

## Skyworks Solutions (SWKS)

**\$151.62** (As of 10/05/20)

Price Target (6-12 Months): **\$159.00**

Long Term: 6-12 Months

**Zacks Recommendation:**

**Neutral**

(Since: 08/05/19)

Prior Recommendation: Underperform

Short Term: 1-3 Months

**Zacks Rank:** (1-5)

**3-Hold**

Zacks Style Scores:

VGM:C

Value: C

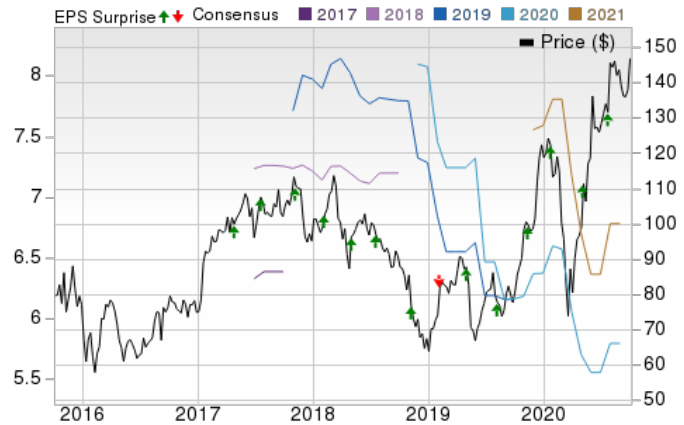
Growth: C

Momentum: B

### Summary

Skyworks is well-poised to benefit from growing demand for 5G handsets as its offerings are widely used by Samsung, and Motorola as well as other players for 5G mobile platforms. Moreover, Skyworks is witnessing strong momentum for BAW-enabled modules in both mobile and broad markets. It is banking on portfolio strength to capitalize on the rapid changes in the industry due to the coronavirus. Notably, its solutions are supporting telemedicine and emergency-response applications, as well as remote work, e-learning and video streaming, among others. Shares have outperformed the industry year to date. However, supply chain disruptions as well as macroeconomic uncertainties stemming from the coronavirus pandemic are major headwinds, at least in the near term. Also, increasing costs for product development and Huawei-related ban remain a concern.

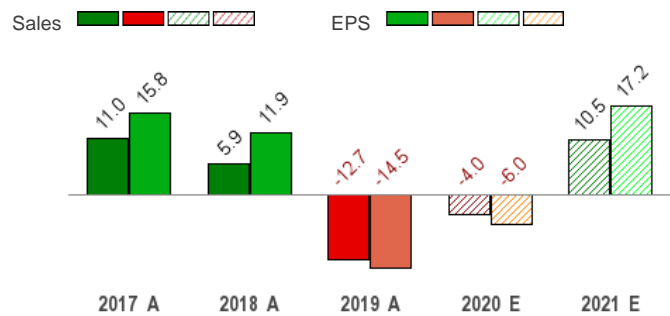
### Price, Consensus & Surprise



### Data Overview

52-Week High-Low	<b>\$154.24 - \$67.90</b>
20-Day Average Volume (Shares)	<b>1,857,953</b>
Market Cap	<b>\$25.3 B</b>
Year-To-Date Price Change	<b>25.4%</b>
Beta	<b>1.21</b>
Dividend / Dividend Yield	<b>\$2.00 / 1.3%</b>
Industry	<b>Semiconductors - Radio Frequency</b>
Zacks Industry Rank	<b>Bottom 21% (200 out of 252)</b>

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



Last EPS Surprise	<b>10.6%</b>
Last Sales Surprise	<b>6.8%</b>
EPS F1 Estimate 4-Week Change	<b>0.4%</b>
Expected Report Date	<b>11/10/2020</b>
Earnings ESP	<b>2.2%</b>
P/E TTM	<b>26.2</b>
P/E F1	<b>22.3</b>
PEG F1	<b>2.0</b>
P/S TTM	<b>7.9</b>

### Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	934 E	830 E	833 E	982 E	3,582 E
2020	896 A	766 A	737 A	843 E	3,242 E
2019	972 A	810 A	767 A	827 A	3,377 A

### EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$1.78 E	\$1.50 E	\$1.54 E	\$1.96 E	\$6.80 E
2020	\$1.68 A	\$1.34 A	\$1.25 A	\$1.52 E	\$5.80 E
2019	\$1.83 A	\$1.47 A	\$1.35 A	\$1.52 A	\$6.17 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 10/05/2020. The reports text is as of 10/06/2020.

## Overview

Headquartered in Irvine, CA, Skyworks Solutions Inc. designs, manufactures, and markets a broad range of high-performance analog and mixed signal semiconductors that enable wireless connectivity.

The company's products include power amplifiers (PAs), front-end modules (FEMs), radio frequency (RF) sub-systems, and cellular systems. Leveraging its core analog technologies, the company also offers a diverse portfolio of linear integrated circuits (ICs) that support automotive, broadband, cellular infrastructure, industrial and medical applications.

Skyworks Solutions reported revenues of \$3.38 billion in fiscal 2019.

The company has designed its product portfolio around two markets — cellular handsets and analog semiconductors. The handset portfolio includes highly customized power amplifiers and front-end solutions that are used in a variety of cellular devices from entry level to multimedia platforms and smartphones.

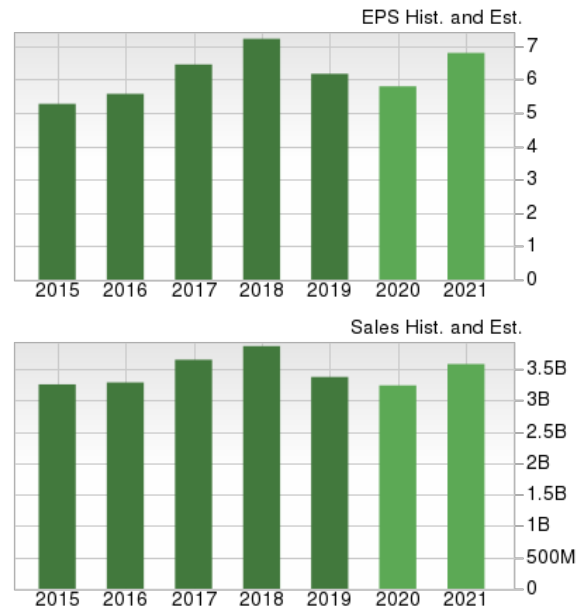
Moreover, the company's product portfolio is reinforced by approximately 3,000 global patents and other intellectual property. The company with industry-leading technology helps to offer highest levels of product performance and integration.

The company is engaged with key original equipment manufacturers ("OEMs"), smartphone providers and baseband reference design partners. Its chief customers includes Amazon, Apple, Arris, Bose, Cisco, DJI, Ericsson, Foxconn, Garmin, Gemalto, General Electric, Google, Honeywell, HTC, Huawei, Itron, Lenovo, LG Electronics, Microsoft, Motorola, to name few.

The company has a diversified business in three areas: addressed markets, customer base and product offerings.

The company has more than 2,500 customers and over 2,500 analog components in markets like automotive, home and factory automation, infrastructure, medical, smart energy and wireless networking.

Skyworks faces stiff competition from Analog Devices, Broadcom, Maxim Integrated Products, Qualcomm and Qorvo.



Source: Zacks Investment Research

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## Reasons To Buy:

- ▲ Skyworks continues to capitalize on three business segments -- mobile Internet, vertical markets and analog components. As demand for mobile Internet applications is exploding with the broad proliferation of smartphones, net books, notebooks, caplets and other forms of embedded wireless devices, Skyworks continue to gain traction. Perfect quality, environment-friendly products and sustainable business practices have been the key differentiators for the company in this competitive environment. The company is aggressively expanding into new vertical markets. It is investing heavily to increase its footprint in traditional analog segments like automotive, medical, aerospace, defense and industrial. These are highly attractive markets with longer product life cycles, fewer competitors and higher margins. Skyworks participates in these markets by leveraging core analog and mixed-signal design capabilities and a broad-based product catalog.
- ▲ The market for smartphones is reportedly growing at four times the growth rate of the traditional cellular handset. The rising RF dollar content and increasing complexity associated with the proliferation of smartphones and an array of other mobile Internet devices are fueling the total available market (TAM) growth, providing a unique opportunity for Skyworks to expand. The company is engaged in media gateway design for a leading network operator which provides the functionality of a traditional set top box with enhanced capabilities to support home networking and streaming on-demand video. The company has mitigated operating risks through diversification of business verticals. Skyworks has multiple connectivity technologies in a growing array of non-mobile applications. Additionally, Skyworks is well-positioned to capitalize on the Internet of Things (IoT) with a rising demand for high-performance analog solutions in new markets. Skyworks expects to gain more businesses going forward, with continued investments in research and development to increase its IoT portfolio. As per market estimates, the growth within the IoT market is likely to exceed that of other connected devices over the next eight years with predictions of as many as 75 billion connected devices by the year 2025. Consequently, we expect Skyworks to have solid operating results in the imminent future.
- ▲ Based on order visibility, Skyworks expects continuous strength in the near future as the products continue to gain momentum. Expanding customer base that now include the likes of Foxconn, and Samsung is a key growth driver.
- ▲ Skyworks has a strong balance sheet with ample liquidity position. As of Jun 26, 2020, cash & cash equivalents were \$1.162 billion, up from \$1.108 billion as of Mar 27, 2020. Moreover, Skyworks' solid liquidity position makes it well-poised to pursue strategic acquisitions and invest in growth initiatives. Notably, total debt to total capital of 3.5% is much lower than industry's figure of 14.9%.
- ▲ Additionally, the company's strong cash flow generation ability helps it to continue shareholder friendly initiatives. Notably, in fiscal 2019, the company returned \$931.5 million to shareholders. Markedly, the company reported free cash flow of \$187 million and free cash flow margin of 32% in third-quarter fiscal 2020. Solid liquidity along with strong free cash flow generating ability is expected to help Skyworks sustain current dividend payout level (0.35) at least in the near term.

Skyworks expects continuous strength in the near future as the products continue to gain momentum. Sustainable business practices is a key differentiator for the company.

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## Reasons To Sell:

- ▼ Skyworks operates in a fiercely competitive market. The wireless handset market is intensely competitive and exposed to pricing pressures. The competitors in the mobile platforms market include Broadcom and Qorvo, while the competitors in the linear products market include Analog Devices, and Maxim Integrated Products. As other handset players such as Qorvo gear up to capitalize on the increasing demand for smartphones, we expect pricing pressure to intensify in the market leading to a decline in margins.
- ▼ We are concerned about concentration risks as a significant portion of Skyworks' revenue comes from a handful of customers. Apple contributed 51% of its revenues, in fiscal 2019. Skyworks' top-line growth is significantly dependent on iPhone's growth trajectory. We also note that due to the significant exposure, Skyworks' share price movement depends heavily on Apple's results, which doesn't bode well for the investors. Furthermore, the US government's banning of Huawei remains a headwind. Huawei's addition to entity list, which was the company's "second largest customer," is negatively impacting financials. During fiscal 2019, the company had to incur \$70.4 million in inventory-related charges, majorly comprising inventory write-downs related to Huawei.
- ▼ Moreover, the company has to continually introduce new products to fend off competition and remain updated on technological advancements. We remain concerned about profitability as heavy investments in R&D escalate operating expenses, often without any significant contribution to its top line. Further, sluggish performance stemming from COVID-19 related global supply chain disruptions is likely to have a negative impact on demand and is a headwind.
- ▼ Skyworks currently has a trailing 12-month Price/Earnings (P/E) ratio of 29.96X. This level compares unfavorably with what the industry witnessed in the last year. Additionally, the ratio is higher than the median of 21.32X and is towards the high end of the valuation range in this period. Consequently, the valuation looks slightly stretched from P/E perspective.

Skyworks has to continually introduce new products to fend off competition and remain updated on technological advancements.

## Last Earnings Report

### Skyworks' Q3 Earnings and Revenues Beat Estimates

Skyworks reported third-quarter fiscal 2020 non-GAAP earnings of \$1.25 per share that beat the Zacks Consensus Estimate by 10.6%. However, the figure declined 7.4% year over year.

Revenues of \$736.8 million surpassed the Zacks Consensus Estimate by 6.8%. However, the top line declined 3.9% year over year.

Per management, export restrictions on Huawei had a negative impact on revenues. Notably, after excluding Huawei-related revenues in both the fiscal third quarter and the year-ago quarter, revenues rose 2.5% year over year.

Broad markets accounted for 31% of revenues, flat sequentially.

### Deal Wins: Key Growth Factor

During the reported quarter, Skyworks' Sky5 product portfolio facilitated several 5G launches. The company's offerings were selected by Samsung, Motorola, VIVO, Xiaomi and OPPO as well as other Tier-1 players for 5G mobile platforms.

Skyworks stated that 5G subscriptions, globally, are continuing to grow with estimates set to hit \$3 billion over the next five years.

The company is benefiting from accelerating demand for 5G handset. Markedly, in China (23% of Skyworks' revenues), during the month of June, approximately 60% of all smartphones sold were 5G-enabled.

Moreover, Skyworks has shipped more than 150 million BAW-enabled modules. The company is witnessing strong momentum for this technology in both mobile and broad markets.

In the fiscal third quarter, the company's Wi-Fi 6 solutions were adopted by AT&T to power its tri-band home gateways.

Moreover, Skyworks is supporting home security solutions at Amazon's Ring Security Systems by delivering highly integrated connectivity. Additionally, it is ramping indoor and outdoor access points at Juniper, Linksys and Aruba.

The company also rolled out mesh router and voice assistant solutions to Google in the third-quarter fiscal 2020.

In the industrial space, Skyworks is powering IoT platforms at Gemalto and Bosch, while the company's GPS, circulator and advanced filter solutions witnessed design wins at leading aerospace and defense companies.

Moreover, the Sky5 platform was adopted by leading automobile manufacturers like Ford and BMW in the fiscal third quarter.

Notably, the company is also diversifying in the infrastructure space based on deals with Ericsson, Nokia and Fujitsu.

### Operating Details

Non-GAAP gross margin contracted 30 basis points (bps) on a year-over-year basis to 50.1%. However, this beat management's expectation by 10 bps.

Research & development expenses, as percentage of revenues, expanded 280 bps on a year-over-year basis to 15.9%. Moreover, selling, general & administrative expenses, as percentage of revenues, expanded 140 bps from the year-ago quarter's tally to 7.5%.

Non-GAAP operating margin contracted 160 bps on a year-over-year basis to 31.3% in the reported quarter.

### Balance Sheet & Cash Flow

As of Jun 26, 2020, cash & cash equivalents were \$1.162 billion, up from \$1.108 billion as of Mar 27, 2020.

Cash generated by operating activities was \$258.7 million compared with \$280.4 million in the prior quarter.

The company reported free cash flow of \$187 million and free cash flow margin of 32% compared with \$220 million and 29% in the previous quarter, respectively.

Capital expenditure came in at \$72 million in the reported quarter compared with \$60 million in the prior quarter.

Skyworks repurchased 670K shares for a total of \$59 million and paid out \$73 million as dividends.

On Jul 23, the company declared a quarterly dividend of 50 cents per share, up 14% from the prior quarter's dividend of 44 cents and payable on Sep 1, to shareholders as on Aug 11.

### Guidance

For fourth-quarter fiscal 2020, revenues are expected in the range of \$830-\$850 million.

Quarter Ending	06/2020
Report Date	Jul 23, 2020
Sales Surprise	6.77%
EPS Surprise	10.62%
Quarterly EPS	1.25
Annual EPS (TTM)	5.79

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The company expects broad markets to increase at a double-digit rate sequentially in fourth-quarter.

Skyworks expects expect gross margin in the range of 50-50.5% and operating expenses of roughly \$142.5 million. Favorable product mix due to more 5G products is expected to aid gross margin growth.

Non-GAAP earnings are anticipated to be \$1.51 per share at the mid-point of the revenue range.

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## Recent News

On Jul 21, Skyworks announced that it has reached a milestone with the shipment of more than 150 million bulk acoustic wave (BAW) filter-enabled modules for 5G mobile solutions.

On Jun 10, Skyworks announced that its Milpitas, CA facility has achieved AS9100D certification, which provides manufacturing suppliers such as Skyworks with a comprehensive quality system for providing safe and reliable products to the aerospace and defense industries.

On May 4, Skyworks declared a quarterly dividend of 44 cents per share payable on Jun 11, to shareholders as on May 21.

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## Valuation

Skyworks' shares are up 25.5% in the year-to-date period and 87.4% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 12% and 24%, in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and sector are up 66.8% and 38.2%, respectively.

The S&P 500 index is up 5.9% in the year-to-date period and 16.2% in the past year.

The stock is currently trading at 25.32X forward 12-month earnings compared with 23.67X for the Zacks sub-industry, 26.6X for the Zacks sector and 22.29X for the S&P 500 index.

Over the past five years, the stock has traded as high as 30.93X and as low as 8.74X, with a five-year median of 13.88X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$159 price target reflects 26.55X forward 12-month earnings.

The table below shows summary valuation data for SWKS

Valuation Multiples - SWKS					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	25.32	23.67	26.6	22.29
	5-Year High	30.93	24.12	28	23.47
	5-Year Low	8.74	10.01	16.95	15.27
	5-Year Median	13.88	12.97	19.95	17.7
P/S F12M	Current	7.06	4.37	4.16	4.09
	5-Year High	7.84	4.65	4.48	4.3
	5-Year Low	2.72	2.15	2.77	3.18
	5-Year Median	4.22	3.13	3.44	3.67
EV/Sales TTM	Current	7.5	4.92	4.88	3.92
	5-Year High	7.58	4.99	5.22	4.15
	5-Year Low	2.5	1.99	2.85	2.61
	5-Year Median	4.17	3.2	3.82	3.57

As of 10/05/2020

Source: Zacks Investment Research

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## Industry Analysis Zacks Industry Rank: Bottom 21% (200 out of 252)



## Top Peers

Company (Ticker)	Rec	Rank
Qorvo, Inc. (QRVO)	Outperform	2
Synaptics Incorporated (SYNA)	Outperform	2
Analog Devices, Inc. (ADI)	Neutral	3
Broadcom Inc. (AVGO)	Neutral	3
Cirrus Logic, Inc. (CRUS)	Neutral	3
Maxim Integrated Products, Inc. (MXIM)	Neutral	3
ON Semiconductor Corporation (ON)	Neutral	3
QUALCOMM Incorporated (QCOM)	Neutral	3

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

Industry Comparison Industry: Semiconductors - Radio Frequency				Industry Peers		
	SWKS	X Industry	S&P 500	AVGO	MXIM	QRVO
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Outperform
Zacks Rank (Short Term)	3	-	-	3	3	2
VGM Score	C	-	-	B	C	B
Market Cap	25.33 B	87.66 M	23.68 B	148.09 B	18.25 B	15.46 B
# of Analysts	9	3	14	13	10	7
Dividend Yield	1.32%	0.00%	1.64%	3.55%	2.81%	0.00%
Value Score	C	-	-	C	D	C
Cash/Price	0.05	0.14	0.07	0.06	0.09	0.08
EV/EBITDA	18.15	0.99	13.45	19.25	22.41	17.51
PEG F1	1.94	1.66	2.88	1.32	2.75	1.55
P/B	6.06	5.45	3.39	6.29	10.98	3.55
P/CF	19.03	13.60	13.14	10.78	25.13	13.60
P/E F1	22.06	22.31	21.79	16.60	27.49	19.16
P/S TTM	7.85	42.97	2.55	6.38	8.33	4.75
Earnings Yield	4.48%	1.12%	4.42%	6.02%	3.63%	5.22%
Debt/Equity	0.00	0.00	0.70	1.83	0.60	0.43
Cash Flow (\$/share)	7.97	-0.12	6.92	33.97	2.72	9.95
Growth Score	C	-	-	A	C	B
Historical EPS Growth (3-5 Years)	3.12%	12.35%	10.45%	20.01%	10.54%	12.35%
Projected EPS Growth (F1/F0)	17.27%	20.31%	-2.97%	3.57%	9.87%	11.53%
Current Cash Flow Growth	-9.68%	-25.18%	5.47%	8.07%	-8.10%	-13.56%
Historical Cash Flow Growth (3-5 Years)	15.70%	15.70%	8.50%	48.32%	-0.43%	22.73%
Current Ratio	5.83	4.53	1.35	2.04	5.11	4.08
Debt/Capital	0.00%	17.36%	42.90%	64.73%	37.49%	30.05%
Net Margin	24.13%	1.13%	10.28%	10.70%	29.88%	12.05%
Return on Equity	20.73%	-35.80%	14.79%	32.44%	36.29%	16.10%
Sales/Assets	0.65	0.50	0.51	0.30	0.61	0.50
Projected Sales Growth (F1/F0)	10.50%	10.01%	-0.79%	5.57%	3.86%	9.52%
Momentum Score	B	-	-	C	A	C
Daily Price Change	3.26%	0.31%	1.71%	2.60%	2.82%	3.62%
1-Week Price Change	6.40%	3.58%	2.13%	0.01%	1.30%	3.93%
4-Week Price Change	9.07%	1.03%	0.26%	0.87%	-0.63%	13.80%
12-Week Price Change	17.11%	1.53%	8.70%	17.60%	-1.50%	22.01%
52-Week Price Change	87.46%	5.62%	4.20%	32.61%	19.91%	82.94%
20-Day Average Volume (Shares)	1,857,953	202,084	2,164,008	2,022,086	3,328,855	1,387,032
EPS F1 Estimate 1-Week Change	0.31%	0.00%	0.00%	0.00%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	0.38%	0.00%	0.00%	0.00%	0.00%	9.00%
EPS F1 Estimate 12-Week Change	5.45%	3.48%	3.80%	3.88%	12.35%	32.45%
EPS Q1 Estimate Monthly Change	0.36%	0.00%	0.00%	0.00%	0.00%	9.82%

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.

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### 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	C
Growth Score	C
Momentum Score	B
VGM Score	C

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.

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## Disclosures

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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 medium-term 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 4-week 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 long-term 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 most recent 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.

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**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 long-term 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.