0.63	0.50	0.26	0.42	0.57
Projected Sales Growth (F1/F0)	11.00%	10.45%	6.01%	9.56%	15.69%	10.84%
Momentum Score	A	-	-	A	A	A
Daily Price Change	1.09%	1.09%	0.11%	2.13%	1.74%	2.46%
1-Week Price Change	-1.99%	6.95%	2.23%	3.24%	2.98%	8.52%
4-Week Price Change	8.89%	18.23%	2.96%	8.94%	12.51%	19.94%
12-Week Price Change	24.92%	42.94%	13.26%	25.02%	49.50%	46.22%
52-Week Price Change	-1.11%	58.12%	6.24%	81.63%	40.95%	51.42%
20-Day Average Volume (Shares)	280,543	295,346	1,749,628	7,352,324	17,563,790	5,296,535
EPS F1 Estimate 1-Week Change	6.21%	0.00%	0.00%	0.00%	13.25%	-0.12%
EPS F1 Estimate 4-Week Change	8.80%	0.00%	0.06%	0.17%	14.26%	0.80%
EPS F1 Estimate 12-Week Change	11.02%	7.04%	2.44%	3.06%	48.97%	3.88%
EPS Q1 Estimate Monthly Change	6.78%	0.00%	0.00%	0.48%	32.49%	1.99%

Source: Zacks Investment Research

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 maintain a 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	C
Momentum Score	A
VGM Score	C

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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Returns quoted represent past performance which is no guarantee of future results. Investment returns and principal value will fluctuate so that when shares are redeemed, they may be worth more or less than their original cost. Current performance may be higher or lower than the performance shown.

Investing involves risk; principal loss is possible. There is no guarantee that companies that can issue dividends will declare, continue to pay or increase dividends.

Glossary of Terms and Definitions

52-Week High-Low: The range of the highest and lowest prices at which a stock has traded during the past year. This range is determined based on the stock's daily closing price which may differ from the intra-day high or low. Many investors use it as a technical indicator to determine a stock's current value and future price movement. The idea here is that if price breaks out from the 52-week range, in either direction, the momentum may continue in the same direction.

20-Day Average Volume (Shares): The average number of shares of a company traded in a day over the last 20 days. It is a direct indication of a security's overall liquidity. The higher the average daily trading volume, the easier it is to enter or exit the stock at a desired price with more buyers and sellers being available.

Daily Price Change: This is the percentage difference between a trading day's closing price and the prior trading day's closing price. This item is updated at 9 p.m. EST each day.

1-Week Price Change: This is the percentage change in a stock's closing price over the last 5 trading days. This change reflects the collective buying and selling sentiment over the 1-week period.

A strong weekly price increase for the stock, especially when accompanied by increased volume, is an indication of it gaining momentum.

4-Week Price Change: This is the percentage change in a stock's closing price over the last 20 trading days or past 4 weeks. This is a mediumterm price change metric and an indication of the stock gaining momentum.

12-Week Price Change: This is the percentage change of a stock's closing price over the last 60 trading days or past 12 weeks. Similar to 4-week price change, this is a medium-term price change metric. It shows whether a stock has been enjoying strong investor demand, or if it has been in consolidation, or distress over this period.

52-Week Price Change: This is the percentage change in a stock's closing price over the last 260 trading days or past 52 weeks. This long-term price change metric is a good reference point for investors. Some investors seek stocks with the best percentage price change over the last 52 weeks, expecting the momentum to continue.

Market Cap: The number of outstanding common shares of a company times its latest price per share. This figure represents a company's size, which indicates various characteristics, including price stability and risk, in which investors could be interested.

Year-To-Date Price Change: Change in a stock's daily closing price in the period of time beginning the first day of the current calendar year through to the previous trading day.

# of Analysts: Number of EPS estimates used in calculating the current-quarter consensus. These estimates come from the brokerage analysts tracking this stock. However, the number of such analysts tracking this stock may not match the number of estimates, as all brokerage analysts may not come up with an estimate or provide it to us.

Beta: A measure of risk commonly used to compare the volatility of a stock to the overall market. The S&P 500 Index is the base for calculating beta and carries a value of 1. A stock with beta below 1 is less risky than the market as a whole. And a stock with beta above 1 is riskier.

Dividend: The portion of earnings a company is expected to distribute to its common shareholders in the next 12 months for each share they own. Dividends are usually paid quarterly. Dividend payments reflect positively on a company and help maintain investors' trust. Investors typically find dividend-paying stocks appealing because the dividend adds to any market price appreciation to result in higher return on investment (ROI). Moreover, a steady or increasing dividend payment provides investors a cushion in a down market.

Dividend Yield: The ratio of a company's annual dividend to its share price. The annual dividend used in the ratio is calculated based on the mostrecent dividend paid by the company. Dividend yield is an estimate of the dividend-only return from a stock in the next 12 months. Since dividend itself doesn't change frequently, dividend yield usually changes with a stock's price movement. As a result, often an unusually high dividend yield is a result of weak stock price.

S&P 500 Index: The Standard & Poor's 500 (S&P 500) Index is an unmanaged group of securities considered to be representative of the stock market in general. It is a market-capitalization-weighted index of stocks of the 500 largest U.S. companies. Each stock's weight in the index is proportionate to its market value.

Industry: One of the 250+ groups that Zacks classifies all stocks into based on the nature of business. These groups are termed as expanded (aka "X") industries and map to their respective (economic) sectors; Zacks has 16 sectors.

Zacks Industry Rank: The Zacks Industry Rank is determined by calculating the average Zacks Rank for all stocks in the industry and then assigning an ordinal rank to it. For example, an industry with an average Zacks Rank of 1.6 is better than an industry with an average Zacks Rank of 2.3. So, the industry with the better average Zacks Rank would get a better Zacks Industry Rank. If an industry has the best average Zacks Rank, it would be considered the top industry (1 out of 250+), which would place it at the top 1% of Zacks-ranked industries. Studies have shown that roughly half of a stock's price movement can be attributed to the industry group it belongs to. In fact, the top 50% of Zacks-ranked industries outperforms the bottom 50% by a factor of more than 2 to 1.

Last EPS Surprise: The percentage deviation of a company's last reported earnings per share from the Zacks Consensus Estimate. Companies with a positive earnings surprise are more likely to surprise again in the future (or miss again if they recently missed).

Last Sales Surprise: The percentage deviation of a company's last reported sales from the Zacks Consensus Estimate.

Expected Report Date: This is an estimated date of a company's next earnings release. The information originated or gathered by Zacks Investment Research from its information providers or publicly available sources is the basis of this estimate.

Earnings ESP: The Zacks Earnings ESP compares the Most Accurate Estimate to the Zacks Consensus Estimate for the yet-to-be reported quarter. The Most Accurate Estimate is the most recent version of the Zacks Consensus EPS Estimate. The idea here is that analysts revising their estimates closer to an earnings release have the latest information, which could potentially be more accurate than what they and others contributing to the consensus had predicted earlier. Thus, a positive or negative Earnings ESP reading theoretically indicates the likely deviation of the actual earnings from the consensus estimate. However, the model's predictive power is significant for positive ESP readings only. A positive Earnings ESP is a strong predictor of an earnings beat, particularly when combined with a Zacks Rank #1 (Strong Buy), #2 (Buy) or #3 (Hold). Our research shows that stocks with this combination produce a positive surprise nearly 70% of the time.

Periods:

TTM: Trailing 12 months. Using TTM figures is an effective way of analyzing the most-recent financial data in an annualized format that helps neutralize the effects of seasonality and other quarter-to-quarter variation.

F1: Current fiscal year. This period is used to analyze the estimates for the ongoing full fiscal year.

F2: Next fiscal year. This period is used to analyze the estimates for the next full fiscal year.

F12M: Forward 12 months. Using F12M figures is an effective way of analyzing the near-term (the following four unreported quarters) estimates in an annualized manner. Instead of typically representing estimates for the full fiscal year, which may not represent the nitty-gritty of each quarter, F12M figures suggest an all-inclusive annualized estimate for the following four quarters. The annualization helps neutralize the potential effects of seasonality and other quarter-to-quarter variations.

P/E Ratio: The price-to-earnings ratio measures a company's current market price per share relative to its earnings per share (EPS). Usually, the trailing-12-month (TTM) EPS, current-fiscal-year (F1) EPS estimate, or forward-12-month (F12M) EPS estimate is used as the denominator. In essence, this ratio shows what the market is willing to pay today for each dollar of EPS. In other words, this ratio gives a sense of what the relative value of the company is at the already reported level of earnings or at a future level of earnings.

It is one of the most widely-used multiples for determining the value of a company and helps comparing its valuation with that of a competitor, the industry group or a benchmark.

PEG Ratio: The price/earnings to growth ratio is a stock's P/E ratio using current fiscal year (F1) EPS estimate divided by its expected EPS growth rate over the coming 3 to 5 years. This ratio essentially determines a stock's value by factoring in the company’s expected earnings growth and is thus believed to provide a more complete picture than just the P/E ratio, particularly for faster-growing companies.

P/S Ratio: The price-to-sales ratio is calculated as a company’s current price per share divided by trailing 12 months (TTM) sales or revenues per share. This ratio shows what the market is willing to pay today for each dollar of TTM sales per share. The P/S ratio is at times the only valuation metric when the company has yet to become profitable.

Cash/Price Ratio: The cash-to-price ratio or Cash Yield is calculated as cash and marketable securities per share divided by the company’s current share price. Like the earnings yield, which shows the anticipated yield (or return) on a stock from earnings for each dollar invested, the cash yield does the same, with cash being the source of return instead of earnings. For example, a cash/price ratio of 0.08 suggests a return of 8% or 8 cents for every $1 investment.

EV/EBITDA Ratio: The EV/EBITDA ratio, also known as Enterprise Multiple, is calculated as a company’s enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by EBITDA (earnings before interest, taxes, depreciation and amortization). Usually, trailing-12-month (TTM) or forward-12-month (F12M) EBITDA is used as the denominator.

EV/Sales Ratio: The enterprise value-to-sales ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by annual sales. It is an expansion of the P/S valuation, which uses market value instead of enterprise value. The EV/Sales ratio is perceived as more accurate than P/S, in part, because the market capitalization does not take a company's debt into account when valuing it.

EV/CF Ratio: The enterprise value-to-cash flow ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by the trailing-12-month (TTM) operating cash flow. It's a measure of how long it would take to buy the entire business if you were able to use all the company's operating cash flow.

The EV/CF ratio is perceived as more accurate than the P/CF ratio, in part, because the market price does not take a company's debt into account when valuing it.

EV/FCF Ratio: The enterprise value-to-free cash flow metric compares a company's enterprise value to its trailing-12-month (TTM) free cash flow (FCF). This metric is very similar to the EV/CF ratio, but is considered a more exact measure owing to the fact that it uses free cash flow, which subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding growth activities and payments to shareholders.

P/EBITDA Ratio: The P/EBITDA ratio is calculated as a company's per share market value divided by EBITDA (earnings before interest, taxes, depreciation, and amortization). This metric is very similar to the EV/EBITDA ratio, but is considered a little less exact measure as it uses market price, which does not take a company's debt into account. However, since EBITDA is often considered a proxy for cash income, the metric is used as a measure of what the market is willing to pay today for each dollar of the company’s cash profitability in the trailing 12 months (TTM) or forward 12 months (F12M).

P/B Ratio: The price-to-book ratio is calculated as a company's current price per share divided by its book value (total assets – liabilities – preferred stocks) per share. In short, the book value is how much a company is worth. In other words, it reflects the total value of a company's assets that its common shareholders would receive if it were to be liquidated. So, the P/B ratio indicates whether you're paying higher or lower than what would remain if the company went bankrupt immediately. Investors typically use this metric to determine how a company's stock price stacks up to its intrinsic value.

P/TB Ratio: The price-to-tangible-book value ratio is calculated as a the per share market value of a company divided by the value of its tangible assets (total assets – liabilities – preferred stocks – intangible assets) per share. Tangible book value is the same thing as book value except it excludes the value of intangible assets to get a step closer to the baseline value of the company.

P/CF Ratio: The price-to-cash flow ratio measures a company’s per share market price relative to its trailing-12-month (TTM) operating cash flow per share. This metric is used to determine whether a company is undervalued or overvalued relative to another stock, industry or sector. And like the P/E ratio, a lower number is typically considered better from the value perspective.

One of the reasons why P/CF ratio is often preferred over P/E ratio is the fact that operating cash flow adds back non-cash expenses such as depreciation and amortization to net income. This feature helps valuing stocks that have positive cash flow but are not profitable because of large noncash charges.

P/FCF Ratio: The price-to-free cash flow ratio is an extension of P/CF ratio, which uses trailing-12-month (TTM) free cash flow per share instead of operating cash flow per share. This metric is considered a more exact measure than P/CF ratio, as free cash flow subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding activities that generate additional revenues.

Earnings Yield: The earnings yield is calculated as current fiscal year (F1) EPS estimate divided by the company’s current share price. The ratio, which is the inverse of the P/E ratio, measures the anticipated yield (or return) from earnings for each dollar invested in a stock today.

For example, earnings yield for a stock, which is trading at $35 and expected to earn $3 per share in the current fiscal year (F1), would be 0.0857 (3/35 = 0.0857) or 8.57%. In other words, for $1 invested in the stock today, the yield from earnings is anticipated to be 8.57 cents.

Investors most commonly compare the earnings yield of a stock to that of a broad market index (such as the S&P 500) and prevailing interest rates, such as the current 10-year Treasury yield. Since bonds and stocks compete for investors’ dollars, stock investors typically demand a higher yield for the extra risk they assume compared to investors of U.S. Treasury-backed securities that offer virtually risk-free returns. This additional return is referred to as the risk premium.

Debt/Equity Ratio: The debt-to-equity ratio is calculated as a company's total liabilities divided by its shareholder equity. This metric is used to gauge a company's financial leverage. In other words, it is a measure of the degree to which a company is financing its operations through debt versus its own funds. The higher the ratio, the higher the risk for shareholders.

However, this ratio is difficult to compare across industry groups where ideal amounts of debt vary. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-equity ratio should be compared with other companies in the same industry.

Cash Flow ($/share): Cash flow per share is calculated as operating cash flow (after-tax earnings + depreciation + other non-cash charges) divided by common shares outstanding. It is used by many investors as a measure of a company's financial strength. Since cash flow per share takes into consideration a company's ability to generate cash by adding back non-cash expenses, it is regarded by some as a more accurate measure of a company's financial situation than earnings per share, which could be artificially deflated.

Current Ratio: The current ratio or liquidity ratio is a company's current assets divided by its current liabilities. It measures a company's ability to pay short-term obligations. A current ratio that is in line with the industry average or slightly higher is generally considered acceptable. A current ratio that is lower than the industry average would indicate a higher risk of distress or default. A higher number is usually better. However, a very high current ratio compared to the industry average could be an indication of inefficient use of assets by management.

Debt/Capital Ratio: Debt-to-capital ratio is a company's total debt (interest-bearing debt + both short- and long-term liabilities) divided its total capital (interest-bearing debt + shareholders' equity). It is a measure of a company's financial leverage. All else being equal, the higher the debt-to-capital ratio, the riskier the stock.

However, this ratio can vary widely from industry to industry, the ideal amount of required debt being different. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-capital ratio should be compared with the same for its industry.

Net Margin: Net margin is calculated as net income divided by sales. It shows how much of each dollar in sales generated by a company translates into profit. For example, if a company's net margin is 15%, its net income is 15 cents for every $1 of sales it makes.

A change in margin can reflect either a change in business conditions, or a company's cost controls, or both. If a company's expenses are growing faster than sales, its net margin will decline. However, different net margin rates are considered good for different industries, so it's better to compare net margin rates of companies in the same industry group.

Return on Equity: Return on equity (ROE) is calculated as trailing-12-month net income divided by trailing-12-month average shareholder equity (including reinvested earnings). This metric is considered a measure of how effectively management is using a company's assets to generate profits. For example, if a company's ROE is 10%, it creates 10 cents profits for every $1 shareholder equity, which is basically the company's assets minus debt. A company's ROE deemed good or bad depends on what's normal for its peers or industry group.

Sales/Assets Ratio: The sales-to-assets ratio or asset utilization ratio or asset turnover ratio is calculated as a company's annual sales divided by average assets (average of assets at the beginning of the year and at the year's end). This metric helps investors understand how effectively a company is using its assets to generate sales. For example, a sales-to-assets ratio of 2.5 indicates that the company generated $2.50 in sales for every $1 of assets on its books.

The higher the sales-to-assets ratio, the better the company is performing. However, similar to many other ratios, the asset turnover ratio tends to be higher for companies in certain industries/sectors than in others. So, a company's sales-to-assets ratio should be compared with the same for its industry/sector.

Historical EPS Growth (3-5 Years): This is the average annual (trailing-12-month) EPS growth rate over the last 3-5 years. This metric helps investors see how a company's EPS has grown from a long-term perspective.

Note: There are many factors that can influence short-term numbers — a recession will reduce this number, while a recovery will inflate it. The longterm perspective helps smooth out short-term events.

Projected EPS Growth (F1/F0): This is the estimated EPS growth rate for the current financial year. It is calculated as the consensus estimate for the current fiscal year (F1) divided by the reported EPS for the last completed fiscal year (F0).

Current Cash Flow Growth: It measures the latest year-over-year change in operating cash flow. Cash flow growth tells an investor how quickly a company is generating inflows of cash from operations. A positive change in the cash flow is desired and shows that more 'cash' is coming in than going out.

Historical Cash Flow Growth (3-5 Years): This is the annualized change in cash flow over the last 3-5 years. The change in a longer period helps put the current reading into proper perspective. By looking at the rate, rather than the actual dollar value, the comparison across the industry and peers becomes easier.

Projected Sales Growth (F1/F0): This metric looks at the estimated sales growth for the current year. It is calculated as sales estimate for the current fiscal year (F1) divided by the reported sales for the last completed fiscal year (F0).

Like EPS growth, a higher rate is better for sales growth. A look at a company's projected sales growth instantly tells you what the outlook is for their products and services. However, different sales growth rates are considered good for different industries, so it's better to compare sales growth rates of companies in the same industry group.

EPS F1 Estimate 1-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past week. The change in a company's consensus EPS estimate (or earnings estimate revision) has proven to be strongly correlated with the near-term price movement of its shares. It is an integral part of the Zacks Rank.

If a stock's consensus EPS estimate is $1.10 now versus $1.00 a week ago, that will be reflected as a 10% upward revision. If, on the other hand, it went from $1.00 to 90 cents, that would be a 10% downward revision.

EPS F1 Estimate 4-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past four weeks.

A stock's earnings estimate revision in a 1-week period is important. But it's more meaningful to look at the longer-term revision. And, of course, the 4-week change helps put the 1-week change into proper perspective.

EPS F1 Estimate 12-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past 12 weeks.

This metric essentially shows how the consensus EPS estimate has changed over a period longer than 1 week or 4 weeks.

EPS Q1 Estimate Monthly Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal quarter over the past four weeks.

While the revision in consensus EPS estimate for the current fiscal year is strongly correlated with the near-term price movement of its shares, the estimate revision for the current fiscal quarter is an important metric as well, especially over the short term, and particularly as a stock approaches its earnings date. If a stock's Q1 EPS estimate decreases ahead of its earnings release, it's usually a negative sign, whereas an increase is a positive sign.