

Boston Beer Company (SAM)

\$367.56 (As of 03/31/20)

Price Target (6-12 Months): **\$386.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 03/16/20)

Prior Recommendation: Outperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:D

Value: D

Growth: C

Momentum: D

Summary

Boston Beer has outpaced the industry in the past three months, courtesy of its robust top-line trends on strong shipments and depletions growth. It delivered the third straight sales beat in fourth-quarter 2019. The Truly, Twisted Tea and Dogfish Head brands remain its key priorities for 2020. Consequently, it expects significant distribution and volume growth opportunities in 2020 for the Dogfish Head brands. However, the company delivered bottom-line miss and soft margins in the fourth quarter, owing to incremental costs due to the use of third-party breweries and a higher proportion of variety packs in its overall product mix. Meeting the increased demand through the expansion of internal capacity and higher use of third-party breweries is likely to affect its gross margin and profitability. Higher operating costs also remain headwinds.

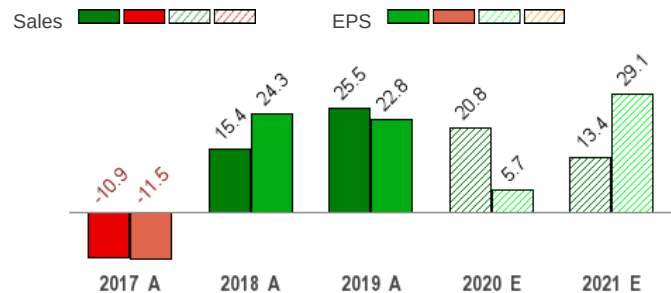
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$444.65 - \$258.34
20 Day Average Volume (sh)	186,377
Market Cap	\$4.5 B
YTD Price Change	-2.7%
Beta	0.58
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Beverages - Alcohol
Zacks Industry Rank	Bottom 9% (232 out of 254)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	-12.7%
Last Sales Surprise	8.7%
EPS F1 Est- 4 week change	-15.9%
Expected Report Date	04/22/2020
Earnings ESP	-7.3%

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	411 E	496 E	535 E	409 E	1,712 E
2020	350 E	391 E	432 E	337 E	1,510 E
2019	252 A	318 A	378 A	301 A	1,250 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$2.81 E	\$3.55 E	\$5.22 E	\$2.58 E	\$12.51 E
2020	\$1.82 E	\$2.61 E	\$4.23 E	\$2.41 E	\$9.69 E
2019	\$1.87 A	\$2.34 A	\$3.58 A	\$1.24 A	\$9.17 A

*Quarterly figures may not add up to annual.

P/E TTM	40.7
P/E F1	37.9
PEG F1	3.8
P/S TTM	3.6

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 03/31/2020. The reports text is as of 04/01/2020.

Overview

Founded by Jim Koch, Harry M. Rubin, and Lorenzo Lamadrid in Boston, MA in 1984, Boston Beer Co. Inc. is one of the largest craft brewers in the United States. Boston Beer produces beer, malt beverages, and cider products at company-owned breweries and under contract. The company sells alcoholic beverages in the United States, Canada, Europe, Israel, Australia, New Zealand, the Caribbean, the Pacific Rim, Mexico, and Central and South America through a formidable network of wholesale distributors.

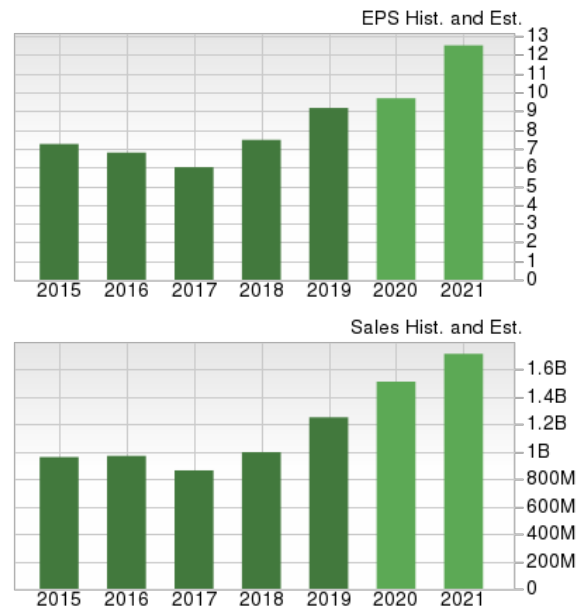
Boston Beer has four company-owned breweries, namely **Boston Brewery** located at Boston, MA; **Cincinnati Brewery** at Cincinnati, OH; **Pennsylvania Brewery** at Breinigsville, PA; and **Angel City Brewery** at Los Angeles, CA.

The company produces and sells three types of alcoholic beverages:

Beer: The company's beer products are primarily positioned in the "Better Beer" category of the beer industry, which includes craft beers, domestic specialty beers and imported beers. The category is decided on the basis of premium price, quality, image and taste. The company is known for its Samuel Adams Boston Lager or Sam Adams Boston Lager beer brands under which it sells about 60 different types of beers. Alongside, the company sells 20 beers of various other brands.

Malt Beverages: Apart from producing beer, the company also produces a malt beverage known as Twisted Tea which contains Iced Tea and alcohol.

Cider: The company sells alcoholic ciders under the Angry Orchard brand.



Reasons To Buy:

- ▲ **Robust Top-Line Trend:** Boston Beer boasts a robust sales surprise trend, which continued in fourth-quarter 2019. The company's fourth-quarter 2019 sales outpaced estimates and improved year over year. This marked its third straight sales beat. In fourth-quarter 2019, revenue growth of 33.8% was backed by a 31.7% improvement in shipments and a 25% increase in depletions. Excluding the addition of Dogfish Head brands, beginning Jul 3, 2019, shipments increased 25.6%. Depletion benefited from a 19% rise from Boston Beer legacy brands and 6% from the addition of Dogfish Head brands. Depletions also gained from major innovations, quality of products and strong brands alongside solid sales execution and support from distributors. Further, increases in Truly Hard Seltzer and Twisted Tea brands as well as the inclusion of Dogfish Head brands aided growth. Notably, shipments reflected a higher growth rate than depletions in the fourth quarter, which resulted in higher distributor inventory levels as of Dec 28, 2019. Although shares of Boston Beer fell 1% in the past three months, it fared better than the industry's 34.7% slump.
- Investments in the Truly brand through the launch of new flavors, NHL partnership and new ad campaign, should bolster Boston Beer's position in hard seltzer category. This is likely to aid depletions.
- ▲ **Strong Shipments & Depletions Outlook:** Boston Beer has been witnessing sturdy depletions and shipment growth for a while now, which has been aiding the top-line performance. The company expects the trend to continue in 2020. Boston Beer will report the impacts of the inclusion of Dogfish Head on 2020 shipments and depletion volume growth rates. Further, the Truly, Twisted Tea and Dogfish Head brands remain the company's key priorities for 2020. Consequently, it expects significant distribution and volume growth opportunities in 2020 for the Dogfish Head brands. Further, it will focus on returning Samuel Adams and Angry Orchard brands to long-term sustainable growth.
- Based on these factors, the company estimates shipment and depletion growth of 15-25% for 2020. Excluding the Dogfish Head brands, shipment and depletion growth is expected to be 11-21%. Notably, the company expects shipment growth to be higher than depletions in first-quarter 2020, driven by continued supply chain and capacity management efforts to ensure that distributor inventory is adequate to support greater demand for brands during the peak summer months.
- ▲ **Truly Brand Holds Potential:** Boston Beer has been lately witnessing robust trends for the Truly Hard Seltzer and Twisted Tea brands, which is driving depletions. Notably, the Truly brand generated triple-digit volume growth in the fourth quarter. Moreover, the company expects to continue expanding the brand's package and draft distribution across all channels. Meanwhile, the Twisted Tea brand generated consistent double-digit volume growth despite increased competition from new entrants. The company is focused on promoting the Truly brand to take advantage of a shift in consumer preference to the fast-growing hard seltzer category. In the fourth quarter, the company launched new formulations for all Truly flavors. Since the formulations hit the market in November, the volume and velocity trends for the brand have increased significantly. The company remains focused on launching additional flavors for Truly, and recently launched Truly Hard Seltzer Lemonade. Earlier, it entered a multi-year U.S. partnership with the National Hockey League (NHL), making its Truly Hard Seltzer the official drink of the League. With the launch of new formulations, the Truly Lemonade; NHL partnership; and new ad campaign, we believe that the company is well-positioned to boost its position as a leader in the hard seltzer category despite the entry of competitors.
- ▲ **Strategic Initiatives:** Boston Beer remains committed to the three-point growth plan focused on the revival of its Samuel Adams and Angry Orchard brands, cost-saving initiatives and long-term innovation. Firstly, it plans to revive the Samuel Adams brand through packaging, innovation, promotion and brand communication initiatives. Further, it remains keen on retaining Angry Orchard and Twisted Tea's momentum while ensuring Truly Spiked & Sparkling's leadership position in the hard sparkling-water category. Secondly, the company is focused on accelerated cost savings and efficiency projects with savings directed for further brand development. Its third priority is long-term innovation and maximizing the shareholder value. Boston Beer remains optimistic about the future of craft beer and cider categories.
- ▲ **Healthy Balance Sheet & Strong Cash Flows:** Boston Beer's balance sheet is reasonably healthy, indicating that its cash position should be able to fund strategic investments. The company had cash balance of \$36.7 million as of Dec 28, 2019, with operating cash flow of \$178.2 million. Its existing cash balance clubbed with future operating cash flows and \$150 million line of credit reflects its immense potential to fund future cash requirements. The company currently has no amount outstanding on its line of credit. Further, disciplined capital spending and ongoing cost-control programs indicate improving cash flows. The company expects to incur capital spending of \$135-\$155 million in 2020. Boston Beer also focuses on enhancing shareholder value as clear from \$90.3 million remaining under the \$931-million share buyback authorization as of Dec 28, 2019.
-

Reasons To Sell:

▼ **Q4 Earnings Miss & Soft Gross Margin:** Boston Beer reported bottom-line miss in fourth-quarter 2019 along with a 33.3% decline year over year. Revenue gains from robust shipments and strong depletions were more than offset by lower gross margin, and higher advertising, promotional and selling costs. Over the past few quarters, Boston Beer has been witnessing incremental costs due to the use of third-party breweries and a higher proportion of variety packs in its overall product mix, which is hurting margins. The company's gross margin contracted 450 basis points (bps) in fourth-quarter 2019 due to elevated processing costs, stemming from higher production at third-party breweries, and increased temporary labor requirements at company-owned breweries. The decline was partly negated by price increases and cost savings at company-owned breweries.

Boston Beer has been witnessing incremental costs due to the use of third-party breweries and a higher proportion of variety packs in its overall product mix, which is hurting gross margin.

▼ **Higher Operating Costs:** Higher advertising, promotional and selling expenses along with increased general and administrative costs remain a threat to the company's overall profitability. In fourth-quarter 2019, advertising, promotional and selling expenses rose 47.7% due to higher investments in media, production and local marketing; expenses related to the inclusion of Dogfish Head brand beginning Jul 3; higher salaries and benefits costs; and increased freight to distributors due to higher volumes. Moreover, general and administrative expenses grew 25.3%, driven by non-recurring Dogfish Head Transaction costs, and the addition of Dogfish Head's general and administrative expenses. Additionally, increases in salaries and benefits costs contributed to the rise.

For 2020, investment in advertising, promotional and selling expenses is envisioned to increase \$80-\$90 million. The increase is mostly attributed to higher spending for the launch of new flavors for the Truly brand, excluding any change in freight expenses for the shipment of products to distributors.

▼ **Scaled Up Investments May Hurt Profitability & Margins:** Boston Beer has been scaling up investments in supply chain, and expanding capacity for boosting production and meeting customer demand, particularly for the fast-growing hard seltzer category. This was one of the reasons for the company's soft margins and lower profitability in the fourth quarter. Notably, in the fourth quarter, it increased brand spending and investments in supply chain to prepare for rampant competition in the hard seltzer category. Additionally, it invested in increased can and automated variety pack capacity, which was eclipsed by rise in depletions, leading to excessive use of third-party breweries. Meeting the increased demand through the combination of internal capacity increases and higher use of third-party breweries has a negative impact on the company's gross margins and profitability.

To overcome the shortcomings, it has started a comprehensive program to transform its supply chain, reduce costs, increase flexibility to better react to mix changes, and allow scaling up more efficiently. However, it expects the two-to-three-year program to begin showing margin improvement by the first half of 2021. Moreover, it expects gross margins to be negatively impacted until volume growth stabilizes. Consequently, for 2020, it expects gross margin of 49-51%.

▼ **Softness in Samuel Adams Brand:** Soft volume for Boston Beer's Samuel Adams (craft beer) brand has been a key headwind, which is weighing on the overall volumes, depletions growth as well as the top line. The brand is struggling due to the industry-wide softening of the craft beer growth rates and increased choices for drinkers on retail shelves. Notably, volume for the Samuel Adams brand continued to decline in fourth-quarter 2019, which partly hurt depletions. The company is working hard to develop brand support and messaging for the Samuel Adams brand to position it for sustainable long-term growth. It remains encouraged by the initial positive response for the reformulations of Samuel Adams Cold Snap seasonal, the new Samuel Adams 'Toast Someone' campaign, and the Samuel Adams Tap Room that opened in downtown Boston in January. However, we believe there is a lot of work to be done before seeing a turnaround in the trends for this troubled brand.

▼ **Competitive Pressure:** Boston Beer faces intense competition from well-established players in the industry such as Molson Coors Brewing Co. and Anheuser-Busch InBev SA/NV on taste, product quality, brand image, price and consumer preference fronts. The company has been a major player in the industry with its Samuel Adams brand over the past few years. Looking ahead, the company expects competition to intensify due to the increasing popularity of craft beer and the entry of new players. This may dent Boston Beer's top and bottom lines.

Last Earnings Report

Boston Beer Q4 Earnings Miss Estimates

Boston Beer reported fourth-quarter 2019 results, wherein earnings missed the Zacks Consensus Estimate but revenues beat the same. Revenue gains from robust shipments and strong depletions were more than offset by lower gross margin, and higher advertising, promotional and selling costs.

Boston Beer's fourth-quarter adjusted earnings of \$1.24 per share missed the Zacks Consensus Estimate of \$1.42. Further, the bottom line declined 33.3% from \$1.86 earned in the year-ago period mainly due to lower gross margin coupled with higher advertising, promotional and selling costs. This was partly offset by higher revenues. On a GAAP basis, earnings were \$1.12 per share in the reported quarter.

Net revenues advanced 33.8% year over year to \$301.3 million and outpaced the Zacks Consensus Estimate of \$277.1 million. Excluding excise taxes, the top line rose 33.9% year over year to \$320.2 million.

Robust top-line performance can primarily be attributed to a 31.7% improvement in shipments to 1.3 million barrels. Excluding the addition of the Dogfish Head brands, beginning Jul 3, 2019, shipments increased 25.6%. Depletions grew 25%, including a 19% rise from Boston Beer legacy brands and 6% from the addition of Dogfish Head brands. Notably, shipments reflected a higher growth rate than depletions in the quarter, which resulted in higher distributor inventory levels as of Dec 28, 2019.

Depletion growth can be attributed to major innovations, quality of products and strong brands alongside solid sales execution and support from distributors. Further, increases in Truly Hard Seltzer and Twisted Tea brands as well as the inclusion of Dogfish Head brands aided growth. Depletion growth was partly offset by the fall in Samuel Adams and Angry Orchard brands.

Notably, the Truly brand is generating triple-digit volume growth and expects to continue expanding brand distribution across all channels. Meanwhile, the Twisted Tea brand generated consistent double-digit volume growth in the fourth quarter despite increased competition from new entrants.

Depletions for the year-to-date period through the six weeks ended Feb 8, 2020, have grown nearly 34% from that witnessed in the year-ago period. Excluding Dogfish Head Brewery, depletions grew 28%.

Costs & Margins

Gross profit improved 22.2% year over year to \$142.8 million. However, gross margin contracted 450 basis points to 47.4% due to elevated processing costs, stemming from higher production at third-party breweries and increased temporary labor requirements at company-owned breweries. The factors were partly negated by higher prices and cost savings at company-owned breweries.

Furthermore, advertising, promotional and selling expenses rose 47.7% to \$93.2 million. The increase was driven by higher investments in media, production and local marketing; expenses related to the inclusion of Dogfish Head brand, beginning Jul 3; higher salaries and benefits costs; and increased freight to distributors due to higher volumes.

General and administrative expenses totaled \$31.2 million, up 25.3% from the year-ago quarter. The increase was mainly driven by non-recurring Dogfish Head Transaction costs, and the addition of Dogfish Head's general and administrative expenses. Additionally, increases in salaries and benefits costs contributed to the rise.

Financials

As of Dec 28, 2019, Boston Beer had cash and cash equivalents of \$36.7 million, and total stockholders' equity of \$735.6 million. Moreover, it had no amounts outstanding on its line of credit.

During 2019, and the period between Dec 29, 2019, and Feb 14, 2020, Boston Beer did not repurchase shares. As a result, the company had \$90.3 million remaining under the \$931-million share buyback authorization.

Outlook

In 2020, Boston Beer will report Dogfish Head's impact on 2020 shipments and depletion volume growth rates. However, it will not report the impact of Dogfish Head on earnings per share as the integration of the business is complete in early 2020.

The Truly, Twisted Tea and Dogfish Head brands remain the company's key priorities for 2020. Consequently, it expects significant distribution and volume growth opportunities in 2020 for the Dogfish Head brands. Further, it will focus on returning Samuel Adams and Angry Orchard brands to long-term sustainable growth.

Based on these factors, the company outlined its view for 2020. Boston Beer estimates shipment and depletion growth of 15-25% for 2020. Excluding the Dogfish Head brands, shipment and depletion growth is expected to be 11-21%. National price increases are estimated between 1% and 3%.

Notably, the company expects shipment growth to be higher than depletions in first-quarter 2020, driven by continued supply chain and capacity management efforts to ensure that distributor inventory is adequate to support greater demand for brands during the peak summer months.

For 2020, it expects gross margin of 49-51%. Investment in advertising, promotional and selling expenses is envisioned to increase \$80-\$90 million. The increase is mostly attributed to higher spending for the launch of new flavors for the Truly brand, excluding any change in freight expenses for the shipment of products to distributors.

Quarter Ending **12/2019**

Report Date	Feb 19, 2020
Sales Surprise	8.74%
EPS Surprise	-12.68%
Quarterly EPS	1.24
Annual EPS (TTM)	9.03

The company expects adjusted effective tax rate of 27%, excluding the impact of ASU 2016-09. It anticipates adjusted earnings per share of \$10.70-\$11.70 on current spending and investment plans.

Furthermore, the company expects capital spending of \$135-\$155 million for 2020, which will be mostly spent on continued investments in breweries and taprooms.

Valuation

Boston Beer shares are down 2.7% in the year-to-date period but up nearly 28.6% for the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Consumer Staples sector are down 34.3% and 20.7% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and the sector are down 28% and 14.9%, respectively.

The S&P 500 index is down 18.5% in the year-to-date period and 8.7% in the past year.

The stock is currently trading at 30.53X forward 12-month earnings, which compares to 18.64X for the Zacks sub-industry, 16.55X for the Zacks sector and 16.12X for the S&P 500 index.

Over the past five years, the stock has traded as high as 45.54X and as low as 19.85X, with a 5-year median of 28.69X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$386 price target reflects 32.06X forward 12-month earnings.

The table below shows summary valuation data for SAM

Valuation Multiples - SAM					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	30.53	18.64	16.55	16.12
	5-Year High	45.54	27.52	22.37	19.34
	5-Year Low	19.85	18.64	16.55	15.18
	5-Year Median	28.69	23.15	19.68	17.44
P/S F12M	Current	2.79	17.44	8.2	2.85
	5-Year High	4.11	20.67	11.16	3.43
	5-Year Low	1.82	14.42	8.1	2.54
	5-Year Median	2.63	17.53	9.89	3
EV/EBITDA TTM	Current	21.79	33.54	31.67	9.72
	5-Year High	27.64	55.56	45.9	12.88
	5-Year Low	8.1	28.99	27.86	8.27
	5-Year Median	14.16	44.61	39.07	10.78

As of 03/31/2020

Industry Analysis Zacks Industry Rank: Bottom 9% (232 out of 254)



Top Peers

Brown-Forman Corporation (BF.B)	Neutral
Craft Brew Alliance, Inc. (BREW)	Neutral
Diageo plc (DEO)	Neutral
Heineken NV (HEINY)	Neutral
Pernod Ricard SA (PDRDY)	Neutral
Constellation Brands Inc (STZ)	Neutral
Molson Coors Brewing Company (TAP)	Neutral
Anheuser-Busch InBev SA/NV (BUD)	Underperform

Industry Comparison Industry: Beverages - Alcohol				Industry Peers		
	SAM Neutral	X Industry	S&P 500	BUD Underperform	HEINY Neutral	TAP Neutral
VGM Score	D	-	-	D	A	B
Market Cap	4.47 B	7.56 B	17.97 B	88.96 B	47.43 B	8.44 B
# of Analysts	3	3	13	2	2	7
Dividend Yield	0.00%	0.00%	2.37%	2.98%	1.38%	5.84%
Value Score	D	-	-	C	C	A
Cash/Price	0.01	0.04	0.06	0.09	0.05	0.06
EV/EBITDA	22.08	7.99	10.93	7.94	9.33	9.81
PEG Ratio	3.77	2.91	1.74	NA	2.37	1.82
Price/Book (P/B)	6.02	2.27	2.39	1.05	2.45	0.62
Price/Cash Flow (P/CF)	26.59	12.19	9.48	6.98	9.52	4.54
P/E (F1)	37.74	18.45	14.84	14.16	16.80	10.91
Price/Sales (P/S)	3.57	1.55	1.91	1.68	NA	0.65
Earnings Yield	2.64%	5.03%	6.65%	7.07%	5.95%	9.15%
Debt/Equity	0.00	0.45	0.70	1.15	0.77	0.59
Cash Flow (\$/share)	13.82	1.72	7.01	6.32	4.32	8.59
Growth Score	C	-	-	D	A	B
Hist. EPS Growth (3-5 yrs)	4.86%	7.53%	10.89%	-5.02%	NA	6.66%
Proj. EPS Growth (F1/F0)	5.67%	0.00%	1.29%	-23.65%	0.82%	-21.27%
Curr. Cash Flow Growth	18.44%	2.58%	6.03%	11.61%	2.45%	-5.29%
Hist. Cash Flow Growth (3-5 yrs)	5.61%	4.22%	8.55%	0.84%	5.02%	11.28%
Current Ratio	1.21	1.21	1.24	0.83	0.68	0.59
Debt/Capital	0.00%	31.25%	42.36%	53.57%	43.57%	37.23%
Net Margin	8.80%	8.03%	11.64%	17.29%	NA	1.86%
Return on Equity	17.62%	8.81%	16.74%	20.56%	NA	7.15%
Sales/Assets	1.39	0.52	0.54	0.45	NA	0.44
Proj. Sales Growth (F1/F0)	20.79%	0.00%	1.61%	-8.65%	-0.51%	-2.53%
Momentum Score	D	-	-	B	B	D
Daily Price Chg	0.88%	0.00%	-2.05%	2.92%	3.22%	-3.20%
1 Week Price Chg	15.81%	4.58%	12.32%	6.67%	2.23%	3.03%
4 Week Price Chg	-1.08%	-16.25%	-18.09%	-22.12%	-18.81%	-22.65%
12 Week Price Chg	-1.69%	-20.97%	-24.90%	-45.94%	-24.22%	-28.41%
52 Week Price Chg	28.69%	-20.39%	-18.55%	-47.59%	-22.33%	-35.15%
20 Day Average Volume	186,377	41,776	4,222,189	5,144,691	139,626	3,185,890
(F1) EPS Est 1 week change	0.00%	0.00%	-0.18%	1.36%	-3.29%	0.00%
(F1) EPS Est 4 week change	-15.93%	-7.73%	-3.16%	-13.23%	-6.25%	-8.28%
(F1) EPS Est 12 week change	-15.05%	-10.19%	-4.36%	-27.33%	-6.37%	-10.19%
(Q1) EPS Est Mthly Chg	-7.47%	-7.47%	-2.63%	NA	NA	-9.43%

Zacks Style Scores

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

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

Value Score	D
Growth Score	C
Momentum Score	D
VGM Score	D

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.