

| Sonos Inc. (SONO) | Long Term: 6-12 Months | Zacks Recommendation: | Neutral | |
|--|------------------------|------------------------------|-------------|--|
| ¢24.94 (Ap. of 06/44/94) | | (Since: 05/14/21) | | |
| \$34.81 (As of 06/14/21) | | Prior Recommendation: Outper | form | |
| Price Target (6-12 Months): \$37.00 | Short Term: 1-3 Months | Zacks Rank: (1-5) | 3-Hold | |
| | | Zacks Style Scores: | VGM:B | |
| | | Value: C Growth: A | Momentum: C | |

Summary

Sonos is well positioned to benefit from its proprietary software backed by a comprehensive product portfolio. The company outsources the manufacturing process to contract manufacturers based in China for a competitive advantage. Expansion of direct-to-consumer initiatives, positive brand image and extended partner ecosystem are some of the key elements of Sonos' growth strategy. However, stiff competition from major players, high research & development expenses and rapid technology shifts are major headwinds. Its business is highly susceptible to seasonality that creates discrepancy in its quarterly revenues. Sales from direct-toconsumer channel are prone to various e-commerce risks. High concentration risks, forex woes, supply-chain disruptions and temporary retail closures stemming from the COVID-19 pandemic are other challenges.

Data Overview

| 52-Week High-Low | \$44.72 - \$11.91 |
|--------------------------------|-----------------------------|
| 20-Day Average Volume (Shares) | 1,730,106 |
| Market Cap | \$4.3 B |
| Year-To-Date Price Change | 48.8% |
| Beta | 1.91 |
| Dividend / Dividend Yield | \$0.00 / 0.0% |
| Industry | Audio Video Production |
| Zacks Industry Rank | Bottom 45% (138 out of 251) |

| Last EPS Surprise | 240.9% |
|-------------------------------|------------|
| Last Sales Surprise | 32.4% |
| EPS F1 Estimate 4-Week Change | 0.0% |
| Expected Report Date | 08/04/2021 |
| Earnings ESP | 0.0% |
| | |
| P/E TTM | 25.0 |
| P/E F1 | 41.0 |
| PEG F1 | 1.2 |
| P/S TTM | 2.8 |

Price, Consensus & Surprise



Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

| | Q1 | Q2 | Q3 | Q4 | Annual* |
|-------|----------|-----------|-----------|----------------|----------------|
| 2022 | 692 E | 276 E | 350 E | 427 E | 1,816 E |
| 2021 | 646 A | 333 A | 320 E | 362 E | 1,663 E |
| 2020 | 562 A | 175 A | 249 A | 340 A | 1,326 A |
| EPS E | stimates | | | | |
| | Q1 | Q2 | Q3 | Q4 | Annual* |
| 2022 | \$0.86 E | -\$0.07 E | -\$0.06 E | \$0.08 E | \$0.92 E |
| 0004 | Φ4.47.A | 00.04.4 | 00 40 E | 00.05.5 | AO OF F |

2021 \$1.17 A \$0.31 A -\$0.12 E -\$0.05 E \$0.85 E 2020 \$0.60 A -\$0.48 A -\$0.24 A \$0.15 A -\$0.18 A

*Quarterly figures may not add up to annual.

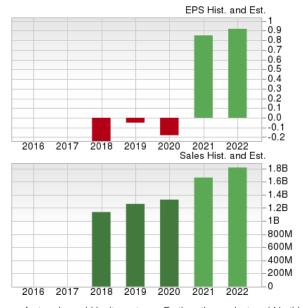
The data in the charts and tables, including the Zacks Consensus EPS and sales estimates, is as of 06/14/2021. The report's text and the analyst-provided price target are as of 06/15/2021.

Overview

Headquartered in Santa Barbara, CA, Sonos operates as a consumer electronics company that is primarily involved in the manufacturing of smart speakers with immersive sound experience. The company leverages evolving consumer technology and entertainment trends to be on par with the audio consumption patterns of customers that is largely characterized by fast-tracked adoption of voice assistants and streaming services.

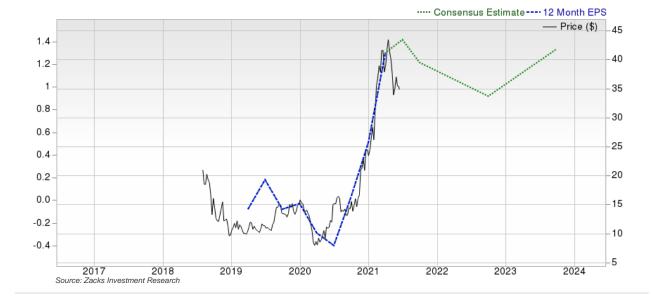
Catering to a varied base of developers, customers and content partners, the company is well poised to capitalize on the potential market opportunities in the booming home audio market. Also, the speakers are specifically designed to deliver a seamless customer experience in a multi-user and open platform environment, thanks to its proprietary software platform. Its product portfolio includes Sonos speakers, Sonos System Products, and Partner Products and Other Revenue category.

The products are distributed in more than 50 countries through third-party physical retail stores, online platform (sonos.com) and select e-commerce retailers. Markedly, Sonos speakers include home theater products and wireless speakers. Sonos System Products covers components that allow customers to transform third-party wired systems and home theater set-ups into wireless streaming music system. The Partner Products and Other Revenue category comprises certain



accessories that enable customers to seamlessly integrate devices that are manufactured or sold by its partners. Further, the products sold in this category are related to licensing and advertising revenues.

As the manufacturer of the world's first multi-room wireless sound system, Sonos has established a solid footprint across the Americas, Europe, Middle East and Africa (EMEA) and Asia Pacific (APAC) region. With an interconnected partner network, including alliances with Sonance and IKEA, the company has attracted nearly 100 streaming content providers, such as Spotify, Apple Music and TuneIn. In April 2020, Sonos had unveiled a free, ad-supported streaming radio service, Sonos Radio, which features exclusive programming content from multiple streaming partners. Markedly, Sonos operates under a single business segment.



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Reasons To Buy:

▲ Sonos delivered a trailing four-quarter earnings surprise of 236.9%, on average. Being one of the leading providers of avant-garde sound systems, it is well poised to benefit from a comprehensive product portfolio backed by an accretive base of customers. Thanks to its dynamic business model, the company sells its products through more than 10,000 third-party physical retail stores. Sonos invests significantly in research & development (R&D) to keep itself abreast of the latest technology in hardware and software products, thereby expanding its capabilities in the global market. Dedicated audio, wireless and industrial design teams ensure that the products reflect a range of assembly architecture and proprietary manufacturing details, which empowers it to be on par with evolving consumer preferences and industry trends. The company believes that its technological knowhow and domain expertise, supported by the intellectual property rights of wireless multi-room and other audio technologies, provide a competitive edge over its rivals.

Higher revenues from Sonos speakers and related products, enhanced direct-toconsumer initiatives and positive brand image are expected to drive its market share in the booming home audio market.

- ▲ Sonos outsources the manufacturing process of its products (speakers and components) to contract manufacturers based in China. The company is dependent on a small number of logistics providers for almost all of its product deliveries, which enables it to minimize shipping costs and improve inventory flexibility while significantly reducing order fulfillment time. Majority of its products are shipped to third-party warehouses, which are then dispatched to distributors, retailers and customers, directly. These third-party warehouses are located in California and Pennsylvania in the United States with overseas presence in the Netherlands, Japan, China, Canada and Australia. This not only streamlines the overall manufacturing process but also strengthens its customer relationship management. Sonos has been actively diversifying its supply chain in Malaysia from early fiscal 2020. Markedly, it is part of the company's long-term manufacturing strategy. It also implemented several supply chain expansion initiatives to tackle the challenges posed by the COVID-19 pandemic while effectively addressing customer demands.
- ▲ Sonos is well positioned to benefit from its proprietary software that serves as the backbone of Sonos sound system, making it different from other major players in the global market. The software enables an open platform for content partners with features like smart audio, multi-room experience and wireless home theater configurations. Moreover, it competes with the likes of established, audio-focused sellers of speakers and sound systems such as Bose, JBL and Harman International. It also competes against Amazon, Google and Apple, which are major developers of voice-enabled speakers. Interestingly, many of its rivals are part of Sonos' broader partner network. A wide customer base, significant market share, diversified product lines along with a solid brand recognition act as driving force to reinforce its momentum in the long run. Apart from its proprietary Sonos app and software platform, some of the primary competitive factors in the booming audio market that act as tailwinds are diligent customer support service, product quality and design, ease of setup and use, network technology, price and wireless capabilities. Active patents and patent applications also form an integral part of Sonos' business. Notably, it holds more than 1,000 issued patents, including design and utility. The company enters into various licensing agreements with third-party content partners so that its customers can get first-hand access to its diverse range of unique content.
- ▲ Expansion of direct-to-consumer initiatives, extended partner ecosystem, continued launch of innovative products and services and augmented geographical footprint are some of the key elements of Sonos' growth strategy. The company expects to develop its long-term business roadmap by tapping new customers while diversifying its international presence, especially in Asia, with increasing sales. Markedly, its website, sonos.com, is responsible for generating a major portion of revenues. The company also anticipates expanding its presence in new regions, including underserved countries, over time on the back of country-specific distribution channels and marketing campaigns. Efforts to enhance its brand awareness in existing regions also remain one of Sonos' top priorities. Consequently, the company can increase its household penetration rates on the back of its growing partner network and expanded product offerings. All these factors bode well for Sonos to thrive in the flourishing entertainment industry.
- As of Mar 31, 2021, Sonos had \$639 million of cash and cash equivalents and \$371 million of total current liabilities compared with the respective tallies of \$678 million and \$456 million in the previous quarter. Although, there has been a sequential decrease in cash and cash equivalents, long-term debt remained zero, which implies that the company is likely to remain less dependent on debt to grow its business. Also, the stock is less-leveraged than the sub-industry. Sonos' debt-to-capital ratio has declined over the past few quarters, indicating that it is more likely to meet its financial obligations with a lower risk of insolvency. The times interest earned ratio is pegged at 103.7 compared with 95.2 of the sub-industry. It is to be seen whether Sonos can maintain the momentum in the coming days amid disruptions stemming from the pandemic.

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Reasons To Sell:

✓ Owing to the rapid changes in the entertainment industry, Sonos speakers are required to be equipped with the latest technology available in the market. However, factors like technology imitation, price erosion, continued inventory shortages hinder Sonos' ability to timely ship products to its broad base of customers. As a result, multiple product lines on its online platform, sonos.com, continue to be out-of-stock with shipment dates weeks into the future. This, in turn, impairs the strength of the brand and hampers inventory flexibility, ultimately leading to customer dissatisfaction. Also, the company is facing industry-wide shortages in semiconductors, which is likely to act as a major bottleneck in addressing the increasing consumer demand for its speakers. Further, comparatively larger rival firms have the privilege of making a greater push into the premium speaker category through the sale of additional services apart from the speakers or subsidizing prices through various monetization efforts. Consequently, lack of visibility of future orders is likely to hamper Sonos' operating results.

Concentration risks, extended international footprint, huge R&D investments and supply chain woes due to COVID-19 pandemic are likely to hurt Sonos' margins. Increased pricing pressure is another headwind.

- ▼ Sonos' business is highly susceptible to seasonality that creates discrepancy in its quarterly revenues. On the basis of historic figures, revenues typically remain high in the first fiscal quarter, ahead of the holiday season, and sluggish during the fourth fiscal quarter. Any significant change in sales mix due to product release patterns, macroeconomic conditions or failure to accurately predict customer demand creates an imbalance in the company's inventory levels, which makes it difficult to forecast revenues on a quarter-by-quarter basis. Moreover, supply chain disruptions, lack of customer confidence, financial market volatility, lower discretionary spending and higher unemployment rate stemming from the COVID-19 pandemic are likely to considerably hurt Sonos' business operations. Given the severity of the pandemic, temporary closure of retail stores across its end markets has dented margins. Ability to anticipate global demand for its products and services is likely to adversely affect its cash flows and operational results.
- ▼ Since Sonos conducts itself in technologically evolving markets, it is essential to invest considerably in R&D to avoid technology obsolescence or pricing pressure, arising out of stiff competition from its major rivals. However, excessive R&D investments are likely to jeopardize its financial position in the long run as these might not yield the innovation required on a timely basis, thereby impeding its capability to effectively commercialize new and competitive products that could have boosted demand in the market. Also, sales from Sonos' direct-to-consumer channel are susceptible to various e-commerce risks. Notably, a lion's share of its revenues is generated from its online platform. However, if the company fails to drive adequate traffic, especially during the COVID crisis when majority of its physical retail stores had truncated operations, it is likely to cast a negative impact on its financial performance, thereby hindering its direct-to-consumer business. Conflict with channel and distribution partners apparently acts as a major headwind. The Audio Video Production industry, of which Sonos is a subset, might not be able to tide over these broader challenges in the near term. Hence, it may not be a good idea to bet on this space at the moment
- ▼ Thanks to its overseas presence, Sonos is subjected to various socio-economic risks, including fluctuations in foreign currency exchange rates, COVID-19 woes, trade barriers, tariffs and reduced protection for intellectual property rights. Sonos has a significant presence in China, wherein high turnover of direct labor is a common phenomenon due to the presence of a fluid labor market. This, in turn, increases the probability of lower production rates, likely hampering its delivery schedule. It faces significant concentration risks due to dependency on a limited number of third-party components suppliers and logistics providers. COVID-19 disruptions or system-wide interruptions are likely to hinder the operations of its distribution facilities, ultimately leading to delays in product deliveries. This is expected to not only pose financial challenges with dampened gross margins but also tarnish its brand image globally. Its manufacturing processes are also likely to get affected by various risks such as price fluctuations and long lead times. Also, failure to protect intellectual property and other litigations coupled with potential cybersecurity breaches might impair its ability to enter new markets. All these factors are likely to hamper Sonos' financial condition to some extent in the long haul.

Last Earnings Report

Sonos Q2 Earnings Surpass Estimates on Increased Outlook

Sonos reported solid second-quarter fiscal 2021 financial results, with both the top and the bottom line surpassing the Zacks Consensus Estimate. Better-than-expected demand across various regions, augmented presence in the audio market and efficient supply-chain mechanism supported by its dynamic business fundamentals drove Sonos' quarterly performance.

Bottom Line

On a non-GAAP basis, net income (excluding stock-based compensation, restructuring and legal and transaction related fees) came in at \$44.6 million or 31 cents per share against net loss of \$37.2 million or loss of 34 cents per share in the year-ago quarter. The bottom line beat the Zacks Consensus Estimate by 53 cents.

 Report Date
 May 12, 2021

 Sales Surprise
 32.39%

 EPS Surprise
 240.91%

 Quarterly EPS
 0.31

 Annual EPS (TTM)
 1.39

03/2021

Quarter Ending

On a GAAP basis, quarterly net income was \$17.2 million or 12 cents per share against net loss of \$52.3 million or loss of 48 cents per share in the prior-year quarter. The year-over-year improvement was primarily driven by top-line expansion.

Top Line

Quarterly revenues came in at \$332.9 million compared with \$175.1 million in the year-ago quarter. Backed by a resilient business model, the 90.2% year-over-year surge was primarily driven by a robust demand environment as the company boosted its supply chain investments with enhanced shipping and logistics processes. New product launches played a vital role as well. The top line, too, surpassed the consensus estimate of \$251 million.

By product type, revenues for Sonos speakers came in at \$267.5 million compared with \$116.4 million, up 129.9%. Sonos system products revenues were \$52.1 million, up 10.3%, and that from Partner products and other revenues totaled \$13.4 million compared with \$11.5 million in the year-ago period.

Region wise, revenues from Americas came in at \$193.9 million compared with \$102 million. EMEA revenues were \$114.3 million compared with \$57.3 million and that from APAC improved 55.6% to \$24.7 million. Higher revenues across these regions were mainly attributable to significant demand for Sonos' products.

Other Details

Total operating expenses were \$153.4 million compared with \$126.2 million in the prior-year quarter. Higher general administrative costs were the primary reason for the year-over-year increase.

Operating income was \$12.4 million against operating loss of \$53.2 million in the year-ago quarter. Gross profit in the quarter came in at \$165.8 million compared with \$73 million in the prior-year quarter with respective margins of 49.8% and 41.7%. Quarterly adjusted EBITDA totaled \$48.5 million against a negative adjusted EBITDA of \$28.4 million with respective margins of 14.6% and a negative 16.2%.

Cash Flow & Liquidity

In the first six months of fiscal 2021, Sonos generated \$176 million of net cash from operations compared with \$35.4 million in the year-ago period. Free cash flow in the same period cataputed 1,530.7% to \$156 million. Capital expenditures were \$19.9 million, down 22.9%, mainly driven by reduced expenses related to diversifying manufacturing operations in Malaysia in the previous year.

As of Apr 3, 2021, the company had \$638.9 million of cash and cash equivalents with \$371.1 million of total current liabilities. Markedly, the company had no long-term debt in the said period.

Fiscal 2021 Outlook Raised

Sonos has revised the financial outlook for fiscal 2021. Revenues are likely to grow at a rate of 23-26% year over year to be in the band of \$1.63-\$1.68 billion compared with prior guidance of \$1.53-\$1.58 billion. Adjusted EBITDA is expected to be between \$225 million and \$250 million with margin increased to a range of 13.8-14.9%. This compares to the previous outlook figure of \$195-\$225 million with margin ranging from 12.8% and 14.3%.

Driven by such stellar performance, the company is confident of realizing its fiscal 2024 targets which include \$2.25 billion of revenues with adjusted EBITDA margin between 15% and 18%. As it expands its footprint in the booming audio market, Sonos remains focused on key three strategic initiatives — expansion of offerings, expansion of brand and fostering operational excellence. All these factors make Sonos poised to tap lucrative market opportunities that might prove beneficial in the long run.

Recent News

On Apr 20, 2021, Sonos announced its decision to expand its much-acclaimed radio service by launching exclusive new programming content on Sonos Radio and Sonos Radio HD. Markedly, the service provides a platform for various artists to connect with listeners through a curated list of songs and stories.

On Apr 14, 2021, Sonos collaborated with automobile manufacturer giant, Audi, to incorporate its premium sound experience in the latter's Q4 etron vehicle along with other models such as Q2, Q3 and A1. The partnership marks Sonos' debut in the auto space. The alliance aims to empower customers with best-in-class audio quality on the go.

Valuation

Sonos' shares are up 167% in the trailing 12-month period, and up 53.6% in the past six months. Stocks in the Zacks sub-industry are up 42.5% in the past year, and up 4.3% in the past six months. Stocks in the Zacks Consumer Discretionary sector are up 30.5% in the past year, and up 3% in the past six months.

The S&P 500 Index is up 38.1% in the past year, and up 15.3% in the past six months.

The stock is currently trading at 2.45X forward 12-month sales, which compares to 0.97X for the Zacks sub-industry, 2.71X for the Zacks sector and 4.73X for the S&P 500 Index.

Over the past two years, the stock has traded as high as 3.18X and as low as 0.53X, with a 2-year median of 1.13X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$37 price target reflects 30.46X forward 12-month sales.

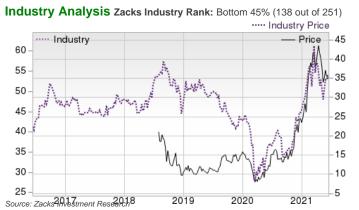
The table below shows summary valuation data for SONO

| Valuation Multiples - SONO | | | | | | |
|----------------------------|---------------|-------|--------------|--------|---------|--|
| | | Stock | Sub-Industry | Sector | S&P 500 | |
| | Current | 2.45 | 0.97 | 2.71 | 4.73 | |
| P/S F12M | 2-Year High | 3.18 | 1.23 | 2.92 | 4.74 | |
| | 2-Year Low | 0.53 | 0.71 | 1.73 | 3.21 | |
| | 2-Year Median | 1.13 | 0.89 | 2.32 | 3.92 | |
| | Current | 7.2 | 1.8 | 3.86 | 7.07 | |
| P/B TTM | 2-Year High | 10.11 | 2.18 | 4.43 | 7.07 | |
| | 2-Year Low | 2.09 | 1.18 | 2.25 | 3.84 | |
| | 2-Year Median | 5.51 | 1.63 | 3.51 | 5.6 | |
| | Current | 2.25 | 0.7 | 3.82 | 4.87 | |
| EV/Sales TTM | 2-Year High | 3.18 | 0.93 | 4.15 | 4.87 | |
| | 2-Year Low | 0.29 | 0.39 | 2.29 | 2.65 | |
| | 2-Year Median | 0.98 | 0.63 | 3.24 | 3.85 | |
| | | | | | | |

As of 06/14/2021

Source: Zacks Investment Research

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Top Peers

| Company (Ticker) | Rec | Rank |
|------------------------------|--------------|------|
| Dolby Laboratories (DLB) | Neutral | 2 |
| GoPro, Inc. (GPRO) | Neutral | 3 |
| LiveXLive Media, Inc. (LIVX) | Neutral | 3 |
| Panasonic Corp. (PCRFY) | Neutral | 3 |
| Sharp Corp. (SHCAY) | Neutral | 4 |
| Sony Corporation (SONY) | Neutral | 3 |
| Technicolor SA (TCLRY) | Neutral | 3 |
| Toshiba Corp. (TOSYY) | Underperform | 3 |

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

| | hold or sell. | | | | | |
|---|--|------------|-----------|---------|-----------|------------|
| Industry Comparison Industry | try: Audio Video Production Industry Peers | | | | | |
| | SONO | X Industry | S&P 500 | DLB | GPRO | LIV |
| Zacks Recommendation (Long Term) | Neutral | - | - | Neutral | Neutral | Neutra |
| Zacks Rank (Short Term) | 3 | - | - | 2 | 3 | 3 |
| VGM Score | В | - | - | F | Α | D |
| Market Cap | 4.34 B | 198.96 M | 30.26 B | 10.22 B | 1.90 B | 360.79 N |
| # of Analysts | 4 | 3 | 12 | 4 | 4 | 1 |
| Dividend Yield | 0.00% | 0.00% | 1.29% | 0.87% | 0.00% | 0.00% |
| Value Score | С | - | - | F | С | F |
| Cash/Price | 0.15 | 0.15 | 0.05 | 0.12 | 0.15 | 0.05 |
| EV/EBITDA | 207.41 | -5.04 | 17.28 | 27.28 | -80.50 | -13.72 |
| PEG F1 | 1.17 | 1.33 | 2.12 | 2.21 | NA | NA |
| P/B | 7.20 | 2.76 | 4.16 | 3.94 | 8.97 | 22.34 |
| P/CF | 236.08 | 15.15 | 17.62 | 30.81 | 993.79 | NA |
| P/E F1 | 40.71 | 19.18 | 21.40 | 28.68 | 19.18 | NA |
| P/S TTM | 2.77 | 1.95 | 3.49 | 8.33 | 1.94 | 6.67 |
| Earnings Yield | 2.44% | 4.83% | 4.58% | 3.49% | 5.17% | -8.79% |
| Debt/Equity | 0.00 | 0.01 | 0.66 | 0.00 | 1.05 | 1.35 |
| Cash Flow (\$/share) | 0.15 | 0.00 | 6.83 | 3.27 | 0.01 | -0.51 |
| Growth Score | Α | - | - | F | Α | C |
| Historical EPS Growth (3-5 Years) | NA% | 5.19% | 9.44% | 6.72% | NA | NA |
| Projected EPS Growth (F1/F0) | 572.22% | 28.71% | 21.49% | 18.35% | 706.25% | 19.23% |
| Current Cash Flow Growth | -48.46% | -19.62% | 0.86% | -3.61% | -93.40% | 3.62% |
| Historical Cash Flow Growth (3-5 Years) | 19.12% | 5.53% | 7.28% | 5.53% | -51.46% | NA |
| Current Ratio | 2.37 | 1.80 | 1.39 | 5.67 | 2.39 | 0.83 |
| Debt/Capital | 0.00% | 1.96% | 41.51% | 0.00% | 51.21% | 57.49% |
| Net Margin | 7.08% | 1.92% | 11.95% | 24.89% | -1.38% | -64.71% |
| Return on Equity | 43.14% | 11.18% | 16.36% | 12.26% | 21.47% | -1,374.97% |
| Sales/Assets | 1.75 | 1.17 | 0.51 | 0.41 | 1.46 | 0.76 |
| Projected Sales Growth (F1/F0) | 25.37% | 0.00% | 9.48% | 10.95% | 25.96% | 40.19% |
| Momentum Score | C | - | - | F | C | C |
| Daily Price Change | -1.47% | 0.00% | 0.18% | 0.62% | -1.75% | -0.62% |
| 1-Week Price Change | -0.28% | -0.28% | 0.68% | 3.27% | 14.04% | -9.07% |
| 4-Week Price Change | 2.78% | 5.56% | 2.21% | 6.45% | 25.08% | 21.32% |
| 12-Week Price Change | -15.28% | -7.48% | 7.98% | 1.17% | -7.48% | -9.98% |
| 52-Week Price Change | 164.11% | 56.94% | 38.76% | 57.02% | 176.12% | 56.21% |
| 20-Day Average Volume (Shares) | 1,730,106 | 82,870 | 1,769,004 | 326,551 | 3,498,869 | 943,462 |
| EPS F1 Estimate 1-Week Change | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| EPS F1 Estimate 4-Week Change | 0.00% | 0.00% | 0.02% | 0.00% | 0.00% | 0.00% |
| EPS F1 Estimate 12-Week Change | 9.32% | -0.13% | 3.44% | 11.63% | 13.51% | -16.67% |
| EPS Q1 Estimate Monthly Change | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | N.A |

Source: Zacks Investment Research

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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.

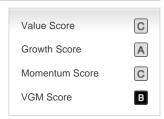
Zacks Rank

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

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Additional Disclosure

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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.

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.

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.

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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.