Qorvo Inc. (QRVO)

$111.64 (As of 01/06/20)

Price Target (6-12 Months): **$117.00**

Long Term: 6-12 Months	**Zacks Recommendation:** (Since: 01/03/20) Prior Recommendation: Outperform	**Neutral**
Short Term: 1-3 Months	**Zacks Rank:** (1-5)	**3-Hold**
	Zacks Style Scores:	VGM:B
	Value: C | Growth: C	Momentum: A

Summary

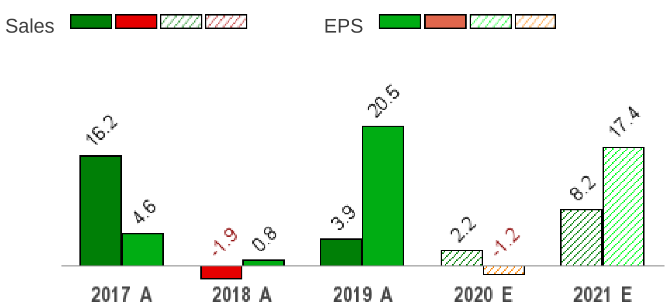
Qorvo is benefiting from improved progress in IDP. Moreover, increased demand in the performance-tier for RF Fusion based solutions, antenna tuning, discrete components and BAW-based multiplexers, remains a key catalyst. Recent acquisition of Cavendish Kinetics is expected to strengthen portfolio of programmable analog and mixed signal power offerings. The company's 5G infrastructure and GaN solutions hold promise. Further, robust growth in company's wireless connectivity as well as in base station solutions is a positive. Moreover, emergence of connected homes, autonomous vehicles, AI, AR, and wearables bode well. Also, Stringent cost control measures are noteworthy. Notably, shares of the company have outperformed the industry in the past year. However, customer concentration from the likes of Apple and Huawei remains a woe.

Price, Consensus & Surprise

Data Overview

52 Week High-Low	**$118.49 - $58.52**
20 Day Average Volume (sh)	**1,540,847**
Market Cap	**$13.0 B**
YTD Price Change	**-4.0%**
Beta	**1.22**
Dividend / Div Yld	**$0.00 / 0.0%**
Industry	**Semiconductors - Radio Frequency**
Zacks Industry Rank	**Top 41% (105 out of 254)**
Last EPS Surprise	**16.9%**
Last Sales Surprise	**6.9%**
EPS F1 Est- 4 week change	**0.0%**
Expected Report Date	**02/06/2020**
Earnings ESP	**-1.1%**
P/E TTM	**18.8**
P/E F1	**19.6**
PEG F1	**1.7**
P/S TTM	**4.2**

Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of $)

	Q1	Q2	Q3	Q4	Annual*
2021	761 E	884 E	925 E	788 E	3,415 E
2020	776 A	807 A	851 E	724 E	3,157 E
2019	693 A	884 A	832 A	681 A	3,090 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	$1.29 E	$1.85 E	$2.05 E	$1.48 E	$6.68 E
2020	$1.36 A	$1.52 A	$1.67 E	$1.14 E	$5.69 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 01/06/2020. The reports text is as of 01/07/2020.

Overview

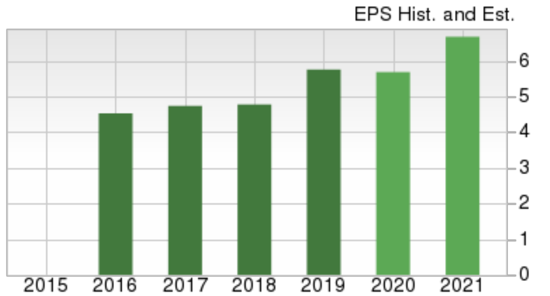
Headquartered in Greensboro, North Carolina, Qorvo Inc. is a leading provider of core technologies and radio frequency (RF) solutions for mobile, infrastructure and aerospace/defense applications.

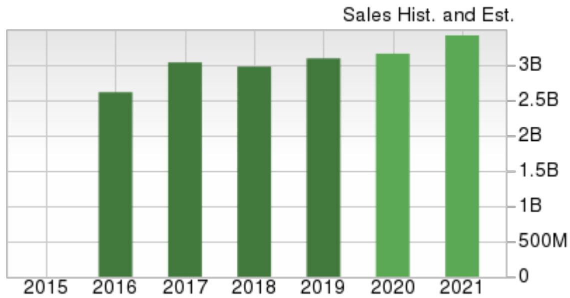
The company was formed with the merger of semiconductor manufacturing firms RF Micro Devices Inc. and TriQuint Semiconductor Inc. in an all-stock transaction. Qorvo went public in 2015.

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

- 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.

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.

Qorvo operates in a competitive landscape that is becoming more complex with low barriers to entry, exerting pricing pressure and reducing margins.

- 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 not 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 Q2 Earnings & Revenues Beat Estimates

Quarter Ending	09/2019
Report Date	Oct 31, 2019
Sales Surprise	6.94%
EPS Surprise	16.92%
Quarterly EPS	1.52
Annual EPS (TTM)	5.95

Qorvo reported second-quarter fiscal 2020 non-GAAP earnings of $1.52 per share, surpassing the Zacks Consensus Estimate of $1.30 per share. However, reported earnings decreased from $1.75 per share reported in the year-ago quarter.

Revenues on a non-GAAP basis declined 8.8% year over year to $806.7 million. However, the figure was higher than management's guidance of $745 million and 765 million. Further, the top line outpaced the Zacks Consensus Estimate of $754 million.

The results can be attributed to improved progress in IDP and stringent cost control measures.
The company benefited from increased demand in the performance-tier for RF Fusion based solutions, antenna tuning, discrete components and BAW-based multiplexers.

Notably, Huawei is one of the more prominent customers of Qorvo. During the reported quarter, sales to Huawei contributed 5% to total revenues.

Quarter Details

Segment-wise, Mobile Products (MP) revenues were $623 million. The segmental revenues were aided by robust demand from top customers.

Infrastructure and Defense (IDP) revenues were down year over year to $184 million, primarily owing to impacts of export restrictions.

However, robust growth in the company's wireless connectivity, improvement in base station solutions, ramping up ofWi-Fi 6 and robust 5G infrastructure market demand acted as tailwinds.

In the quarter under review, Qorvo completed the acquisition of Cavendish Kinetics, with an aim to strengthen portfolio of programmable analog and mixed signal power offerings.

Qorvo was also selected by top four China-based smartphone OEMs to offer the latter with antenna tuning, high-band PAD and other integrated solutions for 5G smartphones.

Further, the company increased shipments of 5G massive MIMO infrastructure solutions to various OEMs. The company also secured new design wins across all 5.9GHz 5G frequency bands. The company's expanding RF product portfolio pertaining to 5G and massive MIMO base stations bodes well in the days ahead.

Notably, Qorvo sampled BAW-based 5G antennaplexer solutions in a bid to aid customers in utilizing antenna architectures for 5G devices.

Operational Details

Non-GAAP gross margin contracted 120 bps from the year-ago quarter to 46.5%. This can be attributed to unfavorable product mix.

Non-GAAP operating expenses decreased around 1% year over year and came in at $166.7 million.

Non-GAAP operating margin contacted 380 bps from the year-ago quarter to 24.8%.

Balance Sheet & Cash Flow

As of Sep 28, 2019, cash and cash equivalents were $586.8 million compared with $629.6 million reported in the previous quarter. Long-term debt was $1.02 billion relatively flat quarter over quarter.

Net cash provided by operating activities was $173 million, down from $257 million in the previous quarter. Free cash flow during the reported quarter came in at $135 million.

During the quarter under review, the company repurchased shares worth $165 million under the share repurchase program. The company also announced the authorization of a new $1 billion under the share repurchase program.

Guidance

For third-quarter fiscal 2020, Qorvo anticipates revenues between $840 million and $860 million. Earnings are projected to be $1.67 per share at the mid-point.

Further, Mobile Products revenues in the third quarter are expected to be up sequentially. IDP revenues are expected to increase year over year and sequentially, primarily owing to robust ramp of Wi-Fi 6 and higher 5G infrastructure customer demand.

Recent News

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.

On **Sep 17, 2019**, Qorvo declared that its gallium nitride based S-band MMIC high power amplifier (HPA) has been chosen by Lockheed Martin to offer GaN modules to be utilized in the production of the U.S. Army's Q-53 radar system.

On **Sep 13, 2019**, Qorvo enhanced infrastructure solutions portfolio with dual-band integrated front end module (FEM) — QPF4800, designed for Wi-Fi 6 customer premise equipment.

Valuation

Qorvo's shares are up 61.9% in the past six-month period and 88% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 48.4% and 14.4% in the past six-month period, respectively. Over the past year, the Zacks sub-industry and sector are up 77.2% and 33.4%, respectively,

The S&P 500 index is up 10.8% in the past six-month period and 27.8% in the past year.

The stock is currently trading at 17.12X forward 12-month earnings, which compares to 19.81X for the Zacks sub-industry, 22.32X for the Zacks sector and 18.79X for the S&P 500 index.

Over the past three years, the stock has traded as high as 70.9X and as low as 9.56X, with a 3-year median of 13.81X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our $117 price target reflects 17.94X 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	17.12	19.81	22.32	18.79
	3-Year High	70.90	20.57	22.32	19.34
	3-Year Low	9.56	10.01	16.96	15.17
	3-Year Median	13.81	13.19	20.14	17.44
P/S F12M	Current	3.87	4.20	3.59	3.48
	3-Year High	4.60	4.92	3.59	3.48
	3-Year Low	1.66	2.15	2.30	2.54
	3-Year Median	2.71	2.93	3.01	3.00
EV/Sales TTM	Current	4.33	4.12	4.22	3.25
	3-Year High	4.57	4.46	4.22	3.30
	3-Year Low	2.24	1.99	3.05	2.46
	3-Year Median	3.07	3.25	3.73	2.95

As of 01/06/2020

Industry Analysis **Zacks Industry Rank:** Top 41% (105 out of 254)

Top Peers

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

Industry Comparison Industry: Semiconductors - Radio Frequency

Industry Peers

	QRVO Neutral	X Industry	S&P 500	AVGO Neutral	QCOM Outperform	SWKS Neutral
VGM Score	B	-	-	C	D	C
Market Cap	12.97 B	82.64 M	23.66 B	124.80 B	98.78 B	19.86 B
# of Analysts	8	6	13	13	9	10
Dividend Yield	0.00%	0.00%	1.79%	4.14%	2.87%	1.51%
Value Score	C	-	-	C	D	C
Cash/Price	0.04	0.06	0.04	0.04	0.12	0.05
EV/EBITDA	16.77	4.22	13.88	18.45	10.29	14.11
PEG Ratio	1.72	1.46	1.99	1.27	1.50	1.27
Price/Book (P/B)	3.04	4.86	3.36	NA	21.42	4.86
Price/Cash Flow (P/CF)	10.30	14.63	13.62	9.24	20.73	14.63
P/E (F1)	19.62	18.97	18.74	13.58	20.98	18.30
Price/Sales (P/S)	4.19	5.88	2.67	5.52	4.07	5.88
Earnings Yield	5.10%	-3.60%	5.32%	7.36%	4.76%	5.46%
Debt/Equity	0.24	0.07	0.72	-214.36	2.74	0.00
Cash Flow ($/share)	10.84	-0.49	6.94	33.97	4.17	7.97
Growth Score	C	-	-	B	D	D
Hist. EPS Growth (3-5 yrs)	8.60%	11.50%	10.56%	28.58%	-8.63%	11.50%
Proj. EPS Growth (F1/F0)	-1.24%	5.82%	7.41%	8.51%	16.51%	3.23%
Curr. Cash Flow Growth	0.78%	-9.68%	14.83%	8.07%	-22.34%	-9.68%
Hist. Cash Flow Growth (3-5 yrs)	68.42%	15.70%	9.00%	48.32%	-10.62%	15.70%
Current Ratio	3.45	4.50	1.23	1.44	1.88	5.97
Debt/Capital	19.24%	12.18%	42.92%	54.64%	73.24%	0.00%
Net Margin	8.19%	-918.71%	11.08%	12.06%	18.07%	25.28%
Return on Equity	15.10%	11.69%	17.10%	46.16%	77.78%	24.41%
Sales/Assets	0.53	0.28	0.55	0.32	0.72	0.70
Proj. Sales Growth (F1/F0)	2.15%	2.15%	4.20%	10.72%	-9.84%	1.79%
Momentum Score	A	-	-	C	A	A
Daily Price Chg	-0.62%	-1.39%	-0.61%	-0.15%	-0.59%	-1.76%
1 Week Price Chg	-3.85%	-2.98%	0.13%	-0.74%	-2.00%	-2.98%
4 Week Price Chg	2.95%	15.41%	2.60%	-0.21%	1.87%	12.91%
12 Week Price Chg	44.35%	5.31%	8.87%	11.38%	13.38%	37.16%
52 Week Price Chg	86.75%	41.15%	29.34%	31.83%	53.28%	80.74%
20 Day Average Volume	1,540,847	150,801	1,603,615	2,339,284	7,351,620	2,090,284
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	0.00%	0.00%	0.00%	-1.83%	0.00%	0.00%
(F1) EPS Est 12 week change	12.94%	-4.62%	-0.57%	-1.83%	5.72%	1.02%
(Q1) EPS Est Mthly Chg	0.00%	0.00%	0.00%	-7.03%	0.00%	0.00%

Zacks Stock Rating System

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

Zacks Recommendation

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

Zacks Rank

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

Zacks Style Scores

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

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

Value Score	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

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