

Oracle Corp. (ORCL)

\$51.79 (As of 05/01/20)

Price Target (6-12 Months): **\$55.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 03/18/19)

Prior Recommendation: Underperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:B

Value: B

Growth: C

Momentum: B

Summary

Oracle is benefiting from strong adoption of cloud-based solutions, comprising NetSuite ERP, Fusion ERP and Fusion HCM. Recently, Zoom Video Communications, selected Oracle Cloud Infrastructure services to address business needs, which is a testament to strength of its cloud offerings. Moreover, strong demand for the latest autonomous database supported by ML is anticipated to drive the top line and provide the company a competitive edge against Amazon Web Services (AWS) in the Database-as-a-Service market. Although the company's shares have underperformed in the past year, these factors are expected to help it grow in the rest of 2020. However, increasing expenses on product enhancements amid stiff competition in the cloud market from dominant players is anticipated to weigh on profitability.

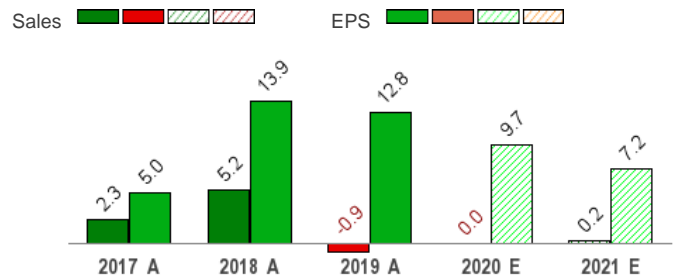
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$60.50 - \$39.71
20 Day Average Volume (sh)	11,359,876
Market Cap	\$163.3 B
YTD Price Change	-2.3%
Beta	0.90
Dividend / Div Yld	\$0.96 / 1.8%
Industry	Computer - Software
Zacks Industry Rank	Top 24% (60 out of 253)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	1.0%
Last Sales Surprise	0.3%
EPS F1 Est- 4 week change	-0.2%
Expected Report Date	06/17/2020
Earnings ESP	-16.4%
P/E TTM	13.5
P/E F1	13.4
PEG F1	1.4
P/S TTM	4.1

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	9,181 E	9,612 E	9,809 E	10,906 E	39,592 E
2020	9,220 A	9,615 A	9,797 A	10,901 E	39,523 E
2019	9,201 A	9,567 A	9,618 A	11,139 A	39,526 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$0.88 E	\$0.96 E	\$1.03 E	\$1.27 E	\$4.14 E
2020	\$0.81 A	\$0.90 A	\$0.97 A	\$1.20 E	\$3.86 E
2019	\$0.71 A	\$0.80 A	\$0.87 A	\$1.16 A	\$3.52 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 05/01/2020. The reports text is as of 05/04/2020.

Overview

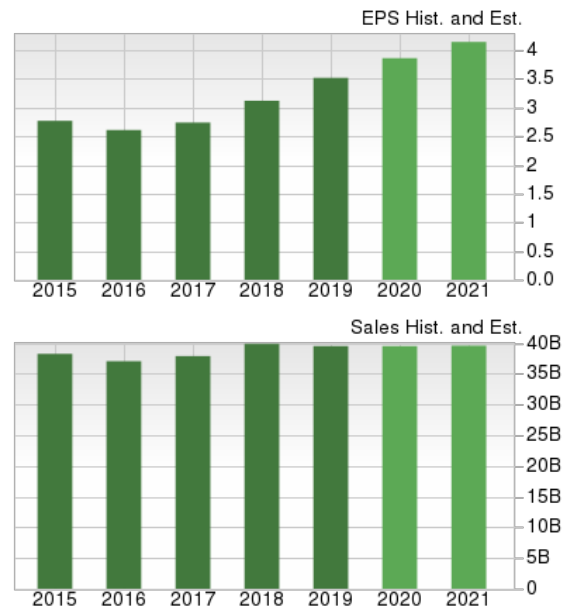
Redwood City, CA-based Oracle Corporation was founded in 1977 and incorporated later in 2005. Oracle is one of the largest enterprise-grade database, middleware and application software providers. With the acquisition of Sun Microsystems in Jan 2010, Oracle began selling hardware products and services, primarily comprising computer server and storage products. Oracle's software and hardware products and services include Oracle Database, Oracle Fusion Middleware, Java and Oracle Engineered Systems. Oracle Engineered Systems include Exadata Database Machine, Exalogic Elastic Cloud, Exalytics In-Memory Machine, SPARC SuperCluster, Virtual Compute Alliance, Oracle Database Appliance, Oracle Big Data Appliance and ZFS Storage.

Oracle has expanded its cloud computing operations over the last couple of years. The company offers cloud solutions and services that can be used to build and manage various cloud deployment models. Built upon open industry standards such as SQL, Java and HTML5, Oracle Cloud provides access to application services, platform services and infrastructure services for a subscription. Through its Oracle Enterprise Manager offering, the company manages cloud environments.

Oracle reported revenues of \$39.5 billion in fiscal 2019. The company reports its new software licenses under its new Cloud license and on-premise license segment. Further, the company merged its Cloud SaaS, Cloud PaaS and IaaS along with its software license updates and product support into Cloud services and license support.

Total cloud services and license support revenues came in at \$26.71 billion in fiscal 2019. Further, total cloud license and on-premise license came in at \$5.86 billion in fiscal 2019.

Oracle faces significant competition in most of its operational markets (database, applications, storage, cloud computing) from the likes of Dell-EMC, IBM, Hewlett-Packard, Microsoft, SAP, Salesforce.com, Workday and Teradata.



Reasons To Buy:

- ▲ Oracle is gaining ground in its **cloud business**. Both its software-as-a-service (SaaS) and platform-as-a-service (PaaS) products should grow very strongly over the next few years as enterprises increasingly transition to the cloud. Bookings are also picking up. Overall, we believe that Oracle's new cloud-based offerings hold promise. Moreover, the cloud services offering has opened up a new source of recurring revenues (subscriptions), which is expected to improve visibility. Oracle is expected to benefit from the ongoing in-premise to cloud transitions leveraging its new technological developments. Additionally, the company is witnessing strong growth in Cloud HCM, which is being purchased as a part of an ERP cloud application suite. Also, the migration of several mid-sized SAP customers to Fusion ERP is an upside.
- ▲ Oracle enjoys a dominant position in the **enterprise software and database management system (DBMS)** software market. Markedly, the company's enormous strength in cloud technology has been a key force behind growth in database business. Among infrastructure, DBMS is expected to record strong growth driven by Big Data and digitalization initiatives. We believe that Oracle's leading position in the DBMS software market will make it the primary beneficiary of this increased spending. The latest autonomous database supported by machine learning is expected to boost competitive position against the likes of AWS. The next-generation autonomous database launched by Oracle, supported by ML, is also gaining traction. New product introductions are likely to boost growth in this category. Markedly, autonomous database in Gen2 Infrastructure is witnessing rapid adoption.
- ▲ Oracle remains very active on the **acquisition** front and chooses companies that can be easily integrated within its existing or new product lines. From time to time, the company also acquires organizations with competing technologies with the intention of killing rival products. The NetSuite acquisition helped the company to fast penetrate the ERP and small & medium companies' segment. Acquisitions like Maxymiser and CloudMonkey helped Oracle in developing cloud-based software and testing tools & platforms for mobile apps. To-date, its most important acquisition remains that of Sun, which helped it to enter the hardware market. In the last 10 years, management has spent more than \$50 billion to acquire 100 companies. Over the last three years, the company has aggressively pursued acquisitions that will boost its presence in the cloud computing and database markets. We believe that Oracle will continue to pursue strategic acquisitions to improve its market share and top line in the long haul. Apart from these, Oracle also boasts partnerships with Accenture and Microsoft for better harnessing cloud capabilities and expanding its clientele.
- ▲ Oracle has historically returned significant cash through a combination of share repurchases and dividend. Operating cash flow and free cash flow for the 12 months ended Feb 29, 2020 came in at \$13.95 billion and \$12.4 billion, respectively. Moreover, Oracle paid out dividends worth \$2.33 billion during the nine months ended Feb 29, 2020. The company has also increased share repurchases authorization by \$15 billion. The company's **ability to generate solid free cash flow** is expected to help it sustain current dividend payout (0.28) level at least in the near term.

Oracle's growing cloud business and the latest autonomous database is expected to boost competitive position in the long haul.

Reasons To Sell:

- ▼ Although engineered systems are expected to drive growth, we believe that lower hardware volumes will continue to hurt Oracle's top-line growth over the next couple of years. Moreover, hardware is significantly a **lower-margin business** that will keep margins under pressure, going forward. Further, Oracle faces significant competition in most of its operational markets (database, applications, storage, cloud computing) from the likes of Dell-EMC, IBM, Hewlett-Packard, Microsoft, SAP, Salesforce.com, Workday and Teradata. The trend toward consolidation is increasing competition for the company in most of these markets. To differentiate products here, large vendors are entering into alliances or partnerships to offer integrated and differentiating solutions. As a result, Oracle continues to face severe pricing pressure and lengthy sales cycles in its core business, which is hurting profitability. Moreover, stiff competition in the cloud is expected to hurt margins and will make revenue growth difficult to come by over the long run.
- ▼ Acquisitions have played an important part in Oracle's growth trajectory over the years. Being a **late entrant** in the cloud computing space, the company is trying to build its position through aggressive acquisitions. The company is making significant investment in these acquisitions in order to catch up with AWS, Microsoft Azure, Salesforce and IBM. As the SaaS market is getting overcrowded, we believe that all acquisitions may not perform as per company expectations, which will eventually hurt profitability. Moreover, large acquisitions can negatively impact the company's balance sheet in the form of a high level of goodwill and intangible assets.
- ▼ Oracle has been embroiled in various **legal tangles**. In 2016, Oracle faced defeat in two of its most high profile lawsuits. In May 2016, a 10 member jury found no violations of JAVA APIs by Alphabet thus dismissing Oracle's \$9 billion claim. Moreover, a California Court held Oracle liable of paying Hewlett Packard Enterprise \$3 billion in damages for withdrawing support to itanium software. The company is hell bent on re-appealing against these verdicts. In December 2017, the company renewed the legal fight over Android against Alphabet. In the recent filing Oracle challenged the idea of "fair use," and alleged that Google lied when it said Android didn't compete directly with Oracle's ability to license its own products to customers. Moreover, lawsuit expenses pertaining to U.S. Department of Defense's (DoD) Joint Enterprise Defense Infrastructure (JEDI) cloud contract does not bode well for Oracle's business opportunities with DoD. This is likely to weigh on the company's bottom line and might impact the stock performance. We believe such high legal risks, if materialized, might wreak havoc on the company's financials.
- ▼ Oracle has a **leveraged balance sheet**. As of Feb 29, 2020, the company's net debt was \$25.82 billion compared with \$24.23 billion as of Nov 30, 2019. Moreover, debt-to-capital stands at 76.8% higher than prior quarter's 75.8%. Although the company generates significant cash flow, the high debt level can not only jeopardize its ability to sustain dividend payout and buyback shares but also pursue accretive acquisitions.

Stiff competition, lawsuits and currency volatility are likely to impact Oracle as it transitions from licensing to cloud.

Last Earnings Report

Oracle Q3 Earnings and Revenues Beat Estimates

Oracle reported third-quarter fiscal 2020 non-GAAP earnings of 97 cents per share, beating the Zacks Consensus Estimate by 1.04%. Further, the figure was up 11% from the year-ago quarter (up 12% in constant currency or cc).

Moreover, non-GAAP revenues improved 2% (up 3% in cc) year over year to \$9.797 billion, outpacing the Zacks Consensus Estimate by 0.32%.

Quarter Ending **02/2020**

Report Date	Mar 12, 2020
Sales Surprise	0.32%
EPS Surprise	1.04%
Quarterly EPS	0.97
Annual EPS (TTM)	3.84

Top Line in Detail

Oracle reported total revenues (on a GAAP basis) of \$9.796 billion, up 2% (up 3% in cc) year over year.

Revenues by Offerings

Oracle's top line benefited from the ongoing cloud-based momentum. **Cloud services and license support** revenues (71% of total revenues) in the reported quarter rose 4% year over year (up 5% in cc) to \$6.93 billion.

Break up of Cloud services and license support Revenues

Applications revenues (contributed 40.5% to total cloud services and license support revenues) amounted to \$2.809 billion, up 6% year over year (up 7% in cc).

Infrastructure related revenues (59.5%) came in at \$4.121 billion, up 2% year over year (up 4% in cc).

Meanwhile, **Cloud license and on-premise license** revenues (12%) declined 2% year over year (flat in cc) to \$1.231 billion.

Hardware revenues (9%) were \$857 million, down 6% (down 5% in cc) year over year.

Services revenues (8%) improved 2% (up 3% in cc) to \$778 million.

Revenues by Geography

Revenues from **Americas** (represented 55% of total revenues) inched up 1.8% year over year to \$5.363 billion.

Revenues from **Europe/Middle East/Africa** (29%) improved 1.9% from the year-ago quarter's figure to \$2.835 billion.

Revenues from **Asia Pacific** (16%) increased 2% from the year-ago quarter level to \$1.598 billion.

Customer Expansion Bodes Well

Management announced that Fusion HCM, NetSuite ERP and Fusion ERP businesses were up 27%, 26% and 38% in the fiscal third quarter, respectively. NetSuite ERP and Fusion ERP have customer strength of around 21,000 and 7,000, respectively.

Additionally, the company is witnessing strong growth in Cloud HCM, which is increasingly being purchased as part of the company's ERP cloud application suite. Further, the migration of several mid-sized SAP customers to Fusion ERP is an upside.

Operating Details

Non-GAAP operating expenses increased 2% year over year (up 3% in cc) to \$5.44 billion.

Non-GAAP operating income during the reported quarter was \$4.357 billion, up 2% year over year (up 3% in cc).

Non-GAAP operating margin came in at 44%, remaining flat on a year-over-year basis.

Balance Sheet & Cash Flow

As of Feb 29, 2020, Oracle had cash & cash equivalents, and marketable securities of \$25.858 billion, down from \$27.444 billion as of Nov 30, 2019.

Operating cash flow and free cash flow for the 12 months ended Feb 29, 2020 came in at \$13.947 billion and \$12.403 billion, respectively.

Share Repurchases & Dividends

Oracle repurchased 73.5 million shares worth approximately \$4 billion during the fiscal third quarter, and paid out dividends worth \$2.33 billion during the nine months ended Feb 29, 2020.

On Mar 12, 2020, the company declared a quarterly dividend of 24 cents per share, payable on Apr 23, 2020, to shareholders as on Apr 9, 2020. The company also increased share repurchases authorization by \$15 billion.

Guidance

For the fiscal fourth quarter, Oracle anticipates total revenue growth rate on a year-over-year basis in the range of (2%) to 2%, both at USD and

cc.

Oracle expects non-GAAP earnings per share in the range of \$1.20-\$1.28.

Recent News

On Apr 28, Oracle announced that Zoom Video Communications, has selected the company's Cloud Infrastructure services to address business needs amid expanding customer base.

On Mar 31, Oracle announced that Taboola has adopted Oracle Data Cloud solution, Moat, to measure and verify video ad viewability.

On Mar 30, Oracle announced the launch of a new Gen 2 Cloud region in Montreal, marking its second cloud region in Canada. The company had launched Toronto Cloud region last year. The expansion in Canada is likely to aid the company in acquiring more customers in the region and retain existing ones.

On Mar 17, Oracle launched Java 14 with new features to improve productivity of software developers.

On Mar 17, Oracle announced that its cloud services are being utilized by internet content providers – Phenix, Net Insight, and Mynet Inc. to support the surge in demand for streaming content.

On Mar 16, Oracle announced that American Electric Power (AEP) has adopted Oracle Utilities Opower solution to provide customers with personalized energy management programs.

On Mar 12, Oracle declared a quarterly dividend of 24 cents per share, payable on Apr 23, 2020, to shareholders as on Apr 9, 2020. The company also increased share repurchases authorization by \$15 billion.

On Feb 12, Oracle rolled out Oracle Cloud Data Science Platform, to aid enterprises to devise, train, manage and deploy machine learning models, to boost data science projects.

Valuation

Oracle shares are down 1.4% in the year-to-date period and 3.8% over the trailing 12-month period. Stocks in the Zacks sub-industry are up 4.3%, while stocks in the Zacks Computer & Technology sector are down 4.7% in the year-to-date period. Over the past year, the Zacks sub-industry and the sector are up 18.1% and 4.7%, respectively.

The S&P 500 index is down 11.5% in the year-to-date period and 1.7% in the past year.

The stock is currently trading at 12.56X forward 12-month earnings, which compares to 27.97X for the Zacks sub-industry, 22.32X for the Zacks sector and 20.18X for the S&P 500 index.

Over the past five years, the stock has traded as high as 19.31X and as low as 10.66X, with a 5-year median of 15.55X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$55 price target reflects 13.34X forward 12-month earnings.

The table below shows summary valuation data for ORCL

Valuation Multiples - ORCL					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	12.56	27.97	22.32	20.18
	5-Year High	19.31	28.74	22.32	20.18
	5-Year Low	10.66	18.62	16.71	15.19
	5-Year Median	15.55	24.78	19.23	17.44
P/S F12M	Current	4.13	6.93	3.41	3.19
	5-Year High	5.72	7.23	3.59	3.44
	5-Year Low	3.15	3.88	2.32	2.54
	5-Year Median	4.56	5.46	3.1	3.01
EV/Sales TTM	Current	4.7	7.27	3.8	2.81
	5-Year High	5.43	8.11	4.44	3.45
	5-Year Low	3.47	3.2	2.58	2.16
	5-Year Median	4.57	5.46	3.57	2.82

As of 05/01/2020

Industry Analysis Zacks Industry Rank: Top 24% (60 out of 253)



Top Peers

Company (Ticker)	Rec	Rank
Adobe Systems Incorporated (ADBE)	Neutral	2
salesforce.com, inc. (CRM)	Neutral	3
International Business Machines Corporation (IBM)	Neutral	3
Intel Corporation (INTC)	Neutral	3
Microsoft Corporation (MSFT)	Neutral	2
SAP SE (SAP)	Neutral	3
VMware, Inc. (VMW)	Neutral	4
Hewlett Packard Enterprise Company (HPE)	Underperform	4

Industry Comparison Industry: Computer - Software				Industry Peers		
	ORCL	X Industry	S&P 500	ADBE	IBM	MSFT
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	3	-	-	2	3	2
VGM Score	B	-	-	C	C	C
Market Cap	163.32 B	1.66 B	20.61 B	165.66 B	108.21 B	1,323.84 B
# of Analysts	12	4	14	12	6	14
Dividend Yield	1.85%	0.00%	2.11%	0.00%	5.32%	1.17%
Value Score	B	-	-	D	B	C
Cash/Price	0.15	0.09	0.06	0.03	0.11	0.10
EV/EBITDA	11.03	16.99	11.87	41.56	8.66	22.31
PEG Ratio	1.37	2.74	2.47	2.20	2.74	2.40
Price/Book (P/B)	10.98	4.76	2.67	15.83	5.38	12.06
Price/Cash Flow (P/CF)	12.01	20.85	10.66	43.18	6.36	28.21
P/E (F1)	13.42	29.51	19.01	35.12	10.80	30.93
Price/Sales (P/S)	4.11	4.36	2.10	14.21	1.41	9.54
Earnings Yield	7.45%	3.25%	5.05%	2.85%	9.26%	3.23%
Debt/Equity	3.31	0.15	0.72	0.39	2.62	0.64
Cash Flow (\$/share)	4.41	1.22	7.01	8.19	19.75	6.35
Growth Score	C	-	-	B	D	C
Hist. EPS Growth (3-5 yrs)	7.82%	10.66%	10.88%	48.86%	-3.16%	17.68%
Proj. EPS Growth (F1/F0)	9.73%	7.75%	-7.32%	24.40%	-11.89%	18.83%
Curr. Cash Flow Growth	-0.35%	10.55%	5.92%	27.62%	2.09%	19.70%
Hist. Cash Flow Growth (3-5 yrs)	-1.03%	8.91%	8.55%	41.64%	-3.76%	11.99%
Current Ratio	2.12	1.46	1.23	1.23	0.96	2.80
Debt/Capital	76.82%	19.73%	43.84%	28.21%	72.36%	39.05%
Net Margin	27.06%	7.18%	11.08%	27.72%	11.78%	33.36%
Return on Equity	64.68%	11.18%	16.44%	33.54%	57.55%	41.16%
Sales/Assets	0.39	0.64	0.54	0.57	0.50	0.49
Proj. Sales Growth (F1/F0)	-0.01%	3.45%	-1.42%	16.25%	-5.40%	12.31%
Momentum Score	B	-	-	A	D	B
Daily Price Chg	-1.69%	-0.96%	-2.39%	1.28%	-2.43%	1.00%
1 Week Price Chg	-2.95%	0.00%	-1.74%	-0.00%	3.83%	-2.27%
4 Week Price Chg	6.37%	19.35%	17.07%	16.34%	14.15%	15.43%
12 Week Price Chg	-3.18%	-11.19%	-18.53%	-3.76%	-19.90%	-2.41%
52 Week Price Chg	-2.99%	0.68%	-9.82%	26.46%	-10.05%	41.99%
20 Day Average Volume	11,359,876	95,459	2,641,413	3,278,993	5,912,796	43,860,436
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	-0.24%	-1.49%	-6.62%	0.00%	-13.43%	-0.65%
(F1) EPS Est 12 week change	-0.01%	-7.59%	-13.28%	-0.18%	-15.35%	-1.52%
(Q1) EPS Est Mthly Chg	-1.34%	-2.57%	-11.97%	0.00%	-27.57%	-1.74%

Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we have an excellent balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

Zacks Style Scores

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

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

Value Score	B
Growth Score	C
Momentum Score	B
VGM Score	B

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

Disclosures

This report contains independent commentary to be used for informational purposes only. The analysts contributing to this report do not hold any shares of this stock. The analysts contributing to this report do not serve on the board of the company that issued this stock. The EPS and revenue forecasts are the Zacks Consensus estimates, unless indicated otherwise on the reports first page. Additionally, the analysts contributing to this report certify that the views expressed herein accurately reflect the analysts personal views as to the subject securities and issuers. ZIR certifies that no part of the analysts compensation was, is, or will be, directly or indirectly, related to the specific recommendation or views expressed by the analyst in the report.

Additional information on the securities mentioned in this report is available upon request. This report is based on data obtained from sources we believe to be reliable, but is not guaranteed as to accuracy and does not purport to be complete. Any opinions expressed herein are subject to change.

ZIR is not an investment advisor and the report should not be construed as advice designed to meet the particular investment needs of any investor. Prior to making any investment decision, you are advised to consult with your broker, investment advisor, or other appropriate tax or financial professional to determine the suitability of any investment. This report and others like it are published regularly and not in response to episodic market activity or events affecting the securities industry.

This report is not to be construed as an offer or the solicitation of an offer to buy or sell the securities herein mentioned. ZIR or its officers, employees or customers may have a position long or short in the securities mentioned and buy or sell the securities from time to time. ZIR is not a broker-dealer. ZIR may enter into arms-length agreements with broker-dealers to provide this research to their clients. Zacks and its staff are not involved in investment banking activities for the stock issuer covered in this report.

ZIR uses the following rating system for the securities it covers. **Outperform-** ZIR expects that the subject company will outperform the broader U.S. equities markets over the next six to twelve months. **Neutral-** ZIR expects that the company will perform in line with the broader U.S. equities markets over the next six to twelve months. **Underperform-** ZIR expects the company will underperform the broader U.S. equities markets over the next six to twelve months.

No part of this report can be reprinted, republished or transmitted electronically without the prior written authorization of ZIR.