

Qorvo Inc. (QRVO)

\$107.89 (As of 02/04/20)

Price Target (6-12 Months): **\$125.00**

Long Term: 6-12 Months

Zacks Recommendation:

Outperform

(Since: 02/03/20)

Prior Recommendation: Neutral

Short Term: 1-3 Months

Zacks Rank: (1-5)

1-Strong Buy

Zacks Style Scores:

VGM:B

Value: C

Growth: C

Momentum: A

Summary

Qorvo reported stellar third-quarter results and provided an encouraging outlook. Robust demand for Mobile Products led to top-line growth. The company benefited from increased demand for Bulk Acoustic Wave (BAW) filters. Further, robust adoption of the company's wireless connectivity and base station solutions is a positive. Additionally, expanding portfolio of 5G solutions amid accelerated deployment of 5G, and Gallium Nitride (GaN) technology based solutions hold promise. Further, emergence of connected homes, autonomous vehicles, and wearables bode well. Moreover, the company is well poised to gain from acquisition of Cavendish Kinetics, aimed at strengthening portfolio of programmable analog and mixed signal power offerings. Notably, shares of the company have outperformed the industry in a year's time.

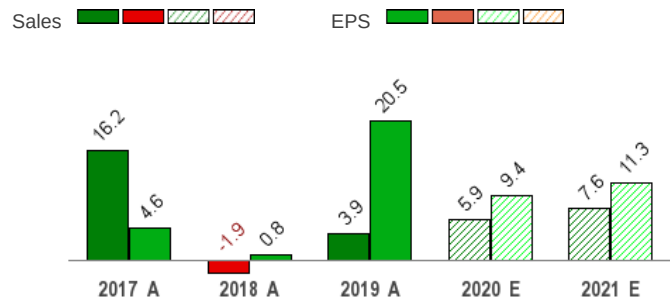
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$122.37 - \$58.52
20 Day Average Volume (sh)	1,964,294
Market Cap	\$12.5 B
YTD Price Change	-7.2%
Beta	1.24
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Semiconductors - Radio Frequency
Zacks Industry Rank	Top 5% (12 out of 255)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	11.4%
Last Sales Surprise	2.2%
EPS F1 Est- 4 week change	14.8%
Expected Report Date	05/05/2020
Earnings ESP	0.0%
P/E TTM	18.1
P/E F1	17.1
PEG F1	1.5
P/S TTM	4.0

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	777 E	901 E	950 E	834 E	3,522 E
2020	776 A	807 A	869 A	821 E	3,272 E
2019	693 A	884 A	832 A	681 A	3,090 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$1.31 E	\$1.90 E	\$2.12 E	\$1.60 E	\$7.01 E
2020	\$1.36 A	\$1.52 A	\$1.86 A	\$1.55 E	\$6.30 E
2019	\$0.96 A	\$1.75 A	\$1.85 A	\$1.22 A	\$5.76 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 02/04/2020. The reports text is as of 02/05/2020.

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 \$3.09 billion in fiscal 2019, up 3.9% over fiscal 2018 tally. As of Apr 1, 2017, the company's reportable segments are Mobile Products (MP) and Infrastructure & Defense Products (IDP).

MP (71.1% of fiscal 2019 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).

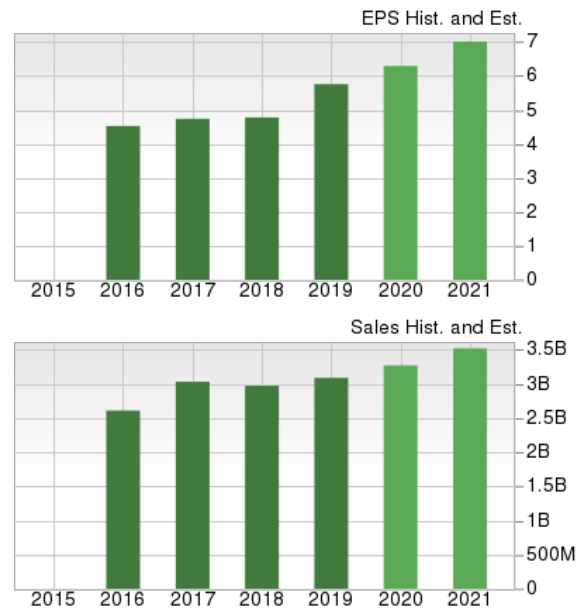
IDP's (28.9% of fiscal 2019 revenues) products are used in high performance defense systems such as radar, electronic warfare and communication systems, WiFi customer premises equipment for home and work, high speed connectivity in Long-Term Evolution ("LTE") and 5G base stations, cloud connectivity 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 16% of revenues from the United States in fiscal 2019. Meanwhile, international sales came in at 84% in fiscal 2019, with China and Taiwan contributing 57% and 18%, respectively.

Apple and Huawei contributed 32% and 15% respectively to total revenues in fiscal 2019.

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



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. The company also recently enhanced 5G infrastructure solutions portfolio with industry's first stand-alone ET PMIC that is "capable of modulating the power supply at 100 MHz for 5G New Radio (NR) operation." 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.

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

Risks

- 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 32% and 15% of its revenues, respectively, in fiscal 2019. 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 2019 came from Asia (79%). 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 2019, Qorvo incurred a foreign currency loss of \$2.1 million as compared to a loss of \$2.8 million in fiscal 2018.
 - Qorvo is also exposed to the demand environment in China (57% of revenues in fiscal 2019), which is at present quite sluggish, particularly for high-end smartphones. This is affecting the company's top-line growth as evident from the decline in the top-line growth rate. In fiscal 2018, China revenues declined 17.5% over fiscal 2017 as compared with 33.1% growth over fiscal 2016.
-

Last Earnings Report

Qorvo Q3 Earnings & Revenues Beat Estimates

Qorvo Inc. reported third-quarter fiscal 2020 non-GAAP earnings of \$1.86 per share, which surpassed the Zacks Consensus Estimate by 11.4%. The figure improved 0.5% on a year-over-year basis.

Revenues on a non-GAAP basis increased 4.4% year over year to \$869.1 million. Notably, the figure was higher than the guided range of \$840 million to \$860 million. Further, the top line outpaced the consensus mark by 2.2%.

The results can be attributed to improved progress in Infrastructure and Defense (IDP) sequentially and strong demand for Mobile Products (MP). The company benefited from increased demand in the performance tier for Radio Frequency (RF) Fusion based solutions and Bulk Acoustic Wave or BAW-based multiplexers.

Quarter Details

Segment-wise, MP revenues were \$662 million. Segmental revenues were aided by robust demand from top customers.

During the third quarter, the company secured multiple design wins to supply low, mid-high and ultra-high band solutions for next-generation 5G smartphones. These are highly integrated and high performance 4G and 5G solutions, enabling customers to reduce product footprint and enhance system performance.

Additionally, Qorvo secured new 4G and 5G design wins and extended leadership in BAW-based multiplexers, including hexaplexers and recently launched micro BAW-based quadplexer.

Moreover, design wins for ultra-high band FEM were broad based across customers and made with multiple 5G cellular chipsets.

IDP revenues declined year over year to \$207 million, primarily owing to impacts of export restrictions.

Strong demand for the company's solutions in defense (advanced radars and other electronic warfare products) and connectivity (Wi-Fi and emerging IoT applications) and rapid adoption of gallium nitride or GaN for high-power applications were key catalysts.

Qorvo expanded GaN customer engagements with ramp up of high-power amplifiers at a third major OEM to support 5G massive Multiple Input Multiple Output or MIMO deployments in the third quarter. The company's expanding RF product portfolio pertaining to 5G and massive MIMO base stations bodes well.

Notably, in the third quarter, the company completed the purchase of the remaining equity in Cavendish Kinetics, a RF Micro-Electro-Mechanical Systems (MEMS) company, further strengthening its technology portfolio for switches, tuners, and other products.

Additionally, the company commenced volume shipments of BAW filters to a top-tier infrastructure OEM supporting China Mobile's 5G small-cell deployments.

Accelerating timeline for 5G deployment bodes well for Qorvo. It has participated in dozens of 5G field trials and demonstrations.

Moreover, Qorvo launched high power GaAs FEM addressing enhanced performance requirements of second-generation 5G millimeter wave base stations during the third quarter.

In the Connectivity business, the company secured new design wins and increased shipments of Wi-Fi 6 Front-End Modules (FEMs) across Customer Premises Equipment (CPE), retail and mobile, supported by new GaAs and BAW processors.

For the Connected Home, Qorvo initiated sampling of the industry's first radio solution combining Zigbee, Thread and Bluetooth Low Energy SoC with a Wi-Fi 6 FEM to enable next-generation distributed Wi-Fi networks.

For the connected car, the company introduced a complete V2X front-end solution, featuring 5.9 gigahertz Wi-Fi coexistence BAW filters, which are gaining traction among automotive OEMs and Tier 1 suppliers.

Operational Details

Non-GAAP gross margin contracted 20 basis points (bps) from the year-ago quarter to 49.3%. This can be attributed to unfavorable product mix.

Non-GAAP operating expenses increased 16.7% year over year to \$175.6 million.

Non-GAAP operating margin contracted 240 bps from the year-ago quarter to 29%.

Balance Sheet & Cash Flow

As of Dec 28, 2019, cash and cash equivalents were \$1.09 billion compared with \$586.8 million reported in the previous quarter. As of Dec 28, 2019 long-term debt was \$1.57 billion, which soared 54.8% sequentially.

Net cash provided by operating activities was \$300.8 million that increased from \$173 million in the previous quarter. Free cash flow during the reported quarter came in at \$260.1 million.

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

Quarter Ending **12/2019**

Report Date	Jan 29, 2020
Sales Surprise	2.16%
EPS Surprise	11.38%
Quarterly EPS	1.86
Annual EPS (TTM)	5.96

Guidance

For fourth-quarter fiscal 2020, Qorvo anticipates revenues between \$800 million and \$840 million. Earnings are projected to be \$1.55 per share at the mid-point.

Mobile Products sales in the fourth quarter are expected to decline sequentially. Nonetheless, IDP revenues are expected to increase year over year and sequentially, primarily owing to sustained strength in defense, the ramp up of Wi-Fi 6 and broader 5G infrastructure customer demand.

Non-GAAP gross margin is anticipated to be 48.5%.

Recent News

On **Jan 7, 2020**, Qorvo unveiled a suite of products to enable reliable vehicle-to-everything (V2X) link in the Telematics Control Unit (TCU) and antenna and provide a readily available solution for V2X communications.

The company also introduced a power management integrated circuit (PMIC) expanding its portfolio of products for rapid in-vehicle charging of phones, tablets and laptops.

On **Jan 6, 2020**, Qorvo announced two RF front-end (RFFE) modules that support the NB-IoT and LTE-M cellular standards. The expansion features the industry's smallest integrated dual-band module, which will help manufacturers add cellular IoT capability to new devices.

On **Nov 25, 2019**, Qorvo unveiled new gallium arsenide (or GaAs) front end module (or FEM), QPF4010 FEM, to aid 5G millimeter wave (mmWave) base stations in supporting additional capacity.

On **Nov 14, 2019**, Qorvo launched PAC5527 Power Application Controller (or PAC), which integrates multiple devices into a single SOC controller, to aid OEMs in developing high-performance tools in a compact footprint.

On **Oct 31, 2019**, Qorvo announced the authorization of a new \$1 billion under the share repurchase program.

On **Oct 1, 2019**, Qorvo concluded the previously announced offering of \$350 million principal amount of 4.375% Senior Notes due 2029. These additional notes once placed will be an unsecured senior liability of Qorvo. Notably, interest for these additional notes will be paid semi-annually.

Valuation

Qorvo's shares are up 53.8% in the past six-month period and 57.3% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 48.3% and 22% in the past six-month period, respectively. Over the past year, the Zacks sub-industry and sector are up 41.4% and 28.8%, respectively.

The S&P 500 index is up 16% in the past six-month period and 22.4% in the past year.

The stock is currently trading at 16.17X forward 12-month earnings, which compares to 18.77X for the Zacks sub-industry, 22.54X for the Zacks sector and 18.89X for the S&P 500 index.

Over 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 13.36X. Our Outperform recommendation indicates that the stock will perform better than the market. Our \$125 price target reflects 18.73X 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	16.17	18.77	22.54	18.89
	5-Year High	70.9	20.56	22.54	19.34
	5-Year Low	8.84	10.01	16.87	15.18
	5-Year Median	13.36	12.94	19.28	17.46
P/S F12M	Current	3.64	4.06	3.69	3.50
	5-Year High	4.60	4.92	3.69	3.50
	5-Year Low	1.66	2.15	2.30	2.54
	5-Year Median	2.71	2.92	3.02	3
EV/Sales TTM	Current	4.14	4.07	4.38	3.31
	5-Year High	9.05	6.23	4.38	3.31
	5-Year Low	1.84	1.99	2.57	2.12
	5-Year Median	3.06	3.22	3.47	2.79

As of 02/04/2020

Industry Analysis Zacks Industry Rank: Top 5% (12 out of 255)



Top Peers

Cirrus Logic, Inc. (CRUS)	Outperform
Synaptics Incorporated (SYNA)	Outperform
Analog Devices, Inc. (ADI)	Neutral
Broadcom Inc. (AVGO)	Neutral
MACOM Technology Solutions Holdings, Inc. (MTSI)	Neutral
QUALCOMM Incorporated (QCOM)	Neutral
Skyworks Solutions, Inc. (SWKS)	Neutral
Texas Instruments Incorporated (TXN)	Neutral

Industry Comparison Industry: Semiconductors - Radio Frequency				Industry Peers		
	QRVO Outperform	X Industry	S&P 500	AVGO Neutral	QCOM Neutral	SWKS Neutral
VGM Score	B	-	-	B	F	D
Market Cap	12.48 B	81.34 M	23.66 B	123.95 B	101.59 B	20.07 B
# of Analysts	7	4	13	13	9	9
Dividend Yield	0.00%	0.00%	1.82%	4.17%	2.79%	1.49%
Value Score	C	-	-	C	D	C
Cash/Price	0.09	0.09	0.04	0.04	0.13	0.06
EV/EBITDA	16.21	3.63	13.87	18.36	10.58	14.28
PEG Ratio	1.50	1.35	1.97	1.26	1.54	1.24
Price/Book (P/B)	2.88	4.70	3.24	NA	22.02	4.70
Price/Cash Flow (P/CF)	9.95	14.77	13.40	9.17	21.31	14.80
P/E (F1)	17.13	17.14	18.48	13.47	21.56	17.89
Price/Sales (P/S)	3.98	6.08	2.60	5.49	4.19	6.08
Earnings Yield	5.84%	5.59%	5.40%	7.43%	4.63%	5.59%
Debt/Equity	0.36	0.09	0.72	-214.36	2.74	0.04
Cash Flow (\$/share)	10.84	-0.49	6.92	33.97	4.17	7.97
Growth Score	C	-	-	B	D	D
Hist. EPS Growth (3-5 yrs)	9.18%	9.18%	10.80%	28.58%	-8.63%	8.28%
Proj. EPS Growth (F1/F0)	9.30%	11.76%	7.46%	8.70%	16.51%	6.88%
Curr. Cash Flow Growth	0.78%	-9.68%	10.59%	8.07%	-22.34%	-9.68%
Hist. Cash Flow Growth (3-5 yrs)	68.42%	15.70%	8.55%	48.32%	-10.62%	15.70%
Current Ratio	4.21	4.88	1.21	1.44	1.88	7.04
Debt/Capital	26.55%	12.18%	42.91%	54.64%	73.24%	3.42%
Net Margin	11.03%	-892.60%	11.76%	12.06%	18.07%	25.02%
Return on Equity	14.97%	11.69%	17.24%	46.16%	77.78%	23.03%
Sales/Assets	0.52	0.28	0.55	0.32	0.72	0.68
Proj. Sales Growth (F1/F0)	5.87%	21.21%	4.22%	10.72%	-9.77%	4.36%
Momentum Score	A	-	-	B	D	C
Daily Price Chg	0.31%	2.55%	0.67%	2.09%	2.83%	2.55%
1 Week Price Chg	-6.64%	-6.64%	-2.60%	-5.81%	-4.84%	-7.49%
4 Week Price Chg	-3.00%	-1.92%	-0.76%	-0.33%	-0.04%	0.25%
12 Week Price Chg	5.18%	5.18%	2.84%	-1.25%	-2.24%	16.11%
52 Week Price Chg	63.37%	5.80%	13.93%	15.41%	75.30%	55.29%
20 Day Average Volume	1,964,294	326,162	1,915,782	2,736,804	9,318,127	2,471,337
(F1) EPS Est 1 week change	14.61%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	14.80%	2.08%	0.00%	0.43%	0.00%	2.15%
(F1) EPS Est 12 week change	14.80%	1.33%	-0.13%	-1.41%	2.78%	2.66%
(Q1) EPS Est Mthly Chg	45.80%	4.26%	0.00%	0.46%	0.00%	3.51%

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	A
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.