

# FLIR Systems, Inc. (FLIR)

\$57.68 (As of 04/05/21)

Price Target (6-12 Months): \$61.00

Law Tames O 40 Mantha	Zaalaa Daaaa		Neutral		
Long Term: 6-12 Months	Zacks Recor	Zacks Recommendation:			
	(Since: 11/30/20)				
	Prior Recommendation: Underperform				
Short Term: 1-3 Months	Zacks Rank:	(1-5)	2-Buy		
	Zacks Style Scores:		VGM:D		
	Value: D	Growth: C	Momentum: D		

# **Summary**

FLIR Systems has been witnessing growing opportunities within many of its core markets, most notably defense. The company offers the broadest range of infrared, also known as thermal, imaging solutions in the world. Declining cost of thermal imaging technology is steadily boosting its adoption, thereby enhancing its growth prospects. In line with this, in the past six months, FLIR Systems' shares have outperformed the industry. It continues to innovate products for capturing a larger market share. However, FLIR Systems' growth trajectory is likely to be hit by an increased tariff on the imports of steel and aluminum imposed by the U.S. administration. Moreover, the company already suffered and may continue facing supply-chain disruptions from government actions or businesses intended to contain the coronavirus spread.

# **Data Overview**

52-Week High-Low	\$57.77 - \$32.53
20-Day Average Volume (Shares)	1,610,296
Market Cap	\$7.5 B
Year-To-Date Price Change	29.8%
Beta	1.57
Dividend / Dividend Yield	\$0.68 / 1.2%
Industry	Electronics - Military
Zacks Industry Rank	Top 13% (33 out of 253)

Last EPS Surprise	23.8%
Last Sales Surprise	6.9%
EPS F1 Estimate 4-Week Change	0.0%
Expected Report Date	05/05/2021
Earnings ESP	0.0%
D / E TT.	

P/E TTM	22.9
P/E F1	24.4
PEG F1	NA
P/S TTM	3.9

# Price, Consensus & Surprise



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



# Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2022	500 E	467 E	542 E	533 E	2,004 E
2021	460 E	451 E	481 E	526 E	1,919 E
2020	451 A	482 A	466 A	524 A	1,924 A

# **EPS Estimates**

	Q1	Q2	Q3	Q4	Annual*
2022	\$0.61 E	\$0.55 E	\$0.70 E	\$0.70 E	\$2.46 E
2021	\$0.53 E	\$0.54 E	\$0.60 E	\$0.68 E	\$2.36 E
2020	\$0.42 A	\$0.64 A	\$0.64 A	\$0.78 A	\$2.48 A

\*Quarterly figures may not add up to annual.

The data in the charts and tables, except sales and EPS estimates, is as of 04/05/2021. The report's text, and the analyst-provided sales estimates, EPS estimates and price target are as of 04/06/2021.

#### Overview

FLIR Systems, incorporated in 1978, is an Oregon-based corporation, engaged in designing, manufacturing, marketing and distributing innovative technologies like thermal imaging systems, visible-light imaging systems, locater systems, measurement and diagnostic systems, as well as advanced threat-detection solutions.

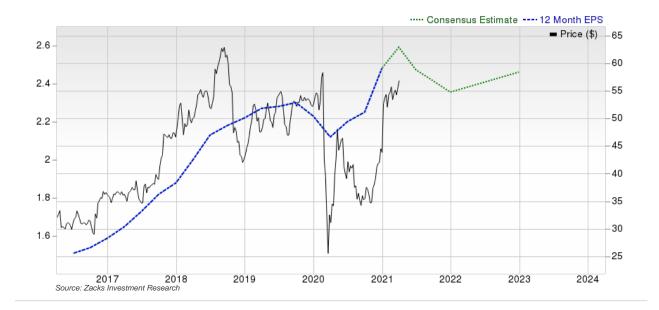
As of Jan 1, 2020, the company's realigned business segments are:

Industrial Technologies: This segment develops thermal and visible-spectrum imaging camera cores and components as well as fixed mounted visible and thermal imaging cameras and related analytics software. Its product portfolio includes thermal imaging cameras, analytics software, gas detection cameras, firefighting cameras, process automation cameras, environmental test and measurement devices, security cameras, marine electronics, and traffic cameras. It generated revenues of \$1,156.1 million and contributed 60.1% to the company's total revenues in 2020.

**Defense Technologies**: This segment develops enhanced imaging and recognition solutions for a wide variety of law enforcement agencies, sensor instruments and integrated platform solutions for the detection, identification, and suppression of chemical, biological, radiological, nuclear, and explosives (CBRNE) threats for military force protection, homeland security, and commercial applications. Its product portfolio



includes airborne, land, maritime, and man-portable multi-spectrum imaging systems, radars, lasers, imaging components, integrated multi-sensor system platforms, CBRNE detectors, nano-class UAS solutions. The company also offers services related to these systems. It generated revenues of \$767.6 million and contributed 39.9% to the company's total revenues in 2020.



Zacks Equity Research www.zackspro.com Page 2 of 12

# **Reasons To Buy:**

▲ Declining cost of thermal imaging technology has created opportunity to increase the adoption of thermal technology, thereby boosting growth prospects of FLIR Systems. Notably, the company offers the broadest range of infrared, also known as thermal, imaging solutions in the world. Notably, during 2020, the company's Industrial Technologies segment experienced an increase in demand for its Elevated Skin Temperature (EST) cameras as a result of the COVID-19 pandemic as these cameras are being deployed to help prevent the spread of the virus. Anticipating a similar demand trend in the near term, the company recently reallocated internal resources, leveraging the strength of its relationships with its world-class suppliers and optimizing manufacturing capacity through investments of relatively small amounts of

Systematic product innovations and increasing demand for its thermal cameras are expected to boost FLIR Systems' growth

capital. These initiatives will allow FLIR Systems to exponentially enhance EST camera production to meet growing customer demand, which, in turn can be expected to boost its top line in the coming days.

▲ To compete in the diverse industries in which the company caters to, FLIR Systems continue to innovate new products, to capture larger market shares. Evidently, during the fourth quarter, the company launched a handful of products like two intelligent traffic system cameras, namely Raymarine YachtSense, an advanced digital control system and FLIR VS290-32, an industry-first videoscope along with four additions to its Exx-Series of advanced thermal imaging cameras. Notably, the intelligent traffic systems cameras, such as the FLIR TrafiSens AI with thermal imaging and the FLIR TrafiCam AI visible camera, both with AI will help optimizing traffic flow on the roadways and at intersections. Raymarine YachtSense will offer premium digital control solution for today's most sophisticated vessels. Meanwhile, FLIR VS290-32 combines thermal imaging and a visible camera, specifically designed for safer and more efficient inspections of hard-to-reach underground utility vaults. Further, the recent portfolio expansion of the Exx-Series cameras when compared to its predecessors offers an enhanced thermal resolution for more vibrant, easy-to-read images and on-camera routing capability to improve field survey efficiency. Such valuable innovations are expected to enhance the company's product portfolio efficiently, thereby creating growth opportunities through greater revenue generation. As a result, shares of the company have gained 57% in the past six months, outperforming the industry's increase of 56.9%.

▲ FLIR Systems has been witnessing growing opportunities within many of its core markets most notably defense. Within its Defense business unit, the company has been experiencing notable growth for unmanned systems in the recent past. In fact, amid the uncertainties posed by the coronavirus pandemic, its Defense Technologies segment continues to experience steady demand for unmanned systems and solutions. Notably, banking on its 2019 acquisitions of Aeryon Labs and Endeavor Robotics, and building on the acquisition of Prox Dynamics in 2016, this segment develops and sell a variety of unmanned aerial systems and ground-based robotic systems that are multi-mission, highly portable and rapidly deployable real-time solutions. To further expand its footprint in the booming unmanned air vehicle (UAV) market, the company acquired Altavian, a privately held manufacturer of small unmanned aerial systems (sUAS) for defense and public safety customers in December 2020. This buyout is expected to enable FLIR Systems offer its customers a more comprehensive solution portfolio than any other American sUAS provider.

Zacks Equity Research www.zackspro.com Page 3 of 12

# **Reasons To Sell:**

✓ In January 2020, the Trump administration announced plans to expand its existing tariffs on imports of steel and aluminum, starting from Feb 8. Steel and aluminum derivatives will also come under the tariff mandate. This tariff expansion is expected to deal a heavy blow to the U.S. aerospace and defense industry, which relies heavily on imported aluminum. In 2018, when the initial tariff was imposed, the Aerospace Industries Association (AIA) had expressed concern by saying that such a tariff will raise cost and disrupt the supply chain. Now that tariffs are being imposed on derivatives as well, the growth prospects for manufacturing-oriented stocks like FLIR Systems seem bleak, unless the current administration under President Joe Biden makes any change of policy.

Escalating tariff on import of aluminum and unfavorable impact of coronavirus pose risk for the stock

▼ FLIR Systems' cash and cash equivalents were \$298 million at the end of fourth-quarter 2020, down from \$320 million as of Sep 30, 2020. Its long-term debt was \$725 million as of Dec 31, 2020, up sequentially from \$715 million. Therefore, its long-term debt is much higher than its cash reserve, reflecting that the company does not hold a very strong solvency position over the long run.

Moreover, at the end of 2020, the company had an outstanding debt worth \$738.4 million, consisting of unsecured term loans and borrowings, which increased 9.1% from the 2019 level. The prolonged impact of COVID-19 pandemic on the global supply chain may lead to sustained economic disruption, thereby hampering global credit and financial markets. FLIR Systems fear that such possible deterioration in capital market might affect its ability to duly meet this debt obligation in time. Its increasing debt value might have also caused its investors to lose confidence in the stock.

▼ The company's Defense Technologies segment experienced administrative processing delays during 2020, which impacted the timing of bookings and revenues. These trends are likely to affect the segment's results in subsequent quarters, which in turn might impact FLIR Systems' overall operational performance in the coming months. Moreover, the company has experienced and may continue to experience disruptions in its supply chain from the actions of governments or businesses intended to contain the spread of the virus, such as closing factories or other operations that produce components necessary for the company's products; quarantining individuals around major commercial hubs, and/or restricting the transportation of goods and services. Given the uncertainty surrounding the pandemic, such lingering disruptions are projected to hurt the company's operational results.

Zacks Equity Research www.zackspro.com Page 4 of 12

# **Last Earnings Report**

#### FLIR Systems Q4 Earnings Beat, Revenues Rise Y/Y

FLIR Systems' fourth-quarter 2020 adjusted earnings of 78 cents per share surpassed the Zacks Consensus Estimate of 63 cents by 23.8%. Also, the reported figure increased 47.2% from 53 cents in the prior-year quarter.

The company reported GAAP earnings of 57 cents per share, compared with a penny in the year-ago quarter.

For 2020, the company reported adjusted earnings of \$2.48, higher than the year-ago figure of \$2.16. The full-year earnings also surpassed the Zacks Consensus Estimate of \$2.33.

# Report Date Feb 25, 2021 Sales Surprise 6.85% EPS Surprise 23.81% Quarterly EPS 0.78 Annual EPS (TTM) 2.48

12/2020

**Quarter Ending** 

#### **Operational Performance**

FLIR Systems' revenues improved 7.2% year over year to \$524.3 million in the reported quarter. Moreover, the top line beat the Zacks Consensus Estimate of \$491 million by 6.8%.

For 2020, the company reported revenues of \$1.92 billion, higher than the year ago figure of \$1.89 billion. Full-year revenues also beat the Zacks Consensus Estimate of \$1.89 billion.

Total backlog at the end of the fourth quarter increased 0.3% to \$809.7 million on a year-over-year basis.

The company's adjusted operating expenses declined 9.1% year over year to \$133.7 million.

Adjusted operating income came in at \$122.5 million compared with operating income of \$101.7 million in the fourth quarter of 2019.

# **Segment Update**

Segment-wise, quarterly revenues in the **Industrial Technologies** segment were \$298.3 million, representing an increase of 7.2% from the prior-year quarter. The increase was primarily attributable to heightened demand for EST solutions as a result of the COVID-19 pandemic and an increase in maritime product sales.

The Industrial Technologies segment's operating income was \$85.2 million compared with \$71.8 million in the prior-year quarter. Segment operating margin expanded to 28.6% from 25.8% in the prior-year quarter.

Revenues in the **Defense Technologies** segment were \$226 million, which rose 7.2% from the prior-year quarter. The increase was primarily attributable to improved volumes for unmanned systems

The Defense Technologies segment's operating income was \$55.3 million compared with \$50.1 million in the prior-year quarter. Segment operating margin expanded to 24.5% from 23.8% in the prior-year quarter.

# Liquidity & Cash Flow

As of Dec 31, 2020, the company's cash and cash equivalents were \$297.8 million compared with \$284.6 million as of Dec 31, 2019.

Long-term debt totaled \$724.9 million, up from \$648.4 million as of Dec 31, 2019.

Cash flow from operating activities for 2020 amounted to \$312.4 million compared with \$370.4 million as of Dec 31, 2019.

# **Acquisition Update**

On Jan 4, 2021, FLIR Systems entered into a definitive agreement to be acquired by Teledyne Technologies Incorporated, a manufacturer and supplier of sophisticated instrumentation, digital imaging products and software, aerospace and defense electronics, and engineered systems.

The transaction is expected to close in the middle of 2021 subject to the receipt of required regulatory approvals

#### **Recent News**

On Jan 25, 2021, FLIR Systems received an additional \$30.1 million contract from the United States (U.S.) Army for sustainment efforts tied in part to the service's Man Transportable Robotic System Increment II (MTRS Inc. II) and Common Robotic System-Heavy (CRS-H) ground robot programs.

On Jan 4, 2021, it was announced that Teledyne Technologies has entered into a definitive agreement, under which Teledyne will acquire FLIR Systems in a cash and stock transaction valued at approximately \$8 billion.

Under the terms of the agreement, FLIR stockholders will receive \$28.00 per share in cash and 0.0718 shares of Teledyne common stock for each FLIR share, which implies a total purchase price of \$56.00 per FLIR share based on Teledyne's 5-day volume weighted average price as of Dec 31, 2020. The transaction reflects a 40% premium for FLIR stockholders based on FLIR's 30-day volume weighted average price as of Dec 31, 2020.

#### **Valuation**

FLIR Systems' shares are up 31.5% in the year to date period and 70.7% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Aerospace sector are up 31.7% and 10.9% in the year to date period, respectively. Over the past year, the Zacks sub-industry is up 70.7% and the sector, 29%.

The S&P 500 index is up 7.4% in the year to date period and 53.8% in the past year.

The stock is currently trading at 24.6X forward 12-month earnings, which compares to 23.9X for the Zacks sub-industry, 23.4X for the Zacks sector and 23X for the S&P 500 index.

Over the past five years, the stock has traded as high as 26.9X and as low as 11.4X, with a 5-year median of 20.1X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$61 price target reflects 26X earnings value.

The table below shows summary valuation data for FLIR

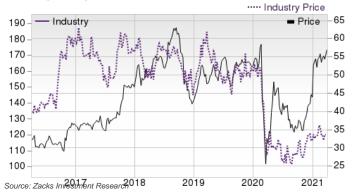
	Valuation	Multip	les - FLIR		
		Stock	Sub-Industry	Sector	S&P 500
	Current	24.6	23.89	23.37	22.98
P/E F12M	5-Year High	26.9	25.36	23.37	23.83
	5-Year Low	11.38	13.58	14.38	15.3
	5-Year Median	20.07	19.33	18.08	18
	Current	3.9	3.76	1.93	4.64
P/S F12M	5-Year High	4.66	4.17	1.93	4.64
	5-Year Low	1.8	2.03	0.96	3.21
	5-Year Median	3.23	3.05	1.27	3.71
	Current	16.92	12.4	16.92	17.21
EV/EBITDA F12M	5-Year High	17.78	16.02	16.92	18.81
	5-Year Low	8.22	7.45	7.14	13.02
	5-Year Median	13.23	12.15	9.14	15.77

As of 04/05/2021

Source: Zacks Investment Research

Zacks Equity Research www.zackspro.com Page 6 of 12

# Industry Analysis Zacks Industry Rank: Top 13% (33 out of 253)



# **Top Peers**

Company (Ticker)	Rec Rank
AAR Corp. (AIR)	Outperform 1
Astronics Corporation (ATRO)	Neutral 3
AeroVironment, Inc. (AVAV)	Neutral 3
Bae Systems PLC (BAESY)	Neutral 3
Elbit Systems Ltd. (ESLT)	Neutral 3
Leidos Holdings, Inc. (LDOS)	Neutral 3
Northrop Grumman Corporation (NOC)	Neutral 3
Raytheon Technologies Corporation (RTX)	Neutral 2

The positions listed should not be deemed a recommendation to buy, hold or sell.

Industry Comparison Industry	lustry Comparison Industry: Electronics - Military			Industry Peers		
	FLIR	X Industry	S&P 500	AIR	BAESY	LDOS
Zacks Recommendation (Long Term)	Neutral	-	-	Outperform	Neutral	Neutral
Zacks Rank (Short Term)	2	-	-	1	3	3
VGM Score	D	-	-	С	А	В
Market Cap	7.46 B	22.69 M	29.75 B	1.49 B	23.04 B	13.70 B
# of Analysts	4	2.5	13	2	2	9
Dividend Yield	1.20%	0.00%	1.31%	0.00%	3.35%	1.41%
Value Score	D	-	-	C	Α	Α
Cash/Price	0.04	0.22	0.06	0.08	0.16	0.04
EV/EBITDA	19.47	17.14	16.95	18.90	NA	14.74
PEG F1	NA	0.99	2.35	NA	2.63	1.38
P/B	3.96	1.95	3.95	1.60	3.65	3.55
P/CF	17.71	18.71	16.86	12.40	9.08	12.67
P/E F1	24.44	31.97	21.87	32.52	10.82	15.19
P/S TTM	3.88	1.79	3.39	0.91	NA	1.11
Earnings Yield	4.15%	3.33%	4.49%	3.06%	9.22%	6.58%
Debt/Equity	0.38	0.05	0.66	0.22	1.01	1.20
Cash Flow (\$/share)	3.26	0.30	6.78	3.39	3.20	7.88
Growth Score	С	-	-	С	A	C
Historical EPS Growth (3-5 Years)	10.69%	-1.71%	9.39%	10.55%	NA	14.94%
Projected EPS Growth (F1/F0)	-5.04%	50.65%	15.24%	-39.77%	23.60%	8.94%
Current Cash Flow Growth	1.30%	-19.31%	0.44%	-5.56%	3.93%	14.02%
Historical Cash Flow Growth (3-5 Years)	9.71%	-2.00%	7.37%	2.12%	-0.45%	34.49%
Current Ratio	2.80	3.08	1.39	2.65	1.00	1.15
Debt/Capital	27.79%	4.18%	41.26%	18.10%	50.18%	54.54%
Net Margin	11.05%	5.68%	10.59%	0.32%	NA	5.11%
Return on Equity	18.39%	11.99%	14.86%	4.26%	NA	23.18%
Sales/Assets	0.60	0.92	0.51	0.92	NA	1.03
Projected Sales Growth (F1/F0)	-0.26%	0.00%	7.36%	-21.00%	34.87%	12.79%
Momentum Score	D	-	-	Α	C	D
Daily Price Change	1.42%	0.00%	1.04%	-0.28%	1.45%	3.60%
1-Week Price Change	2.23%	0.00%	0.35%	-1.80%	4.05%	0.26%
4-Week Price Change	5.54%	-5.56%	5.47%	-0.28%	6.31%	8.61%
12-Week Price Change	8.54%	-0.28%	9.17%	11.09%	8.24%	-3.91%
52-Week Price Change	64.38%	13.47%	61.87%	143.70%	14.83%	5.30%
20-Day Average Volume (Shares)	1,610,296	28,171	2,120,273	306,323	345,765	771,442
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	-2.84%	0.00%
EPS F1 Estimate 4-Week Change	0.00%	0.00%	0.00%	14.10%	-0.58%	-0.10%
EPS F1 Estimate 12-Week Change	2.39%	1.20%	2.19%	24.52%	6.64%	-0.63%
EPS Q1 Estimate Monthly Change	0.00%	-75.00%	0.00%	69.23%	NA	0.00%

Source: Zacks Investment Research

# **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 maintain a 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.



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.

Zacks Equity Research www.zackspro.com Page 8 of 12

#### **Additional Disclosure**

This material represents an assessment of the market and economic environment at a specific point in time and is not intended to be a forecast of future events, or a guarantee of future results. Forward-looking statements are subject to certain risks and uncertainties. Any statements that refer to expectations, projections or characterizations of future events or circumstances, including any underlying assumptions, are forwardlooking statements. Actual results, performance, or achievements may differ materially from those expressed or implied.

Returns quoted represent past performance which is no guarantee of future results. Investment returns and principal value will fluctuate so that when shares are redeemed, they may be worth more or less than their original cost. Current performance may be higher or lower than the performance shown.

Investing involves risk; principal loss is possible. There is no guarantee that companies that can issue dividends will declare, continue to pay or increase dividends.

# **Glossary of Terms and Definitions**

52-Week High-Low: The range of the highest and lowest prices at which a stock has traded during the past year. This range is determined based on the stock's daily closing price which may differ from the intra-day high or low. Many investors use it as a technical indicator to determine a stock's current value and future price movement. The idea here is that if price breaks out from the 52-week range, in either direction, the momentum may continue in the same direction.

20-Day Average Volume (Shares): The average number of shares of a company traded in a day over the last 20 days. It is a direct indication of a security's overall liquidity. The higher the average daily trading volume, the easier it is to enter or exit the stock at a desired price with more buyers and sellers being available.

Daily Price Change: This is the percentage difference between a trading day's closing price and the prior trading day's closing price. This item is updated at 9 p.m. EST each day.

1-Week Price Change: This is the percentage change in a stock's closing price over the last 5 trading days. This change reflects the collective buying and selling sentiment over the 1-week period.

A strong weekly price increase for the stock, especially when accompanied by increased volume, is an indication of it gaining momentum.

4-Week Price Change: This is the percentage change in a stock's closing price over the last 20 trading days or past 4 weeks. This is a mediumterm price change metric and an indication of the stock gaining momentum.

12-Week Price Change: This is the percentage change of a stock's closing price over the last 60 trading days or past 12 weeks. Similar to 4week price change, this is a medium-term price change metric. It shows whether a stock has been enjoying strong investor demand, or if it has been in consolidation, or distress over this period.

52-Week Price Change: This is the percentage change in a stock's closing price over the last 260 trading days or past 52 weeks. This longterm price change metric is a good reference point for investors. Some investors seek stocks with the best percentage price change over the last 52 weeks, expecting the momentum to continue.

Market Cap: The number of outstanding common shares of a company times its latest price per share. This figure represents a company's size, which indicates various characteristics, including price stability and risk, in which investors could be interested.

Year-To-Date Price Change: Change in a stock's daily closing price in the period of time beginning the first day of the current calendar year through to the previous trading day.

# of Analysts: Number of EPS estimates used in calculating the current-quarter consensus. These estimates come from the brokerage analysts tracking this stock. However, the number of such analysts tracking this stock may not match the number of estimates, as all brokerage analysts may not come up with an estimate or provide it to us.

Beta: A measure of risk commonly used to compare the volatility of a stock to the overall market. The S&P 500 Index is the base for calculating beta and carries a value of 1. A stock with beta below 1 is less risky than the market as a whole. And a stock with beta above 1 is riskier.

Dividend: The portion of earnings a company is expected to distribute to its common shareholders in the next 12 months for each share they own. Dividends are usually paid quarterly. Dividend payments reflect positively on a company and help maintain investors' trust. Investors typically find dividend-paying stocks appealing because the dividend adds to any market price appreciation to result in higher return on investment (ROI). Moreover, a steady or increasing dividend payment provides investors a cushion in a down market.

Dividend Yield: The ratio of a company's annual dividend to its share price. The annual dividend used in the ratio is calculated based on the mostrecent dividend paid by the company. Dividend yield is an estimate of the dividend-only return from a stock in the next 12 months. Since dividend itself doesn't change frequently, dividend yield usually changes with a stock's price movement. As a result, often an unusually high dividend yield is a result of weak stock price.

**S&P 500 Index:** The Standard & Poor's 500 (S&P 500) Index is an unmanaged group of securities considered to be representative of the stock market in general. It is a market-capitalization-weighted index of stocks of the 500 largest U.S. companies. Each stock's weight in the index is proportionate to its market value.

Industry: One of the 250+ groups that Zacks classifies all stocks into based on the nature of business. These groups are termed as expanded (aka "X") industries and map to their respective (economic) sectors; Zacks has 16 sectors.

Past performance is no guarantee of future results. Please see important disclosures and definitions at the end of this report.

Zacks Industry Rank: The Zacks Industry Rank is determined by calculating the average Zacks Rank for all stocks in the industry and then assigning an ordinal rank to it. For example, an industry with an average Zacks Rank of 1.6 is better than an industry with an average Zacks Rank of 2.3. So, the industry with the better average Zacks Rank would get a better Zacks Industry Rank. If an industry has the best average Zacks Rank, it would be considered the top industry (1 out of 250+), which would place it at the top 1% of Zacks-ranked industries. Studies have shown that roughly half of a stock's price movement can be attributed to the industry group it belongs to. In fact, the top 50% of Zacks-ranked industries outperforms the bottom 50% by a factor of more than 2 to 1.

Last EPS Surprise: The percentage deviation of a company's last reported earnings per share from the Zacks Consensus Estimate. Companies with a positive earnings surprise are more likely to surprise again in the future (or miss again if they recently missed).

Last Sales Surprise: The percentage deviation of a company's last reported sales from the Zacks Consensus Estimate.

Expected Report Date: This is an estimated date of a company's next earnings release. The information originated or gathered by Zacks Investment Research from its information providers or publicly available sources is the basis of this estimate.

Earnings ESP: The Zacks Earnings ESP compares the Most Accurate Estimate to the Zacks Consensus Estimate for the yet-to-be reported quarter. The Most Accurate Estimate is the most recent version of the Zacks Consensus EPS Estimate. The idea here is that analysts revising their estimates closer to an earnings release have the latest information, which could potentially be more accurate than what they and others contributing to the consensus had predicted earlier. Thus, a positive or negative Earnings ESP reading theoretically indicates the likely deviation of the actual earnings from the consensus estimate. However, the model's predictive power is significant for positive ESP readings only. A positive Earnings ESP is a strong predictor of an earnings beat, particularly when combined with a Zacks Rank #1 (Strong Buy), #2 (Buy) or #3 (Hold). Our research shows that stocks with this combination produce a positive surprise nearly 70% of the time.

#### Periods:

TTM: Trailing 12 months. Using TTM figures is an effective way of analyzing the most-recent financial data in an annualized format that helps neutralize the effects of seasonality and other quarter-to-quarter variation.

F1: Current fiscal year. This period is used to analyze the estimates for the ongoing full fiscal year.

F2: Next fiscal year. This period is used to analyze the estimates for the next full fiscal year.

F12M: Forward 12 months. Using F12M figures is an effective way of analyzing the near-term (the following four unreported quarters) estimates in an annualized manner. Instead of typically representing estimates for the full fiscal year, which may not represent the nitty-gritty of each quarter, F12M figures suggest an all-inclusive annualized estimate for the following four quarters. The annualization helps neutralize the potential effects of seasonality and other quarter-to-quarter variations.

P/E Ratio: The price-to-earnings ratio measures a company's current market price per share relative to its earnings per share (EPS). Usually, the trailing-12-month (TTM) EPS, current-fiscal-year (F1) EPS estimate, or forward-12-month (F12M) EPS estimate is used as the denominator. In essence, this ratio shows what the market is willing to pay today for each dollar of EPS. In other words, this ratio gives a sense of what the relative value of the company is at the already reported level of earnings or at a future level of earnings.

It is one of the most widely-used multiples for determining the value of a company and helps comparing its valuation with that of a competitor, the industry group or a benchmark.

PEG Ratio: The price/earnings to growth ratio is a stock's P/E ratio using current fiscal year (F1) EPS estimate divided by its expected EPS growth rate over the coming 3 to 5 years. This ratio essentially determines a stock's value by factoring in the company's expected earnings growth and is thus believed to provide a more complete picture than just the P/E ratio, particularly for faster-growing companies.

P/S Ratio: The price-to-sales ratio is calculated as a company's current price per share divided by trailing 12 months (TTM) sales or revenues per share. This ratio shows what the market is willing to pay today for each dollar of TTM sales per share. The P/S ratio is at times the only valuation metric when the company has yet to become profitable.

Cash/Price Ratio: The cash-to-price ratio or Cash Yield is calculated as cash and marketable securities per share divided by the company's current share price. Like the earnings yield, which shows the anticipated yield (or return) on a stock from earnings for each dollar invested, the cash yield does the same, with cash being the source of return instead of earnings. For example, a cash/price ratio of 0.08 suggests a return of 8% or 8 cents for every \$1 investment.

EV/EBITDA Ratio: The EV/EBITDA ratio, also known as Enterprise Multiple, is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by EBITDA (earnings before interest, taxes, depreciation and amortization). Usually, trailing-12-month (TTM) or forward-12-month (F12M) EBITDA is used as the denominator.

EV/Sales Ratio: The enterprise value-to-sales ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by annual sales. It is an expansion of the P/S valuation, which uses market value instead of enterprise value. The EV/Sales ratio is perceived as more accurate than P/S, in part, because the market capitalization does not take a company's debt into account when valuing it.

EV/CF Ratio: The enterprise value-to-cash flow ratio is calculated as a company's enterprise value (market capitalization + value of total longterm debt + book value of preferred shares - cash and marketable securities) divided by the trailing-12-month (TTM) operating cash flow. It's a measure of how long it would take to buy the entire business if you were able to use all the company's operating cash flow.

The EV/CF ratio is perceived as more accurate than the P/CF ratio, in part, because the market price does not take a company's debt into account when valuing it.

Past performance is no guarantee of future results. Please see important disclosures and definitions at the end of this report.

**EV/FCF Ratio:** The enterprise value-to-free cash flow metric compares a company's enterprise value to its trailing-12-month (TTM) free cash flow (FCF). This metric is very similar to the EV/CF ratio, but is considered a more exact measure owing to the fact that it uses free cash flow, which subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding growth activities and payments to shareholders.

**P/EBITDA Ratio:** The P/EBITDA ratio is calculated as a company's per share market value divided by EBITDA (earnings before interest, taxes, depreciation, and amortization). This metric is very similar to the EV/EBITDA ratio, but is considered a little less exact measure as it uses market price, which does not take a company's debt into account. However, since EBITDA is often considered a proxy for cash income, the metric is used as a measure of what the market is willing to pay today for each dollar of the company's cash profitability in the trailing 12 months (TTM) or forward 12 months (F12M).

**P/B Ratio:** The price-to-book ratio is calculated as a company's current price per share divided by its book value (total assets – liabilities – preferred stocks) per share. In short, the book value is how much a company is worth. In other words, it reflects the total value of a company's assets that its common shareholders would receive if it were to be liquidated. So, the P/B ratio indicates whether you're paying higher or lower than what would remain if the company went bankrupt immediately. Investors typically use this metric to determine how a company's stock price stacks up to its intrinsic value.

**P/TB Ratio:** The price-to-tangible-book value ratio is calculated as a the per share market value of a company divided by the value of its tangible assets (total assets – liabilities – preferred stocks – intangible assets) per share. Tangible book value is the same thing as book value except it excludes the value of intangible assets to get a step closer to the baseline value of the company.

**P/CF Ratio:** The price-to-cash flow ratio measures a company's per share market price relative to its trailing-12-month (TTM) operating cash flow per share. This metric is used to determine whether a company is undervalued or overvalued relative to another stock, industry or sector. And like the P/E ratio, a lower number is typically considered better from the value perspective.

One of the reasons why P/CF ratio is often preferred over P/E ratio is the fact that operating cash flow adds back non-cash expenses such as depreciation and amortization to net income. This feature helps valuing stocks that have positive cash flow but are not profitable because of large noncash charges.

**P/FCF Ratio:** The price-to-free cash flow ratio is an extension of P/CF ratio, which uses trailing-12-month (TTM) free cash flow per share instead of operating cash flow per share. This metric is considered a more exact measure than P/CF ratio, as free cash flow subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding activities that generate additional revenues.

Earnings Yield: The earnings yield is calculated as current fiscal year (F1) EPS estimate divided by the company's current share price. The ratio, which is the inverse of the P/E ratio, measures the anticipated yield (or return) from earnings for each dollar invested in a stock today.

For example, earnings yield for a stock, which is trading at \$35 and expected to earn \$3 per share in the current fiscal year (F1), would be 0.0857 (3/35 = 0.0857) or 8.57%. In other words, for \$1 invested in the stock today, the yield from earnings is anticipated to be 8.57 cents.

Investors most commonly compare the earnings yield of a stock to that of a broad market index (such as the S&P 500) and prevailing interest rates, such as the current 10-year Treasury yield. Since bonds and stocks compete for investors' dollars, stock investors typically demand a higher yield for the extra risk they assume compared to investors of U.S. Treasury-backed securities that offer virtually risk-free returns. This additional return is referred to as the risk premium.

**Debt/Equity Ratio:** The debt-to-equity ratio is calculated as a company's total liabilities divided by its shareholder equity. This metric is used to gauge a company's financial leverage. In other words, it is a measure of the degree to which a company is financing its operations through debt versus its own funds. The higher the ratio, the higher the risk for shareholders.

However, this ratio is difficult to compare across industry groups where ideal amounts of debt vary. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-equity ratio should be compared with other companies in the same industry.

Cash Flow (\$/share): Cash flow per share is calculated as operating cash flow (after-tax earnings + depreciation + other non-cash charges) divided by common shares outstanding. It is used by many investors as a measure of a company's financial strength. Since cash flow per share takes into consideration a company's ability to generate cash by adding back non-cash expenses, it is regarded by some as a more accurate measure of a company's financial situation than earnings per share, which could be artificially deflated.

Current Ratio: The current ratio or liquidity ratio is a company's current assets divided by its current liabilities. It measures a company's ability to pay short-term obligations. A current ratio that is in line with the industry average or slightly higher is generally considered acceptable. A current ratio that is lower than the industry average would indicate a higher risk of distress or default. A higher number is usually better. However, a very high current ratio compared to the industry average could be an indication of inefficient use of assets by management.

**Debt/Capital Ratio:** Debt-to-capital ratio is a company's total debt (interest-bearing debt + both short- and long-term liabilities) divided its total capital (interest-bearing debt + shareholders' equity). It is a measure of a company's financial leverage. All else being equal, the higher the debt-to-capital ratio, the riskier the stock.

However, this ratio can vary widely from industry to industry, the ideal amount of required debt being different. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-capital ratio should be compared with the same for its industry.

Zacks Equity Research www.zackspro.com Page 11 of 12

**Net Margin:** Net margin is calculated as net income divided by sales. It shows how much of each dollar in sales generated by a company translates into profit. For example, if a company's net margin is 15%, its net income is 15 cents for every \$1 of sales it makes.

A change in margin can reflect either a change in business conditions, or a company's cost controls, or both. If a company's expenses are growing faster than sales, its net margin will decline. However, different net margin rates are considered good for different industries, so it's better to compare net margin rates of companies in the same industry group.

Return on Equity: Return on equity (ROE) is calculated as trailing-12-month net income divided by trailing-12-month average shareholder equity (including reinvested earnings). This metric is considered a measure of how effectively management is using a company's assets to generate profits. For example, if a company's ROE is 10%, it creates 10 cents profits for every \$1 shareholder equity, which is basically the company's assets minus debt. A company's ROE deemed good or bad depends on what's normal for its peers or industry group.

Sales/Assets Ratio: The sales-to-assets ratio or asset utilization ratio or asset turnover ratio is calculated as a company's annual sales divided by average assets (average of assets at the beginning of the year and at the year's end). This metric helps investors understand how effectively a company is using its assets to generate sales. For example, a sales-to-assets ratio of 2.5 indicates that the company generated \$2.50 in sales for every \$1 of assets on its books.

The higher the sales-to-assets ratio, the better the company is performing. However, similar to many other ratios, the asset turnover ratio tends to be higher for companies in certain industries/sectors than in others. So, a company's sales-to-assets ratio should be compared with the same for its industry/sector.

**Historical EPS Growth (3-5 Years):** This is the average annual (trailing-12-month) EPS growth rate over the last 3-5 years. This metric helps investors see how a company's EPS has grown from a long-term perspective.

Note: There are many factors that can influence short-term numbers — a recession will reduce this number, while a recovery will inflate it. The longterm perspective helps smooth out short-term events.

**Projected EPS Growth (F1/F0):** This is the estimated EPS growth rate for the current financial year. It is calculated as the consensus estimate for the current fiscal year (F1) divided by the reported EPS for the last completed fiscal year (F0).

**Current Cash Flow Growth:** It measures the latest year-over-year change in operating cash flow. Cash flow growth tells an investor how quickly a company is generating inflows of cash from operations. A positive change in the cash flow is desired and shows that more 'cash' is coming in than going out.

**Historical Cash Flow Growth (3-5 Years):** This is the annualized change in cash flow over the last 3-5 years. The change in a longer period helps put the current reading into proper perspective. By looking at the rate, rather than the actual dollar value, the comparison across the industry and peers becomes easier.

**Projected Sales Growth (F1/F0):** This metric looks at the estimated sales growth for the current year. It is calculated as sales estimate for the current fiscal year (F1) divided by the reported sales for the last completed fiscal year (F0).

Like EPS growth, a higher rate is better for sales growth. A look at a company's projected sales growth instantly tells you what the outlook is for their products and services. However, different sales growth rates are considered good for different industries, so it's better to compare sales growth rates of companies in the same industry group.

**EPS F1 Estimate 1-Week Change:** The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past week. The change in a company's consensus EPS estimate (or earnings estimate revision) has proven to be strongly correlated with the near-term price movement of its shares. It is an integral part of the Zacks Rank.

If a stock's consensus EPS estimate is \$1.10 now versus \$1.00 a week ago, that will be reflected as a 10% upward revision. If, on the other hand, it went from \$1.00 to 90 cents, that would be a 10% downward revision.

EPS F1 Estimate 4-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past four weeks.

A stock's earnings estimate revision in a 1-week period is important. But it's more meaningful to look at the longer-term revision. And, of course, the 4-week change helps put the 1-week change into proper perspective.

EPS F1 Estimate 12-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past 12 weeks

This metric essentially shows how the consensus EPS estimate has changed over a period longer than 1 week or 4 weeks.

EPS Q1 Estimate Monthly Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal quarter over the past four weeks

While the revision in consensus EPS estimate for the current fiscal year is strongly correlated with the near-term price movement of its shares, the estimate revision for the current fiscal quarter is an important metric as well, especially over the short term, and particularly as a stock approaches its earnings date. If a stock's Q1 EPS estimate decreases ahead of its earnings release, it's usually a negative sign, whereas an increase is a positive sign.

Past performance is no guarantee of future results. Please see important disclosures and definitions at the end of this report.