

Bruker Corporation (BRKR)

\$42.19 (As of 08/25/20)

Price Target (6-12 Months): **\$44.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 06/02/20)

Prior Recommendation: Underperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:F

Value: D

Growth: D

Momentum: C

Summary

Bruker ended the second quarter with better-than-expected earnings. The successful installation and customer acceptance of the Avance system bode well. Launch of the MALDI-2 PI source instills optimism in the stock. Potential of the Nano Group, PCI and the MALDI Biotyper is also encouraging. Rising demand for MALDI Biotyper in applied markets and a strong solvency but leveraged balance sheet bode well. Yet, year-over-year fall in revenues in all reporting segments and major geographies due to business disruptions is concerning. Contraction of both margins is also worrying. The company's inability to provide any financial guidance also raises apprehensions. Exposure to foreign exchange fluctuations, stiff competition and macroeconomic woes pose challenges to Bruker. Over the past six months, Bruker has underperformed the industry it belongs to.

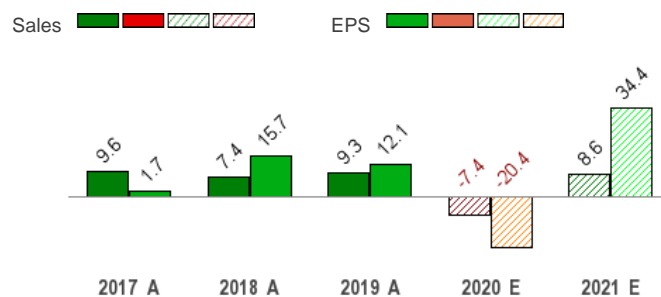
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$54.49 - \$30.78
20 Day Average Volume (sh)	418,474
Market Cap	\$6.5 B
YTD Price Change	-17.2%
Beta	1.39
Dividend / Div Yld	\$0.16 / 0.4%
Industry	Instruments - Scientific
Zacks Industry Rank	Top 33% (83 out of 252)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	320.0%
Last Sales Surprise	0.5%
EPS F1 Est- 4 week change	7.9%
Expected Report Date	10/29/2020
Earnings ESP	3.8%
P/E TTM	32.2
P/E F1	33.8
PEG F1	2.8
P/S TTM	3.3

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	454 E	503 E	529 E	615 E	2,085 E
2020	424 A	425 A	486 E	586 E	1,920 E
2019	461 A	490 A	521 A	600 A	2,073 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$0.31 E	\$0.38 E	\$0.44 E	\$0.52 E	\$1.68 E
2020	\$0.14 A	\$0.21 A	\$0.33 E	\$0.54 E	\$1.25 E
2019	\$0.28 A	\$0.33 A	\$0.43 A	\$0.53 A	\$1.57 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 08/25/2020. The reports text is as of 08/26/2020.

Overview

Billerica, MA-headquartered Bruker Corporation designs and manufactures proprietary life science and materials research systems and associated products that serve multiple customers in life science research, pharmaceuticals, applied markets, nanotechnology, cell biology, clinical research, microbiology and in-vitro diagnostics. Currently, Bruker employs 6,000 individuals who work at 90 locations across the globe. It has direct sales forces employed through North America, Europe, Japan, Asia Pacific and Australia.

Business Segments:

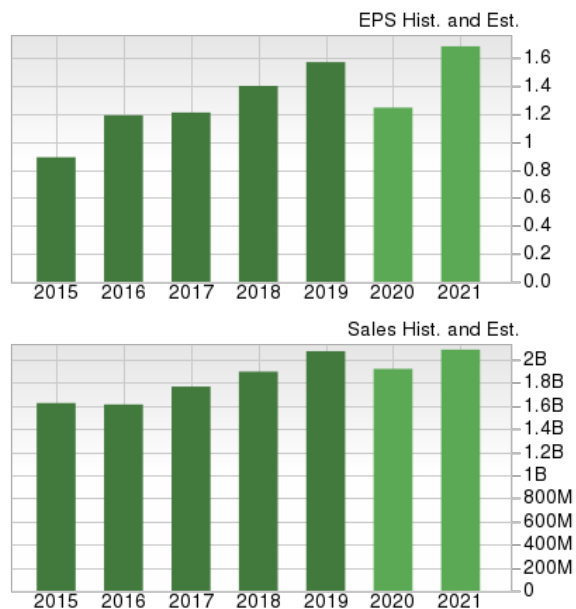
Bruker Scientific Instruments (BSI) Life Science: Within the segment, Bruker reports under two groups: Bruker BioSpin Group (comprising 29.9% of revenues in 2019, up 5.1% from 2018) and Bruker CALID Group (30.1%, up 13.8%).

The **Bruker BioSpin** comprises the Bruker Magnetic Resonance and Preclinical Imaging divisions, which designs, manufactures and distributes enabling life science tools based on the magnetic resonance technology.

The **Bruker CALID** comprises the Bruker Daltonics and primarily designs, manufactures and distributes life-science mass spectrometry instruments that can be integrated with other sample preparation or chromatography instruments.

BSI Nano (30.5%, up 11.4%): The Bruker Nano combines the Bruker AXS, Bruker Nano Surfaces, Bruker Nano Analytics and Bruker Elemental divisions, and designs, manufactures and distributes advanced X-ray instruments to determine the characteristics of matter and the three-dimensional structure of molecules.

Bruker Energy & Supercon Technologies (BEST) (10.1%, up 7.8%): This segment designs, manufactures and distributes superconducting materials, primarily metallic low temperature superconductors, for use in magnetic resonance imaging, nuclear magnetic resonance, fusion energy research and other applications.



Reasons To Buy:

- ▲ **BSI Nano Group Prospects Bright:** Bruker's Nano Group has been a solid performer till the pandemic hit the market. Despite its disappointing performance in the second quarter due to temporary factory closures being one of the reasons, the segment holds the potential of a rebound. The stores have started reopening since May-end. Semiconductor metrology revenues have been steady year over year, with order rates improving as semi metrology equipment markets are on a rebound.

Bruker's acquisitions of Anasys (in April 2018), JPK (in July), RAVE (April 2019) and Alicona are also progressing well.

The company has several Bruker NANO products that are being assembled and tested in Malaysia and by 2022, management expects more than \$50 million of revenues to be generated from Penang.

Overall, the Nano Group holds strong long-term potential on higher demand from industrial markets, semiconductors and growing academic markets.

- ▲ **High Potential of MALDI Biotyper:** Bacteria analysis and the identification of microorganisms to the species level and beyond is a key task in microbiology. Although current sequencing technologies provide more precise insights in biochemical analysis, they are still far too slow and expensive. Keeping this in mind, Bruker developed the MALDI Biotyper – a revolutionary approach for the analysis of microorganisms. The company expanded its MALDI Biotyper workflow's menu to include selected high-value resistance testing for clinical microbiology research.

We are also encouraged to note that demand for the MALDI Biotyper is increasing in applied markets, specifically for food, feed and beverage. Based on the recent developments witnessed in this product portfolio, management believes Bruker is poised to double its microbiology business over the next four to five years. Given an increase in the aging population, a higher number of individuals are likely to fall prey to illnesses, especially those caused by microorganisms. We believe MALDI Biotyper is thus positioned well to contribute significantly to the company's top line over time.

In May, Bruker launched the world's first commercial MALDI-2 post-ionization (PI) source, which is now available as an option on the timsTOF fleX ESI/MALDI mass spectrometer. It also launched additional unique TIMS/PASEF-enabled 4D proteomics methods.

- ▲ **Strong Prospects in NMR Industry:** Nuclear Magnetic Resonance (NMR) spectroscopy is an analytical technique used in quality control and research to identify the content and purity of a sample as well as its molecular structure. Bruker BioSpin's products, which have specific application in structural proteomics, drug discovery, research and food and materials science fields, provide customers with the ability to ascertain the structure, dynamics, and function of specific molecules, such as proteins, as well as characterize and determine the composition of mixtures. A vast majority of Bruker BioSpin's customers include academic and government customers as well as pharmaceutical and biotechnology companies.

Although BioSpin Group revenues declined in the reported quarter due to delay in certain deliveries and installations due to the pandemic-led customer loss and installation delays along with the temporary closure of one of BioSpin's manufacturing sites, it holds long-term potential. The company continues to invest in operational excellence like the multi-year Project 2020 which consolidates two major BioSpin sites in Germany into a single, modern, lean and customer-oriented site. The project is likely to be completed in 2021.

In May, Bruker announced the successful installation and customer acceptance of the world's first Avance NEO1.2 GHz NMR system in Italy. In July, the same was announced in Switzerland.

- ▲ **Initiatives to Combat the Coronavirus Crisis:** Bruker has been making notable efforts to combat the coronavirus crisis. In Bremen, the company's Germany campus, Bruker is currently offering a pilot COVID-19 at work testing program for its factory workforce. The program, implemented in April, offers weekly company-paid voluntary COVID-19 PCR tests to employees in the factory.

Further, the company is providing critical technologies and solutions to help fight the crisis. The microbiology and infectious disease diagnostics portfolio has added a SARS-CoV-2 PCR test and the NMR and mass spec systems, which are used in critical disease, therapeutic and vaccine research.

Bruker entered into a distribution agreement with Primer Design from UK, a subsidiary of Novacyt SA, in March. Per the agreement, Bruker-Hain Diagnostics will distribute the CE-IVD-labeled genesig real-time PCR coronavirus (COVID-2019) assay, effective immediately. In this respect, Bruker has been ramping up the Bruker-Hain deliveries of nucleic acid extraction kits and of COVID-19 PCR test kits to customers in Europe and Africa.

Bruker, in July, launched its FluoroType SARS-CoV-2 plus next-generation 6-plex PCR assay for higher specific detection of the SARS-CoV-2 virus, which causes COVID-19. Notably, the assay has already received the CE Mark and is available on the Bruker Hain FluoroCycler XT real-time PCR system as well as on other commonly available thermocyclers.

- ▲ **Potential of Preclinical Imaging Market:** Preclinical imaging (PCI) can dramatically increase the efficiency and pace of drug discovery and development. Bruker offers advanced PCI solutions for a broad spectrum of application fields, such as cancer research, functional and anatomical neuroimaging, orthopedics, cardiac imaging and stroke models. Moreover, this division is experiencing increasing customer demand for higher-strength pre-clinical magnetic resonance imaging (MRI) system.

The MRI system market, which is expected to see a CAGR of 5.9% between 2020 and 2027 from \$5.19 billion in 2019 (as per research firm Grand View Research), is encouraging. We believe this translates into a golden opportunity for Bruker to expand its foothold in the PCI market and earn higher profits from this division, going ahead. Currently, the company is investing vigorously in the PCI division to capture a larger share in this fast-growing market space.

Bruker's recent acquisition of Hain Diagnostics expands its MALDI Biotyper solution product line. The company's collaboration with Champalimaud Foundation in the field of Preclinical Imaging seems strategic.

▲ **Strong Solvency but Leveraged Balance Sheet:** Bruker exited the second quarter of 2020 with cash, cash equivalents and short-term investments of \$797 million compared with \$852 million at the end of the first quarter of 2020. Meanwhile, total debt came up to \$1.07 billion in the period, compared with \$1.06 billion in the sequentially last-reported quarter. However, if we go by the company's current-year debt level of \$101 million, it is pretty low compared to the cash in hand. This is good news in terms of the solvency position of the company, at least during a year of economic downturn, implying that the company has sufficient cash for debt repayment.

Debt comparison with the industry is, favorable as, the industry's total debt of \$1.36 billion is much higher than the company's debt level.

The quarter's total debt-to-capital ratio of 0.54 represented an increase from 0.53 at the end of the first quarter of 2020. It indicates a moderately leveraged balance sheet. This compares unfavorably with the total debt-to-capital ratio of the industry which stands at a lower level of 0.53.

In the second quarter of 2020, the company paid out \$6.1 million as dividends to common stockholders and also approved a quarterly cash dividend of 4 cents per share on the company's common stock. The current payout ratio stands at a very low level of 12.2%. Although, it represents a sequential increase from 11.2% from the end of the first quarter of 2020, this ratio itself indicates sustainability in terms of dividend payment amid the ongoing economic crisis. However, this compares unfavorably with the payout rate of the industry which stands at a further low level (4%).

Reasons To Sell:

▼ **Share Price Movement:** Over the past six months, Bruker has underperformed the industry it belongs to. The stock has lost 4.9% against the industry's 20.9% rise. Despite Bruker ending the second quarter with better-than-expected earnings, the year-over-year decline in revenues across all reporting segments as well as major geographies due to business disruptions is concerning. Contraction of both margins is discouraging as well. The company's inability to provide any financial guidance also raises apprehensions. Further, the expectation of a negative year-over-year impact of the pandemic on third-quarter results is deterring.

The company's exposure to the foreign exchange fluctuations is a cause of concern as it conducts majority of its business in international markets. Further, a competitive landscape and macroeconomic woes, stemming from the coronavirus pandemic, pose persistent challenges to the company.

Currency fluctuations remain a drag on Bruker's top as well as bottom-line. Moreover, headwinds such as unfavorable economic conditions and competitive threats continue to pose concern.

▼ **Exposed to Currency Movement:** Bruker conducts 80% of its business in international markets. As a result, currency fluctuations continue to result in foreign currency transaction losses at the company. In the second quarter of 2020, changes in foreign currency had 1.1% negative impact on the company's revenues. In addition, currency fluctuations could cause the price of Bruker's products to be less competitive than its principal competitors' offerings.

▼ **Coronavirus Dampeners:** The coronavirus pandemic has been wreaking havoc on the economy and Bruker has also been affected. The company's second-quarter 2020 results reflected decline in both reported and organic revenues, primarily due to COVID-19-related disruptions. This led to year-over-year fall in the company's GAAP and non-GAAP operating income, operating margins and diluted earnings per share. Segmental performance was dismal primarily due to pandemic-led business disruptions.

This time, too, the company refrained from providing any financial guidance for the year.

▼ **Macroeconomic Factors:** Many of the countries in which Bruker operates, including the U.S., Russia, and certain European nations, have experienced and continue to face uncertain economic conditions. Any company conducting business in these nations tend to be impacted by unfavorable changes in economic or political conditions herein, including adverse changes in interest rates or tax rates, volatile financial and commodity markets, contraction in the availability of credit in the marketplace, and changes in capital spending patterns.

Moreover, continued volatility and disruption of global financial markets might limit Bruker's customers' ability to obtain adequate financing to maintain operations and proceed with planned or new capital spending initiatives. This could lead to a drop in sales volume that could materially and adversely affect the company's operational results and cashflow. Management further anticipates that the persistence of an economic downturn may entail increased pricing pressure for Bruker's products and services, thus weighing on its operating margins and profitability.

▼ **Competitive Landscape:** Bruker faces substantial competition in a consolidating industry and expects competition in all of its markets to increase further. Bruker BioSpin competes with companies that offer magnetic resonance spectrometers, mainly JEOL and Oxford Instruments. In the field of preclinical imaging, Bruker BioSpin faces competitive threat from Perkin Elmer, Mediso, Trifol, MR Solutions, RS2D, Visualsonics (Fuji Film) and others.

Bruker CALID's competitors in the life science markets and chemical and applied markets include Danaher, Agilent, GE-Healthcare, Waters, Thermo Fisher Scientific, Shimadzu, Hitachi and JEOL. BEST competes with Oxford Instruments and Luvata in low temperature superconducting materials. Unfortunately, a number of Bruker's peers have expanded their market share in recent years through business combinations. Other companies may also choose to enter Bruker's fields of operation in the near future.

Last Earnings Report

Bruker's Q2 Earnings Surpass Estimates, Margins Fall

Bruker delivered adjusted earnings per share of 21 cents in the second quarter of 2020, down 36.4% year over year. However, the figure surpassed the Zacks Consensus Estimate of 5 cents.

The adjustments include expenses related to purchased intangible amortization and restructuring costs.

GAAP earnings per share for the quarter was 16 cents a share, marking a 30.4% decline from the year-earlier figure.

Revenues in Detail

Bruker registered revenues of \$424.6 million in the second quarter, down 13.4% year over year.

Excluding a positive impact of 0.4% from acquisitions and a 1.1% negative impact from changes in foreign currency rates, the company recorded organic revenue decline of 12.7% and a 14.5% drop at CER year over year.

The fall in reported and organic revenues resulted from business disruptions across the globe and softer global instrumentation demand arising from the pandemic.

Geographically, the United States witnessed an 18.7% decline in revenues in the reported quarter. Also, revenues in the Asia Pacific fell 11.5% and the Other category's revenues declined 28.2%. Further, Europe revenues fell 7.2% year over year.

Segments in Details

Bruker reports results under three segments — BSI Life Science (comprising BioSpin and CALID), BSI NANO and BEST.

In the second quarter, BioSpin Group revenues fell 17.1% from the year-ago quarter to \$125.1 million due to the pandemic-led customer loss and installation delays along with the temporary closure of one of BioSpin's manufacturing sites.

CALID revenues were down 5.6% year over year to \$132.7 million, primarily resulting from fall in molecular spectroscopy revenues. However, the decline was partially offset by continued growth in Daltonics Life Science mass spectrometry, microbiology and infectious disease diagnostics business. CALID's microbiology and infectious disease consumables, which include the MALDI Biotyper Consumables and Bruker Hain nucleic acid extraction and COVID-19 Polymerase Chain Reaction assays, recorded significant growth year over year.

Total **BSI Life Science** revenues were \$291.4 million, down 11.5% year over year.

Revenues in the **Nano** group fell 16.9% to \$125.5 million due to global academic customer closures due to the pandemic, weaker industrial markets demand and temporary factory closures at some of Nano's businesses.

Organic revenues and revenues at CER of the BSI segment (including BSI Life Science and BSI Nano Segments) declined 12.7% and 13.4% year over year, respectively.

In the second quarter, the company's **BEST** segment's revenues were \$44.8 million, indicating a fall of 13.7% year over year resulting from lower demand for superconductor toward the quarter-end.

However, organically, the BEST segment revenues declined 12.5% year over year, net of intercompany eliminations. At CER, the segment fell 13.6%.

Margin Trend

In the quarter under review, Bruker's gross profit fell 19.2% to \$186.2 million. Gross margin contracted 315 basis points (bps) to 43.9%.

Meanwhile, selling, general & administrative expenses fell 17.8% to \$102.4 million. Research and development expenses went down 9.1% year over year to \$44.1 million. Adjusted operating expenses of \$146.5 million declined 15.3% year over year.

Adjusted operating profit totaled \$39.7 million, reflecting a 30.8% decline from the prior-year quarter. Further, adjusted operating margin in the second quarter contracted 236 bps to 9.3%.

Financial Position

Bruker exited the second quarter with cash and cash equivalents, and short-term investments of \$796.8 million compared with \$851.7 million at the end of the first quarter. Long-term debt at the end of the second quarter was \$924.2 million compared with \$914.8 million at the end of the first quarter of 2020.

Cumulative net cash flow from operating activities at the end of the second quarter was \$46.8 million compared with \$24.8 million in the year-ago period.

The company incurred expenses of \$12.3 million as payment of dividends to common stockholders and repurchased \$50 million worth of stocks for the first six months of 2020. As of Jun 30, Bruker had \$107.7 million remaining under its share repurchase authorization.

2020 Guidance

Bruker's 2020 financial guidance remains suspended due to challenging business conditions created by the pandemic. However, the company

Quarter Ending **06/2020**

Report Date	Aug 03, 2020
Sales Surprise	0.50%
EPS Surprise	320.00%
Quarterly EPS	0.21
Annual EPS (TTM)	1.31

expects to witness a sequential improvement in financial results in the third quarter of 2020 despite the expectation of a continued negative year-over-year impact of the pandemic on the third quarter results.

Recent News

Bruker, Utrecht University to Collaborate for Advanced Study: Aug 07, 2020

Bruker entered into a collaboration with Utrecht University to advance the study of the 3-D structures and interactions of proteins by mass spectrometry.

Bruker Launches Enhanced AFM System: Jul 30, 2020

Bruker launched the high-speed NanoRacer high-speed atomic force microscopy (AFM) system, which sets a new milestone in high-speed scanning capabilities to enable true real-time visualization of dynamic biological processes using AFM.

Bruker Launches Next-Generation PCR Assay: Jul 27, 2020

Bruker launched its FluoroType SARS-CoV-2 plus next-generation 6-plex polymerase chain reaction (PCR) assay for higher specific detection of the SARS-CoV-2, the COVID-19 causing virus.

Bruker Successfully Completes Installation at ETH Zürich: Jul 22, 2020

Bruker announced the successful installation and customer acceptance of the Avance NEO 1.2 GHz NMR system at the Department of Chemistry and Applied Biosciences of the Eidgenössische Technische Hochschule (ETH) Zürich in Switzerland.

Bruker Launches MALDI-2 PI Source: May 29, 2020

Bruker announced a major development in matrix-assisted laser desorption ionization (MALDI) with the launch of the world's first commercial MALDI-2 post-ionization (PI) source at the virtual ASMS 2020 Reboot conference. It is currently available as an option on the timsTOF flexX ESI/MALDI mass spectrometer.

Valuation

Bruker shares are down 17.2% in the year-to-date period and up 0.7% in the trailing 12-month periods. Stocks in the Zacks sub-industry are up 4.6% while the Zacks Medical sector rose 25.6% in the year-to-date period. Over the past year, the Zacks sub-industry is up 21.9% and sector is up 43.4%.

The S&P 500 index is up 6.9% in the year-to-date period and up 20.3% in the past year.

The stock is currently trading at 27.6X Forward 12-months earnings, which compares to 24.5X for the Zacks sub-industry, 27.3X for the Zacks sector and 23.1X for the S&P 500 index.

Over the past five years, the stock has traded as high as 32.7X and as low as 17X, with a 5-year median 23.8X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$44 price target reflects 28.8X forward 12-months earnings.

The table below shows summary valuation data for BRKR

Valuation Multiples - BRKR					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	27.56	24.49	27.25	23.12
	5-Year High	32.74	26.74	27.25	23.12
	5-Year Low	17.00	18.41	16.72	15.25
	5-Year Median	23.78	22.61	19.60	17.58
P/S F12M	Current	3.19	4.61	4.24	3.77
	5-Year High	3.86	5.92	4.24	3.77
	5-Year Low	1.66	3.63	2.32	2.53
	5-Year Median	2.65	4.91	3.14	3.05
P/B TTM	Current	7.18	11.28	5.72	4.66
	5-Year High	9.32	12.24	5.84	4.66
	5-Year Low	3.57	5.27	3.16	2.83
	5-Year Median	6.18	7.75	4.44	3.76

As of 08/25/2020

Industry Analysis Zacks Industry Rank: Top 33% (83 out of 252)



Top Peers

Company (Ticker)	Rec	Rank
Danaher Corporation (DHR)	Outperform	2
PerkinElmer, Inc. (PKI)	Outperform	1
Thermo Fisher Scientific Inc. (TMO)	Outperform	2
Agilent Technologies, Inc. (A)	Neutral	3
Hitachi Ltd. (HTHIY)	Neutral	5
MettlerToledo International, Inc. (MTD)	Neutral	3
Waters Corporation (WAT)	Neutral	3
General Electric Company (GE)	Underperform	4

Industry Comparison Industry: Instruments - Scientific				Industry Peers		
	BRKR	X Industry	S&P 500	MTD	PKI	WAT
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Outperform	Neutral
Zacks Rank (Short Term)	3	-	-	3	1	3
VGM Score	F	-	-	C	D	B
Market Cap	6.46 B	223.27 M	23.77 B	23.14 B	13.00 B	13.38 B
# of Analysts	6	5.5	14	5	6	7
Dividend Yield	0.38%	0.00%	1.65%	0.00%	0.24%	0.00%
Value Score	D	-	-	D	D	D
Cash/Price	0.12	0.09	0.07	0.01	0.02	0.03
EV/EBITDA	18.62	17.59	13.35	29.92	24.24	17.59
PEG Ratio	2.74	4.83	3.03	4.30	1.26	7.03
Price/Book (P/B)	7.18	1.97	3.17	51.41	4.36	NA
Price/Cash Flow (P/CF)	20.22	15.80	12.81	35.86	18.53	19.40
P/E (F1)	33.59	33.89	21.72	41.76	21.81	26.45
Price/Sales (P/S)	3.28	2.80	2.47	7.88	4.37	5.87
Earnings Yield	2.96%	2.96%	4.45%	2.40%	4.59%	3.78%
Debt/Equity	1.07	0.64	0.75	2.55	0.61	-8.40
Cash Flow (\$/share)	2.09	0.71	6.93	26.99	6.27	11.14
Growth Score	D	-	-	A	C	A
Hist. EPS Growth (3-5 yrs)	11.98%	11.00%	10.41%	14.75%	12.49%	10.01%
Proj. EPS Growth (F1/F0)	-20.70%	-7.25%	-4.92%	1.79%	29.96%	-9.11%
Curr. Cash Flow Growth	12.63%	7.99%	5.20%	7.99%	15.05%	-4.57%
Hist. Cash Flow Growth (3-5 yrs)	11.39%	9.94%	8.50%	9.94%	12.03%	5.07%
Current Ratio	2.61	1.95	1.33	1.41	1.32	1.82
Debt/Capital	51.60%	38.44%	44.20%	71.81%	37.79%	NA
Net Margin	8.35%	1.61%	10.25%	18.61%	9.87%	22.61%
Return on Equity	22.70%	-1.20%	14.66%	138.77%	18.40%	-349.31%
Sales/Assets	0.71	0.71	0.51	1.07	0.46	0.87
Proj. Sales Growth (F1/F0)	-7.38%	0.00%	-1.45%	-1.71%	10.26%	-7.02%
Momentum Score	C	-	-	C	D	C
Daily Price Chg	0.45%	0.14%	-0.03%	2.10%	0.87%	0.52%
1 Week Price Chg	-1.88%	-3.26%	-1.45%	-0.11%	-1.14%	0.39%
4 Week Price Chg	-2.68%	-0.36%	3.76%	9.73%	2.86%	-3.29%
12 Week Price Chg	-2.88%	12.78%	5.99%	17.51%	14.03%	6.56%
52 Week Price Chg	0.72%	13.86%	4.07%	49.53%	44.91%	5.85%
20 Day Average Volume	418,474	74,042	1,880,903	105,303	924,056	467,159
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	7.95%	8.93%	1.03%	9.91%	30.33%	0.79%
(F1) EPS Est 12 week change	8.73%	9.51%	3.40%	10.29%	40.80%	2.05%
(Q1) EPS Est Mthly Chg	-0.75%	10.52%	0.00%	21.79%	37.05%	-5.00%

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	D
Momentum Score	C
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

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