

## Mastercard Inc. (MA)

**\$305.72** (As of 07/15/20)

Price Target (6-12 Months): **\$321.00**

Long Term: 6-12 Months

**Zacks Recommendation:**

**Neutral**

(Since: 12/31/18)

Prior Recommendation: Outperform

Short Term: 1-3 Months

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

**3-Hold**

Zacks Style Scores:

VGM:B

Value: D

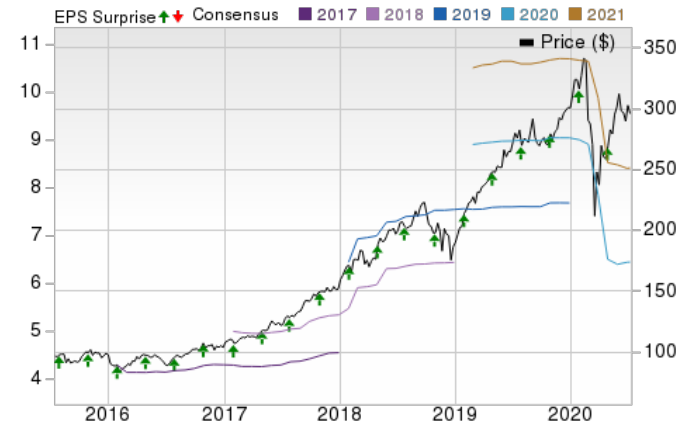
Growth: A

Momentum: A

### Summary

Mastercard's stock has outperformed its industry in a year's time. The company is gaining from shifts in payments from physical to digital. Investment in technology keeps it at the forefront of the rapidly-evolving payments industry. The company has announced second-quarter 2020 operating metrics regarding switched volumes, switched transactions and cross-border payments, which reflected stabilization in business volumes. Mastercard is also witnessing buoyant demand for its Data & Analytics and Cyber solutions. Its solid capital position enables investment in business. However, escalating costs might put pressure on the company's margins. It also cancelled its annual 2020 outlook for net revenue and operating expense growth due to coronavirus-induced business loss. Share buyback delays and low profitability are other woes.

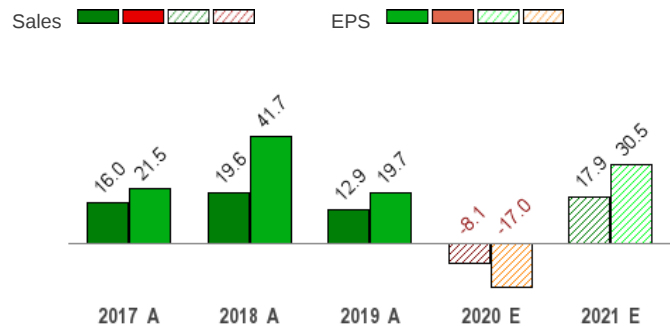
### Price, Consensus & Surprise



### Data Overview

|                            |                                                |
|----------------------------|------------------------------------------------|
| 52 Week High-Low           | \$347.25 - \$199.99                            |
| 20 Day Average Volume (sh) | 3,833,007                                      |
| Market Cap                 | \$306.9 B                                      |
| YTD Price Change           | 2.4%                                           |
| Beta                       | 1.08                                           |
| Dividend / Div Yld         | \$1.60 / 0.5%                                  |
| Industry                   | <a href="#">Financial Transaction Services</a> |
| Zacks Industry Rank        | Top 20% (51 out of 251)                        |

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



|                           |            |
|---------------------------|------------|
| Last EPS Surprise         | 6.4%       |
| Last Sales Surprise       | 1.1%       |
| EPS F1 Est- 4 week change | 1.2%       |
| Expected Report Date      | 07/30/2020 |
| Earnings ESP              | 4.8%       |
| P/E TTM                   | 39.0       |
| P/E F1                    | 47.4       |
| PEG F1                    | 2.9        |
| P/S TTM                   | 18.1       |

### Sales Estimates (millions of \$)

|      | Q1      | Q2      | Q3      | Q4      | Annual*  |
|------|---------|---------|---------|---------|----------|
| 2021 | 4,289 E | 4,277 E | 4,742 E | 4,988 E | 18,292 E |
| 2020 | 4,009 A | 3,227 E | 3,915 E | 4,364 E | 15,520 E |
| 2019 | 3,889 A | 4,113 A | 4,467 A | 4,414 A | 16,883 A |

### EPS Estimates

|      | Q1       | Q2       | Q3       | Q4       | Annual*  |
|------|----------|----------|----------|----------|----------|
| 2021 | \$1.93 E | \$1.94 E | \$2.26 E | \$2.30 E | \$8.42 E |
| 2020 | \$1.83 A | \$1.13 E | \$1.64 E | \$1.85 E | \$6.45 E |
| 2019 | \$1.78 A | \$1.89 A | \$2.15 A | \$1.96 A | \$7.77 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 07/15/2020. The reports text is as of 07/16/2020.

## Overview

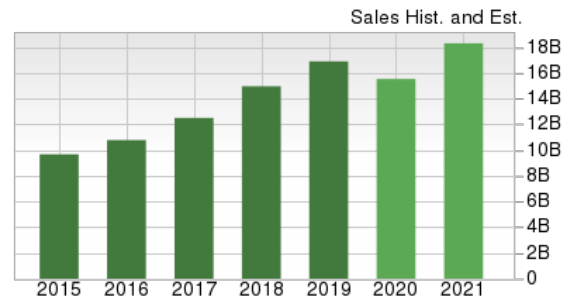
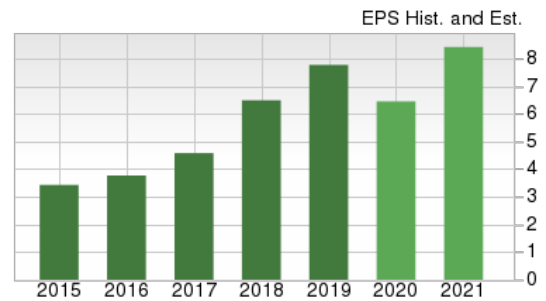
Founded in 1966 and headquartered in Purchase, NY, Mastercard Inc. is a leading global payment solutions company that provides an array of services in support of the credit, debit, mobile, web-based and contactless payments, and other related electronic payment programs to financial institutions and other entities.

The company's payment solutions include payment programs, marketing, product development, technology, processing, consulting and information services. It also provides worldwide transaction processing and other payment-related services, which include facilitating the authorization, clearing and settlement process of transactions, as well as processing cross-border and currency conversion transactions.

In May 2001, the company was incorporated as a Delaware stock corporation.

MasterCard manages and licenses payment card brands including MasterCard, Maestro and Cirrus. The company generates revenues from the fees it charges its customers for transaction processing and other payment-related services. It also earns revenues by charging customers for assessments based on the gross dollar volume (GDV) of activity on the cards that carry MasterCard brands. Revenues of the company are based on factors such as cross-border volumes, number of transactions, GDV and pricing changes.

The company operates a unique and proprietary global payments network that links issuers and acquirers around the globe to facilitate the switching of transactions, permitting account holders to use a Mastercard product at millions of acceptance locations worldwide. Its core network facilitates an efficient and secure means for receiving payments, a convenient payment method for consumers to access their funds and a channel for businesses to receive insight that is derived from its network. Mastercard authorizes, clears, and settles transactions through its core network for issuer customers in more than 150 currencies and in more than 210 countries and territories.



## Reasons To Buy:

- ▲ **Share Price Performance:** Mastercard's shares have outperformed its industry in a year's time. Given its progress on fundamentals, the stock should keep performing well in the quarters ahead.
- ▲ **Business Volumes Catching Up:** The company has provided an update on second-quarter 2020 operating metrics, which showed stability in its business volumes. The company's Switched Volume and switched transactions are showing an improving trend since April, partly owing to the relaxation of social-distancing measures in several markets and the positive impact of fiscal stimulus in the United States. Notably switched transactions, which were down 20% in April, improved to a decline of 7% in the week ending May 28. Mastercard's cross-border volume continues to be impacted by infrequent travel, although it slightly bettered over the last week, partly on a resurgence in intra-Europe travel. Thus, cross-border volumes, which contracted 50% in April, saw a 44% plunge in the week ending May 28. The company is also witnessing strong demand for its Data & Analytics and Cyber solutions. For the second quarter, it expects services growth, which provides a nice diversification to the company's revenues, to continue outperforming its core products and aid growth.
- ▲ **Accretive Acquisitions:** Over the years, Mastercard used acquisitions to supplement its organic efforts and diversify its revenues. Most of the acquisitions made by the company focused in areas such as data analytics, cyber and intelligence, loyalty and costs in developing multi-rail solutions for its customers. This has helped expand its addressable markets, drive new revenue streams and strengthen core product solutions. The Scandinavian payments group Nets acquisition, which is expected to be closed soon, will further aid inorganic growth. Acquisition added about 1% to revenue growth in the first quarter of 2020.
- ▲ **Consistent Revenue Growth:** Organic growth remained a key factor at Mastercard as evident from a revenue CAGR of 13% from 2010-2019. It was up further 5% in the first quarter, slightly exceeding management's expectation of revenue growth in low-single digit range. We believe that the company should retain its revenue momentum in the coming quarters on the back of its strong market position and attractive core business that continues to be driven by new deals, renewed agreements and an expansion of service offerings. Ongoing initiatives, including digital strategy and continued widening geographic footprints, create further optimism.
- ▲ **Strong International Operations:** International markets provide growth and diversification benefits to Mastercard. A major part of the company's revenues is generated from international regions such as the Asia-Pacific, Canada, Europe, Latin America, Africa and the Middle East. Strategic alliances with the governments, banks and corporations of these regions along with the developed nations of Germany, the U.K., Australia, and Japan bode well for expansion into e-commerce in the emerging e-money sector. These markets have the potential to generate growth in the coming years, led by a shift toward card usage and higher consumer spending. The company also received the preliminary approval for its license application to operate in China, which will allow it to set up a joint venture in the region. China is a vital market for the company and should drive long-term growth. The company's strong international business led to an increase in cross-border volume growth for the past several years. For 2020, however, cross-border business is expected to remain under pressure due to COVID-19-related disruption in customer spending. Nevertheless, this downturn should be a blip and the company should be back on track in terms of reaping cross-border revenues once the pandemic subsides.
- ▲ **Continuous Investment in Technology:** The company has been making significant progress in its digital strategy and continuously investing in technology. Some of the company's digital innovations are MasterPass, investment in tokenization technology with its Mastercard Digital Enablement Service (MDES), which supports contactless payments and Digital Secure Remote Payments. The company also plans to offer token services on all of its cards by 2020, allowing consumers to store credentials with merchants without exposing their actual card details. Recently, the company rolled out its solution named Mastercard Identity Check globally, which uses data-rich EMV 3D secure authentication standard, and applies AI and behavioral biometric capabilities to verify the consumer with a single touch or click. It also launched its Secure Remote Commerce framework (SRC) in the second half of 2019, which provides a safe, streamlined and standardized online checkout experience for all the key stakeholders. The company's continuous investments in technology will keep it ahead in the dynamic payments industry.
- ▲ **Strong Cash Generation:** Mastercard has been successfully generating cash flow from operations over the years. Its cash flow generated from operating activities has been increasing since 2009 except in 2014. The same was up 31.5% year over year in 2019. This cash flow enables capital management by way of share buyback and dividend payouts. In December 2019, the company increased its quarterly dividend by 21.2% and also authorized share repurchase program of \$8 billion. We believe the company will continue to generate favorable cash from operations on the back of its growing business volumes. Its strong capital position also enables it to pursue acquisitions, which have driven inorganic growth.
- ▲ **Strong Solvency Position:** The company's long-term debt as of Mar 31, 2020 was \$12.5 billion, up 46% because a \$4-billion long-term debt was issued in March, which caused the debt load to deteriorate to 230% of its equity compared with 144% as of Dec 31, 2019. However, its cash balance of \$10.7 billion along with \$6 billion in credit facility is enough to service its debt. The company has significant capacity to take on additional debt, given a strong investment grade rating of A1 from Moody's and A+ from S&P ratings. Moreover, its times interest earned of 29.8x is sufficient enough to cover its interest obligation though the same went down from 39.5x in the fourth quarter. The company's strategy is to migrate to a more normalized mix of debt and equity over time. Given the company's ability to perk up revenues consistently and generate positive cash flows, a spike in debt should not be a matter of concern for investors.

Mastercard's strategic acquisitions, alliances and technology upgrades, along with product-diversification and geographic-expansion initiatives augur long-term growth.

---

## Reasons To Sell:

- ▼ **Impact of Coronavirus:** The company's cross-border business took a hit from reduction in cross-border travel as people around the globe are taking precautionary measures by staying put. The company is witnessing deterioration in its cross-border revenues, switched volume and switched transaction metrics. Mastercard also scrapped its annual 2020 outlook for net revenue and operating expense growth due to coronavirus-led volatility.
- ▼ **Share Repurchase Suspension:** Due to the uncertainty related to COVID-19, the company temporarily suspended its share buyback plans. This halt will eliminate the cushion provided to earnings per share.
- ▼ **High Expenses:** Mastercard continues face a rise in total expenses. Total operating expenses were up 8% in the first quarter of 2020, higher than the increase of 5% in revenues. The company is accelerating investments in strategic areas such as safety and security, digital and B2B (business-to-business) products. The company is also witnessing increased operating costs related to higher revenues, particularly to some of its services such as loyalty. We expect growth in operating expenses, driven by investments in digital solutions, safety and security products, data analytics, geographic expansion, and platforms to address new payment flows. The company's continued investments in digital, analytics and security products and platforms to address new payment flows will keep operating expenses at elevated levels.
- ▼ **High Rebates and Incentives:** The company has been incurring quite high levels of cost under rebates and incentives (it is a contra revenue item), over the past many years, in order to gain customers and new business. The same was up 24% in the first quarter of 2020. We believe increasing client incentives will put pressure on the company's net revenues.
- ▼ **Low Return on Equity (ROE):** The company's ROE of 31% in the first quarter of 2020 declined from 35% in the fourth quarter of 2019 and 36% in the first quarter of 2019. The same is also lower than the industry average of 33.9%.
- ▼ **Exposure to Currency Volatility:** Due to the company's vast international operations, fluctuation in currency imparts volatility to its earnings. In the first quarter of 2020 foreign exchange had a 2% negative impact on revenues.

Higher expenses, high rebates and incentives might drag the company's margins.

---

## Last Earnings Report

### Mastercard Q1 Earnings Beat Despite Coronavirus Fallout

Mastercard Inc.'s first-quarter 2020 earnings of \$1.83 per share beat the Zacks Consensus Estimate by 6.4% and also grew 6% year over year.

Better-than-expected results were primarily driven by higher switched transactions, increase in gross dollar volume and gains from acquisitions.

Rises in rebates and incentives, and a decrease in cross-border volume were partial dampeners. Following strong results, shares of the company were up 5.04% in pre-market trading.

Mastercard's revenues of \$4 billion beat the Zacks Consensus Estimate by 0.9% and also rose 5% year over year. This upside was driven by an increase in gross dollar volume, switched transactions and other revenues, partly offset by higher rebates and incentives and a decline in cross-border business.

Total adjusted operating expenses rose 8% to \$1.8 billion due to higher general and administrative expenses.

Adjusted operating margin of 55.3% was down 140 basis points year over year.

Gross dollar volume increased 8% to \$1.6 trillion but cross-border volumes slipped 1% on a local-currency basis.

As of Mar 31, 2020, the company's customers had issued 2.6 billion Mastercard and Maestro-branded cards.

### Share Repurchase and Dividend Payout

During the reported quarter, Mastercard bought back shares worth \$1.4 billion and paid out \$403 million in dividends.

The company for the time being discontinued its share buyback plans as the plaguing impact of COVID-19-related uncertainty persists.

### Strong Balance Sheet Position

The company's long-term debt as of Mar 31, 2020 was \$12.5 billion, up 46% because a sum of worth \$4-billion long-term debt was issued in March. However, its liquid cash of \$10.7 billion along with \$6 billion in credit facility is enough to service its debt. The company has significant capacity to take on additional debt, given a strong investment grade ratings of A1 from Moody's and A+ from S&P ratings.

**Quarter Ending** 03/2020

| Report Date      | Apr 29, 2020 |
|------------------|--------------|
| Sales Surprise   | 1.12%        |
| EPS Surprise     | 6.40%        |
| Quarterly EPS    | 1.83         |
| Annual EPS (TTM) | 7.83         |

## Recent News

### Mastercard Partners tonik to Boost Presence in Philippines – Jul 9, 2020

Mastercard has announced a new partnership agreement with tonik, a two-year-old startup, which recently received a bank license in the Philippines. Per the pact, Mastercard will further enhance tonik's market proposition by enabling the latter to issue a range of electronic payments products that utilizes the company's global network and extensive business intelligence when tonik launches operationally later this year.

### Mastercard Rolls Out Recovery Insights for Small Businesses – Jul 8, 2020

In a bid to support small businesses, which are badly hit by a business loss from the plaguing coronavirus pandemic, Mastercard has announced its Recovery Insights program. This includes twin initiatives, namely the geographic expansion of ShopOpenings.com and a global project named Digital Acceleration for Small Business.

### Mastercard Sees Business Normalization in Most Markets - Jun 24, 2020

The company has provided an update on second-quarter 2020 operating metrics, which showed stability in its business volumes. Switched transactions, which were down 7% in May, improved to 1% in the week ending Jun 21. Cross-border volumes, which contracted 44% in May, saw a 41% plunge in the week ending Jun 21.

### Mastercard to Enhance Open Banking via Finicity Acquisition – Jun 23, 2020

Mastercard announced that it has entered into an agreement to acquire Finicity, a leading North American provider of solutions for financial management, payments and credit decisioning. Finicity's acquisition is in line with its strategy to grow and strengthen Mastercard's Open Banking platform.

### Mastercard Brings Tokenization to Amazon to Ease Payments – Jun 17, 2020

Mastercard has announced that it will provide tokenization service to Amazon customers in 12 countries across North America, Latin America, the Middle East and Europe. The company will begin using Mastercard tokens via the Mastercard Digital Enablement Service (MDES) for transactions through 2020. Mastercard's MDES is a frictionless commerce platform, which is live with more than 2,600 issuers and 1,200 token requestors around the world.

## Valuation

Mastercard's shares are up 2.4% in the year-to-date period, and up 11% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Business Services sector are up 0.4% but down 0.5% in the year-to-date period. Over the past year, the Zacks sub-industry and the sector are up 4.4% and 0.6%, respectively.

The S&P 500 index is up 0.4% in the year-to-date period but up 8.7% in the past year.

The stock is currently trading at 40.7x forward 12-month earnings, which compares to 30.91x for the Zacks sub-industry, 30.05x for the Zacks sector and 22.72x for the S&P 500 index.

Over the past five years, the stock has traded as high as 42.99x and as low as 21.36x, with a 5-year median of 27.88x. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$321 price target reflects 42.74x forward earnings.

The table below shows summary valuation data for MA

| Valuation Multiples - MA |               |       |              |        |         |
|--------------------------|---------------|-------|--------------|--------|---------|
|                          |               | Stock | Sub-Industry | Sector | S&P 500 |
| P/E F 12M                | Current       | 40.7  | 30.91        | 30.05  | 22.72   |
|                          | 5-Year High   | 42.99 | 31.68        | 30.05  | 22.72   |
|                          | 5-Year Low    | 21.36 | 20.78        | 18.68  | 15.25   |
|                          | 5-Year Median | 27.88 | 23.2         | 20.89  | 17.52   |
| P/S F 12M                | Current       | 18.03 | 11.13        | 4.16   | 3.55    |
|                          | 5-Year High   | 18.92 | 11.28        | 4.16   | 3.55    |
|                          | 5-Year Low    | 8.42  | 7.18         | 3.06   | 2.53    |
|                          | 5-Year Median | 11.61 | 8.78         | 3.59   | 3.02    |
| P/B TTM                  | Current       | 56.59 | 7.71         | 4.7    | 4.38    |
|                          | 5-Year High   | 61.06 | 12.78        | 6.71   | 4.56    |
|                          | 5-Year Low    | 14.85 | 5.22         | 3.28   | 2.83    |
|                          | 5-Year Median | 31.03 | 8.07         | 5.21   | 3.7     |

As of 07/15/2020

## Industry Analysis Zacks Industry Rank: Top 20% (51 out of 251)



## Top Peers

| Company (Ticker)                                   | Rec          | Rank |
|----------------------------------------------------|--------------|------|
| Alliance Data Systems Corporation (ADS)            | Neutral      | 3    |
| Fidelity National Information Services, Inc. (FIS) | Neutral      | 3    |
| Fiserv, Inc. (FISV)                                | Neutral      | 3    |
| Global Payments Inc. (GPN)                         | Neutral      | 3    |
| Ingenico Group (INGIY)                             | Neutral      | 2    |
| Visa Inc. (V)                                      | Neutral      | 3    |
| The Western Union Company (WU)                     | Neutral      | 2    |
| Diebold Nixdorf, Incorporated (DBD)                | Underperform | 2    |

| Industry Comparison Industry: Financial Transaction Services |           |            |           | Industry Peers |           |           |
|--------------------------------------------------------------|-----------|------------|-----------|----------------|-----------|-----------|
|                                                              | MA        | X Industry | S&P 500   | FIS            | FISV      | V         |
| Zacks Recommendation (Long Term)                             | Neutral   | -          | -         | Neutral        | Neutral   | Neutral   |
| Zacks Rank (Short Term)                                      | 3         | -          | -         | 3              | 3         | 3         |
| VGM Score                                                    | B         | -          | -         | B              | A         | C         |
| Market Cap                                                   | 306.86 B  | 2.41 B     | 22.66 B   | 86.76 B        | 67.44 B   | 381.99 B  |
| # of Analysts                                                | 16        | 6          | 14        | 14             | 14        | 16        |
| Dividend Yield                                               | 0.52%     | 0.00%      | 1.83%     | 1.00%          | 0.00%     | 0.61%     |
| Value Score                                                  | D         | -          | -         | C              | C         | C         |
| Cash/Price                                                   | 0.04      | 0.07       | 0.07      | 0.02           | 0.01      | 0.04      |
| EV/EBITDA                                                    | 26.52     | 16.42      | 12.99     | 31.92          | 26.45     | 24.14     |
| PEG Ratio                                                    | 2.81      | 1.88       | 2.97      | 1.91           | 1.76      | 3.11      |
| Price/Book (P/B)                                             | 56.60     | 4.26       | 3.12      | 1.76           | 2.05      | 13.15     |
| Price/Cash Flow (P/CF)                                       | 32.07     | 13.96      | 12.14     | 17.27          | 15.04     | 29.79     |
| P/E (F1)                                                     | 46.69     | 27.87      | 22.04     | 25.67          | 22.84     | 39.28     |
| Price/Sales (P/S)                                            | 18.05     | 4.10       | 2.38      | 7.64           | 5.42      | 15.99     |
| Earnings Yield                                               | 2.11%     | 3.53%      | 4.32%     | 3.90%          | 4.38%     | 2.54%     |
| Debt/Equity                                                  | 2.30      | 0.43       | 0.76      | 0.39           | 0.65      | 0.48      |
| Cash Flow (\$/share)                                         | 9.53      | 2.39       | 6.94      | 8.13           | 6.70      | 6.60      |
| Growth Score                                                 | A         | -          | -         | B              | A         | C         |
| Hist. EPS Growth (3-5 yrs)                                   | 23.08%    | 18.08%     | 10.85%    | 18.33%         | 17.52%    | 21.17%    |
| Proj. EPS Growth (F1/F0)                                     | -16.99%   | -8.11%     | -9.64%    | -2.48%         | 10.28%    | -8.01%    |
| Curr. Cash Flow Growth                                       | 13.13%    | 13.06%     | 5.51%     | 57.47%         | 147.85%   | 14.82%    |
| Hist. Cash Flow Growth (3-5 yrs)                             | 15.42%    | 14.80%     | 8.55%     | 26.53%         | 29.38%    | 8.28%     |
| Current Ratio                                                | 1.87      | 1.25       | 1.30      | 1.05           | 1.07      | 1.25      |
| Debt/Capital                                                 | 69.81%    | 34.80%     | 44.46%    | 27.85%         | 39.67%    | 28.66%    |
| Net Margin                                                   | 46.75%    | 7.54%      | 10.59%    | 1.45%          | 8.51%     | 52.26%    |
| Return on Equity                                             | 149.02%   | 19.20%     | 15.75%    | 7.89%          | 9.62%     | 43.45%    |
| Sales/Assets                                                 | 0.61      | 0.49       | 0.54      | 0.16           | 0.20      | 0.33      |
| Proj. Sales Growth (F1/F0)                                   | -8.07%    | -4.30%     | -2.52%    | 19.37%         | 35.35%    | -4.65%    |
| Momentum Score                                               | A         | -          | -         | B              | B         | A         |
| Daily Price Chg                                              | 2.26%     | 3.28%      | 1.91%     | 2.94%          | 3.28%     | 1.67%     |
| 1 Week Price Chg                                             | -2.23%    | -0.75%     | -0.41%    | 0.07%          | -2.31%    | -1.59%    |
| 4 Week Price Chg                                             | 0.65%     | 1.26%      | 1.88%     | 1.33%          | -2.34%    | 1.54%     |
| 12 Week Price Chg                                            | 19.00%    | 29.52%     | 16.37%    | 14.59%         | 5.60%     | 17.98%    |
| 52 Week Price Chg                                            | 11.06%    | -6.87%     | -4.22%    | 7.53%          | 7.04%     | 9.71%     |
| 20 Day Average Volume                                        | 3,833,007 | 601,234    | 2,266,132 | 3,722,584      | 5,048,555 | 7,929,686 |
| (F1) EPS Est 1 week change                                   | 0.10%     | 0.00%      | 0.00%     | 0.00%          | 0.00%     | 0.16%     |
| (F1) EPS Est 4 week change                                   | 1.23%     | 0.14%      | 0.00%     | 0.62%          | 0.14%     | 0.30%     |
| (F1) EPS Est 12 week change                                  | -13.00%   | -7.38%     | -5.76%    | -4.11%         | -5.74%    | -7.12%    |
| (Q1) EPS Est Mthly Chg                                       | 2.23%     | 0.00%      | 0.00%     | 1.39%          | 0.00%     | 0.45%     |

---

## 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   | A |
| Momentum Score | A |
| VGM Score      | B |

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.