

## 3D Systems Corporation (DDD)

**\$28.76** (As of 03/19/21)

Price Target (6-12 Months): **\$30.00**

Long Term: 6-12 Months

**Zacks Recommendation:**

**Neutral**

(Since: 11/25/20)

Prior Recommendation: Underperform

Short Term: 1-3 Months

**Zacks Rank:** (1-5)

**4-Sell**

Zacks Style Scores:

VGM:C

Value: D

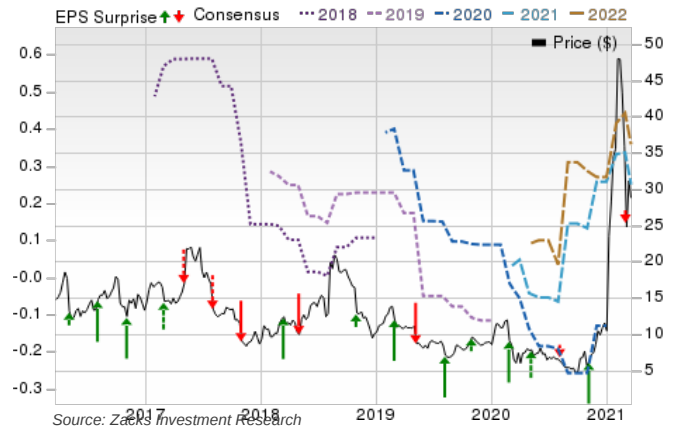
Growth: A

Momentum: D

### Summary

3D Systems fourth-quarter 2020 results reflect robust performance from the healthcare division amid coronavirus-related disruptions. Revenues benefited from robust healthcare performance driven by strong dental and medical applications end-market. Moreover, rebound in customer activity following pandemic-related shutdowns is a positive. Cost structure by trimming cost of sales and operating expenses will boost margins over the long run. Moreover, the strategic move of selling Cimatron and GibbsCAM software businesses will help 3D Systems utilize its resources on more profitable additive manufacturing part. Nevertheless, industrial division was hurt as demand is yet to fully recover from pandemic-induced disruptions. Declining gross margin due to unfavorable sales mix was a headwind.

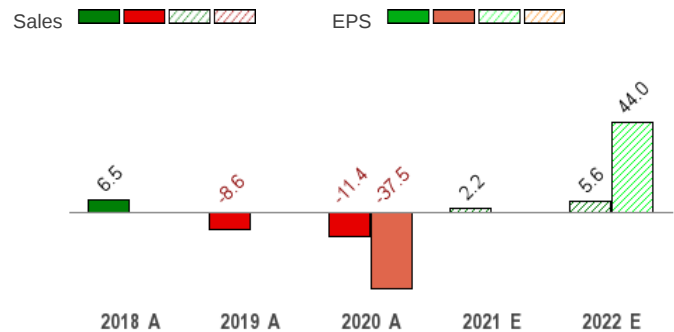
### Price, Consensus & Surprise



### Data Overview

|                                |                           |
|--------------------------------|---------------------------|
| 52-Week High-Low               | \$56.50 - \$4.60          |
| 20-Day Average Volume (Shares) | 5,635,882                 |
| Market Cap                     | \$3.6 B                   |
| Year-To-Date Price Change      | 174.4%                    |
| Beta                           | 1.50                      |
| Dividend / Dividend Yield      | \$0.00 / 0.0%             |
| Industry                       | Computer - Mini computers |
| Zacks Industry Rank            | Top 45% (113 out of 253)  |

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



|                               |            |
|-------------------------------|------------|
| Last EPS Surprise             | -18.2%     |
| Last Sales Surprise           | -0.4%      |
| EPS F1 Estimate 4-Week Change | -63.0%     |
| Expected Report Date          | 05/05/2021 |
| Earnings ESP                  | 8.3%       |

|         |       |
|---------|-------|
| P/E TTM | NA    |
| P/E F1  | 115.0 |
| PEG F1  | 5.0   |
| P/S TTM | 6.4   |

### Sales Estimates (millions of \$)

|      | Q1    | Q2    | Q3    | Q4    | Annual* |
|------|-------|-------|-------|-------|---------|
| 2022 | 145 E | 149 E | 152 E | 159 E | 601 E   |
| 2021 | 135 E | 136 E | 141 E | 158 E | 569 E   |
| 2020 | 135 A | 112 A | 135 A | 173 A | 557 A   |

### EPS Estimates

|      | Q1        | Q2        | Q3        | Q4       | Annual*   |
|------|-----------|-----------|-----------|----------|-----------|
| 2022 | \$0.09 E  | \$0.10 E  | \$0.12 E  | \$0.14 E | \$0.36 E  |
| 2021 | \$0.03 E  | \$0.04 E  | \$0.07 E  | \$0.13 E | \$0.25 E  |
| 2020 | -\$0.04 A | -\$0.13 A | -\$0.03 A | \$0.09 A | -\$0.11 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 03/19/2021. The report's text and the analyst-provided price target are as of 03/22/2021.

## Overview

Headquartered in Rock Hill, SC, 3D Systems is a leading provider of 3D content-to-print solutions including 3D printers, print materials, on-demand custom parts services and 3D authoring solutions for professionals and consumers, worldwide.

The company also provides scanners for a variety of medical and mechanical X-Ray film digital archiving.

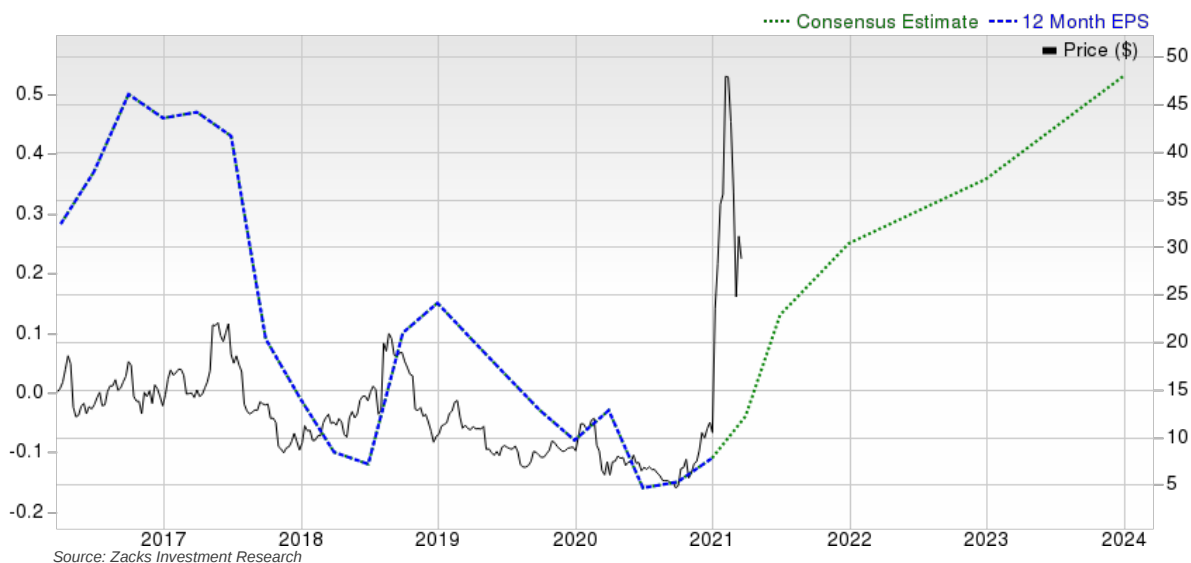
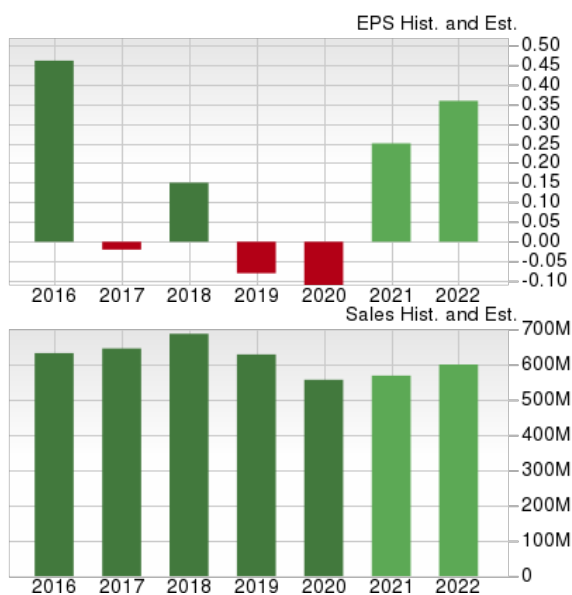
The company's primary print engines comprise stereolithography, selective laser sintering, multi-jet modeling as well as ZPrinters. Its 3D printers convert data input from computer aided design software or 3D scanning and sculpting devices to produce physical objects from engineered plastic, metals, ceramics and edibles.

The company primarily caters to a broad range of industries, including manufacturers of automotive, aerospace, computer, electronic, defense, education, consumer, energy and healthcare products, as well as original equipment manufacturers, government agencies, universities, independent service bureaus and individual consumers.

3D Systems operates through two reportable segments — Products and Services. Under its Product division, the company offers 3D printers, materials, software, haptic design tools, 3D scanners and virtual surgical simulators. The segment accounted for 59.7% of 2020 total revenues of \$557.2 million.

Under the Service segment, the company provides maintenance and service support, periodic hardware and software updates, printer installations, and training of customers. The division contributed 40.3% to 2020 total revenues.

Region wise, revenue contributions from Americas, EMEA, and APAC were 50.2%, 38.2%, and 11.6%, respectively in 2019.



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## Reasons To Buy:

- ▲ 3D Systems business follows an annuity-based business model, which combines materials, services and software, to boost structural improvements and ensure profitable growth. The company is focusing on strategic initiatives like improvement of existing 3D printers, strengthening partnerships and enhancing productivity to drive growth. 3D Systems' strategy of reducing costs through headcount reductions and lowering selling and research and development expenses will help it enhance profitability. It has also implemented organizational changes to improve execution, and increased investments as it shifts to a worldwide go-to-market structure. The company plans to drive further reductions in cost of sales from supply-chain betterment initiatives and manufacturing improvements, in order to drive margins higher. Improvements made in the cost structure have also helped the company review and adjust pricing of printers and materials, which, in turn, has better aligned their demand and boosted their market traction.
- ▲ With the 3D printing industry booming, the company's focus on this market presents a favorable long-term opportunity. As a matter of fact, majority of 3D Systems customers are shifting from prototyping to end use production, using 3D printing technology and the company believes that it is well positioned to aid them in their transformation. Moving ahead, 3D Systems believes that robust demand for production printers, materials and software will continue to act as major catalysts, supplementing growth. It launched 3DXpert software solution for direct metal 3D printing and made groundbreaking advancements to its Figure 4 technology – the ultra-fast, modular Stereo lithography system – designed for the production of plastic parts on the factory floor. These initiatives are a bold, definite step toward the company's transition from prototyping to production. They will enable its additive manufacturing clients to leverage on its digital manufacturing solutions. The company is enabling 3D production through digital design and manufacturing workflows, technology advancements and materials innovation, and application engineering expertise. Additionally, last year, the company unveiled four materials optimized for producing precision metal parts. Also, it has begun bundling the innovative 3DXpert software with all direct metal printers. The company believes metal technology and Figure 4, combined with the advanced materials and software innovation such as 3D Sprint and 3D Expert, will eventually help customers shift from prototyping to production. This can unlock multiple profitable growth opportunities for the company.
- ▲ Currently, 3D Systems is witnessing robust prospects across most of its end business. Especially, the company remains bullish on the prospects of its healthcare business. Consistent demand for printers and materials for medical and dental customers fueled growth of this segment. 3D Systems believes material science will be a key driver in the transition to 3D production and the company is investing large sums in materials innovation across its portfolio to capitalize on this trend. In this regard, it announced the acquisition of dental materials provider, Vertex-Global Holding B.V., which operates under the Vertex and NextDent brands. The company has integrated its proprietary Figure 4 platform with NextDent's advanced 3D printing materials to fortify its foothold in the billion-dollar digital dentistry space. The company also continues to see steady performance of its Software business and believes it to be one of the major growth drivers going ahead.
- ▲ 3D technology has the potential to revolutionize manufacturing and improve the commercial space. Various companies, ranging from hospital managers to car manufacturers, are now opting for varied 3D solutions to address simple make-to-stock orders as well as complex, engineer-to-order production strategies. Consequently, the company has been expanding its operation processes to meet increasing demand across diverse sectors. For instance, sectors like automotive, consumer products, government and defense, industrial/business machines, education research, and others (arts and architecture) are expected to raise demand for 3D printing products. Apart from this, aerospace and the trillion-dollar oil & gas industry are showing a penchant for 3D printing too, that will aid the company's growth in future. Consequently, 3D Systems has been making acquisitions to diversify its offerings, add synergistic technology and expand its domain expertise in operating markets. Encouragingly, the company has already secured an important place in sectors like manufacturing, medical and aerospace, while also pursuing unconventional sectors like food and fashion. Going forward, the company expects its portfolio of innovative products to drive more than 30% organic growth over the next couple of years, thereby enhancing its margins and earnings.
- ▲ 3D Systems has a strong balance sheet with ample liquidity position and less debt obligations. As of Dec 31, 2020, 3D Systems had cash and cash equivalents of \$75 million. The company also had unused revolving credit facility worth \$100 million with roughly \$62 million available currently. Total debt was \$21.4 million as of Dec 31, 2020. 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.

3D Systems' efforts to simplify its cost structure by lowering headcount, and trimming cost of sales and operating expenses would boost its profitability.

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## Reasons To Sell:

- ▼ We remain concerned about 3D Systems' declining gross margin and increasing operating expenses. Unfavorable sales mix and increased investment in services, and on-demand manufacturing, more than offset the cost-reduction benefits achieved from ongoing supply-chain initiatives.
- ▼ 3D Systems operates in a highly competitive industry with its chief competitors being the firms that manufacture or use machines to make models, prototypes, molds and small-volume to medium-volume manufacturing parts. These industry players include suppliers of CNC, dealers of plastics molding equipment, including injection-molding equipment, suppliers of traditional machining, milling and grinding equipment, and businesses that use such equipment to produce models, prototypes and molds. Some of the company's existing and potential competitors are researching, designing, developing and marketing other types of competitive equipment and software, print materials and services. A few of these competitors may have substantially greater financial, marketing, manufacturing, distribution and other resources. Printing giant HP is surging into the 3D printing market with new "Jet Fusion 3D printers" and looks well-positioned to challenge 3D Systems' leadership. There is also a great risk that 3D Systems will be forced to cut prices to compete with rivals, which might ignite a price war that will hit the company's already weak margins severely and might also contract its market share.
- ▼ 3D Systems operates in a highly dynamic industry. The company's business faces the adverse effects of rapid technological changes, alterations in user and customer requirements and preferences, new product and service introductions requiring new technologies, and the emergence of new standards and practices. The company has to constantly come up with new products, services and technologies that address the increasingly sophisticated and needs of prospective customers, particularly in the area of printer speeds and print materials functionality.
- ▼ This apart, 3D Systems has to incur high research & development and acquisition costs. Going forward, the company believes investment in IT and go-to-market initiatives will result in higher expenses, thus restricting near-term operating income growth. 3D Systems also needs to continually spend heavily on research and development to keep up with the competitive marketplace, which adds to the pressures on its margins on a sustained basis. Although these initiatives hold good for long-term growth, such costs continue to take a toll on the company's financial health in the near term.
- ▼ Apart from seasonality, the company's near-term results are likely to be impacted by persistently tough year-over-year comparisons due to last year's large orders from Align. Further, the suspension of new federal contracts is a major downside.

Declining gross margin due to unfavorable sales mix and increased investment in services, and on-demand manufacturing, is a major concern.

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## Last Earnings Report

### 3D Systems Q4 Earnings Miss Estimates

3D Systems reported fourth-quarter 2020 non-GAAP earnings of 9 cents per share, missing the Zacks Consensus Estimate by 18.18%. However, the bottom line was higher than the year-ago quarter's earnings of 5 cents per share.

Revenues of \$172.7 million beat the consensus mark of \$171.7 million but increased 2.7% year over year.

Strong performance in the Healthcare segment drove the year-over-year rally.

Revenues from the products division (65.2% of revenues) rose 7.1% year over year to \$112.6 million. Services revenues (34.8% of revenues) fell 4.8% from the year-ago quarter to \$60.1 million.

### Quarterly Details

Healthcare segment revenues jumped 48% year over year to \$86.6 million. Robust dental and medical application end markets drove the growth.

Industrial division revenues plunged 21.6% year over year to \$86 million, as demand is yet to fully recover from pandemic-induced disruptions.

In the reported quarter, non-GAAP gross margin contracted 140 basis points (bps) year over year to 42.9%.

In the fourth quarter, 3D Systems' non-GAAP operating expenses dropped 15.8% year over year to \$58 million. This year-over-year decline was primarily driven by savings achieved from cost restructuring activities as well as reduced hiring and lower travel expenses due to the coronavirus pandemic.

### Balance Sheet Details

As of Dec 31, 2020, 3D Systems had cash and cash equivalents of \$75 million, flat sequentially.

3D Systems had an unused revolving credit facility worth \$100 million, with roughly \$62 million currently available.

Total debt was \$21.4 million as of Dec 31, 2020.

Moreover, the company did not issue any shares under its at-the-market equity program (ATM program) during the reported quarter. The program has been terminated.

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Quarter Ending 12/2020

|                  |              |
|------------------|--------------|
| Report Date      | Mar 01, 2021 |
| Sales Surprise   | -0.43%       |
| EPS Surprise     | -18.18%      |
| Quarterly EPS    | 0.09         |
| Annual EPS (TTM) | -0.11        |

## Recent News

On Jan 7, 3D Systems announced the completion of sale of its non-core software businesses – Cimatron and GibbsCAM – to a subsidiary of ST Acquisition Co., a Battery Ventures' affiliate, on Jan 1 for a consideration of \$64.2 million.

Additionally, the company issued overwhelming preliminary financial data for the fourth quarter of 2020. It expects to report fourth-quarter revenues between \$170 million and \$176 million.

On Nov 17, 3D Systems announced that the Food and Drug Administration (FDA) has provided 510(k) clearance for Vantage Ankle PSI, which will drive expansion of VSP surgical planning applications in partnership with Exactech.

On Nov 5, 3D Systems announced that it has collaborated with Veteran Health Administration (VHA) to deliver additive manufacturing solutions at the point of care and provide next-generation medical devices to the U.S. veterans.

On Nov 3, 3D Systems announced the sale of its Cimatron Ltd and GibbsCAM Businesses to Battery Ventures, a technology-focused investment firm, at a purchase price of \$65 million.

On Oct 6, 3D Systems announced that Meeno Ellis will lead the Healthcare Solutions as Executive Vice President and Reji Puthenveetil will lead the Industrial Solutions as Executive Vice President.

On Oct 1, 3D Systems announced that the Food and Drug Administration (FDA) has provided 510(k) clearance for maxillofacial surgical guides 3D printed using its LaserForm Ti and DuraForm ProX PA materials.

On Aug 26, 3D Systems announced that Jagtar Narula will join the company as Executive Vice President and Chief Financial Officer, effective September 14.

On Aug 6, 3D Systems announced realignment of business into two verticals – Healthcare and Industrials. The company also announced to reduce its workforce by 20% which is anticipated to lower operating expenses by \$100 million annually.

On Aug 5, 3D Systems announced an at-the-market equity program of up to \$150 million.

## Valuation

Shares of 3D Systems have increased 508% in the 6-month period and gained 387.4% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector have gained 13.3% and 23.5%, respectively, in the past six months. Over the past year, the Zacks sub-industry and the sector increased 115.2% and 87.6%, respectively.

The S&P 500 Index has increased 21.8% in the 6-month period and 76.6% in the past year.

The stock is currently trading at 6.20X forward 12-month sales, which compares to 5.55X for the Zacks sub-industry, 4.65X for the Zacks sector and 4.52X for the S&P 500 index.

Over the past five years, the stock has traded as high as 12.19X and as low as 1.02X with a 5-year median of 2.04X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$30 price target reflects 6.51X forward 12-month sales.

The table below shows summary valuation data for DDD

| Valuation Multiples - DDD |               |       |              |        |         |
|---------------------------|---------------|-------|--------------|--------|---------|
|                           |               | Stock | Sub-Industry | Sector | S&P 500 |
| P/S F12M                  | Current       | 6.20  | 5.55         | 4.65   | 4.52    |
|                           | 5-Year High   | 12.19 | 6.79         | 4.68   | 4.52    |
|                           | 5-Year Low    | 1.02  | 2.22         | 2.78   | 3.21    |
|                           | 5-Year Median | 2.04  | 3.22         | 3.50   | 3.69    |
| P/B TTM                   | Current       | 8.29  | 28.94        | 9.04   | 6.61    |
|                           | 5-Year High   | 15.95 | 34.34        | 9.77   | 6.71    |
|                           | 5-Year Low    | 1.20  | 3.68         | 4.41   | 3.83    |
|                           | 5-Year Median | 2.31  | 7.26         | 5.77   | 4.97    |
| EV/Sales TTM              | Current       | 6.31  | 6.51         | 5.33   | 4.63    |
|                           | 5-Year High   | 12.23 | 7.86         | 5.76   | 4.71    |
|                           | 5-Year Low    | 0.89  | 2.11         | 3.05   | 2.64    |
|                           | 5-Year Median | 1.93  | 3.53         | 3.95   | 3.62    |

As of 03/19/2021

Source: Zacks Investment Research

## Industry Analysis Zacks Industry Rank: Top 45% (113 out of 253)



## Top Peers

| Company (Ticker)             | Rec        | Rank |
|------------------------------|------------|------|
| Apple Inc. (AAPL)            | Outperform | 2    |
| Canon, Inc. (CAJ)            | Neutral    | 3    |
| HP Inc. (HPQ)                | Neutral    | 3    |
| Immersion Corporation (IMMR) | Neutral    | 2    |
| Lenovo Group Ltd. (LNVGY)    | Neutral    | 3    |
| LG Display Co., Ltd. (LPL)   | Neutral    | 2    |
| Panasonic Corp. (PCRFY)      | Neutral    | 2    |
| Stratasys, Ltd. (SSYS)       | Neutral    | 4    |

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

| Industry Comparison Industry: Computer - Mini Computers |           |            |           | Industry Peers |            |         |
|---------------------------------------------------------|-----------|------------|-----------|----------------|------------|---------|
|                                                         | DDD       | X Industry | S&P 500   | AAPL           | HPQ        | LNVGY   |
| Zacks Recommendation (Long Term)                        | Neutral   | -          | -         | Outperform     | Neutral    | Neutral |
| Zacks Rank (Short Term)                                 | 4         | -          | -         | 2              | 3          | 3       |
| VGM Score                                               | C         | -          | -         | B              | A          | A       |
| Market Cap                                              | 3.57 B    | 25.95 B    | 28.48 B   | 2,014.40 B     | 37.50 B    | 14.40 B |
| # of Analysts                                           | 5         | 5          | 13        | 12             | 6          | 2       |
| Dividend Yield                                          | 0.00%     | 0.97%      | 1.38%     | 0.68%          | 2.58%      | 1.26%   |
| Value Score                                             | D         | -          | -         | D              | A          | A       |
| Cash/Price                                              | 0.02      | 0.07       | 0.06      | 0.04           | 0.11       | 0.27    |
| EV/EBITDA                                               | -47.25    | 8.08       | 15.90     | 26.06          | 9.00       | 7.16    |
| PEG F1                                                  | 5.13      | 1.79       | 2.36      | 2.43           | 1.15       | 0.44    |
| P/B                                                     | 8.29      | 8.29       | 3.90      | 30.42          | NA         | 3.68    |
| P/CF                                                    | NA        | 10.27      | 15.91     | 29.80          | 10.27      | 8.81    |
| P/E F1                                                  | 118.00    | 19.16      | 21.22     | 26.78          | 9.13       | 11.53   |
| P/S TTM                                                 | 6.44      | 3.55       | 3.30      | 6.85           | 0.65       | 0.26    |
| Earnings Yield                                          | 0.87%     | 6.21%      | 4.61%     | 3.73%          | 10.97%     | 8.70%   |
| Debt/Equity                                             | 0.04      | 0.52       | 0.67      | 1.50           | -1.53      | 1.00    |
| Cash Flow (\$/share)                                    | -0.02     | 2.82       | 6.78      | 4.03           | 2.93       | 2.72    |
| Growth Score                                            | A         | -          | -         | A              | A          | A       |
| Historical EPS Growth (3-5 Years)                       | NA%       | 12.55%     | 9.32%     | 12.55%         | 6.41%      | 14.94%  |
| Projected EPS Growth (F1/F0)                            | 327.27%   | 73.21%     | 14.54%    | 36.59%         | 44.52%     | 90.37%  |
| Current Cash Flow Growth                                | -147.51%  | -1.08%     | 0.72%     | 0.98%          | -3.13%     | 17.18%  |
| Historical Cash Flow Growth (3-5 Years)                 | NA%       | 1.15%      | 7.32%     | 1.15%          | -17.70%    | 4.06%   |
| Current Ratio                                           | 2.03      | 1.03       | 1.39      | 1.16           | 0.73       | 0.90    |
| Debt/Capital                                            | 4.27%     | 50.11%     | 41.42%    | 59.99%         | NA         | 50.11%  |
| Net Margin                                              | -26.98%   | 3.67%      | 10.59%    | 21.74%         | 5.61%      | 1.73%   |
| Return on Equity                                        | -10.47%   | 6.31%      | 14.75%    | 90.59%         | -169.24%   | 23.08%  |
| Sales/Assets                                            | 0.75      | 1.25       | 0.51      | 0.89           | 1.68       | 1.60    |
| Projected Sales Growth (F1/F0)                          | 2.60%     | 12.09%     | 7.02%     | 22.60%         | 5.93%      | 18.24%  |
| Momentum Score                                          | D         | -          | -         | B              | A          | A       |
| Daily Price Change                                      | -3.65%    | -0.60%     | -0.12%    | -0.45%         | -0.76%     | 1.24%   |
| 1-Week Price Change                                     | 25.82%    | 0.73%      | 2.96%     | -0.32%         | 1.78%      | -1.68%  |
| 4-Week Price Change                                     | -30.55%   | -10.07%    | 3.72%     | -7.49%         | 13.90%     | -12.65% |
| 12-Week Price Change                                    | 149.00%   | 30.62%     | 8.75%     | -9.08%         | 23.99%     | 37.26%  |
| 52-Week Price Change                                    | 333.13%   | 129.96%    | 72.55%    | 96.08%         | 108.89%    | 151.04% |
| 20-Day Average Volume (Shares)                          | 5,635,882 | 9,104,506  | 2,394,762 | 123,265,664    | 12,573,130 | 75,124  |
| EPS F1 Estimate 1-Week Change                           | 0.00%     | 0.00%      | 0.00%     | 0.00%          | 0.00%      | 0.00%   |
| EPS F1 Estimate 4-Week Change                           | -62.96%   | 0.07%      | 0.00%     | 0.13%          | 22.01%     | 0.00%   |
| EPS F1 Estimate 12-Week Change                          | -21.57%   | 12.97%     | 2.10%     | 11.30%         | 22.16%     | 14.64%  |
| EPS Q1 Estimate Monthly Change                          | -800.00%  | -0.14%     | 0.00%     | -0.28%         | 46.29%     | 0.00%   |

Source: Zacks Investment Research

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## 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   | A |
| Momentum Score | D |
| 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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## Disclosures

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## Additional Disclosure

This material represents an assessment of the market and economic environment at a specific point in time and is not intended to be a forecast of future events, or a guarantee of future results. Forward-looking statements are subject to certain risks and uncertainties. Any statements that refer to expectations, projections or characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. Actual results, performance, or achievements may differ materially from those expressed or implied.

**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 medium-term 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 most recent 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.

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**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.

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**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.

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**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.