

## The Walt Disney (DIS)

**\$146.50** (As of 01/03/20)

Price Target (6-12 Months): **\$154.00**

Long Term: 6-12 Months

**Zacks Recommendation:**

**Neutral**

(Since: 11/12/19)

Prior Recommendation: Underperform

Short Term: 1-3 Months

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

**3-Hold**

Zacks Style Scores:

VGM:F

Value: D

Growth: F

Momentum: F

### Summary

Disney is expected to benefit from its solid slate of theatrical releases in fiscal 2020. The upcoming movies, including *Mulan*, *Free Guy* and *Black Widow*, are anticipated to aid the Studio Entertainment top line. The success of *Frozen 2* and *Star Wars: The Rise of Skywalker* is positive for the company's first-quarter fiscal 2020 results. Moreover, growing popularity of Disney+ makes it a key catalyst for the company's prospects. However, the company anticipates higher operating losses in the DTC & International segment due to the ongoing investments. Moreover, increasing operating expenses related to domestic parks and resorts are expected to negatively impact profitability. Notably, Disney's shares have underperformed the industry in the past year.

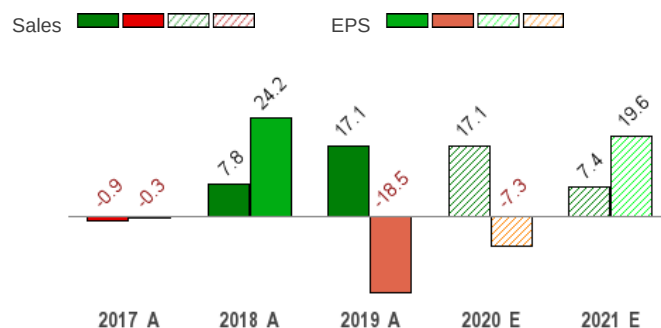
### Price, Consensus & Surprise



### Data Overview

|                            |                                     |
|----------------------------|-------------------------------------|
| 52 Week High-Low           | \$153.41 - \$107.25                 |
| 20 Day Average Volume (sh) | 7,300,166                           |
| Market Cap                 | \$264.1 B                           |
| YTD Price Change           | 1.3%                                |
| Beta                       | 1.00                                |
| Dividend / Div Yld         | \$1.76 / 1.2%                       |
| Industry                   | <a href="#">Media Conglomerates</a> |
| Zacks Industry Rank        | Top 38% (96 out of 252)             |

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



|                           |            |
|---------------------------|------------|
| Last EPS Surprise         | 12.6%      |
| Last Sales Surprise       | 0.4%       |
| EPS F1 Est- 4 week change | -4.6%      |
| Expected Report Date      | 02/04/2020 |
| Earnings ESP              | 4.4%       |
| P/E TTM                   | 25.0       |
| P/E F1                    | 27.4       |
| PEG F1                    | 4.9        |
| P/S TTM                   | 3.8        |

### Sales Estimates (millions of \$)

|      | Q1       | Q2       | Q3       | Q4       | Annual*  |
|------|----------|----------|----------|----------|----------|
| 2021 | 21,914 E | 20,721 E | 22,326 E | 21,812 E | 87,521 E |
| 2020 | 21,142 E | 19,819 E | 20,361 E | 20,501 E | 81,497 E |
| 2019 | 15,303 A | 14,922 A | 20,245 A | 19,100 A | 69,570 A |

### EPS Estimates

|      | Q1       | Q2       | Q3       | Q4       | Annual*  |
|------|----------|----------|----------|----------|----------|
| 2021 | \$1.74 E | \$1.91 E | \$1.90 E | \$1.59 E | \$6.40 E |
| 2020 | \$1.48 E | \$1.42 E | \$1.36 E | \$1.11 E | \$5.35 E |
| 2019 | \$1.84 A | \$1.61 A | \$1.35 A | \$1.07 A | \$5.77 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 01/03/2020. The reports text is as of 01/06/2020.

## Overview

Burbank, CA-based Walt Disney Company has assets that span movies, television, publishing and theme parks. Revenues were \$69.57 billion in fiscal 2019.

Media Networks (35.7% of total revenues) segment includes domestic broadcast television network, television production and distribution operations, domestic television stations, cable networks, domestic broadcast radio networks and stations, and publishing and digital operations. The company operates the ABC Television Network and 8 owned television stations; ESPN and Disney Channel cable networks; ESPN Radio and Radio Disney networks.

Studio Entertainment (16% of revenues) segment produces animated and live-action motion pictures, direct-to-video programming, musical recordings, and live stage plays. The library of films is distributed under 5 banners namely Walt Disney Pictures, Touchstone Pictures, Pixar, Marvel, and Lucasfilms.

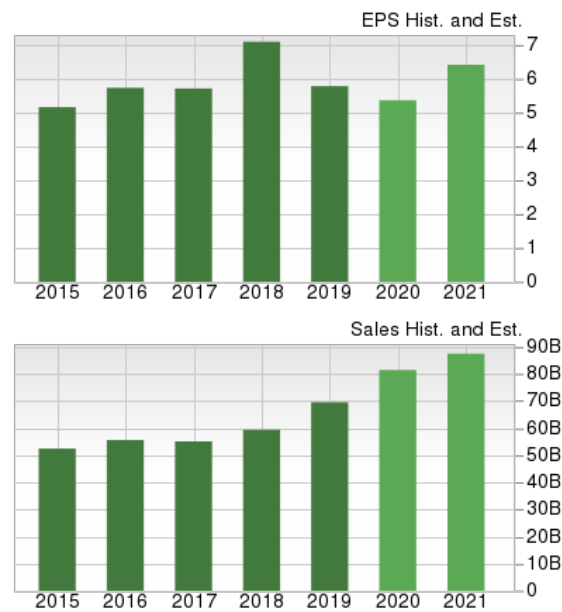
Parks, Experiences & Consumer Products (37.7% of revenues) segment is a combination of global consumer products business with Parks and Resorts. Parks and Resorts owns and operates the Disney World Resort in Florida, the Disneyland Resort in California, the Disney Vacation Club, the Disney Cruise Line, and Adventures by Disney. The company also has ownership interests in Disneyland Paris, in Hong Kong Disneyland Resort and in Shanghai Disney Resort, and licenses the operations of the Tokyo Disney Resort in Japan.

Consumer products business engages with licensees, manufacturers, publishers and retailers to design, develop, publish, promote and sell a wide variety of products based on existing and new Disney characters and other intellectual property via its Merchandise Licensing, Publishing and Retail businesses throughout the world.

Direct-to-Consumer (DTC) & International segment (13.4% of revenues) comprises Disney's direct-to-consumer streaming services, international media operations and global advertising sales and ad technology for Disney media properties including Freeform, ESPN, ABC and Disney Channels.

On Mar 20, 2019, Disney completed the acquisition of 21st Century Fox and got hold of Fox's production, animation and television assets. National Geographic channel, FX Networks and international networks were also part of the deal.

Additionally, the company has acquired full operational control of Hulu.



---

## Reasons To Buy:

- ▲ Disney completed the acquisition of Twenty-First Century Fox (21CF). The majority of Fox's assets acquired contribute to Disney's content portfolio. Fox's television business is expected to help the company strengthen its TV slate globally, which has been facing some issues in terms of distribution or subscribers. Disney's international footprint will increase substantially post the acquisition. Notably, Fox Networks International operates above 350 channels in 170 countries, while Star India has 69 channels serving 720 viewers per month
- ▲ Disney's Studio Entertainment segment has an impressive line-up of big budget movies slated to be released over the next 18 months. Additionally, following Fox's acquisition, the company's slate of movies releases has increased. The movies scheduled to release till Christmas include *Maleficent: Mistress of Evil* from Disney, *Frozen 2* from Disney Animation and *Star Wars: The Rise of Skywalker*.
- ▲ Disney launched its own direct-to-consumer service Disney+ on Nov 12 in the United States, Canada and The Netherlands. The service offers nearly 500 movies and 7,500 episodes of television from brands such as Disney, Pixar, Marvel, Star Wars and National Geographic and Disney+ originals. Moreover, Disney+ will cost \$6.99 a month or \$69.99 a year. Notably, the service can also be purchased in the United States as part of a bundle that includes Hulu (with ads) and ESPN for \$12.99 a month. Disney+ is expected to have between 60 million and 90 million subscribers globally by the end of fiscal 2024.
- ▲ Disney's already launched ESPN+, which offers tournaments like Major League Baseball, National Hockey League, Major League Soccer, Grand Slam tennis, Italy's Serie A soccer and thousands of college sports for \$4.99 per month, is gaining traction. ESPN+, which currently has more than 3.4 million paid subscribers, is expected to expand its subscriber base through continued investments in content.

The acquisition of the majority of Fox's assets, impressive lineup of big budget movies, launch of direct-to-consumer service and robust visitor growth rate are key catalysts.

---

## Reasons To Sell:

- ▼ Higher programming costs at ESPN are a major concern for the company's profitability. Programming costs were high due to increase in contractual rate and production costs for a few sports programs.
- ▼ Moreover, continued heavy investments in ESPN+ and Disney+ is likely to hurt DTC& International segment's profitability. Notably, management expects the segment's operating loss to be \$800 million in first-quarter fiscal 2019. Disney projects license content expenses related to Disney+ to increase from less than \$1.5 billion for fiscal 2020 to mid-\$2-billion range by fiscal 2024. Additionally, total operating expenses for Disney+, which include marketing, technology, customer service, billing and G&A expenses, are estimated to be slightly less than \$1 billion for fiscal 2020. Furthermore, Disney will spend \$1 billion in cash on original programming for Disney+ in fiscal 2020. Spending on Disney+ originals is likely to flare up to around \$2.5 billion by fiscal 2024. The company expects Disney+ to achieve profitability not before fiscal 2024, which is expected to keep margins under pressure.
- ▼ Disney+ is expected to face significant competition in the streaming market from the likes of Netflix and Amazon Prime. Netflix enjoys a first-mover advantage in the streaming market and its solid original programming portfolio is a major differentiator. Amazon is also catching up. With the entrance of Apple TV+, HBO Max and Comcast's Peacock, the competition is likely to get stiffer. In fact, we believe Disney is significantly late to the streaming market and thus have to spend a significant amount to attract subscribers.
- ▼ Softness experienced in tourism and consumer confidence in China is a headwind. Moreover, weak results at domestic parks and resorts hurt operating income growth in the fourth-quarter. Disney expects operating income at Hong Kong Disneyland to decline almost \$80 million in the first-quarter. Moreover, if the current trends continue (lower tourism due to political unrest), management expects fiscal 2020 operating income to decline \$275 million over fiscal 2019.

Higher programming costs at ESPN, heavy investments in ESPN+ and Disney+ and softness experienced in tourism and consumer confidence in China are factors that may hamper growth in the near term.

## Last Earnings Report

### Disney Q4 Earnings Beat Estimates, Revenues Up Y/Y

Disney reported fourth-quarter fiscal 2019 adjusted earnings of \$1.07 per share, beating the Zacks Consensus Estimate by 12.6% but decreasing 27.7% year over year.

Notably, on Mar 20, Disney acquired Twenty-First Century Fox (21CF) for cash and issuance of 307 million shares. The quarterly results include 21CF and Hulu LLC (Hulu) results and the consolidations affected earnings before purchase accounting by 47 cents.

Revenues jumped 33.5% from the year-ago quarter to \$19.10 billion, which surpassed the consensus mark by 0.4%. The year-over-year growth was driven by solid top-line performance across all segments, particularly the Studio Entertainment and Direct-to-Consumer (DTC) businesses.

However, higher operating losses in the DTC segment and Media Networks' operating income decline hurt profitability.

#### Media Networks Segment Details

Media Networks' (34.1% of revenues) revenues grew 22.3% year over year to \$6.51 billion. Revenues from Cable Networks increased 20.3% to \$4.24 billion. Broadcasting revenues were up 26.1% year over year to \$2.27 billion.

Media Networks' segment operating income decreased 3.2% year over year to \$1.78 billion. Cable Networks' operating income fell 1.5% to \$1.26 billion. Broadcasting operating income declined 4.3% to \$377 million.

Cable Networks' operating income decreased due to a decline at ESPN, which was partially offset by the addition of 21CF businesses (mainly the FX and National Geographic networks).

ESPN's results were negatively impacted by higher programming, production and marketing costs, somewhat negated by increase in affiliate revenues.

Higher programming costs were driven by rate increases for NFL, college sports and MLB programming. However, affiliate revenues benefited from contractual rate increases and the launch of the ACC Network, partially offset by a decline in subscribers.

The decrease in broadcasting operating income resulted from lower ABC Studios program sales, higher programming and production costs at the ABC Television Network, reduced advertising revenues and increased marketing costs.

#### Parks, Experiences and Products

The segment revenues (34.8% of revenues) increased 8.5% year over year to \$6.66 billion.

Operating income went up 17.3% to \$1.38 billion, driven by robust contributions from Consumer Products (merchandise licensing), Disneyland Resort and Disney Vacation Club.

Consumer Products operating income grew 36% year over year, primarily driven by higher licensing revenues from the Toy Story and Frozen merchandise, partially offset by a decrease in the Mickey and Minnie merchandise.

Operating income growth at Disneyland Resort was primarily owing to higher guest spending, driven by increases in average ticket prices and higher food, beverage and merchandise spending.

However, the growth in Disneyland Resort operating income was somewhat negated by expenses associated with Star Wars: Galaxy's Edge, which opened on May 31 and lower attendance.

Disney Vacation Club operating income increased on higher sales at Disney's Riviera Resort in the reported quarter.

Walt Disney World Resort results were flat year over year. Increases in guest spending (up 5%), and occupied room nights and attendance were offset by higher costs associated with Star Wars: Galaxy's Edge, which opened on Aug 29 and cost inflation.

Disney stated that Hurricane Dorian adversely impacted Walt Disney World. The hurricane also negatively impacted attendance at the company's domestic parks.

Notably, guest spending growth was primarily driven by increased food, beverage and merchandise spending and higher average ticket prices.

Moreover, per room spending at Disney's domestic hotels was up 2%, and occupancy of 85% was flat year over year.

International parks and resorts operating income was also flat year over year, as growth at Disneyland Paris and Shanghai Disney Resort was largely offset by a decrease at Hong Kong Disneyland Resort.

#### Studio Entertainment Performance

Studio Entertainment segment (17.3% of revenues) revenues surged 52% to \$3.31 billion.

Operating income soared 78.6% to \$1.08 billion, backed by higher theatrical distribution results, partially muted by the 21CF business losses.

Theatrical distribution revenues benefited from the solid performance of The Lion King, Toy Story 4 and Aladdin.

Quarter Ending 09/2019

| Report Date      | Nov 07, 2019 |
|------------------|--------------|
| Sales Surprise   | 0.38%        |
| EPS Surprise     | 12.63%       |
| Quarterly EPS    | 1.07         |
| Annual EPS (TTM) | 5.87         |

---

The 21CF business operating losses resulted from a loss in theatrical distribution, primarily due to the lackluster performance of Ad Astra, Art of Racing In The Rain and Dark Phoenix.

#### **Direct-to-Consumer (DTC) & International Interactive Media**

The segment (17.9% of revenues) revenues came in at \$3.43 billion, significantly up from \$825 million in the year-ago quarter.

ESPN+ had more than 3.4 million paid subscribers at the end of the fiscal fourth quarter, while Hulu had approximately 28.5 million paid subscribers.

Operating loss widened to \$740 million from \$340 million in the year-ago quarter. Consolidation of Hulu, and ongoing investments in ESPN+ and Disney+ affected profitability.

The 21CF film studio reported an operating loss of almost \$120 million in the reported quarter.

#### **Other Quarter Details**

Selling, general and administrative (SG&A) expenses surged 51.9% to \$3.36 billion in the reported quarter.

Segment operating income increased 4.9% year over year to \$3.44 billion. Consolidation of Hulu and intersegment eliminations marred profit by almost \$300 million.

Free cash flow at the end of the quarter was \$409 million compared with free cash flow of \$2.65 billion reported in the year-ago quarter.

#### **Outlook**

For first-quarter fiscal 2020, Disney expects operating income at Hong Kong Disneyland to decline almost \$80 million. Moreover, if the current trends continue (lower tourism due to political unrest), management expects fiscal 2020 operating income to decline \$275 million over fiscal 2019.

However, domestic parks and resorts results are expected to benefit from the opening of Star Wars: Galaxy's Edge at Walt Disney World and the December opening of Rise of the Resistance at Walt Disney World.

However, the revenue growth is expected to be partially offset by meaningful cost increase, primarily attributable to higher operating expenses associated with Galaxy's Edge and labor expenses due to higher wages.

So far this quarter, Disney's domestic resort reservations have risen 5% year over year.

Management expects the DTC & International segment to report roughly \$800 million in operating losses for the first quarter. Moreover, continued investment in DTC services, including ESPN+ and Disney+, and the consolidation of Hulu are expected to hurt DTC & International segment operating income by \$850 million.

Further, theatrical releases of *Frozen 2* and *Star Wars: The Rise of Skywalker* are expected to aid Studio Entertainment segment's first-quarter results. However, 21CF film studio is expected to report operating loss of roughly \$60 million.

Disney projects the 21CF acquisition and the impact of taking full operational control of Hulu to hurt fiscal first-quarter earnings before purchase accounting by 30 cents. Nevertheless, management expects the acquisition to be accretive to earnings before purchase accounting for fiscal 2021.

Furthermore, Disney expects fiscal 2020 consolidated capital expenditure to be \$500 million higher than the figure spent in fiscal 2019, due to increase in spending at DTCL and corporate.

Moreover, the fourth quarter and fiscal 2020 results are likely to benefit from an extra week of operations.

---

---

## Recent News

On Dec 16, Disney announced that *Frozen 2*'s global box office collection crossed \$1 billion.

Per a Reuters article on Dec 11, which cited a report by research firm Apptopia, Disney+ has been downloaded 22 million times on mobile devices since the launch of the streaming service in Nov 12.

On Nov 25, Disney announced that *Frozen 2*, the sequel to 2013's *Frozen*, collected \$358.4 million in the opening weekend.

On Nov 13, Disney announced that Disney+, launched on Nov 12, have attracted more than 10 million subscribers.

On Oct 4, Disney and Target launched the Disney store at 25 select Target locations. It also launched an online experience for Target shoppers.

---

## Valuation

Disney shares are up 3.9% in the six-months period and 32.5% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Consumer Discretionary sector are up 4.5% and 5.3% in the six-months period, respectively. Over the past year, the Zacks sub-industry and the sector are up 38.3% and 22.9%, respectively.

The S&P 500 index is up 9.2% in the six-months period and 25.6% in the past year.

The stock is currently trading at 26.02X forward 12-month earnings, which compares to 25.4X for the Zacks sub-industry, 20.47X for the Zacks sector and 18.7X for the S&P 500 index.

Over the past five years, the stock has traded as high as 26.38X and as low as 13.4X, with a 5-year median of 16.66X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$154 price target reflects 27.35X forward 12-month earnings.

The table below shows summary valuation data for DIS

| Valuation Multiples - DIS |               |       |              |        |         |
|---------------------------|---------------|-------|--------------|--------|---------|
|                           |               | Stock | Sub-Industry | Sector | S&P 500 |
| P/E F12M                  | Current       | 26.02 | 25.4         | 20.47  | 18.7    |
|                           | 5-Year High   | 26.38 | 25.4         | 23.34  | 19.34   |
|                           | 5-Year Low    | 13.4  | 12.9         | 16.17  | 15.17   |
|                           | 5-Year Median | 16.66 | 17.58        | 20.07  | 17.44   |
| P/B TTM                   | Current       | 2.81  | 1.57         | 3.57   | 4.42    |
|                           | 5-Year High   | 4.17  | 2.89         | 5.04   | 4.42    |
|                           | 5-Year Low    | 1.91  | 1.09         | 3.13   | 2.85    |
|                           | 5-Year Median | 3.35  | 1.97         | 4.29   | 3.6     |
| EV/EBITDA TTM             | Current       | 22.07 | 14.18        | 12.77  | 12.01   |
|                           | 5-Year High   | 23.85 | 15.72        | 17.77  | 12.86   |
|                           | 5-Year Low    | 9.77  | 5.78         | 11.08  | 8.49    |
|                           | 5-Year Median | 11.83 | 7.39         | 12.43  | 10.66   |

As of 01/03/2020

---

## Industry Analysis Zacks Industry Rank: Top 38% (96 out of 252)



## Top Peers

|                                        |            |
|----------------------------------------|------------|
| Cable One, Inc. (CABO)                 | Outperform |
| Apple Inc. (AAPL)                      | Neutral    |
| Amazon.com, Inc. (AMZN)                | Neutral    |
| Comcast Corporation (CMCSA)            | Neutral    |
| DISH Network Corporation (DISH)        | Neutral    |
| Lions Gate Entertainment Corp. (LGF.A) | Neutral    |
| Netflix, Inc. (NFLX)                   | Neutral    |
| AT&T Inc. (T)                          | Neutral    |

| Industry Comparison Industry: Media Conglomerates |             |            |           | Industry Peers |              |            |
|---------------------------------------------------|-------------|------------|-----------|----------------|--------------|------------|
|                                                   | DIS Neutral | X Industry | S&P 500   | CMCSA Neutral  | NFLX Neutral | T Neutral  |
| <b>VGM Score</b>                                  | <b>F</b>    | -          | -         | <b>B</b>       | <b>F</b>     | <b>A</b>   |
| Market Cap                                        | 264.05 B    | 10.05 B    | 23.66 B   | 204.76 B       | 142.69 B     | 285.33 B   |
| # of Analysts                                     | 6           | 3          | 13        | 12             | 13           | 17         |
| Dividend Yield                                    | 1.20%       | 0.00%      | 1.79%     | 1.87%          | 0.00%        | 5.22%      |
| <b>Value Score</b>                                | <b>D</b>    | -          | -         | <b>B</b>       | <b>F</b>     | <b>B</b>   |
| Cash/Price                                        | 0.02        | 0.07       | 0.04      | 0.02           | 0.03         | 0.02       |
| EV/EBITDA                                         | 15.55       | 9.57       | 13.88     | 10.40          | 16.27        | 6.65       |
| PEG Ratio                                         | 4.87        | 5.75       | 1.99      | 1.13           | 1.98         | 2.45       |
| Price/Book (P/B)                                  | 2.81        | 0.48       | 3.36      | 2.59           | 20.80        | 1.47       |
| Price/Cash Flow (P/CF)                            | 18.52       | 13.30      | 13.62     | 9.05           | 16.05        | 4.27       |
| P/E (F1)                                          | 27.38       | 19.65      | 18.74     | 13.61          | 59.53        | 10.83      |
| Price/Sales (P/S)                                 | 3.80        | 5.08       | 2.67      | 1.89           | 7.56         | 1.56       |
| Earnings Yield                                    | 3.65%       | 3.65%      | 5.32%     | 7.35%          | 1.68%        | 9.24%      |
| Debt/Equity                                       | 0.41        | 0.66       | 0.72      | 1.33           | 1.81         | 0.79       |
| Cash Flow (\$/share)                              | 7.91        | 3.27       | 6.94      | 4.98           | 20.31        | 9.14       |
| <b>Growth Score</b>                               | <b>F</b>    | -          | -         | <b>B</b>       | <b>D</b>     | <b>C</b>   |
| Hist. EPS Growth (3-5 yrs)                        | 7.57%       | 44.39%     | 10.56%    | 15.86%         | 72.13%       | 8.60%      |
| Proj. EPS Growth (F1/F0)                          | -7.25%      | -6.04%     | 7.41%     | 6.88%          | 63.58%       | 1.17%      |
| Curr. Cash Flow Growth                            | 4.37%       | -30.03%    | 14.83%    | 15.26%         | 28.72%       | 29.91%     |
| Hist. Cash Flow Growth (3-5 yrs)                  | 7.57%       | -7.66%     | 9.00%     | 9.26%          | 30.20%       | 12.00%     |
| Current Ratio                                     | 0.90        | 0.50       | 1.23      | 0.86           | 0.73         | 0.74       |
| Debt/Capital                                      | 33.40%      | 39.87%     | 42.92%    | 57.33%         | 64.43%       | 44.14%     |
| Net Margin                                        | 15.89%      | -18.59%    | 11.08%    | 11.45%         | 7.49%        | 8.97%      |
| Return on Equity                                  | 11.38%      | -1.64%     | 17.10%    | 17.97%         | 23.65%       | 13.42%     |
| Sales/Assets                                      | 0.39        | 0.05       | 0.55      | 0.42           | 0.66         | 0.34       |
| Proj. Sales Growth (F1/F0)                        | 17.14%      | 10.90%     | 4.20%     | 5.39%          | 21.88%       | 0.41%      |
| <b>Momentum Score</b>                             | <b>F</b>    | -          | -         | <b>D</b>       | <b>F</b>     | <b>B</b>   |
| Daily Price Chg                                   | -1.15%      | -0.16%     | -0.61%    | -0.79%         | -1.19%       | 0.51%      |
| 1 Week Price Chg                                  | -0.77%      | 0.00%      | 0.13%     | 2.29%          | -2.32%       | 0.23%      |
| 4 Week Price Chg                                  | -0.64%      | 0.58%      | 2.60%     | 2.20%          | 7.61%        | 2.28%      |
| 12 Week Price Chg                                 | 13.27%      | 11.60%     | 8.87%     | 1.15%          | 16.19%       | 4.38%      |
| 52 Week Price Chg                                 | 37.78%      | 37.78%     | 29.34%    | 29.94%         | 20.17%       | 32.05%     |
| 20 Day Average Volume                             | 7,300,166   | 206,600    | 1,603,615 | 20,046,914     | 5,491,207    | 21,786,436 |
| (F1) EPS Est 1 week change                        | 0.00%       | 0.00%      | 0.00%     | 0.00%          | -0.03%       | 0.00%      |
| (F1) EPS Est 4 week change                        | -4.58%      | 2.19%      | 0.00%     | -2.87%         | -0.03%       | -0.02%     |
| (F1) EPS Est 12 week change                       | -11.23%     | 0.72%      | -0.57%    | -2.17%         | -4.81%       | -1.01%     |
| (Q1) EPS Est Mthly Chg                            | -0.47%      | 2.89%      | 0.00%     | 0.29%          | -0.11%       | 0.00%      |



---

## Zacks Stock Rating System

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

### Zacks Recommendation

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

### Zacks Rank

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

---

### Zacks Style Scores

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

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

|                |   |
|----------------|---|
| Value Score    | D |
| Growth Score   | F |
| Momentum Score | F |
| VGM Score      | F |

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

---

### Disclosures

**This report contains independent commentary to be used for informational purposes only. The analysts contributing to this report do not hold any shares of this stock. The analysts contributing to this report do not serve on the board of the company that issued this stock. The EPS and revenue forecasts are the Zacks Consensus estimates, unless indicated otherwise on the reports first page.** Additionally, the analysts contributing to this report certify that the views expressed herein accurately reflect the analysts personal views as to the subject securities and issuers. ZIR certifies that no part of the analysts compensation was, is, or will be, directly or indirectly, related to the specific recommendation or views expressed by the analyst in the report.

Additional information on the securities mentioned in this report is available upon request. This report is based on data obtained from sources we believe to be reliable, but is not guaranteed as to accuracy and does not purport to be complete. Any opinions expressed herein are subject to change.

ZIR is not an investment advisor and the report should not be construed as advice designed to meet the particular investment needs of any investor. Prior to making any investment decision, you are advised to consult with your broker, investment advisor, or other appropriate tax or financial professional to determine the suitability of any investment. This report and others like it are published regularly and not in response to episodic market activity or events affecting the securities industry.

This report is not to be construed as an offer or the solicitation of an offer to buy or sell the securities herein mentioned. ZIR or its officers, employees or customers may have a position long or short in the securities mentioned and buy or sell the securities from time to time. ZIR is not a broker-dealer. ZIR may enter into arms-length agreements with broker-dealers to provide this research to their clients. Zacks and its staff are not involved in investment banking activities for the stock issuer covered in this report.

ZIR uses the following rating system for the securities it covers. **Outperform-** ZIR expects that the subject company will outperform the broader U.S. equities markets over the next six to twelve months. **Neutral-** ZIR expects that the company will perform in line with the broader U.S. equities markets over the next six to twelve months. **Underperform-** ZIR expects the company will underperform the broader U.S. equities markets over the next six to twelve months.

No part of this report can be reprinted, republished or transmitted electronically without the prior written authorization of ZIR.