

Sony Group Corporation (SONY)

\$28.78 (Stock Price as of 12/01/2025)

Price Target (6-12 Months): **\$33.00**

Short Term: 1-3 Months Zacks Rank: (1-5) 2-Buy
Zacks Style Scores: VGM: B

Value: B Growth: C Momentum: B

Summary

Sony's fiscal second-quarter results reflect strength in the Game & Network Services (G&NS), Music and Imaging & Sensing Solutions (I&SS) units amid softness in the Pictures and ET&S. Higher PS engagement drove G&NS, while Music gained from strong streaming in Recorded Music and Publishing. I&SS sales rose 15% on higher image sensor sales for mobiles and cameras. Stronger image sensor sales and tighter cost control by cutting low-profit areas and focusing resources on key priorities are driving profitability in fiscal 2025. The sports business gained momentum with the STATSports buyout. Combining its data with Hawk-Eye and KinaTrax is likely to deliver top-tier sports analytics and drive overall growth. However, business volatility in the second half, along with a slowdown in the imaging market, remains a worry.



Data Overview

52 Week High-Low	\$30.34 - \$19.36
20 Day Average Volume (sh)	3,783,117
Market Cap	\$174.1 B
YTD Price Change	36.0%
Beta	0.97
Dividend / Div Yld	\$0.11 / 0.4%
Industry	Audio Video Production
Zacks Industry Rank	Top 15% (36 out of 243)

Sales and EPS Growth Rates (Y/Y %)(1)



Last EPS Surprise	6.1%
Last Sales Surprise	5.2%
EPS F1 Est- 4 week change	4.3%
Expected Report Date	02/12/2026
Earnings ESP	0.0%

P/E TTM	22.7
P/E F1	24.0
PEG F1	5.5
P/S TTM	2.0

Sales Estimates (millions of \$)⁽¹⁾

	Q1	Q2	Q3	Q4	Annual*
2027					82,990 E
2026	18,147 A	21,077 A	24,626 E	18,746 E	79,965 E
2025	19,320 A	19,529 A	28,949 A	17,252 A	85,087 A

EPS Estimates⁽¹⁾

	Q1	Q2	Q3	Q4	Annual*
2027					1.34 E
2026	0.30 A	0.35 A	0.34 E		1.20 E
2025	0.24 A	0.37 A	0.41 A	0.21 A	1.23 A

^{*}Quarterly figures may not add up to annual.

⁽¹⁾ The data in the charts and tables, including the Zacks Consensus EPS and sales estimates, is as of 12/01/2025.

⁽²⁾ The report's text and the price target are as of 11/21/2025.

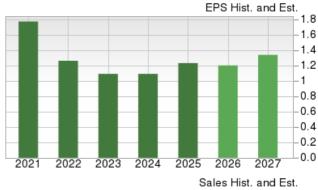
Overview

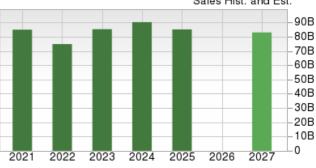
Headquartered in Tokyo, Japan, Sony Group Corporation designs, manufactures and sells several consumer and industrial electronic equipment. The company's product roster comprises audio and video equipment, televisions, network services, game hardware and software, mobile phones and image sensors. Additionally, Sony is active in the production, acquisition and distribution of recorded music and the management and licensing of the words and music for songs.

In addition, Sony operates several financial services businesses that include banking operations and life and non-life insurance operations, both of which are managed by its Japanese subsidiaries. Sony Financial Group mainly focuses on insurance, banking and other operations primarily through Sony Life. Markedly, Sony Bank offers mortgage loans and foreign-currency deposits to consumers via online services. Also, the company has an advertising agency and a network services business in Japan.

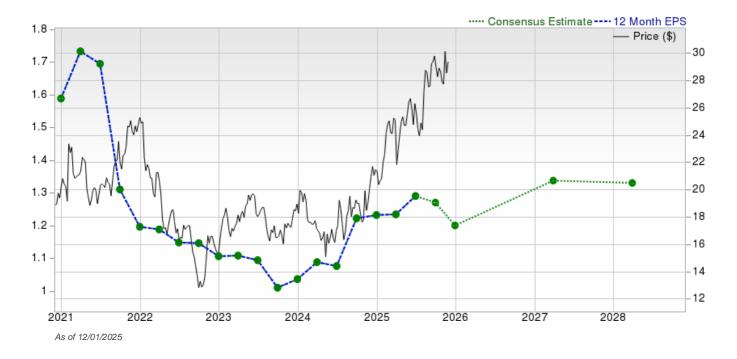
The company currently has six major reportable segments – G&NS (accounting for 36% of total operating revenues in fiscal 2024); Music (14.2%); Pictures (11.6%); Entertainment, Technology & Services (ET&S) (18.6%); Imaging & Sensing Solutions (I&SS) (13.9%); and Financial Services (7.2%).

(Note: Zacks identifies fiscal years by the month in which the fiscal year ends, while SONY identifies its fiscal year by the calendar year in which it begins; so comparable figures for any given fiscal year, as published by SONY, will refer to this same fiscal year as being the year before the same year, as identified by Zacks)





As of 12/01/2025



Reasons To Buy:

▲ Strategic shift toward an entertainment-focused business has been Sony's key growth driver over the years. In recent years, it has increasingly relied on expanding its content offerings across games, music, film and TV. The company has also prioritized the growth of its intellectual property across various business areas, made strategic investments in content, music catalogs and emerging sectors such as anime, and advanced the development and use of innovative technologies to support content creation. The entertainment business accounted for nearly 60% of revenues in the fiscal 2024, showcasing strength even during times of economic uncertainties like the COVID-19 pandemic. Going forward, Sony's corporate

Sony is benefiting from a strategic focus on entertainment-driven businesses and buyout synergies.

strategy will center on the momentum achieved so far, with a clear and focused effort to realize its long-term Creative Entertainment Vision, unveiled last year. The vision aims to deliver Kando through creativity and technology. It envisions a future of "Creating Infinite Realities" with creators, partners, employees and by uniting its businesses. The G&NS segment is on steady track, driven by the continued growth of PlayStation 5 in both active users and user spending. PlayStation's monthly active users rose 3% year over year in September to 119 million, and total play time for the quarter also grew 1%. For fiscal 2025, the sales forecast has been revised upward by 3% from the previous view, led by favorable forex movements and solid hardware sales. Game software and network services sales are steadily increasing, and it expects this to continue in the second half, driven by more users moving to higher service tiers and stronger first-party game releases. Sony plans to build on this momentum to support long-term, profitable growth and invest in shaping the future of play. The company expects steady growth in revenues and profit from network services as the PS5 user base expands. Key goals include increasing revenues from PlayStation Plus and maximizing PlayStation Store earnings through personalization and pricing optimization.

- ▲ Sony plans to grow the Music business by expanding into emerging markets (Latin America, India and parts of Europe), where **streaming is gaining popularity**, by growing organically and through acquisition synergies. It is exploring strategic investments in key areas and music catalogs to grow revenue and increase asset value, with a focus on discovering talent and strengthening ties with local independent labels and artists. It aims to serve passionate fans and expand IP through biopics, documentaries and live events. Additionally, Sony Music Group strengthened its ties with digital platforms. It signed new licensing deals with Spotify this quarter and, along with other labels, agreed to back Spotify's efforts to ensure AI is used in ways that support artists and songwriters. Music sales improved 21% year over year to ¥542.4 billion in the fiscal second quarter on the back of higher revenues from streaming services in Recorded Music and Music Publishing, as well as mobile game applications in Visual Media & Platform. For fiscal 2025, the sales forecast has been revised upward by 6% from the previous projection on the back of higher revenues in Visual Media & Platform and foreign exchange tailwinds.
- Sony has been strengthening its business segments through accretive acquisitions and joint ventures. In its growth-focused sports business, Sony closed the acquisition of STATSports in October 2025. STATSports brings strong real-time athlete tracking and performance analytics, which, when integrated with Hawk-Eye's and KinaTrax's optical tracking systems, will help create a leading global sports data platform. This combination is expected to strengthen Sony's offerings and support faster growth across its sports portfolio. In July, Sony and Bandai Namco announced a strategic business alliance. As part of the deal, Sony will buy 16 million Bandai Namco shares for about 68 billion yen, giving it a 2.5% stake in the company. The two companies will work together to grow global fan communities, especially around anime and manga. They aim to combine their strengths to create new, engaging experiences and boost the value of their content. In 2024, Sony acquired 12,054,100 KADOKAWA shares for ¥50 billion, increasing its stake to 10%, making it the largest shareholder. The goal is to boost their IP value, invest in content, discover new talent and expand media collaborations for greater impact. Moving forward, the duo plans to collaborate on live-action adaptations, co-produce anime, expand global distribution, grow game publishing and develop virtual production talent. Sony acquired KinaTrax, Inc, which specializes in motion capture technology and data analysis for sports. KinaTrax will integrate with Sony's Hawk-Eye Innovations to gather in-game biomechanical performance data on athletes, strengthening Sony's sports business. Sony Pictures Entertainment acquired a Texas-based Alamo Drafthouse Cinema theatrical exhibitor. Alamo is a premium dine-in cinema chain that operates 41 theaters across the United States. It boasts of a 4-million-strong loyalty member base, mostly the younger generation. Sony aims to leverage Alamo's ties with the spend community to create synergies across its content IP, including movies, games, music and anime. It also sees potential for collaboration between Alamo and Crunchyroll. Sony's acquisition of the Crunchyroll anime business added to its library of fan-centric Japanese anime movies and TV shows. The acquisition has benefited Sony, as Crunchyroll surpassed the 17 million paid subscriber mark at the end of March 2025. The anime market is expected to grow steadily, with a high single-digit annual growth rate from 2023 to 2030. Crunchyroll's core anime streaming business is projected to grow even faster, at more than 10% annually by 2030.

Risks⁽²⁾

- Sony faces **intense competition** in each of its product lines including television, gaming platform and smartphone around the world. Failure to create new products that are in sync with customer demand may reduce sales of the company's products. Each of these markets witnesses stiff price wars, continuous product innovations and changing customer preferences, which put pressure on Sony to come up with better products to retain competitiveness. Although Sony's business restructuring initiatives pave way for enhancement of profitability and shareholder value in the long run, these increase restructuring charges in the near term. Hence, the company needs to be cautious as
- The company has a strong international presence with majority of revenues coming from emerging markets. Fluctuations in foreign exchange rates, particularly those of yen, the U.S. dollar and euro impact Sony's financials as it has significant exposure to these currencies, both in terms of sales and production costs. As many segments of the company have concentrated operations in specific regions, the currency impact differs from segment to segment. This is expected to hurt its consolidated results. Businesses with significant U.S. dollar- and euro-denominated expenses, such as Game & Network Services and Electronics, are more exposed to forex swings.
- The situation regarding additional **U.S. tariffs** remains highly volatile and uncertain. The G&NS, ET&S and I&SS segments, which are expected to be directly impacted, are already facing challenges from the tariffs currently in effect. While efforts are being made to respond, these segments are under significant strain and must now prepare for multiple uncertain and potentially disruptive scenarios, which could hinder operational stability and strategic planning. Additional U.S. tariffs are still expected to reduce fiscal 2025 operating income by about ¥50 billion, affecting multiple segments. For the second half of the fiscal year, Sony projects the uncertain environment to persist and expects to operate cautiously, with only modest progress likely. A major North American customer is exploring alternative suppliers (including Korean chipmakers), which could adversely impact Sony's market position if tariffs alter procurement patterns. While Sony is shifting hardware production for U.S. sales outside China, relocation and supply chain changes may affect costs and require flexible pricing strategies. In the imaging market, demand has weakened sharply in China after subsidies ended on June 30, 2025, and in the United States due to the drag from additional tariffs.

Last Earnings Report

Sony's Q2 Earnings Rise Y/Y

Sony reported second-quarter fiscal 2025 net income per share (on a GAAP basis) of ¥51.71, up from ¥48.04 in the year-ago quarter. Adjusted net income came in at ¥311.4 billion compared with ¥291.8 billion in the prior-year quarter.

Quarterly total revenues rose 5% year over year to ¥3,107.9 billion, driven by higher revenues in the Game & Network Services (G&NS), Music and Imaging & Sensing Solutions (I&SS) segments, partially offset by a decline in the Entertainment, Technology & Services (ET&S) segment.

Earnings Reporting Date	Nov 11, 2025
Sales Surprise	5.15%
EPS Surprise	6.06%
Quarterly EPS	0.35
Annual EPS (TTM)	1.27

3/31/2025

FY Quarter Ending

Sony has updated its outlook for the fiscal year ending March 31, 2026. It now expects sales of ¥12,000 billion, up from the previous guidance of ¥11,700 billion. The top-line performance is likely to be driven by strengthening momentum in the G&NS and Music segments. For G&NS, revenues are now expected to be ¥4,470 billion compared with the earlier projection of ¥4,320 billion, while for Music, net sales are now estimated at ¥1,980 billion compared to ¥1,870 billion predicted earlier.

Segmental Results

In the quarter under review, **G&NS** sales were up 4% year over year to ¥1,113.2 billion. The uptick was fueled by higher sales from network services and rising sales of game software titles. Operating income decreased 13% to ¥120.4 billion due to impairment losses of ¥31.5 billion on a portion of Bungie, Inc.'s intangible and other assets related to Destiny 2 and ¥18.3 billion in expenses from correcting previously capitalized development costs, partially offset by higher sales from network services.

Music sales improved 21% year over year to ¥542.4 billion in the fiscal second quarter on the back of higher revenues from streaming services in Recorded Music and Music Publishing, as well as mobile game applications in Visual Media & Platform. Operating income rose to ¥115.4 billion from ¥90.4 billion in the same quarter last year.

Pictures sales declined 3% year over year to ¥346 billion, affected by lower revenues from theatrical releases and catalog licensing in Motion Pictures, partially offset by higher revenues from Crunchyroll and growth in paid subscribers. Operating income plunged 25% year over year to ¥13.9 billion, as higher revenue from Crunchyroll was more than offset by lower revenues from theatrical releases.

ET&S sales totaled ¥575.7 billion, down 7% year over year, owing to a fall in unit sales of displays. Operating income decreased 13% to ¥61 billion, mainly due to lower sales in Displays and Imaging as well as the impact of tariffs, partially offset by reductions in operating expenses.

I&SS sales rose 15% year over year to ¥614.6 billion, owing to an increase in sales of image sensors for mobile products. Higher unit sales, coupled with a favorable product mix and the positive impact of the forex movement, acted as other catalysts. Operating income was ¥138.3 billion compared with ¥92.4 billion in the year-ago quarter, owing to higher sales and favorable forex impact.

All Other sales were nearly flat year over year at ¥23.6 billion in the fiscal second quarter. Operating loss was ¥2.9 billion compared with a loss of ¥6.5 billion in the year-ago quarter.

Other Details

For the quarter under review, total costs and expenses were ¥2,677.3 billion, up 3.8% year over year. Operating income was ¥429 billion, up 10%.

Cash Flow & Liquidity

For the six months ended Sept. 30, Sony generated ¥471.6 billion of cash from operating activities compared with ¥616.3 billion a year ago.

As of Sept. 30, 2025, the company had ¥1,497.9 billion in cash and cash equivalents with ¥1,345 billion of long-term debt.

Fiscal 2025 Forecast Bolstered

Operating income guidance has been raised to ¥1,430 billion from ¥1,330 billion after accounting for tariff impacts, driven by higher profits in the I&SS and Music segments and a reduction in the estimated tariff impact.

Net income is now estimated to be ¥1,050 billion compared with the prior view of ¥970 billion.

Sony also tweaked guidance for the I&SS and ET&S segments. For I&SS, revenues are now expected at ¥1,990 billion compared with the earlier forecast of ¥1,960 billion. For ET&S, revenues are now estimated at ¥2,300 billion compared with the earlier forecast of ¥2,280 billion.

Recent News

On Oct. 29, 2025, Sony India has launched the new FE 100mm F2.8 Macro GM OSS, the first medium telephoto macro lens in its G Master series. Designed for ? (Alpha) E-mount cameras, it offers 1.4x magnification, advanced stabilization and improved handling for exceptional precision and creative versatility.

On Oct. 15, 2025, Sony has announced its entry into INZONE gaming peripherals. The new lineup includes keyboards, mice, mouse pads, wired earphones and headphones, optimized with insights from Fnatic players for core and pro esports gamers.

On Oct. 8, 2025, Sony has announced the acquisition of a majority stake in STATSports Group, a leading provider of athlete monitoring and performance analysis solutions, bringing the company into Sony's sports business portfolio.

On Oct. 6, 2025, Sony partnered with Smart Eye AB, a global pioneer in Interior Sensing Al and Driver Monitoring Systems, to integrate Smart Eye's advanced sensing and biometric authentication software with Sony's newly launched IMX775 RGB-IR image sensor. The initiative aims to address key global automotive safety regulations while enabling a new level of secure, personalized in-vehicle experiences.

On July 24, 2025, Sony and Bandai Namco announced a strategic business alliance. As part of the deal, Sony will buy 16 million Bandai Namco shares for about 68 billion yen, giving it a 2.5% stake in the company. The two companies will work together to grow global fan communities, especially around anime and manga. They aim to combine their strengths to create new, engaging experiences and boost the value of their content.

On April 30, 2025, Sony and BandLab Technologies have partnered to empower emerging artists by combining Sony's audio expertise with BandLab's music creation platform. As a first step, Sony's 360 Reality Audio spatial sound technology is integrated into the BandLab app, allowing users worldwide to create and experience spatial audio using any standard headphones.

On March 14, 2025, Sony unveiled a new RGB LED display system with independent color control and high-density backlight, offering vibrant color reproduction and subtle gradations. Equipped with proprietary backlight control technology, it delivers cinematic image quality that captures the creator's intent, making it ideal for both film production and home viewing.

Valuation

Sony's shares are up 31.1% in the year to date and 45.6% in the trailing 12-month period. Stocks in the Zacks sub-industry are up 31.5% while the Zacks Consumer Discretionary sector is down 15.3% year to date. In the past year, the Zacks sub-industry has gained 44.9% but the sector has declined 17.4%.

The S&P 500 Index is up 14.2% in the year-to-date period and 13.1% in the past year.

The stock is currently trading at 2.05X forward 12-month sales, which compares to 2.05X for the Zacks sub-industry, 2.03X for the Zacks sector and 5.19X for the S&P 500 Index.

Over the past three years, the stock has traded as high as 2.24X and as low as 1.02X, with a 3-year median of 1.31X. Our Outperform recommendation indicates that the stock will perform better than the market. Our \$33 price target reflects 2.35X forward 12-month sales.

The table below shows summary valuation data for SONY:

Valuation Multiples - SONY					
		Stock	Sub-Industry	Sector	S&P 500
	Current	2.05	2.05	2.03	5.19
P/S F12M	3-Year High	2.24	2.1	2.7	5.51
	3-Year Low	1.02	1.04	1.78	4.09
	3-Year Median	1.31	1.36	2.2	4.98
	Current	3.09	2.87	2.57	8.19
P/B TTM	3-Year High	3.37	3.04	4.11	8.93
	3-Year Low	1.74	1.82	2.57	6.69
	3-Year Median	2.22	2.27	3.4	8.03
	Current	9.64	9.84	8.35	18.71
P/EBITDA TTM	3-Year High	10.51	10.41	12.29	20.37
	3-Year Low	5.24	5.44	6.7	14.59
	3-Year Median	6.96	7.15	9.51	18.54

As of 11/20/2025 Source: Zacks Investment Research

Industry Analysis⁽¹⁾ Zacks Industry Rank: Top 15% (36 out of 243)

····· Industry Price 100-— Price ····· Industry 10₂₀₂₁

Top Peers (1)

Company (Ticker)	Rec	Rank
Dolby Laboratories (DLB)	Neutral	3
GoPro, Inc. (GPRO)	Neutral	3
LiveOne, Inc. (LVO)	Neutral	3
Panasonic Corp. (PCRHY)	Neutral	
Sharp Corp. (SHCAY)	Neutral	2
Sonos, Inc. (SONO)	Neutral	3
LIZHI INC. Sponsored(SOGP)	NA	
Toshiba Corp. (TOSYY)	NA	

Industry Comparison ⁽¹⁾ Industry: Au	udio Video Production			Industry Peers
	SONY	X Industry	S&P 500	SHCAY
Zacks Recommendation (Long Term)	Outperform	-	-	Neutra
Zacks Rank (Short Term)	2	-	-	2
VGM Score	В	-	-	В
Market Cap	174.05 B	161.56 M	37.98 B	3.08 E
# of Analysts	3	2	22	1
Dividend Yield	0.39%	0.00%	1.46%	0.00%
Value Score	В	-	-	A
Cash/Price	0.06	0.34	0.04	0.45
EV/EBITDA	9.71	1.28	14.48	2.30
PEG Ratio	5.48	11.00	2.21	N/A
Price/Book (P/B)	3.20	2.39	3.36	2.39
Price/Cash Flow (P/CF)	11.52	13.62	14.93	9.59
P/E (F1)	23.98	17.55	20.30	16.91
Price/Sales (P/S)	2.04	1.29	3.10	0.23
Earnings Yield	4.17%	4.83%	4.91%	5.93%
Debt/Equity	0.17	0.00	0.57	0.06
Cash Flow (\$/share)	2.50	-0.04	8.99	0.12
Growth Score	С	-	-	С
Hist. EPS Growth (3-5 yrs)	-4.88%	-4.88%	8.16%	-19.04%
Proj. EPS Growth (F1/F0)	-2.44%	8.10%	8.18%	N/A
Curr. Cash Flow Growth	3.30%	8.49%	7.00%	-0.39%
Hist. Cash Flow Growth (3-5 yrs)	10.45%	9.68%	7.31%	-20.95%
Current Ratio	1.05	1.43	1.19	0.85
Debt/Capital	14.40%	0.06%	38.15%	5.54%
Net Margin	9.18%	-2.91%	12.82%	2.95%
Return on Equity	13.55%	-0.69%	17.00%	20.90%
Sales/Assets	0.36	0.87	0.53	1.37
Proj. Sales Growth (F1/F0)	-6.00%	0.00%	5.53%	-11.10%
Momentum Score	В	-	-	Α
Daily Price Chg	-1.94%	-1.95%	0.54%	-3.74%
1 Week Price Chg	2.87%	7.58%	3.73%	-1.60%
4 Week Price Chg	2.97%	-10.46%	0.13%	-12.85%
12 Week Price Chg	0.38%	-6.23%	5.67%	-17.20%
52 Week Price Chg	43.83%	-4.20%	13.54%	-21.07%
20 Day Average Volume	3,783,117	118,193	2,762,023	6,256
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	4.35%	2.79%	0.15%	N/A
(F1) EPS Est 12 week change	3.00%	2.79%	0.60%	N/A
(Q1) EPS Est Mthly Chg	NA%	-21.32%	-0.04%	N/A

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.

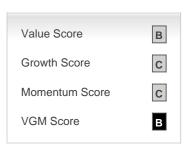
Zacks Rank

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.



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 otherwise indicated in the report's first-page footnote. 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.