

Viasat, Inc. (VSAT)

\$45.55 (As of 04/29/20)

Price Target (6-12 Months): **\$48.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 12/10/19)

Prior Recommendation: Outperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:B

Value: C

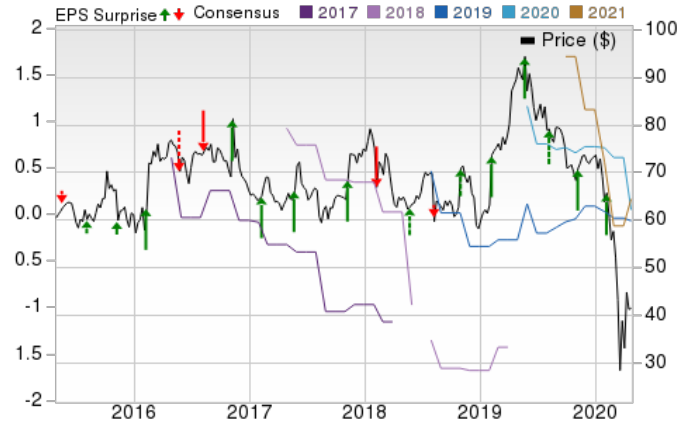
Growth: A

Momentum: F

Summary

Viasat is seeking opportunities to extend broadband satellite mobility to rotary-wing aircraft as it is a large addressable market that can emerge as a key profit churner. It continues to ramp up investments in the development of its revolutionary ViaSat-3 broadband communications platform, which is expected to have about 10 times the bandwidth capacity of ViaSat-2. ARPU is growing on the back of a solid retail distribution network, which accounts for an increasing proportion of high value and high bandwidth subscriber base. However, the company operates in a highly dynamic and competitive market. Massive R&D expenses related to the commercial launch of Viasat-3 satellites and high integration costs are headwinds. It depends on U.S. government contracts for a major portion of its revenues, and thus faces risks of customer concentration.

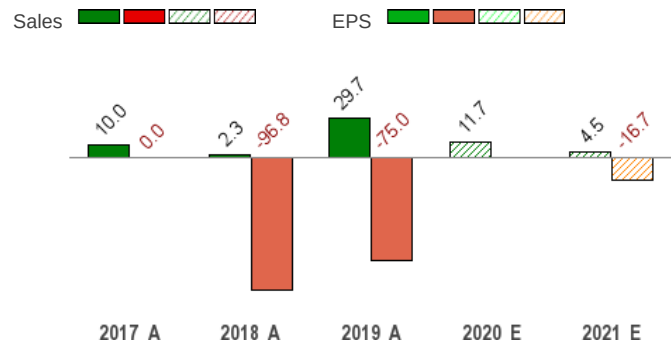
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$97.31 - \$25.10
20 Day Average Volume (sh)	385,665
Market Cap	\$2.8 B
YTD Price Change	-37.8%
Beta	1.12
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Wireless Equipment
Zacks Industry Rank	Top 25% (62 out of 253)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	1,100.0%
Last Sales Surprise	0.3%
EPS F1 Est- 4 week change	-131.2%
Expected Report Date	05/28/2020
Earnings ESP	-108.3%

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	499 E	544 E	586 E	617 E	2,412 E
2020	537 A	592 A	588 A	581 E	2,309 E
2019	439 A	517 A	555 A	557 A	2,068 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	-\$0.22 E	-\$0.05 E	\$0.10 E	\$0.15 E	-\$0.14 E
2020	\$0.10 A	\$0.05 A	\$0.10 A	-\$0.06 E	-\$0.12 E
2019	-\$0.30 A	-\$0.15 A	\$0.12 A	\$0.33 A	\$0.01 A

*Quarterly figures may not add up to annual.

P/E TTM	78.5
P/E F1	NA
PEG F1	NA
P/S TTM	1.2

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 04/29/2020. The reports text is as of 04/30/2020.

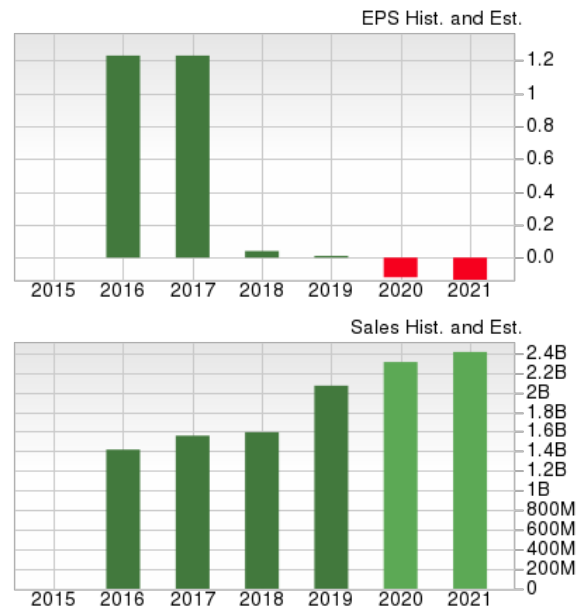
Overview

Headquartered in Carlsbad, CA, Viasat designs, develops and markets advanced digital satellite telecommunications and other wireless networking and signal processing equipment. The company serves its high-bandwidth, high-performance communications solutions to public as well as military, enterprises and governments enterprises.

Viasat provides broadband services named 'Exede' in North America. This features the world's highest capacity satellite – ViaSat-1; satellite broadband networking systems; global mobile satellite services comprising high-speed in-flight Internet as well as global tracking and messaging; and Wi-Fi and other hotspot support, operations and management systems. Apart from these, the company offers cybersecurity and network-centric military communication systems for the U.S. government and its alliances.

Viasat has three operating segments that are as follows:

- **Satellite Services** (36% of total revenues in third-quarter fiscal 2020): Under this segment, Viasat offers retail and wholesale satellite-based broadband services to mobile broadband customers and enterprises mainly in the U.S. Apart from providing Exede broadband services, the company presents a platform for network management services provision to national and international satellite service providers.
- **Commercial Networks** (14.4%): The segment creates and produces a varied range of comprehensive and advanced satellite and other wireless communication systems as well as ground networking equipment and products. These offerings are aimed at addressing five key market segments: consumer, enterprise, maritime, in-flight and ground mobile applications.
- **Government Systems** (49.6%): Through this segment, Viasat creates and presents network-centric IP-based fixed and mobile secure government communications systems and solutions for its federal customers such as DoD, armed forces, public safety first-responders and remote government employees. The segment offering is strategized at aiding the collection and distribution of secure real-time digital information between communications nodes, command centers and air defense systems.



Reasons To Buy:

- ▲ Viasat enjoys a leading position in the satellite and wireless communications market. With the rapid proliferation of the smartphone market and usage of mobile broadband, the user demand for coverage speed and quality has increased, which in turn is fueling the demand for network tuning and optimization to maintain high data traffic. The company attracts millions of U.S. consumers and enterprises by its high-quality broadband service. Encouragingly, Viasat's blue-chip customer base, which comprises of the U.S. Department of Defense, civil agencies, allied foreign governments, satellite network integrators as well as large communications service providers and enterprises adds to its strength. Currently, the company's Government Systems is acting as a major profit churner. Going forward, Viasat is eyeing opportunities to extend broadband satellite mobility to rotary wing aircraft, as it is a large addressable market that can emerge as a key profit churner.
- ▲ Viasat's Satellite Services business is progressing well, with key metrics including steady growth of ARPU (average revenue per user) and revenues showing impressive growth. ARPU is growing on the back of solid retail distribution network, which accounts for a growing proportion of high value and high bandwidth subscriber base. Further, growing adoption of in-flight Wi-Fi services in commercial aircrafts are proving conducive to the growth of the Satellite Services business. Additionally, Viasat's in-flight Internet services are on a roll with commercial flights like Virgin America and Boeing increasingly adopting them, and this has been driving significant revenue growth over the past few quarters. The commercial in-flight Wi-Fi business continues to make steady gains. With the surging popularity of high-engagement in-flight connectivity and high passenger engagement, leading airline companies are scouting for new ways to utilize Viasat's high capacity satellite solutions to maximize passenger satisfaction. Viasat signed a contract with JetBlue, for both aircraft connectivity and on-board Wi-Fi distribution. Under the contract, Viasat will upgrade JetBlue's fleet with its next-generation connectivity suite. Viasat's impressive bandwidth productivity sets it apart from conventional and lower-yield satellites providers who run on incumbent business models. Also, Viasat has a competitive advantage in bandwidth economics, global coverage, flexibility and bandwidth allocation, which makes it believe that mobile broadband will act as a profit churner.
- ▲ Viasat is ramping up investments in the development of its revolutionary ViaSat-3 broadband communications platform, which will boast nearly 10 times the bandwidth capacity of ViaSat-2. The ViaSat-3 payload program has begun its transition to the construction phase. These satellites will be capable of covering one-third of the world, including all Americas. The second ViaSat-3 will cover the Europe, the Middle East and Africa region, launching in 2020. The ViaSat-3 platform will help to form a global broadband network with sufficient network capacity to allow better consumer choices with an affordable, high-quality, high-speed Internet and video streaming service. In a nutshell, Viasat has garnered enough economics of scale and scope to serve vast emerging markets in South America, Africa, the Middle East and Western Asia. Hence, momentous market traction of ViaSat-1 and ViaSat-2 satellites, coupled with strategically planned ViaSat 3 satellites, are expected to provide Viasat with a solid competitive edge over its peers, thereby bolstering growth in long run.
- ▲ Furthermore, the company has augmented its footprint in the U.K. defense market with the acquisition of Horsebridge Defence & Security. The transaction has extended its long-term business relationship with the country's Armed Forces and has enabled it to provide superior support system for Ministry of Defense programs.
- ▲ As of Dec 31, 2019, Viasat had \$47.8 million in cash and equivalents with \$289.2 million of non-current operating lease liabilities. The company currently has a debt-to-capital ratio of .48 compared with 0.34 of the sub-industry. The times interest earned has improved steadily over the past few quarters to 0.9 at present relative to 5.8 for the sub-industry. This shows that the company is more likely to clear its debt. It remains to be seen whether Viasat can maintain the momentum in the coming days amid disruptions caused by COVID-19 pandemic.

Viasat has witnessed solid growth in Government Systems segment and in-flight connectivity while enjoying favorable industry trends. It is ramping up investments for ViaSat-3 communication platform.

Reasons To Sell:

- ▼ Viasat operates in a dynamic and competitive market, which includes stalwarts from varied industries. In its Satellite Services segment, the company faces competition from companies like AT&T, CenturyLink, Comtech and DISH Network. On the other hand, its Government Systems segment faces threats from manufacturers of defense electronics products and systems such as General Dynamics. Hence, to combat such competitive pressure, Viasat has to continuously customize its network offering as per needs, enhance cost-effectiveness of its products and services, and boost the satellite data networks. Increased competition results in price reductions, reduced margins, and loss of market share, which has an adverse effect on the results of operations.
- ▼ Although Viasat's acquisition strategy has significant long-term impact, it has led to integration risks in the near term. Failure to successfully integrate the newly acquired companies into its own business model is likely to hurt the company's financials. Moreover, though the company's research and development activities promise long-term prospects, they weigh on net income in the near term. This apart, the company anticipates incurring huge rise in research and development activities related to the launch of ViaSat-3 satellites that can materially impact its margins and bottom line.
- ▼ Viasat's Satellite Services segment is highly affected by seasonality of demand due to traditional retail selling periods. Historically, March through May of any year proves to be expensive months for the company in terms of subscriber acquisition. Additionally, the sales activity is mostly high during the second half of every calendar year. Any failure in promotional and subscriber retention efforts, changes in third parties, changes in subscribers' approval processes will likely magnify the sales activity and churn rate. In addition, there may be a number of technical problems in relation with the performance of satellites, as they utilize highly complex technology and operate in the harsh environment, which may pose concerns for Viasat's future profitability. For instance, problems associated with the power sub-systems, control sub-systems and degradation or unforeseen anomalies in space can pose material threats to profitability.
- ▼ Viasat depends on U.S. Government contracts for a major part of its revenues. In future, any additional Federal budgetary pressure will likely lead to deeper-than-expected cuts in defense spending, significantly impacting the company's business prospects. A shift in the U.S. Government's foreign policy may result in the termination of some major international contracts. Moreover, as the company's international sales and operations are subject to laws related to trade, export controls and foreign corrupt practices and others, failures to comply with them are expected to hurt its financials.

Viasat expects to incur huge R&D costs relating to the commercial service launch of ViaSat-3 satellites, which can materially impact its margins and bottom line.

Last Earnings Report

Viasat Q3 Earnings & Revenues Beat Estimates, Up Y/Y

Viasat reported solid third-quarter fiscal 2020 results, wherein both the bottom line and the top line surpassed the respective Zacks Consensus Estimate, and increased year over year.

Net Income

On a GAAP basis, net income for the December quarter was \$6.5 million or 10 cents per share against net loss of \$10.4 million or loss of 17 cents per share in the year-ago quarter. The improvement was primarily driven by top-line growth. The bottom line surpassed the Zacks Consensus Estimate by 11 cents.

Non-GAAP net income came in at \$24.7 million or 39 cents per share compared with \$6.9 million or 12 cents per share in the prior-year quarter.

Revenues

Quarterly total revenues increased 6% year over year to \$588.2 million from \$554.7 million. This was driven by strong revenue growth in both Satellite Services and Government Systems segment backed by sustained backlog and new contract awards, partially offset by decline in the Commercial Networks segment. While product revenues totaled \$303.1 million, up 0.4% year over year, service revenues grew 12.8% to \$285.1 million. The top line surpassed the consensus estimate of \$586 million.

Segment Results

Revenues from **Satellite Services** increased 19.1% year over year to \$211.7 million, setting a record high. Markedly, the segment achieved its eighth sequential quarter of revenue growth. The performance was led by record-high average revenue per user, up 15% year over year to \$89.71 primarily driven by the addition of new subscribers to premium broadband service plans.

Impressively, Viasat established robust customer relationships with the sequential growth of Community Wi-Fi internet hotspots, while residential broadband services were introduced in Mexico. Subsequent to the quarter end, the company announced that it is diversifying its third-party platform engagement program by introducing first-of-its-kind live TV streaming services, fuboTV, to the U.S. aviation market.

The segment's operating profit was \$3.6 million against loss of \$10.2 million in the year-ago quarter. Adjusted EBITDA was \$75.1 million, up 32.5% driven by higher mobile and fixed broadband revenues related to the ViaSat-2 satellite system.

Commercial Networks revenues were down 33.3% to \$84.7 million due to the accelerated American Airlines install schedule in the prior-year quarter. The segment's operating loss was \$46.9 million compared with loss of \$31.2 million in the year-ago quarter. Adjusted EBITDA was negative \$30.6 million compared with negative \$17 million a year ago, due to lower IFC terminal deliveries and higher R&D costs in relation to ViaSat-3 ground and space segments.

Revenues from **Government Systems** increased 16.7% year over year to \$291.8 million, owing to augmented positions in the data links, satcom and mobile networking offerings. The segment's operating profit was \$59.1 million, up 18.4% year over year. Adjusted EBITDA was \$77.8 million, up 12.8% year over year, mainly due to robust performance across government satellite communication systems, reconnaissance, tactical data links and global mobility/intelligence surveillance.

Other Details

Total operating income was \$14 million compared with \$6 million in the year-earlier quarter. Adjusted EBITDA witnessed a record high of \$122.3 million compared with \$108.7 million a year ago.

Cash Flow & Liquidity

During the first nine months of fiscal 2020, Viasat generated \$293.4 million of cash from operations compared with \$214.7 million in the year-ago period.

As of Dec 31, 2019, the satellite and wireless networking technology provider had \$47.8 million in cash and equivalents with \$289.2 million of non-current operating lease liabilities.

Quarter Ending **12/2019**

Report Date	Feb 06, 2020
Sales Surprise	0.34%
EPS Surprise	1,100.00%
Quarterly EPS	0.10
Annual EPS (TTM)	0.58

Recent News

On Mar 16, 2020, Viasat announced that it has participated in the Federal Communications Commission's ("FCC") 'Keep Americans Connected' initiative. The company intends to work with its residential and small business customers to keep them connected, while minimizing potential health and economic impacts associated with the coronavirus (COVID-19) outbreak.

On Mar 5, 2020, Viasat announced the expansion of its global leadership team with the addition of Jim Dodd, as president, Global Mobile Solutions; Peter Langkilde, as vice president and head of Broadband Services for Europe, Middle East and Africa; and Dr. Krishna Nathan, as chief information officer.

On Mar 5, 2020, Viasat announced that it has inked a Strategic Alliance Agreement with Blacktree Technology, an Australia-based communications systems design and integration company. The companies will provide in-country manufacturing and support services for Ultra High Frequency satellite communications systems of the Australian Defence Force.

On Mar 2, 2020, Viasat announced that it has inked an agreement with Japan Airlines to deploy its Aerodocs document management system to support the airline's safety and compliance objectives. The comprehensive product offering is likely to transform the information management strategy of the airline firm and enable it to take more informed, data-driven decisions.

On Feb 6, 2020, Viasat announced that it has appointed Dr. Theresa Wise to its board of directors. Dr. Wise will serve as a class I director, with an initial term expiring at the company's 2021 annual meeting of stockholders. With this, the board currently consists of eight members, six of whom are independent directors.

On Feb 6, 2020, Viasat and fuboTV, a sports and news-focused live TV streaming service, announced a video streaming distribution and technology partnership that advances how content can be delivered and consumed in-flight. Viasat is working with airlines to develop innovative technology tools and business models that align with their brand and interest in engaging more passengers with in-flight Wi-Fi at the lowest cost. Viasat's partnership with fuboTV uses state-of-the-art technology to leverage its bandwidth advantage to offer reliable, high quality OTT, live or on-demand.

On Jan 21, 2020, Viasat announced that it has secured a prime contract from the U.S. Air Force to fortify the tactical data networking capabilities of warfighters. The indefinite-delivery/indefinite-quantity contract, worth a maximum ceiling of \$90 million, will enhance situational awareness and mission co-ordination across military branches with improved communication system in a multi-domain battlespace. Per the deal, Viasat will offer Battlefield Awareness Targeting System—Dismounted (BATS-D) handheld Link 16 radios along with associated operator training and maintenance to the U.S. Air Force.

Valuation

Viasat shares are down 49.4% over the trailing 12-month period. Stocks in the Zacks sub-industry are down 14.3%, while those in the Zacks Computer and Technology sector are up 6.9% over the past year.

The S&P 500 Index is up 0.2% in the past year.

The stock is currently trading at 12.89X trailing 12-month EV/EBITDA, which compares to 19.09X for the Zacks sub-industry, 11.38X for the Zacks sector and 10.76X for the S&P 500 Index.

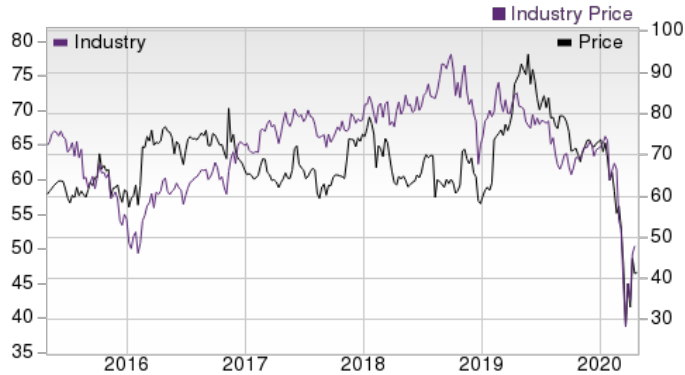
Over the past five years, the stock has traded as high as 32.3X and as low as 9.8X, with a 5-year median of 16.3X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$48 price target reflects 34.28X trailing 12-month book value.

The table below shows summary valuation data for VSAT

Valuation Multiples - VSAT					
		Stock	Sub-Industry	Sector	S&P 500
EV/EBITDA TTM	Current	12.89	19.09	11.38	10.76
	5-Year High	32.3	25.88	12.85	12.87
	5-Year Low	9.77	9.84	7.56	8.27
	5-Year Median	16.3	16.25	10.63	10.78
P/B TTM	Current	1.4	5.75	4.64	3.89
	5-Year High	3.36	7.16	5.38	4.55
	5-Year Low	0.84	2.62	3.16	2.84
	5-Year Median	2.31	3.76	4.29	3.64
P/S F12M	Current	1.14	2.97	3.53	3.3
	5-Year High	2.6	3.52	3.59	3.44
	5-Year Low	0.67	2.07	2.32	2.54
	5-Year Median	2.06	2.77	3.09	3.01

As of 04/29/2020

Industry Analysis Zacks Industry Rank: Top 25% (62 out of 253)



Top Peers

Company (Ticker)	Rec	Rank
InterDigital, Inc. (IDCC)	Outperform	1
Aviat Networks, Inc. (AVNW)	Neutral	3
Comtech Telecommunications Corp. (CMTL)	Neutral	4
PCTEL, Inc. (PCTI)	Neutral	3
Sonim Technologies, Inc. (SONM)	Neutral	3
Sierra Wireless, Inc. (SWIR)	Neutral	3
Ubiquiti Inc. (UI)	Neutral	3
China Teletch Holding Inc. (CNCT)	NA	NA

Industry Comparison Industry: Wireless Equipment				Industry Peers		
	VSAT	X Industry	S&P 500	BA	SWIR	UI
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	3	-	-	3	3	3
VGM Score	B	-	-	F	D	B
Market Cap	2.83 B	340.48 M	20.82 B	78.28 B	340.48 M	10.74 B
# of Analysts	2	3	14	5	4	1
Dividend Yield	0.00%	0.00%	2.07%	0.00%	0.00%	0.72%
Value Score	C	-	-	C	D	D
Cash/Price	0.02	0.18	0.06	0.14	0.24	0.01
EV/EBITDA	17.87	9.23	12.12	110.82	-12.49	27.99
PEG Ratio	NA	1.76	2.51	NA	NA	2.38
Price/Book (P/B)	1.40	1.57	2.74	NA	0.89	NA
Price/Cash Flow (P/CF)	10.98	14.46	11.23	256.73	NA	33.65
P/E (F1)	NA	20.59	19.26	NA	NA	29.88
Price/Sales (P/S)	1.24	1.21	2.16	1.11	0.48	8.93
Earnings Yield	-0.31%	4.55%	5.03%	-2.45%	-4.80%	3.35%
Debt/Equity	0.90	0.15	0.72	-2.41	0.18	-2.17
Cash Flow (\$/share)	4.15	0.49	7.01	0.54	-0.10	4.92
Growth Score	A	-	-	F	C	A
Hist. EPS Growth (3-5 yrs)	-97.01%	-5.87%	10.88%	14.14%	-18.62%	25.38%
Proj. EPS Growth (F1/F0)	-12.50%	-12.50%	-6.94%	1.73%	-4,400.00%	16.14%
Curr. Cash Flow Growth	22.20%	-18.50%	5.92%	-97.35%	-108.17%	18.36%
Hist. Cash Flow Growth (3-5 yrs)	6.34%	4.04%	8.55%	-48.30%	NA	14.25%
Current Ratio	1.39	1.74	1.23	1.05	1.54	2.59
Debt/Capital	47.49%	19.45%	43.90%	NA	15.31%	NA
Net Margin	0.03%	3.15%	11.15%	-4.84%	-9.89%	28.52%
Return on Equity	0.04%	3.33%	16.47%	-3.57%	-4.32%	-592.27%
Sales/Assets	0.53	0.78	0.54	0.54	1.08	1.49
Proj. Sales Growth (F1/F0)	4.45%	-0.15%	-1.52%	-14.63%	-2.40%	8.69%
Momentum Score	F	-	-	D	F	A
Daily Price Chg	6.00%	3.30%	2.91%	5.86%	4.46%	2.92%
1 Week Price Chg	0.56%	0.00%	-1.74%	-16.25%	10.13%	-2.07%
4 Week Price Chg	38.49%	18.18%	21.33%	6.35%	70.67%	23.23%
12 Week Price Chg	-31.67%	-12.90%	-16.28%	-57.82%	-6.39%	-1.49%
52 Week Price Chg	-49.42%	-16.90%	-7.57%	-63.11%	-29.71%	-2.47%
20 Day Average Volume	385,665	133,989	2,658,107	36,976,420	455,624	133,989
(F1) EPS Est 1 week change	-417.65%	0.00%	0.00%	-12.17%	-52.35%	0.00%
(F1) EPS Est 4 week change	-131.21%	0.00%	-6.32%	-536.06%	-52.35%	0.00%
(F1) EPS Est 12 week change	-119.01%	-12.13%	-12.93%	-144.66%	-398.08%	-4.50%
(Q1) EPS Est Mthly Chg	-379.17%	0.00%	-11.84%	-186.24%	0.00%	NA

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	F
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.