

## Intl Business Machines (IBM)

**\$124.44** (As of 08/17/20)

Price Target (6-12 Months): **\$132.00**

Long Term: 6-12 Months

**Zacks Recommendation:**

**Neutral**

(Since: 10/09/19)

Prior Recommendation: Underperform

Short Term: 1-3 Months

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

**4-Sell**

Zacks Style Scores:

VGM:A

Value: A

Growth: B

Momentum: B

### Summary

IBM is witnessing solid uptake of cloud-based solutions and digital transformation offerings. Moreover, Red Hat buyout is enabling IBM in enhancing containerized software capabilities and strengthening competitive position in the hybrid cloud market. Improving position in the hosted cloud, security and analytics domains bodes well. Also, gains from z15 is a positive. However, stiff competition in the cloud computing market from Amazon Web Services, Microsoft Azure, and Oracle Cloud, and high-debt levels remain woes. Additionally, adoption of cognitive applications and transaction processing platforms in May was affected by coronavirus pandemic, which remains a headwind. For 2020, IBM refrained from providing any guidance, citing uncertainty stemming from coronavirus crisis. Notably, IBM stock has underperformed the industry on a year-to-date basis.

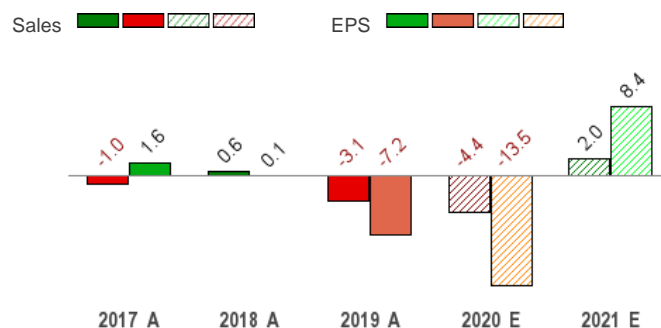
### Price, Consensus & Surprise



### Data Overview

|                            |  |
|----------------------------|--|
| 52 Week High-Low           | <b>\$158.75 - \$90.56</b>                            |
| 20 Day Average Volume (sh) | <b>4,550,696</b>                                     |
| Market Cap                 | <b>\$110.8 B</b>                                     |
| YTD Price Change           | <b>-7.2%</b>   |
| Beta                       | <b>1.20</b>  |
| Dividend / Div Yld         | <b>\$6.52 / 5.2%</b>                                 |
| Industry                   | <b><a href="#">Computer - Integrated Systems</a></b> |
| Zacks Industry Rank        | <b>Bottom 19% (203 out of 252)</b>                   |

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



|                           |                   |
|---------------------------|-------------------|
| Last EPS Surprise         | <b>1.9%</b>       |
| Last Sales Surprise       | <b>2.3%</b>       |
| EPS F1 Est- 4 week change | <b>-0.7%</b>      |
| Expected Report Date      | <b>10/21/2020</b> |
| Earnings ESP              | <b>-2.2%</b>      |
| P/E TTM                   | <b>10.9</b>       |
| P/E F1                    | <b>11.2</b>       |
| PEG F1                    | <b>2.8</b>        |
| P/S TTM                   | <b>1.5</b>        |

### Sales Estimates (millions of \$)

|      | Q1       | Q2       | Q3       | Q4       | Annual*  |
|------|----------|----------|----------|----------|----------|
| 2021 | 17,922 E | 18,685 E | 18,646 E | 20,468 E | 75,169 E |
| 2020 | 17,571 A | 18,123 A | 17,762 E | 20,283 E | 73,727 E |
| 2019 | 18,182 A | 19,161 A | 18,028 A | 21,777 A | 77,147 A |

### EPS Estimates

|      | Q1       | Q2       | Q3       | Q4       | Annual*   |
|------|----------|----------|----------|----------|-----------|
| 2021 | \$1.89 E | \$2.60 E | \$2.60 E | \$4.55 E | \$12.01 E |
| 2020 | \$1.84 A | \$2.18 A | \$2.54 E | \$4.50 E | \$11.08 E |
| 2019 | \$2.25 A | \$3.17 A | \$2.68 A | \$4.71 A | \$12.81 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 08/17/2020. The reports text is as of 08/18/2020.

## Overview

International Business Machines Corporation has gradually evolved as a provider of cloud and data platforms.

Red Hat acquisition, in particular, has helped IBM in strengthening competitive position in the hybrid cloud market. With Red Hat buyout, the company offers Linux operating system — Red Hat Enterprise Linux — and hybrid cloud platform — Red Hat OpenShift — that aids enterprises with digital transformation.

Besides, the company provides advanced information technology solutions, computer systems, quantum computing and super computing solutions, enterprise software, storage systems and microelectronics.

Moreover, IBM has the leading position with the highest number of patent wins, which is a testament to its technical expertise in innovative research and development. In 2019, the company maintained the lead spot for the 27th year, with 9,262 patents.

Armonk, NY-based, IBM reported revenues of \$77.15 billion in 2019.

The company's five reporting segments are as follows:

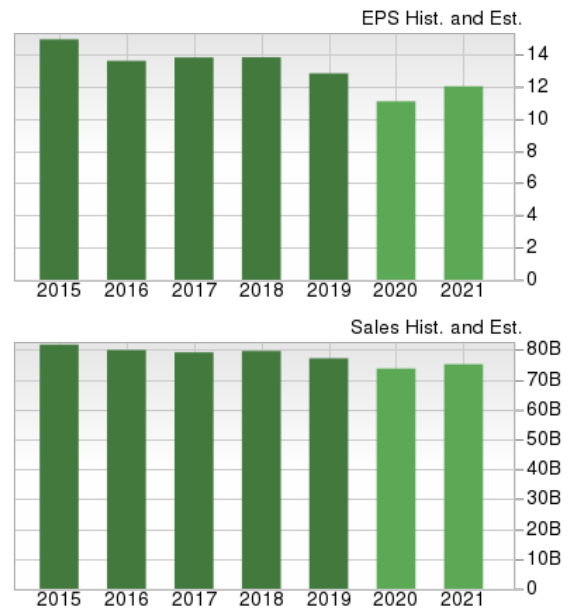
Cloud & Cognitive Software segment (30% of 2019 revenues) includes cloud and data platform, Cognitive application and transaction processing. Watson Platform, Watson Health and Watson Internet of Things (IoT) are notable offerings, which are included in Solutions Software.

Global Business Services segment (21.6%) includes consulting, global process services, application management. These professional services offer value and innovation to clients through solutions that leverage industry, technology and business strategy and process know-how.

Global Technology Services segment (35.5%) includes infrastructure services, technical support services, integration software. It provides comprehensive IT infrastructure and platform services that helps to build business value for clients.

Systems segment (9.9%) includes systems hardware and operating systems software. It offers clients with infrastructure platforms to help address the new requirements of hybrid cloud and enterprise.

Global Financing (1.8%) includes financing, primarily conducted through IBM Credit LLC (IBM Credit) and used equipment sales.



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## Reasons To Buy:

- ▲ IBM's growth is expected to be driven primarily by analytics, cloud computing, and security in the long haul. A combination of a better business mix, improving operating leverage through productivity gains and increased investment in growth opportunities will drive profitability. IBM's research and development (R&D) initiatives set it apart from its peers. On an annual basis, the company invests around 7-8% on R&D for reaping the high growth and high-value opportunities. Notably, the company was awarded the maximum number of U.S. patents for the 27th consecutive year in 2019, totaling 9,262 patents, reflecting a year-over-year rise of 2%. The patents represent inventions in artificial intelligence, cloud, cybersecurity and other strategic growth areas.
- ▲ With the strength of its global on-demand model (responding to customer demand with flexibility and speed), IBM has been gaining a lot of traction in emerging markets. As growth and investment opportunities in developed countries continue to slow down, we believe that emerging economies will play a key role for the company.
- ▲ IBM has been building its portfolio through strategic acquisitions (over 150 companies since 2000), which are generating incremental revenues, strengthening its technology leadership, and resulting in a more favorable mix of business. The company's strategy of making accretive acquisitions that can be easily integrated into its current business has expanded its product portfolio into higher-growth segments, such as cloud computing, analytics, and security. The acquisitions have also increased its scale of operations globally.
- ▲ IBM completed the acquisition of Red Hat for \$34 billion in cash on Jul 9, 2019. The deal is part of the company's efforts to bolster Open Hybrid Architecture Initiative. The deal marks IBM's largest acquisition ever and the combined company is likely to alter the dynamics of "the cloud market for business." Specifically, IBM hopes to leverage Red Hat to help it become the world's largest hybrid cloud platform provider. The company anticipates Red Hat buyout to improve revenue growth approximately by a CAGR of two points over a five-year period. IBM Cloud remains the key to winning back investors' optimism regarding strength of the company's business model. IBM's cloud revenue as a percentage of total revenue has increased from 4% in 2013 to 25% in 2019. In fact, revenues from Red Hat in second-quarter 2020 improved 18% (at cc) on a normalized basis. Currently, more than 2,400 clients are utilizing Red Hat and IBM's hybrid cloud platform, and around 600 IBM Services clients are leveraging Red Hat technology. We remain optimistic regarding improving utility of hybrid cloud services based on architecture built by IBM and Red Hat, by notable clients including American Express, Bharti Airtel, Vodafone, Banco Sabadell, Broadridge Financial Solutions, and Caixa Bank. We believe IBM's attempt to bolster its hybrid cloud business is likely to pave the way for the company's growth prospects. Apart from the aforementioned factors, Red Hat's expanding foothold across Asia Pacific is also anticipated to bolster IBM's TAM.
- ▲ IBM has been returning cash to shareholders for over a decade. From 2000 to 2019, IBM has returned more than \$182 billion to shareholders in the form of dividends and share repurchases. In second-quarter 2020, IBM returned \$1.5 billion to shareholders through dividends. The company reported cash flow from operations of \$3.6 billion and generated free cash flow of \$2.3 billion in the second quarter. Strong free cash flow generation is expected to provide the financial flexibility required for strategic investments in the changing business environment. The company's ability to generate solid free cash flow is expected to help it sustain current dividend payout (0.57) level at least in the near term.

Expanding product portfolio, accretive acquisitions, strong free cash flow generating ability and aggressive share buyback are key positives.

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## Reasons To Sell:

▼ IBM faces stiff competition in most of its markets. In the hardware enterprise servers and storage segment, the company competes against Dell, Oracle, Hewlett-Packard, and NetApp. The IT services business is also becoming increasingly competitive due to its high-margin nature and the company is facing pricing pressure from Hewlett-Packard. Although it possesses massive data centers, we believe that the company will continue facing tough competition from Amazon Web Services (AWS) and Microsoft's Azure. In the services and software space, the company competes with Accenture. The company competes with Oracle in the middleware software market. Although IBM continues to extend and build its capabilities in the analytics arena, competition from Oracle in this space is intensifying.

Time consuming transition to cloud, weakness in traditional businesses, cash crunch and increasing competition are primary headwinds.

▼ IBM's ongoing heavily time-consuming business model transition to cloud is a headwind at least in the near term. Weakness in its traditional business and foreign exchange volatility remain significant concerns. Also, higher profit on lower revenues indicates that the company has been lowering costs to maintain profits. We believe that the scope for further cost cutting is limited. Consequently, if costs are further reduced, there could be a negative impact on product quality. It could also delay the launch of new products, causing it to lag its peers.

▼ IBM's frequent acquisitions have escalated integration risks. Moreover, we note that the buyouts negatively impacted the company's balance sheet in the form of high level of goodwill and net intangible assets, which totaled \$72.1 billion, representing 46.8% of total assets as of Jun 30, 2020.

▼ Moreover, highly leveraged balance sheet has been troubling IBM over time. As of Jun 30, 2020, net debt amounted to \$50.4 billion. Notably, total debt to total capital of 75.8% is higher than the industry's figure of 65%, indicating a higher liability in repaying the debt. Further, times interest earned is 5.9X, compared with the prior-quarter's figure of 6.6X. Although the company generates significant cash flow, the high debt level can not only jeopardize its ability to sustain dividend payout but also pursue accretive acquisitions.

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## Last Earnings Report

### IBM Q2 Earnings and Revenues Top Estimates

International Business Machines Corporation (IBM) reported second-quarter 2020 non-GAAP earnings of \$2.18 per share, which surpassed the Zacks Consensus Estimate by 1.9%. However, the bottom line fell 31% on a year-over-year basis.

Revenues of \$18.12 billion outpaced the Zacks Consensus Estimate by 2.3% but declined 5.4% (as reported) on a year-over-year basis. At constant currency (cc), the top line fell 3.9%. Meanwhile, adjusting for currency and divested businesses, revenues were down 1.9%.

Revenues from signings declined 14% (at cc) in the second quarter to \$8.2 billion. Backlog was down 1% at cc (down 4% at actual) on a year-over-year basis and amounted to \$107.1 billion.

Nevertheless, total Cloud revenues were \$6.3 billion during the quarter, up 30% year over year. Adjusting for currency and divested businesses, total cloud revenues increased 34%.

Quarter Ending 06/2020

| Report Date      | Jul 20, 2020 |
|------------------|--------------|
| Sales Surprise   | 2.32%        |
| EPS Surprise     | 1.87%        |
| Quarterly EPS    | 2.18         |
| Annual EPS (TTM) | 11.41        |

### Synergies from Red Hat Acquisition

Revenues from Red Hat in the second quarter totaled \$1.09 billion, reflecting an increase of 17% (up 18% at cc) on a normalized basis. The buyout has helped IBM to enhance containerized software capabilities and accelerate service engagement. Moreover, OpenShift and Ansible have supported advancements in application and technology developments. Currently, more than 2,400 clients are using Red Hat and IBM's hybrid cloud platform, and around 600 IBM Services clients are leveraging Red Hat technology.

Management is optimistic about enhancing utility of hybrid cloud services based on architecture built by IBM and Red Hat, by notable clients including American Express, Bharti Airtel, Vodafone, Banco Sabadell, Broadridge Financial Solutions, and Caixa Bank.

### Geographic Revenue Details

Revenues from Americas remained flat year over year at cc (excluding divestiture impacts) and were \$8.5 billion. Revenues from Europe, Middle-East and Africa were \$5.7 billion, down 3% year over year. Meanwhile, revenues from Asia-Pacific declined 4% on a year-over-year basis and were \$4 billion.

### Cloud & Cognitive Software Segment

Cloud & Cognitive Software segment's revenues-external rose 3% year over year (up 5% on cc basis) to \$5.7 billion. The upside can be attributed to synergies from Red Hat acquisition and growth in cloud, Data & AI, security and IoT solutions. Markedly, cloud revenues soared 116% to \$1.6 billion.

Revenues in the Cloud and Data platforms increased 29% year over year (up 30% on cc basis) to \$2.8 billion. The platform is gaining from Red Hat's acquisition synergies and traction in Cloud Paks suite.

Adoption of cognitive applications and transaction processing platforms was affected by the coronavirus outbreak. In May, the decline was worse than anticipated, and recovery in June failed to bring the tally to "normal levels." Revenues from the Cognitive Applications declined 8% year over year to \$1.2 billion. Revenues from the Transaction Processing Software, which includes software that runs mission-critical workloads, declined 14% on a year-over-year basis to \$1.7 billion.

### Global Business Services Segment

Revenues in the Global Business Services-external segment totaled \$3.9 billion, which declined 7% (down 6% at cc) from the year-ago quarter.

Consulting revenues declined 3% year over year at cc to \$1.9 billion. Application Management and Global Process Services revenues declined 8% and 12% (at cc) year over year to \$1.7 billion and \$0.2 billion, respectively.

### Global Technology Services Segment

Revenues from Technology Services-external fell 8% (down 5% at cc) from the year-ago quarter to \$6.3 billion.

Segmental revenues pertaining to cloud advanced 20% at cc from the prior-year quarter's reported figure to \$2.4 billion.

Infrastructure & Cloud Services and Technical Support Services revenues declined 5% and 6% (at cc) year over year to \$4.8 billion and \$1.5 billion, respectively.

### Systems Revenues

Systems revenues-external rose 6% at cc on a year-over-year basis to \$1.9 billion, primarily owing to growth in the IBM Z and Storage Systems.

Systems Hardware revenues increased 13% (at cc) year over year to \$1.5 billion. Operating Systems Software declined 13% (at cc) year over year to \$0.4 billion.

IBM Z revenues surged 68% year over year courtesy of gains from innovation in z15 mainframe, and higher demand for data privacy and

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resiliency solutions across hybrid cloud. However, Power revenues fell 28% from the year-ago quarter.

Storage revenues improved 3% year over year owing to growth in high-end storage systems.

Segmental revenues pertaining to cloud advanced 22% at cc from the prior-year quarter's reported figure to \$0.8 billion.

Finally, Global Financing (includes financing and used equipment sales) revenues-external fell 25% year over year and 23% at cc to \$265 million.

## **Operating Details**

Non-GAAP gross margin expanded 160 basis points (bps) year over year and came in at 49%. The gross margin benefited from synergies from Red Hat acquisition, high-value software, and systems contributions.

Non-GAAP R, D&E expenses increased 12.4% year over year to \$1.58 billion.

Non-GAAP selling, general and administration (S, G&A) expenses declined 6.5% year over year to \$4.96 billion.

Non-GAAP pre-tax income margin from continuing operations was 12.8% compared with year-ago period's 16.6%.

## **Balance Sheet & Cash Flow Details**

As of Jun 30, 2020, IBM had \$14.3 billion in total cash and marketable securities compared with \$12 billion as of Mar 31, 2020.

As of Jun 30, 2020, total debt (which includes \$21.9 billion from Global Financing debt) was \$64.7 billion, compared with \$64.3 billion as of Mar 31, 2020.

The company reported cash flow from operations of \$3.6 billion during the second quarter, compared with \$4.5 billion reported in the first quarter.

IBM generated free cash flow of \$2.3 billion in the second quarter, compared with \$1.4 billion reported in the first quarter.

Moreover, the company returned \$1.5 billion to shareholders through dividends.

## **Guidance**

For 2020, IBM refrained from providing any guidance, citing uncertainty stemming from coronavirus crisis.

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## Recent News

On Aug 17, IBM rolled out its latest OpenShift version, Red Hat OpenShift 4.5., which includes OpenShift Virtualization platform at no extra cost.

On Aug 17, IBM unveiled its latest chip processor — IBM POWER 10 — which will be manufactured by Samsung Electronics. The chip is primarily meant for use across data center operations and will be based on Samsung's 7-nanometer (nm) process technology. IBM POWER 10 boasts of three times enhanced performance than its predecessor, IBM POWER 9. This will help data centers achieve greater operational efficiency.

On Aug 12, IBM and Workday expanded partnership with the roll out of a joint return-to-workplace focused solution to help enterprises reopen safely. The integrated solution combines IBM's Watson Works, and Workday's Adaptive Planning and HCM solutions.

On Aug 11, IBM inked a multi-year deal with Coca-Cola European Partners ("CCEP") to help the latter move to an open hybrid cloud environment. IBM will deploy its Red Hat OpenShift and Red Hat Enterprise Linux solutions to assist CCEP in achieving operational efficiency by reducing expenses and streamlining its IT infrastructure.

On Jul 28, IBM board of directors declared quarterly cash dividend of \$1.63 per common share, payable Sep 10, 2020 to shareholders of record as of Aug 10, 2020.

On Jul 22, IBM announced that a number of global banks including BNP Paribas, and around 30 new technology providers have selected IBM Cloud for Financial Services. The company announced availability of the IBM Cloud Policy Framework for Financial Services developed in collaboration with Bank of America.

On Jul 21, IBM and Celero, Canada-based solutions integrator for credit unions, inked a seven-year, outsourcing agreement worth multi-million dollars, in a bid to enhance and transform Celero's data center and related network architecture, and shift infrastructure services to a hybrid cloud environment.

On Jul 21, IBM and Red Hat announced partnership with Adobe to aid enterprises operating in regulated industries in accelerating digital transformation and enhance real-time data security.

On Jul 8, IBM inked deal to acquire Brazil-based robotic process automation (RPA) software provider, WDG Soluções Em Sistemas E Automação De Processos LTDA, or "WDG Automation". The aim is to strengthen end-to-end AI-infused automation capabilities, to aid enterprises accelerate business processes to IT operations. Financial terms have been kept under wraps.

## Valuation

IBM shares are down 7.2% in the year-to-date period and 7.9% over the trailing 12-month period. Stocks in the Zacks sub-industry are down 11.8%, while the same in the Zacks Computer & Technology sector are up 21.2% in the year-to-date period. Over the past year, the Zacks sub-industry is down 10%, while the sector is up 35.8%.

The S&P 500 index is up 4.8% in the year to date period and 15.7% in the past year.

The stock is currently trading at 10.67X forward 12-month earnings, which compares with 10.29X for the Zacks sub-industry, 26.33X for the Zacks sector and 22.85X for the S&P 500 index.

Over the past five years, the stock has traded as high as 13.12X and as low as 7X, with a 5-year median of 10.49X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$132 price target reflects 11.32X forward 12-month earnings.

The table below shows summary valuation data for IBM

| Valuation Multiples - IBM |               |       |              |        |         |
|---------------------------|---------------|-------|--------------|--------|---------|
|                           |               | Stock | Sub-Industry | Sector | S&P 500 |
| P/E F12M                  | Current       | 10.67 | 10.29        | 26.33  | 22.85   |
|                           | 5-Year High   | 13.12 | 18.34        | 26.33  | 22.85   |
|                           | 5-Year Low    | 7     | 7.94         | 16.72  | 15.25   |
|                           | 5-Year Median | 10.49 | 10.34        | 19.61  | 17.58   |
| P/S F12M                  | Current       | 1.49  | 1.3          | 4.05   | 3.7     |
|                           | 5-Year High   | 2.19  | 1.87         | 4.05   | 3.7     |
|                           | 5-Year Low    | 1.07  | 0.76         | 2.32   | 2.53    |
|                           | 5-Year Median | 1.69  | 1.47         | 3.14   | 3.05    |
| EV/EBITDA TTM             | Current       | 9.49  | 8.32         | 13.32  | 12.74   |
|                           | 5-Year High   | 11.85 | 10.86        | 13.49  | 12.85   |
|                           | 5-Year Low    | 5.4   | 3.92         | 7.59   | 8.25    |
|                           | 5-Year Median | 8.76  | 8.55         | 10.92  | 10.91   |

As of 08/17/2020

## Industry Analysis Zacks Industry Rank: Bottom 19% (203 out of 252)



## Top Peers

| Company (Ticker)             | Rec        | Rank |
|------------------------------|------------|------|
| Blackbaud, Inc. (BLKB)       | Outperform | 1    |
| Accenture PLC (ACN)          | Neutral    | 3    |
| Amazon.com, Inc. (AMZN)      | Neutral    | 3    |
| salesforce.com, inc. (CRM)   | Neutral    | 2    |
| HP Inc. (HPQ)                | Neutral    | 3    |
| Microsoft Corporation (MSFT) | Neutral    | 3    |
| Oracle Corporation (ORCL)    | Neutral    | 4    |
| SAP SE (SAP)                 | Neutral    | 2    |

| Industry Comparison Industry: Computer - Integrated Systems |           |            |           | Industry Peers |            |            |
|---|-----------|------------|-----------|----------------|------------|------------|
|   | IBM       | X Industry | S&P 500   | AMZN           | HPQ        | MSFT       |
| Zacks Recommendation (Long Term)                            | Neutral   | -          | -         | Neutral        | Neutral    | Neutral    |
| Zacks Rank (Short Term)                                     | 4         | -          | -         | 3              | 3          | 3          |
| VGM Score   | A         | -          | -         | A              | A          | C          |
| Market Cap  | 110.82 B  | 506.77 M   | 23.75 B   | 1,594.04 B     | 25.67 B    | 1,591.33 B |
| # of Analysts   | 6         | 3          | 14        | 14             | 6          | 14         |
| Dividend Yield  | 5.24%     | 0.00%      | 1.62%     | 0.00%          | 3.93%      | 0.97%      |
| Value Score   | A         | -          | -         | C              | A          | D          |
| Cash/Price  | 0.13      | 0.16       | 0.07      | 0.05           | 0.16       | 0.09       |
| EV/EBITDA   | 8.65      | -22.31     | 13.49     | 41.64          | 5.53       | 22.24      |
| PEG Ratio   | 2.85      | 3.12       | 3.03      | 3.30           | 5.65       | 2.40       |
| Price/Book (P/B)  | 5.36      | 3.17       | 3.18      | 21.62          | NA         | 13.45      |
| Price/Cash Flow (P/CF)                                      | 6.30      | 7.10       | 12.85     | 47.47          | 6.41       | 27.88      |
| P/E (F1)  | 11.30     | 13.78      | 22.17     | 99.46          | 8.55       | 32.89      |
| Price/Sales (P/S)   | 1.47      | 1.65       | 2.49      | 4.95           | 0.45       | 11.13      |
| Earnings Yield  | 8.90%     | 2.82%      | 4.32%     | 1.01%          | 11.70%     | 3.04%      |
| Debt/Equity   | 2.68      | 0.15       | 0.77      | 0.45           | -5.30      | 0.57       |
| Cash Flow (\$/share)  | 19.75     | 0.01       | 6.94      | 67.05          | 2.80       | 7.54       |
| Growth Score  | B         | -          | -         | A              | C          | A          |
| Hist. EPS Growth (3-5 yrs)                                  | -3.28%    | -3.01%     | 10.44%    | 97.34%         | -5.33%     | 19.44%     |
| Proj. EPS Growth (F1/F0)                                    | -13.54%   | -10.76%    | -5.97%    | 39.06%         | -6.33%     | 10.99%     |
| Curr. Cash Flow Growth                                      | 2.09%     | 2.09%      | 5.22%     | 31.33%         | 8.32%      | 17.66%     |
| Hist. Cash Flow Growth (3-5 yrs)                            | -3.76%    | -3.43%     | 8.52%     | 49.26%         | -18.40%    | 10.19%     |
| Current Ratio   | 1.04      | 2.09       | 1.33      | 1.18           | 0.78       | 2.52       |
| Debt/Capital  | 72.83%    | 13.53%     | 44.59%    | 31.00%         | NA         | 36.24%     |
| Net Margin  | 10.44%    | -1.40%     | 10.13%    | 4.10%          | 5.27%      | 30.96%     |
| Return on Equity  | 51.06%    | -3.34%     | 14.51%    | 20.47%         | -295.77%   | 39.45%     |
| Sales/Assets  | 0.50      | 0.80       | 0.51      | 1.42           | 1.74       | 0.50       |
| Proj. Sales Growth (F1/F0)                                  | -4.43%    | 0.00%      | -1.67%    | 31.31%         | -6.75%     | 8.57%      |
| Momentum Score  | B         | -          | -         | A              | B          | D          |
| Daily Price Chg   | -0.66%    | 0.00%      | -0.02%    | 1.09%          | -1.27%     | 0.66%      |
| 1 Week Price Chg  | 0.25%     | 1.14%      | 1.09%     | -0.61%         | -1.57%     | -1.68%     |
| 4 Week Price Chg  | -1.53%    | 10.63%     | 4.83%     | -0.45%         | 1.70%      | -0.62%     |
| 12 Week Price Chg   | 5.11%     | 6.66%      | 13.09%    | 30.59%         | 5.59%      | 14.59%     |
| 52 Week Price Chg   | -7.85%    | -5.71%     | 2.77%     | 75.23%         | -6.56%     | 51.92%     |
| 20 Day Average Volume                                       | 4,550,696 | 111,846    | 1,932,479 | 4,328,554      | 10,109,933 | 36,190,020 |
| (F1) EPS Est 1 week change                                  | 0.00%     | 0.00%      | 0.00%     | 0.00%          | 0.00%      | 0.00%      |
| (F1) EPS Est 4 week change                                  | -0.75%    | 3.20%      | 1.80%     | 58.58%         | 0.00%      | 2.51%      |
| (F1) EPS Est 12 week change                                 | -1.88%    | -5.37%     | 2.88%     | 62.03%         | -3.30%     | 3.00%      |
| (Q1) EPS Est Mthly Chg                                      | -4.62%    | 7.04%      | 0.80%     | 48.99%         | 0.00%      | 3.89%      |



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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 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.

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

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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