

## Qorvo Inc. (QRVO)

**\$110.89** (As of 07/13/20)

Price Target (6-12 Months): **\$116.00**

Long Term: 6-12 Months

**Zacks Recommendation:**

**Neutral**

(Since: 03/30/20)

Prior Recommendation: Outperform

Short Term: 1-3 Months

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

**3-Hold**

Zacks Style Scores:

VGM:B

Value: C

Growth: A

Momentum: C

## Summary

Qorvo is expected to gain from robust demand across Infrastructure & Defense and mobile products verticals. Increased demand for Bulk Acoustic Wave (BAW) filters, as economies start to reopen, is likely to drive the top line. Moreover, expanding portfolio of 5G based solutions amid accelerated deployment of 5G bodes well. Additionally, growing momentum for Qorvo's Gallium Nitride (GaN) technology-based solutions is a positive. Further, emergence of connected homes, autonomous vehicles, AI, AR, and wearables holds promise. However, customer concentration from Apple amid coronavirus breakout is a headwind. Further, significant exposure to international markets makes it susceptible to exchange rate volatility. Also, sluggish smartphone sales are a concern. Notably, shares of the company have underperformed the industry on a year-to-date basis.

## Data Overview

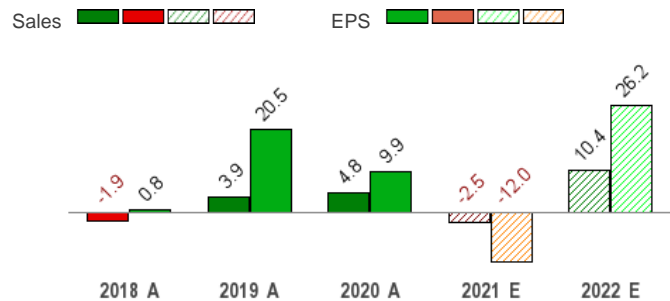
52 Week High-Low	<b>\$122.37 - \$67.54</b>
20 Day Average Volume (sh)	<b>1,046,133</b>
Market Cap	<b>\$12.7 B</b>
YTD Price Change	<b>-4.6%</b>
Beta	<b>1.41</b>
Dividend / Div Yld	<b>\$0.00 / 0.0%</b>
Industry	<a href="#">Semiconductors - Radio Frequency</a>
Zacks Industry Rank	<b>Top 42% (105 out of 251)</b>

Last EPS Surprise	<b>18.9%</b>
Last Sales Surprise	<b>2.5%</b>
EPS F1 Est- 4 week change	<b>0.0%</b>
Expected Report Date	<b>08/06/2020</b>
Earnings ESP	<b>0.0%</b>
P/E TTM	<b>17.6</b>
P/E F1	<b>19.9</b>
PEG F1	<b>2.4</b>
P/S TTM	<b>3.9</b>

## Price, Consensus & Surprise



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



## Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2022	742 E	886 E	969 E	840 E	3,485 E
2021	730 E	794 E	861 E	768 E	3,157 E
2020	776 A	807 A	869 A	788 A	3,239 A

## EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2022	\$1.33 E	\$1.86 E	\$2.14 E	\$1.63 E	\$7.03 E
2021	\$1.13 E	\$1.40 E	\$1.69 E	\$1.33 E	\$5.57 E
2020	\$1.36 A	\$1.52 A	\$1.86 A	\$1.57 A	\$6.33 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 07/13/2020. The reports text is as of 07/14/2020.

## Overview

Headquartered in Greensboro, North Carolina, Qorvo Inc. is a leading provider of core technologies and radio frequency (RF) solutions for mobile, infrastructure and aerospace/defense applications.

The company was formed with the merger of semiconductor manufacturing firms RF Micro Devices Inc. and TriQuint Semiconductor Inc. in an all-stock transaction. Qorvo went public in 2015.

Qorvo reported revenues of \$3.239 billion in fiscal 2020. As of Apr 1, 2017, the company's reportable segments are Mobile Products (MP) and Infrastructure & Defense Products (IDP).

MP (65.7% of fiscal 2020 revenues) supplies cellular RF and WiFi solutions into a variety of mobile devices, including smartphones, notebook computers, wearables, tablets, and cellular-based applications for the Internet of Things (IoT).

The segment's product offerings include Bulk Acoustic Wave (BAW) and surface acoustic wave (SAW) filters, power amplifiers (PAs), low noise amplifiers (LNAs), switches, multimode multi-band PAs and transmit modules, RF power management integrated circuits (ICs), diversity receive modules, antenna switch modules, antenna tuning and control solutions, modules incorporating PAs and duplexers (PADs) and modules incorporating switches, PAs and duplexers (S-PADs).

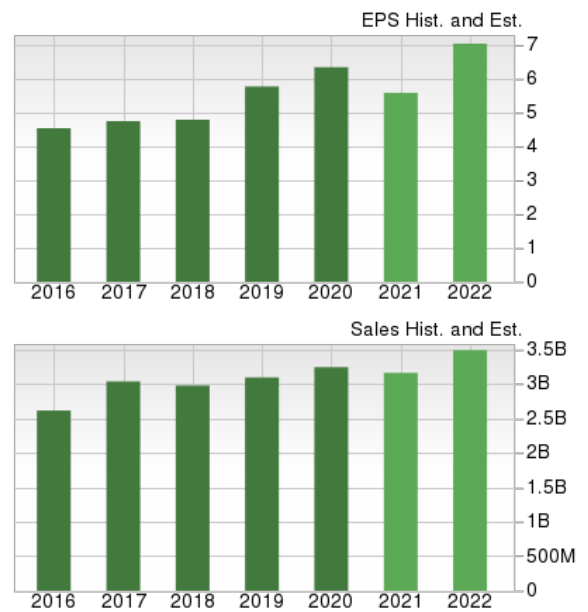
IDP's (34.3% of fiscal 2020 revenues) products are used in high performance defense systems such as radar, electronic warfare and communication systems, WiFi customer premises equipment for home and work, high speed connectivity in Long-Term Evolution ("LTE") and 5G base stations, cloud connectivity via data center communications and telecom transport, automotive connectivity and smart home solutions.

The products include high power GaAs and GaN PAs, LNAs, switches, CMOS system-on-a-chip (SoC) solutions, premium BAW and SAW filter solutions and various multi-chip and hybrid assemblies.

The company derived approximately 45.3% of revenues from the United States in fiscal 2020. Meanwhile, international sales came in at 54.7% in fiscal 2020, with China and Taiwan contributing 34.2% and 5.2%, respectively.

Apple and Huawei contributed 33% and 10% respectively to total revenues in fiscal 2020.

Qorvo primarily competes with Broadcom, Skyworks, Qualcomm, Analog Devices, and Cree, among others.



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## Reasons To Buy:

- ▲ Qorvo is expected to leverage the core strengths of both the merged companies to rapidly translate research and development advances into large scale production. In addition, synergistic benefits from the merger is likely to increase profitability through economies of scale and mutual sharing of manufacturing expertise, research and development costs and adjustment of staffing expenses.
- ▲ With a broad product portfolio, Qorvo is likely to create new growth opportunities in three large global markets, namely, mobile devices, network infrastructure and aerospace/defense. This is expected to be a boon for the overall industry as a huge talent pool and combined resources will spearhead technological innovation. The combination will also offer higher data throughput for the overall benefit of carriers and consumers and reap synergistic benefits for the company.
- ▲ Qorvo has introduced highly integrated front-end solutions that simplify and accelerate the implementation of multimode, multi-band 4G smartphones and tablets. These new RF Fusion front-end solutions showcase the company's ability to help leading OEMs to quickly launch their next-generation flagship devices. Qorvo's RF Flex solutions have been selected to support multiple upcoming leading 4G reference designs. RF Flex delivers best-in-class current consumption to enable superior device performance and leading-edge design flexibility to simplify regional customization. Accelerating timeline for 5G deployment bodes well for Qorvo. It has participated in dozens of 5G field trials and demonstrations. We believe an expanding portfolio enabling 5G deployment augurs well for the long term growth of the company.
- ▲ Qorvo offers the most complete product portfolio, targeting the highest growth segments of its market including filters, switches and tuners. The company is well-positioned to win some of the industry's highest growth opportunities by leveraging its diversified product portfolio, systems-level expertise, R&D and manufacturing scale and internal assembly and test capabilities. The company is expected to improve its financial performance as it aims to invest in building a wider technology, supporting better-than-industry growth, greater diversification, a richer mix of new products and an expanding gross margin.
- ▲ We believe efforts to reward shareholders through share buybacks deserves a special mention. Also, cash from operations in the fiscal fourth quarter was reported at \$214.3 million. The company generated free cash flow of \$179.2 million during the fiscal fourth quarter. The strong cash flows help Qorvo to continue shareholder friendly initiatives of share repurchase. Notably, lower number of outstanding shares favors the bottom line. The company repurchased \$515 million worth of shares in fiscal 2020, out of which \$125 million worth shares were repurchased in the fiscal fourth quarter. As of Mar 28, 2020, \$765.9 million worth of shares remains available for future repurchases under the current share repurchase program. The company's ability to generate solid cash flow is also expected to help it sustain share buybacks, at least in the near term.

Qorvo is leveraging industry's most comprehensive product portfolio, advanced packaging technologies, and system-level expertise to gain unrivalled competitive advantage.

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## Reasons To Sell:

- ▼ Qorvo operates in a competitive landscape that is becoming more complex with low barriers to entry. As each player strives to win designs to have a greater pie in the market, the battle gets murkier. The increased competition is exerting pricing pressure, which remains a matter of concern for the company.
  - ▼ A significant portion of Qorvo's revenue comes from a handful of customers including Apple and Huawei which contributed 33% and 10% of its revenues, respectively, in fiscal 2020. Qorvo's top-line growth is significantly dependent on iPhone's growth trajectory. Additionally, the company is engaged in developing a custom product for Apple, which is pushing up Qorvo's R&D expense, thereby hurting its profitability. We also note that due to the significant exposure, Qorvo's 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.
  - ▼ Qorvo derives a significant proportion of its revenues from outside America, subjecting the company to exchange rate volatility. By geographical regions, bulk of the revenues in fiscal 2020 came from Asia (50%). Unfavorable movement in exchange rates of foreign currencies like Renminbi, Euro, Pound Sterling, Costa Rican Colon, and Yen related to the U.S. dollar can adversely impact results and undermine its growth potential to some extent. In fiscal 2020, Qorvo incurred a foreign currency loss of \$2.2 million as compared to a loss of \$2.1 million in fiscal 2019. Qorvo is also exposed to the demand environment in China (34.2% of revenues in fiscal 2020), which is at present quite sluggish.
  - ▼ Moreover, Qorvo has a leveraged balance sheet, which adds to the risk of investing in the company. As of Mar 28, 2020, the company's net debt was \$852.1 million compared with \$479 million as of Dec 28, 2019. Moreover, total debt to total capital of 26.8% is higher than industry's figure of 14.9%. Further, times interest earned is 7.5X, compared to the industry's figure of 28.7X. Although the company generates significant cash flow, the high debt level can not only jeopardize its ability to repurchase shares, but also pursue accretive acquisitions.
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Qorvo operates in a competitive landscape that is becoming more complex with low barriers to entry, exerting pricing pressure and reducing margins.

## Last Earnings Report

### Qorvo Q4 Earnings Beat Estimates, Revenues Rise Y/Y

Qorvo Inc. reported fourth-quarter fiscal 2020 non-GAAP earnings of \$1.57 per share, which increased 28.7% on a year-over-year basis. The figure surpassed the Zacks Consensus Estimate by 18.9%. However, earnings declined 15.6% sequentially.

Revenues on a non-GAAP basis fell 9.4% sequentially but increased 15.7% year over year to \$787.8 million.

The results can be attributed to improvement in Infrastructure and Defense (IDP) as well as strong demand for Mobile Products (MP). Moreover, the company benefited from broad-based demand in 5G handsets, Wi-Fi 6 and IoT products.

#### Quarter Details

Segment-wise, mobile products (MP) revenues were \$556 million that fell 16% sequentially but rallied 25.5% year over year. Notably, revenues exceeded the company's expectations, driven by strong mobile and handset demand. Impact of global supply chain disruptions due to COVID-19 was also less than initially expected.

During the fiscal fourth quarter, the company witnessed robust traction for its 5G and LTE-Advanced Pro solutions. These are highly integrated and high performance solutions, which enable customers to reduce product footprint and accelerate products to market.

Additionally, Qorvo's ultra-high-band solutions are being adopted by all leading 5G chipsets. Notably, the company's mid-high-band and ultra-high-band 5G solutions were adopted by Samsung to support its Galaxy S20 platform during the fiscal fourth quarter.

Further, the acquisition of Decawave and integration of its radio technology has significantly expanded Qorvo's capabilities and well positioned it to benefit from growing demand for proximity awareness, secure payments as well as secure access for smartphones, automotive and IoT.

IDP revenues declined 2.5% year over year to \$232 million. However, revenues increased 12.1% sequentially primarily owing to infrastructure and Wi-Fi growth.

Notably, shipments of gallium nitride or GaN high-power amplifiers and small signal components improved during the quarter, driven by increasing deployment of massive MIMO antennas.

In the connectivity and broadband business, the company increased shipments of Wi-Fi 6 solutions and secured multiple cable amplifier design wins to support increased need for data to the home due to COVID-19 induced lockdowns. Notably, Qorvo expanded its global customer base for Wi-Fi 6 solutions, which includes front-end modules (FEM) and BAW filters, during the quarter.

In defense, the company expanded its portfolio of GaN-based solid state amplifiers for millimeter wave applications, including SATCOM radar and electronic warfare, with the launch of broadband 100 and 130 millimeter to 131 millimeter wave power amplifiers. Moreover, the acquisition of Custom MMIC enhanced Qorvo's capabilities in the defense end-market.

In the programmable power management business, the company's programmable ICs enjoyed solid momentum driven by robust growth in data center, computing and gaming consoles.

#### Operational Details

Non-GAAP gross margin expanded 140 basis points (bps) from the year-ago quarter's tally to 49.6%. This can be attributed to lower manufacturing cost and favorable product mix.

Non-GAAP operating expenses increased 12.6% year over year to \$181 million, due to acquisition related expenses.

Non-GAAP operating margin expanded 220 bps from the year-ago quarter's level to 26.8%.

#### Balance Sheet & Cash Flow

As of Mar 28, 2020, cash and cash equivalents were \$714.9 million compared with \$1.09 billion reported as of Dec 28, 2019. Long-term debt was \$1.567 billion compared with \$1.569 billion in the prior quarter.

Net cash provided by operating activities was \$214.3 million compared with \$300.8 million in the previous quarter. Free cash flow during the reported quarter came in at \$179.2 million, compared with \$260.1 in the prior quarter.

During the fourth quarter, the company repurchased shares worth \$125 million under the share repurchase program.

#### Guidance

For first-quarter fiscal 2021, Qorvo anticipates revenues between \$710 million and \$750 million.

The guidance range for revenues is wider than normal due to COVID-19 induced uncertainties prevailing in the market. However, consistent growth in mobile 5G and infrastructure is anticipated to drive performance in first-quarter fiscal 2021.

Non-GAAP earnings are projected to be \$1.13 per share at the mid-point.

Non-GAAP gross margin is anticipated to be 47.5%.

Quarter Ending **03/2020**

Report Date	May 07, 2020
Sales Surprise	2.52%
EPS Surprise	18.94%
Quarterly EPS	1.57
Annual EPS (TTM)	6.31



## Recent News

On Jun 17, Qorvo announced that four of its Wi-Fi 6 front-end modules (FEMs) have adopted by TP-Link to power the Archer AX1500 series of routers.

On Jun 11, Qorvo announced the closing of its offering of an additional \$300 million principal amount of its senior notes slated to mature on Oct 15, 2029. The Notes will pay interest semi-annually at a rate of 4.375% per annum.

On May 28, Qorvo announced the pricing its offering of an additional \$300 million principal amount of its 4.375% senior notes slated to mature in 2029. The notes are priced at 102.250% of par value plus interest deemed to have accrued from Apr 15, 2020 to the closing date.

On May 20, Qorvo announced that it has been awarded a three-year contract to further advance the development of copper-pillar-on-GaN flip-chip technology by the United States Department of Defense (DoD).

On Mar 12, Qorvo announced the launch of two new power management ICs (PMICs) designed for handling data center, cloud storage and computing applications.

On Feb 24, Qorvo announced that it has concluded acquisition of Decawave, with an aim to strengthen Mobile Products segment with ultra-wideband (UWB) technology capabilities.

On Feb 19, Qorvo announced closure of Custom MMIC acquisition, to strengthen its Infrastructure and Defense Products (IDP) business, with robust millimeter wave (mmWave) capabilities across defense end-market.

## Valuation

Qorvo's shares declined 4.6% in the year-to-date period but surged 56.8% in the trailing 12-month period. Stocks in the Zacks sub-industry are down 3.9%, while the same in the Zacks Computer & Technology sector are up 16.2% in the year-to-date period. In the past year, the Zacks sub-industry and sector are up 42.7% and 26.6%, respectively.

The S&P 500 index fell 0.8% in the year-to-date period but rose 6.5% in the past year.

The stock is currently trading at 18.51X forward 12-month earnings, which compares to 23.17X for the Zacks sub-industry, 26.56X for the Zacks sector and 22.69X for the S&P 500 index.

In the past five years, the stock has traded as high as 70.9X and as low as 8.84X, with a 5-year median of 13.33X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$116 price target reflects 19.36X forward 12-month earnings.

The table below shows summary valuation data for QRVO

Valuation Multiples - QRVO					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	18.51	23.17	26.56	22.69
	5-Year High	70.9	23.17	26.56	22.69
	5-Year Low	8.84	10.01	16.72	15.25
	5-Year Median	13.33	12.94	19.33	17.52
P/S F12M	Current	3.9	4.32	3.99	3.55
	5-Year High	4.24	4.32	3.99	3.55
	5-Year Low	1.66	2.15	2.32	2.53
	5-Year Median	2.71	3.12	3.14	3.02
EV/Sales TTM	Current	4.18	4.12	4.63	3.11
	5-Year High	5.53	4.92	4.63	3.45
	5-Year Low	1.84	1.99	2.59	2.14
	5-Year Median	3.05	3.19	3.62	2.84

As of 07/13/2020

## Industry Analysis Zacks Industry Rank: Top 42% (105 out of 251)



## Top Peers

Company (Ticker)	Rec	Rank
Analog Devices, Inc. (ADI)	Neutral	3
Broadcom Inc. (AVGO)	Neutral	3
Cirrus Logic, Inc. (CRUS)	Neutral	3
MACOM Technology Solutions Holdings, Inc. (MTSI)	Neutral	3
QUALCOMM Incorporated (QCOM)	Neutral	3
Resonant Inc. (RESN)	Neutral	3
RF Industries, Ltd. (RFIL)	Neutral	4
Skyworks Solutions, Inc. (SWKS)	Neutral	2

Industry Comparison Industry: Semiconductors - Radio Frequency				Industry Peers		
	QRVO	X Industry	S&P 500	AVGO	RFIL	SWKS
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	3	-	-	3	4	2
VGM Score	B	-	-	A	D	B
Market Cap	12.69 B	81.83 M	21.41 B	125.20 B	43.91 M	21.60 B
# of Analysts	7	3	14	13	1	9
Dividend Yield	0.00%	0.00%	1.92%	4.18%	1.78%	1.36%
Value Score	C	-	-	B	C	B
Cash/Price	0.06	0.13	0.07	0.07	0.32	0.05
EV/EBITDA	14.65	1.29	12.70	16.99	5.83	15.52
PEG Ratio	2.35	1.90	2.87	1.20	NA	1.86
Price/Book (P/B)	2.99	3.52	3.02	5.23	1.39	5.21
Price/Cash Flow (P/CF)	11.15	11.15	11.61	9.17	10.35	16.25
P/E (F1)	19.70	23.28	21.07	14.47	112.50	23.28
Price/Sales (P/S)	3.92	6.63	2.23	5.47	0.82	6.63
Earnings Yield	5.02%	0.89%	4.47%	6.91%	0.89%	4.29%
Debt/Equity	0.37	0.06	0.76	1.88	0.00	0.04
Cash Flow (\$/share)	9.95	-0.12	6.94	33.97	0.43	7.97
Growth Score	A	-	-	B	D	B
Hist. EPS Growth (3-5 yrs)	10.82%	10.82%	10.85%	22.21%	58.03%	5.50%
Proj. EPS Growth (F1/F0)	-11.94%	-12.24%	-9.37%	1.08%	-88.89%	-9.87%
Curr. Cash Flow Growth	-13.56%	-25.18%	5.51%	8.07%	-37.54%	-9.68%
Hist. Cash Flow Growth (3-5 yrs)	22.73%	15.70%	8.55%	48.32%	16.22%	15.70%
Current Ratio	3.14	5.10	1.30	2.15	5.10	6.13
Debt/Capital	26.75%	16.39%	44.46%	65.31%	0.00%	3.54%
Net Margin	10.32%	-7.99%	10.59%	10.97%	3.09%	24.35%
Return on Equity	15.74%	-0.06%	15.75%	32.00%	5.42%	21.89%
Sales/Assets	0.52	0.25	0.55	0.31	1.41	0.66
Proj. Sales Growth (F1/F0)	-2.52%	-1.26%	-2.54%	4.38%	-16.98%	-7.05%
Momentum Score	C	-	-	A	D	B
Daily Price Chg	-1.00%	-1.22%	-0.19%	-2.55%	-1.10%	-1.33%
1 Week Price Chg	1.55%	-1.17%	-0.41%	1.26%	-1.09%	2.18%
4 Week Price Chg	1.07%	0.34%	-0.91%	2.37%	-7.22%	1.75%
12 Week Price Chg	30.81%	31.39%	10.22%	20.53%	-8.72%	39.92%
52 Week Price Chg	56.87%	36.91%	-7.40%	7.97%	-41.18%	57.81%
20 Day Average Volume	1,046,133	398,159	2,267,087	2,208,127	43,521	1,698,173
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.27%
(F1) EPS Est 4 week change	0.00%	0.00%	0.00%	0.09%	0.00%	0.27%
(F1) EPS Est 12 week change	-8.91%	-10.97%	-6.60%	1.53%	-102.86%	-10.97%
(Q1) EPS Est Mthly Chg	0.00%	0.00%	0.00%	0.14%	-100.00%	1.18%



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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 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.

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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	A
Momentum Score	C
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.

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