

Luminex Corporation (LMNX)

\$29.63 (As of 08/26/20)

Price Target (6-12 Months): **\$31.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 01/07/20)

Prior Recommendation: Underperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:A

Value: C

Growth: A

Momentum: A

Summary

Luminex exited the second quarter on a mixed note, with earnings beating estimates but revenues missing the same. Revenues at the Assay and Other segments witnessed an uptick during the quarter. The company continues to gain from its flagship ARIES and VERIGENE platforms that currently have a strong customer base. Also, the company witnessed total sample-to-answer molecular diagnostics revenue growth in the quarter. Expansion of both margins is a positive. The acquisition of the flow cytometry asset of Millipore Sigma continues to drive performance. Notably, a plethora of regulatory clearances instill optimism on the stock. Solid product portfolio expansion is also encouraging. Over the past year, the stock has outperformed its industry. However, revenues at each operating segment other than the Assay and Other segments declined in the quarter.

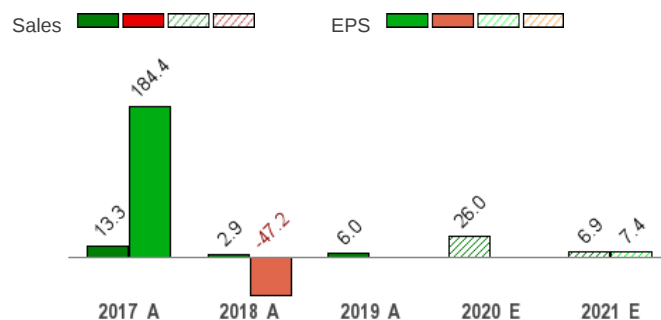
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$41.42 - \$17.35
20 Day Average Volume (sh)	882,755
Market Cap	\$1.4 B
YTD Price Change	27.9%
Beta	0.71
Dividend / Div Yld	\$0.36 / 1.2%
Industry	Medical - Instruments
Zacks Industry Rank	Bottom 34% (167 out of 252)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	237.5%
Last Sales Surprise	-0.1%
EPS F1 Est- 4 week change	224.0%
Expected Report Date	11/02/2020
Earnings ESP	0.0%

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	109 E	113 E	106 E	116 E	451 E
2020	90 A	110 A	106 E	116 E	422 E
2019	82 A	83 A	79 A	91 A	335 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$0.23 E	\$0.21 E	\$0.18 E	\$0.21 E	\$0.87 E
2020	\$0.01 A	\$0.27 A	\$0.21 E	\$0.32 E	\$0.81 E
2019	-\$0.07 A	-\$0.10 A	-\$0.12 A	\$0.07 A	-\$0.21 A

*Quarterly figures may not add up to annual.

P/E TTM	128.8
P/E F1	36.6
PEG F1	2.4
P/S TTM	3.7

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 08/26/2020. The reports text is as of 08/27/2020.

Overview

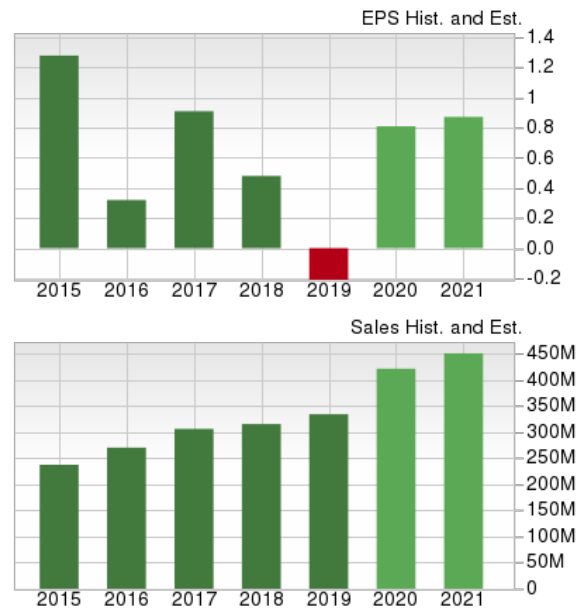
Luminex Corporation founded in 1995 and based in Austin, TX, develops, manufactures and markets proprietary biological testing technologies with applications throughout the life sciences and diagnostics industry. The company's open-architecture multiplexing xMAP (Multi-Analyte Profiling) technology is sold worldwide and is used by leading research laboratories as well as major pharmaceutical, diagnostic and biotechnology companies for conducting biological tests.

Its products include Luminex 100/200 that integrates fluidics, optics, and digital signal processing; FLEXMAP 3D system for use as a general laboratory instrument; MAGPIX system, a multiplexing analyzer for qualitative and quantitative analysis of proteins and nucleic acids; ARIES system, a sample to answer real-time PCR platform; ARIES M1 system, a single-module version of the ARIES System; and VERIGENE system, a semi-automated, multiplex, molecular analysis system for the clinical diagnostics market.

2019 at a Glance

Luminex's 2019 revenues grossed \$334.6 million, up 5.9% year over year.

- System sales were \$76.3 million (21% of net revenues)
- Consumables were \$48.5 million (14.5%)
- Royalty Revenues were \$53.6 million (16%)
- Assay Revenues were \$132 million (39.5%)
- Service Revenues were \$22.4 million (6.7%)
- Other revenues were \$7.8 million (2.3%).



Reasons To Buy:

▲ **Share Price Movement:** In the past year, shares of Luminex have gained 47.2%, compared with the industry's growth of 23.1%. The company continues to benefit from its flagship ARIES and VERIGENE platforms that currently have a strong customer base. Revenues at Assay and Other revenues also improved significantly. The acquisition of the flow cytometry asset of MilliporeSigma continues to positively impact performance.

▲ **Molecular Diagnostics Platform Solid:** The COVID-19 pandemic positively impacted the company's molecular diagnostic revenues. The company placed over 160 molecular diagnostic systems in the second quarter.

In the second quarter, total sample-to-answer molecular diagnostics revenues grew more than 100% from the prior-year quarter, mainly driven by increased demand from the COVID-19 pandemic. Non-automated Molecular Diagnostics revenues were up 150% year over year and sample-to-answer Molecular Diagnostics revenues grew 64%. Management anticipates Molecular Diagnostics revenue growth between 80% and 100% from the year-ago quarter.

▲ **Product Portfolio Strong:** Luminex has a broad product portfolio that comprises of its advanced xMAP, xTAG and Multi Code technology. Per management, 2020 will be a transformative year for the company owing to three new product launches supporting a return-to-accelerated growth.

The first new product is VERIGENE II system that will provide a fully automated solution, comprising room temperature storage with significantly reduced footprint, thereby achieving equivalent throughput to the current VERIGENE system.

Also, Luminex's Flow Cytometry group will launch the Guava easyCyte next generation system. The main objective of this system is to reinforce the company's position as a leader in the benchtop flow cytometry space. Given the software enhancements made to this system, the company is optimistic regarding generating a steady revenue stream from the newly acquired Flow Cytometry.

In the second quarter, the company launched a plethora of new testing solutions in response to the pandemic and anticipates launching several more very soon. At the same time, it continues to invest in the development of core technologies, including its VERIGENE portfolio, xMAP Technology and flow cytometry portfolios. Luminex expanded its sample-to-answer system installed base in the second quarter with more than 160 systems.

In July 2020, the company delivered the first of its new xMAP INTELLIFLEX Systems to several of its Life Science Research Partners. This marks a significant milestone in the company's strategy with respect to the expansion of its xMAP Technology with new functionality to facilitate new applications. By the end of 2020, the company intends to fully commercialize this next generation of xMAP Technology.

▲ **VERIGENE Platform Drives Growth:** Luminex' flagship VERIGENE System enables clinicians to identify the pathogens for some of the most complex, costly, and deadly infectious diseases.

Luminex's molecular portfolio integrated the next gen VERIGENE II system, which initiated clinical trial in June 2018. VERIGENE II is a higher-plex instrument that can run complex assays of more than 50 pathogens in less than two hours. Each VERIGENE II instrument can have up to six units in a system, allowing for up to six independent assays to be performed at once. The new VERIGENE II Plus component, which increases the power and flexibility of the VERIGENE II instrument, would be incorporated into the VERIGENE II system, allowing for faster turnaround times, and real time chemistry option.

In the second quarter, the company submitted SARS-CoV-2 stand-alone assay on VERIGENE I and is planning to submit soon for a FDA EUA for VERIGENE II Respiratory assay with the SARS-CoV-2 target.

▲ **The Aries Platform:** Luminex is making noteworthy progress with another major product– the ARIES system, which represents a major revenue opportunity for the company. Luminex is focused on fortifying its market leadership in infectious disease with sample to answer platform, the ARIES system. Notably, with respect to this product line, average annual utilization was up 7% from the prior year.

Per management, Luminex is the only company that provides solutions for both targeted and syndromic testing in a lab. Luminex received an approval from the U.S. FDA for the ARIES Group B Strep assay. Luminex received its fourth and fifth FDA clearances on the Aries assay platform in the recent past for ARIES Bordetella and ARIES C. Difficile assays. Luminex also gained CE-IVD marking for Norovirus and C. Difficile. In fact, the company is about to complete its clinical study for Group A Strep, which would be soon given for review to the U.S. FDA.

In the second quarter, the company raked in \$643,000 of revenues from the second BARDA contract that it inked associated with the development of its ARIES SARS-CoV-2 assay. The utilization rate for the company's ARIES systems was slightly more than 80,000 per ordering customer during the second quarter.

In our opinion, approval for Luminex's products in international markets will further strengthen its pipeline, which should help the company gain significant top-line growth over the long haul.

▲ **Plethora of Regulatory Approvals:** In the third quarter, Luminex's ARIES, MRSA Assay received FDA clearance, marking the company's eighth assay clearance globally.

In fact, on the international front, Japan's Central Social Insurance Medical Council had approved the recommendation by the Japanese Ministry of Health, Labor and Welfare ("MHLW") to provide reimbursement for two VERIGENE assays: The Gram-Positive Blood Culture (BC-GP) test and the Gram-Negative Blood Culture (BC-GN) test. Notably, Japan is the company's second largest market for molecular diagnostics.

Earlier, Luminex announced the receipt of FDA clearance for the ARIES Group A Strep Assay, which is a moderate complexity, sample to

Luminex is making significant progress with its ARIES system, plethora of regulatory approvals, and accretive acquisitions which we believe will drive market share expansion in the long run.

answer test for the direct detection of *Streptococcus pyogenes* from throat swab specimens using the ARIES System. Per management, this is the sixth assay that has been cleared by the FDA for use on the company's ARIES Systems in the last two years.

During the fourth quarter, the company submitted VERIGENE II Gastrointestinal Flex Assay to the FDA. Further, the company submitted VERIGENE II Respiratory Flex Assay to the FDA in first-quarter 2020 and then commercially launched the system and both assays soon after approval.

In March 2020, the company received EUA from the FDA for its NxTAGCoV Extended Panel that will be used to detect the SARS-CoV-2 virus. Now, high-complexity molecular laboratories can utilize the NxTAG test on Luminex's easy-to-use, compact MAGPIX System, which will help detect the virus causing COVID-19 for up to 96 patients in about four hours. In April, the company announced the receipt of EUA from the FDA for its ARIES SARS-CoV-2 Assay that can rapidly detect the virus causing COVID-19.

In June, the company submitted an EUA request to the FDA for its xMAP SARS-CoV-2 Multi-Antigen IgG assay. The assay has been created to offer additional capacity to detect antibodies in patients who might have been exposed to or infected by SARS-CoV-2. Notably, this COVID-19 antibody test can deliver outstanding results for up to 96 samples in under three hours and has been developed to run on all xMAP platforms.

In July, the company received EUA from the FDA for its xMAP SARS-CoV-2 Multi-Antigen immunoglobulin class G (IgG) Assay. Clinical laboratories can now utilize this serology assay to detect the presence of antibodies in people affected by the virus causing COVID-19. Notably, this is the company's third COVID-19 test to receive EUA since March 2020.

▲ **Strategic Collaborations:** Luminex has entered collaborative agreements with several companies, which should help expand the use of its products/technology. An agreement with EDP Biotech Corporation buoys optimism, wherein EDP will have the rights to develop, market and sell its blood-based colorectal cancer diagnostic assay, ColoPlex, utilizing Luminex's xMAP technology.

Luminex had also announced earlier the signing of a new supply and distribution agreement with Bio-Techne Corp. through 2020. The partnership deal involves immunoassay development and commercialization of Bio-Techne biological content using the Luminex testing platform.

▲ **Promising Market Trends:** Luminex is a leading player in the molecular diagnostics space. The company offers more than 15,000 products encompassing 16 different categories. The categories include Recombinant Proteins, GMP Proteins, Antibodies, ELISAs, Luminex Assays and High-Performance Assays, Stem Cell Products, Cell Culture, Small Molecules & Peptides and more. In the global scenario, a report by Grand View Research reveals that the molecular diagnostics market is estimated to witness a CAGR of 9.1% to reach \$19.8 billion by 2026. Such market trends can also prove accretive for Luminex.

▲ **Balance Sheet View:** Luminex exited the second quarter with cash and cash equivalents amounting to \$292 million, up sequentially from \$43 million. Long-term debt at the end of the quarter was \$214 million, up from \$17 million sequentially. However, the company finished the second quarter with no current debt on its balance sheet. Also, cumulative net cash provided by operating activities at the end of the second quarter of 2020 was \$24.1 million against cumulative net cash used in operating activities of \$1.2 million in the year-ago quarter. This is particularly good when it comes to the company's solvency position, as at least during a year of economic downturn, the company has sufficient cash for debt repayment.

Reasons To Sell:

▼ **Headwinds:** In the second quarter, revenues at System Sales segment declined 16.7% from the year-ago quarter. Consumable Sales segment was down 11% year over year. Royalty revenues were down 5.5% on a year-over-year basis. Revenues at the Service segment were down 8.3% from the year-ago quarter.

▼ **Challenging Reimbursement Landscape:** Luminex may be impacted by future changes to the reimbursement landscape. As per the new molecular diagnostic code system established by the Centers for Medicare and Medicaid Services (CMS) in recent past, the Protecting Access to Medicare Act (PAMA) will require clinical laboratories to report to CMS the volume of each laboratory test and the price paid by private payors. This has led to a drop in Luminex's lab customer traffic.

A number of Luminex' lab customers have experienced several headwinds and delays, all of which are resulting in lower than anticipated testing volumes for the customers and resultantly decreased assay revenues for the ARP segment. Additionally, budget sequestration in the U.S. adds to the reimbursement risk for the company.

▼ **Cutthroat Competition in Life-sciences Industry:** Luminex operates in the highly competitive life sciences industry. The industry is characterized by rapid and continuous technological innovation. Currently, it is facing significant competitive headwinds in the respiratory market.

▼ **Reduced Spending by Partner Companies:** Luminex is highly dependent on its partners for revenue generation. The company's customers include clinical diagnostic, pharmaceutical, biotechnological, chemical and industrial companies. Reduced spending on research and diagnostics by these companies is adversely impacting the demand for the company's products. In general, spending on research and drug discovery remains weak given the soft macroeconomic conditions. Moreover, the company's consumable sales have been fluctuating considerably over the last 3 years mainly due to periodic changes in volume of the company's largest bulk purchasing partners. These fluctuations are expected to remain as the ordering patterns and inventory levels of Luminex's largest bulk purchasing partners continue to be variable. This lower level of purchasing is expected to continue over the next several years.

Reimbursement risk and fluctuations in consumables revenues are major headwinds faced by the company in the near term.

Last Earnings Report

Luminex Q2 Earnings Beat Estimates, Revenues Miss

Luminex Corporation reported second-quarter 2020 adjusted earnings of 27 cent per share , beating the Zacks Consensus Estimate of 8 cents. The company reported loss per share of 11 cents in the year-ago period.

Revenues came in at \$109.5 million, missing the Zacks Consensus Estimate by a marginal 0.1%. However, the top line improved 31.8% on a year-over-year basis.

Total sample-to-answer molecular diagnostics revenues grew more than 100% from the prior-year quarter.

Segmental Analysis

System Sales

Revenues at this segment totaled \$15.5 million, declined 16.7% from the year-ago quarter.

Consumable Sales

This segment accounted for \$11.3 million of revenues, down 11% year over year.

Royalty Revenues

Royalty revenues totaled \$12.1 million, down 5.5% on a year-over-year basis.

Assay Revenues

This segment reported revenues worth \$61.2 million, up 94.9% on a year-over-year basis.

Service Revenues

Revenues in the segment amounted to \$5.5 million, down 8.3% from the year-ago quarter.

Other

Other revenues came in at \$3.9 million, up 160% from the prior-year quarter.

Financial Update

The company exited second quarter with cash and cash equivalents totaled \$291.7 million, up from \$43.1 million on a sequential basis.

Cumulative net cash provided by operating activities at the end of second quarter of 2020, came in at \$24.1 million, against cumulative net cash used in operating activities of \$1.2 million in the year-ago period.

Margins

Gross profit in the reported quarter was \$69.7 million, up 54.1% year over year. Gross margin was 63.6%, expanding 917 (basis points) bps.

The company reported adjusted operating profit of \$21.6 million, against the year-ago quarter's adjusted operating loss of \$2.9 million. Adjusted operating margin came in at 19.7%, an expansion of 2324 bps.

2020 Guidance

Luminex projects third-quarter 2020 revenue to be at or above \$100 million, reflecting growth above 26% from figure reported in third quarter 2019. The Zacks Consensus estimate for the same is pegged at \$93.3 million.

Revenue for the full -year 2020 is estimated to be at or above \$415 million, reflecting growth over 24% from figure reported in 2019. The Zacks Consensus estimate for the same is pegged at \$407.4 million.

It is important to note here that the company expects to present an updated full-year revenue outlook in its third-quarter earnings release.

Quarter Ending 06/2020

Report Date	Aug 04, 2020
Sales Surprise	-0.07%
EPS Surprise	237.50%
Quarterly EPS	0.27
Annual EPS (TTM)	0.23

Recent News

Luminex Submits EUA Request for Expanded NxTAG RPP Test: Jul 22, 2020

Luminex has submitted an Emergency Use Authorization request to the FDA for a new expanded version of its NxTAG Respiratory Pathogen Panel (RPP) in order to include the SARS-CoV-2 virus for high-throughput COVID-19 testing.

Luminex Receives EUA for New COVID-19 Antibody Test: Jul 20, 2020

Luminex announced that it has received Emergency Use Authorization (EUA) from the FDA for its xMAP SARS-CoV-2 Multi-Antigen immunoglobulin class G (IgG) Assay. Clinical laboratories can now utilize this serology assay to detect the presence of antibodies in people affected by the virus causing COVID-19. Notably, this is the company's third COVID-19 test to receive EUA since March 2020.

Luminex Boosts Product Portfolio With New xMAP Technology: Jul 1, 2020

Luminex delivered the first of its new xMAP INTELLIFLEX Systems to several of its Life Science Research Partners. This marks a significant milestone in the company's strategy with respect to the expansion of its xMAP Technology with new functionality to facilitate new applications.

Valuation

Luminex's shares are up 27.9% and 47.2% in the year-to-date period and the trailing 12-month periods, respectively. Stocks in the Zacks sub-industry and Zacks Medical sector are up 17.3% and down 0.5% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry is up 23.1% while the sector is up 9.5%.

The S&P 500 index is up 6.9% in the year-to-date period and 19.5% in the past year.

The stock is currently trading at 3.1X Forward 12-months sales, which compares to 4.4X for the Zacks sub-industry, 2.8X for the Zacks sector and 3.8X for the S&P 500 index.

Over the past five years, the stock has traded as high as 4.9X and as low as 0.02X, with a 5-year median of 3.1X.

Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$31 price target reflects 3.3X forward 12-months sales.

The table below shows summary valuation data for LMNX.

Valuation Multiples - LMNX					
		Stock	Sub-Industry	Sector	S&P 500
P/S F12M	Current	3.11	4.44	2.81	3.77
	5-Year High	4.88	4.44	3.42	3.77
	5-Year Low	0.02	2.52	2.23	2.53
	5-Year Median	3.11	3.09	2.89	3.05
P/B TTM	Current	2.69	4.54	3.85	4.66
	5-Year High	3.82	4.77	5.07	4.66
	5-Year Low	1.71	2.75	2.94	2.83
	5-Year Median	2.24	3.9	4.29	3.76
EV/SALES TTM	Current	3.46	5.39	3.42	3.38
	5-Year High	5.08	5.43	3.84	3.46
	5-Year Low	2.28	3.06	2.61	2.15
	5-Year Median	2.96	3.92	3.37	2.88

As of 08/26/2020

Industry Analysis Zacks Industry Rank: Bottom 34% (167 out of 252)



Top Peers

Company (Ticker)	Rec	Rank
PerkinElmer, Inc. (PKI)	Outperform	1
Quidel Corporation (QDEL)	Outperform	1
QIAGEN N.V. (QGEN)	Outperform	1
Thermo Fisher Scientific Inc. (TMO)	Outperform	2
Abbott Laboratories (ABT)	Neutral	3
Becton, Dickinson and Company (BDX)	Neutral	3
BioRad Laboratories, Inc. (BIO)	Neutral	2
Illumina, Inc. (ILMN)	Underperform	5

Industry Comparison Industry: Medical - Instruments				Industry Peers		
	LMNX	X Industry	S&P 500	BDX	ILMN	TMO
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Underperform	Outperform
Zacks Rank (Short Term)	3	-	-	3	5	2
VGM Score	A	-	-	C	D	C
Market Cap	1.37 B	133.01 M	23.69 B	73.62 B	51.62 B	168.38 B
# of Analysts	4	2	14	10	7	8
Dividend Yield	1.22%	0.00%	1.65%	1.24%	0.00%	0.21%
Value Score	C	-	-	C	D	C
Cash/Price	0.20	0.12	0.07	0.04	0.06	0.03
EV/EBITDA	68.09	-1.58	13.37	21.57	35.39	26.09
PEG Ratio	2.12	4.04	3.04	3.22	11.51	1.87
Price/Book (P/B)	2.69	3.49	3.17	3.07	11.39	5.64
Price/Cash Flow (P/CF)	69.33	23.41	12.78	12.23	42.95	23.54
P/E (F1)	31.77	49.53	21.63	25.62	80.59	28.02
Price/Sales (P/S)	3.72	4.42	2.50	4.35	15.40	6.42
Earnings Yield	2.73%	-3.67%	4.44%	3.90%	1.24%	3.57%
Debt/Equity	0.42	0.13	0.75	0.71	0.29	0.69
Cash Flow (\$/share)	0.43	-0.13	6.94	20.77	8.23	18.08
Growth Score	A	-	-	B	C	B
Hist. EPS Growth (3-5 yrs)	-26.00%	10.12%	10.41%	10.16%	20.27%	14.10%
Proj. EPS Growth (F1/F0)	485.71%	7.56%	-4.92%	-15.11%	-33.23%	23.00%
Curr. Cash Flow Growth	-57.32%	5.66%	5.22%	14.64%	13.10%	6.99%
Hist. Cash Flow Growth (3-5 yrs)	-15.21%	10.65%	8.50%	24.86%	16.75%	10.08%
Current Ratio	7.25	2.94	1.34	1.45	3.76	2.62
Debt/Capital	29.75%	18.30%	44.18%	41.57%	22.70%	40.86%
Net Margin	3.04%	-25.57%	10.25%	5.30%	20.67%	14.12%
Return on Equity	2.38%	-17.25%	14.66%	14.19%	19.13%	18.18%
Sales/Assets	0.62	0.53	0.50	0.32	0.46	0.45
Proj. Sales Growth (F1/F0)	26.10%	0.00%	-1.45%	-2.67%	-12.78%	9.77%
Momentum Score	A	-	-	D	D	F
Daily Price Chg	-1.36%	0.00%	-0.18%	-0.71%	0.74%	0.80%
1 Week Price Chg	1.94%	-1.62%	-1.45%	-0.17%	1.59%	3.58%
4 Week Price Chg	-17.67%	-0.12%	2.10%	-8.11%	-8.23%	4.00%
12 Week Price Chg	-4.39%	0.00%	3.61%	4.50%	-1.33%	22.60%
52 Week Price Chg	47.19%	3.10%	3.61%	0.38%	25.55%	54.19%
20 Day Average Volume	882,755	244,212	1,883,291	1,337,392	935,291	1,094,757
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	224.00%	4.03%	0.93%	-4.23%	-28.62%	1.57%
(F1) EPS Est 12 week change	367.31%	4.63%	3.41%	-5.27%	-29.78%	27.43%
(Q1) EPS Est Mthly Chg	937.50%	3.60%	0.00%	-16.11%	-55.69%	0.00%

Zacks Stock Rating System

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

Zacks Recommendation

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

Zacks Rank

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

Zacks Style Scores

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

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

Value Score	C
Growth Score	A
Momentum Score	A
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.

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.