

Marvell Technology (MRVL)

\$22.43 (As of 04/03/20)

Price Target (6-12 Months): \$26.00

Long Term: 6-12 Months	Zacks Recommendation	: Neutral		
	(Since: 05/07/19)			
	Prior Recommendation: Und	lerperform		
Short Term: 1-3 Months	Zacks Rank: (1-5)	3-Hold		
	Zacks Style Scores:	VGM:F		
	Value: D Growth: F	Momentum: F		

Summary

Continued deal wins are driving Marvell's top line. Strong demand from enterprise and datacenter markets was also a positive. The company's recent acquisitions of Avera and Aquantia are expected to boost the top line. Further, the divestment of the Wi-Fi business to NXP Semiconductors will help Marvell focus on other high-growth areas. The company's shares have outperformed the industry in the past 12 months. Nonetheless, global business disruptions due to the rapidly-spreading coronavirus could hurt Marvell's financials in the near term. Moreover, economic weaknesses across the European and Asian regions were major headwinds, which continued to hurt demand in the enterprise end market. Also, the U.S. government's export restriction on certain Chinese customers is likely to continue to be an overhang on the top line.



Data Overview

52 Week High-Low	\$28.86 - \$16.45
20 Day Average Volume (sh)	11,451,245
Market Cap	\$15.0 B
YTD Price Change	-15.6%
Beta	0.96
Dividend / Div Yld	\$0.24 / 1.1%
Industry	Semiconductor - Communications
Zacks Industry Rank	Top 9% (23 out of 253)

Zacks Industry Rank	Top 9% (23 out of 253)
Last EPS Surprise	6.3%
Last Sales Surprise	0.9%
EPS F1 Est- 4 week change	-4.7%
Expected Report Date	NA
Earnings ESP	-7.7%

Expected Report Date	NA
Earnings ESP	-7.7%
P/E TTM	34.0
P/E F1	25.8
PEG F1	3.5
P/S TTM	5.6

Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

*Quarterly figures may not add up to annual.

	Q1	Q2	Q3	Q4	Annual*
2022	811 E	846 E	903 E	905 E	3,459 E
2021	678 E	697 E	780 E	832 E	2,981 E
2020	662 A	657 A	662 A	718 A	2,699 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2022	\$0.28 E	\$0.31 E	\$0.36 E	\$0.37 E	\$1.33 E
2021	\$0.14 E	\$0.17 E	\$0.25 E	\$0.32 E	\$0.87 E
2020	\$0.16 A	\$0.16 A	\$0.17 A	\$0.17 A	\$0.66 A

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 04/03/2020. The reports text is as of 04/06/2020.

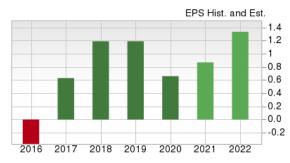
Overview

California-based Marvell Technology is a fabless designer, developer and marketer of analog, mixed-signal and digital signal processing integrated circuits. The company operates in Bermuda, China, Germany, Japan, Korea, Taiwan, the United Kingdom, and the United States.

The acquisition of Cavium in July 2018 helped Marvell enhance its product portfolio and access to newer markets. Before the Cavium acquisition, Marvell was mainly known as the leading suppliers of chips for hard disk drives (HDD) used in PCs. Cavium was specialized in offering software compatible processors that enable functionality in data center applications and network connectivity for server and switches.

Therefore, the acquisition helped Marvell expanding its capabilities in the networking market and capture significant market share in the fast-growing data-center space. The strategy also helped Marvell in countering declining chips demand in HDDs due to a weaker PC market. Additionally, the move might put Marvell in a stronger competitive position in the coming years.

Marvell specializes in highly integrated System-on-a-Chip (SoC) and System-in-a-Package (SiP) devices based primarily on ARM designs and sells to both enterprise and consumer customers. It has a significant number of patents in design, software and reference platforms to its credit.

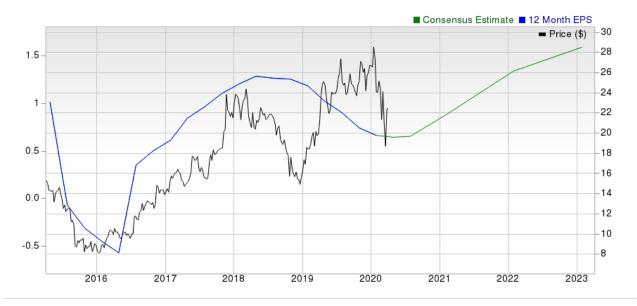




The company's product line includes application processors, controllers, switches, communications and networking processors and technologies, as well as other SoCs for printers and smart home products. These serve two broad end markets — storage and networking.

Marvell has three reportable segments — Storage, Networking, and Others. In fiscal 2019, revenues from storage made up 48% of total revenues and networking, 46%. The remaining 6% of revenues came from Others (Printing Solutions Application Processors, Communication Processors, and others).

End Customers such as Western Digital, Toshiba and Seagate accounted for approximately 12%, 11%, and 10%, respectively of Marvell's consolidated fiscal 2019 revenues.



Reasons To Buy:

- Marvell is a promising player in the solid state drive (SSD) controllers market. The storage market is seeing a steady increase in demand, given fast-growing data volume, especially the exponential growth in unstructured data.
- products and increasing 5G adoptions across A Being a fabless company, it does not have to own or operate foundries for the production of countries could be a silicon. Instead, it works with independent merchant foundries and chip assemblers for the growth driver. manufacturing of products. Marvell's customers are original equipment manufacturers and original design manufacturers, both of which design and manufacture end
 - market devices. This benefits the company with superior manufacturing capability, scalability, as well as flexibility to develop complex SoC and SiP devices that offer superior technology and services at competitive prices. It also frees up resources for research and development (R&D) activity that would otherwise have been locked up in capital assets. This approach permits the company to focus more on the designing, developing and marketing side, which reduces operational and financial risk.

We believe solid demand

for Marvell's 4G LTE

- ▲ Marvell has initiated restructuring activities to boost operational efficiency. It is concentrating on high-growth markets like IoT. Research firm IDC quoted the Wall Street Journal that the market could nearly triple, going ahead. In 2014, the global IoT market was worth \$655.8 billion and might hit \$1.7 trillion by 2020. In its recent report, Bain predicts the global IoT market will grow to about \$520 billion in 2021, more than doubling the 2017 value of \$235 billion. Marvell's efforts to capitalize on the emerging opportunities are encouraging. We believe that these initiatives will provide the company with adequate growth opportunities in the long run.
- ▲ Marvell expects strong growth in 5G-related revenues in the second half of fiscal 2021, driven by continued deployment in Korea and the beginning of higher 5G adoption in Japan and other countries. This makes us optimistic about the company's prospects.
- Marvell regularly returns value to shareholders. In fiscal 2020, the company returned \$524 million to shareholders. We consider that share repurchases are a good way of returning cash to investors while at the same time boosting the company's earnings.

Reasons To Sell:

- ▼ We believe global business disruptions due to the rapidly-spreading coronavirus could hurt Marvell's financials in the near run. It is believed the semiconductor industry has remained resilient of the coronavirus impact so far due to substantial chip inventory available in the supply chain. However, if the coronavirus stays for a longer period, it will affect the supply chain as well as demand. The coronavirus could impact the production of electronic manufacturing companies, thereby affecting demand for semiconductor chips and equipment.
- ▼ In the High Definition (HD) storage drive market, Broadcom is Marvell's main competitor as these two are the primary SoC (system on a chip) suppliers. Also, NXP Semiconductors, QUALCOMM and Texas Instruments offer various components to the market, making us increasingly cautious about growth prospect of Marvell Technology.
- Global business disruptions due to the rapidly-spreading coronavirus and economic weaknesses across the European and Asian regions are major headwinds.
- ▼ Marvell depends on some big customers for a substantial portion of its net revenues. Marvell faces customer concentration risk as revenues from its top three customers accounted for approximately 33% of total revenue in fiscal 2019, which is significant. The loss of any customer may reduce orders, thereby impacting revenues and operating results.
- ▼ A substantial portion of the company's sales is derived from outside the U.S. During fiscal 2019, 2018 and 2017 approximately 85%, 95% and 94% respectively, of total revenue was garnered in currencies other than the U.S. dollar. This exposes the company to exchange rate fluctuations and counterparty default risk. Thus, an economic condition, which impacts foreign currency exchange rates, does result in transaction exposure, which leads to profit fluctuation.
- ▼ The oversupply in the NAND market which is leading to the loss of value of the SSD market, is a concern for the company. This trend is expected to continue for sometime now, which might be an overhang on its storage business. Impact of the export restrictions and accounting for the customer factory transition is expected to be an overhang on storage revenues.

Last Earnings Report

Marvell Q4 Earnings & Revenues Beat Estimates

Marvell reported fourth-quarter fiscal 2020 non-GAAP earnings of 17 cents, which surpassed the Zacks Consensus Estimate by 6.25%. However, it declined 32% from the year-ago quarter.

Marvell's revenues of \$717.7 million also outpaced the consensus mark of \$712 million. However, the figure declined 3.6% year over year. Macroeconomic uncertainties and the divestiture of the Wi-Fi business to NXP Semiconductors (NXPI) on Dec 6, 2019, hurt the top line. Nonetheless, key deal wins across various OEMs, which resulted in strong bookings, were a breather.

Quarter Ending	01/2020	
Report Date	Mar 04, 2020	
Sales Surprise	0.92%	
EPS Surprise	6.25%	
Quarterly EPS	0.17	
Annual EPS (TTM)	0.66	

Quarter Details

In the end markets, storage revenues (41% of total revenues) fell 6.5% year over year to \$296.5 million but grew 3% sequentially on increased demand for both of its storage controller product lines. Marvell's HDD business continued to benefit from its strengthening foothold in the nearline market. Its enterprise and data center SSD businesses also continued to recover in the fourth quarter.

The networking business (52%) revenues dropped 2.8% year over year to \$377 million due to macroeconomic challenges, which continued to hurt demand in the enterprise end market. Additionally, the divestment of the Wi-Fi business was another dampener. However, full quarter contributions from the Avera and Aquantia acquisitions led to 14% sequential growth in the segment.

Other product revenues (7%) during the fiscal third quarter increased 10.4% on a year-over-year basis to \$44.5 million.

Margins

Marvell's non-GAAP gross profit was \$446.8 million, down 6.9% on a year-over-year basis. Non-GAAP gross margin contracted 220 basis points (bps) to 62.3%.

Non-GAAP operating expenses increased 7% year over year to \$306.1 million. Non-GAAP operating margin contracted 640 bps to 19.6%.

Balance Sheet

Marvell exited the quarter with cash and cash equivalents of \$647.6 million compared with \$438.4 million in the previous quarter.

The company's long-term debt totaled \$1.44 billion compared with \$2.04 billion in the previous quarter. Cash from operating activities amounted to \$55.8 million compared with \$65.5 million in the prior quarter.

During the quarter, Marvell paid out dividends of around \$40 million to shareholders.

Guidance

Marvell's guidance for the first quarter of fiscal 2021 takes into account the U.S. Government's export restriction on certain Chinese customers. The company also expects a 5% decrease in revenues due to the uncertainty associated with the coronavirus.

The company projects first-quarter fiscal 2021 revenues of \$680 million (up or down up to 5%). The Zacks Consensus Estimate for revenues stands at \$711.2 million, suggesting a decline of 4.52% from the year-ago quarter's reported figure.

Non-GAAP earnings per share are expected between 11 cents and 17 cents. The consensus mark of 16 cents indicates a 36% year-over-year decline.

Networking revenues for the first quarter are expected to witness a low to mid-single-digit decline sequentially due to a lack of Wi-Fi revenues.

The first quarter is typically and seasonally a weak quarter for the storage business. Due to coronavirus-related impacts, a mid-single-digit sequential decline is expected to hurt the storage segment.

Further, the company expects operating expenses to decline from the second quarter of fiscal 2021. Operating expenses are expected to decrease to \$300 million in the fourth quarter of fiscal 2021.

Management expects Avera to contribute \$300 million to revenues for fiscal 2021. Moreover, Avera is expected to bring an additional \$4 billion to Marvell's addressable market across the data center, carrier, enterprise and automotive end markets.

Management expects strong growth in 5G-related revenues in the second half of fiscal 2021, driven by continued deployment in Korea and the beginning of higher 5G adoption in Japan and other countries.

Recent News

On Feb 25, 2020, Marvell launched a new powerful processor for 5G wireless network – OCTEON Fusion processors built on the OCTEON TX2 platform.

On Feb 4, 2020, Marvell launched dual 400GbE MACsec PHY transceiver with 256-bit encryption and Class C compliant precision time protocol timestamping for data center and 5G infrastructure.

On Dec 6, 2019, Marvell announced completing the divesture of its WiFi Connectivity business to NXP Semiconductors.

On Dec 3, Marvell announced that NVIDIA's GPU support on its ThunderX suite of Arm-based server processors is now available. The parallel processing capabilities of NVIDIA GPUs will greatly complement the computational performance and memory bandwidth of Marvell's 64-bit Armv8-A based server processor, ThunderX2, providing a powerful energy-efficient exascale computing.

On the same day, Marvell and NXP Semiconductors jointly announced that they have received all necessary regulatory approvals for NXP's acquisition of Marvell's Wi-Fi business.

On Nov 5, Marvell completed the acquisition of the Application Specific Integrated Circuit (ASIC) business of GLOBALFOUNDRIES, Avera Semiconductor, for approximately \$600 million. The acquisition will allow Marvell to offer a complete range of semiconductor solutions, including 5G, data center, enterprise and automotive applications.

Valuation

Marvell's shares have plunged 15.6% year to date whilethey have jumped 4.6% over the trailing 12 months. Stocks in the Zacks sub-industry fell 10.8% while the Zacks Computer & Technology sector declined 18% in the year to date period. Over the past year, while the Zacks sub-industry increased 16%, the sector lost 9.2%.

The S&P 500 Index is down 22.7% year to date and 14.2% in the past year.

The stock is currently trading at 23.53X forward 12-month earnings, which compares with 31.05X for the Zacks sub-industry, 18.21X for the Zacks sector and 15.74X for the S&P 500 Index.

Over the past five years, the stock has traded as high as 90.66X and as low as 11.46X, with a 5-year median of 22.55X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$26 price target reflects 24.7X forward 12-months earnings.

The table below shows summary valuation data for MRVL

	Valuation M	ultiple	s - MRVL		
		Stock	Sub-Industry	Sector	S&P 500
	Current	23.53	31.05	18.21	15.74
P/E F 12M	5-Year High	90.66	37.93	21.91	19.34
	5-Year Low	11.46	13.64	16.71	15.19
	5-Year Median	22.55	23.98	19.18	17.44
	Current	4.8	4.16	2.9	2.72
P/Sales F12M	5-Year High	6.43	4.96	3.59	3.43
	5-Year Low	1.41	1.50	2.3	2.54
	5-Year Median	3.36	2.71	3.05	3
	Current	5.99	5.13	3.31	2.47
EV/Sales TTM	5-Year High	7.60	5.64	4.44	3.46
	5-Year Low	0.57	0.90	2.57	2.16
	5-Year Median	3.08	2.70	3.55	2.83

As of 04/03/2020

Industry Analysis Zacks Industry Rank: Top 9% (23 out of 253)

■ Industry Price -30 Industry -14 -8

Top Peers

Broadcom Inc. (AVGO)	Neutral
Cypress Semiconductor Corporation (CY)	Neutral
NVIDIA Corporation (NVDA)	Neutral
QUALCOMM Incorporated (QCOM)	Neutral
Silicon Motion Technology Corporation (SIMO)	Neutral
STMicroelectronics N.V. (STM)	Neutral
Texas Instruments Incorporated (TXN)	Neutral
Xilinx, Inc. (XLNX)	Neutral

Industry Comparison Industry: Semiconductor - Communications			Industry Peers			
	MRVL Neutral	X Industry	S&P 500	AVGO Neutral	QCOM Neutral	SIMO Neutra
VGM Score	E	-	-	D	D	O
Market Cap	15.04 B	5.57 B	16.73 B	93.66 B	74.56 B	1.39 [
# of Analysts	12	5	13	13	10	
Dividend Yield	1.07%	1.03%	2.53%	5.55%	3.80%	3.61%
Value Score	D	-	-	D	С	C
Cash/Price	0.04	0.17	0.06	0.07	0.15	0.2
EV/EBITDA	10.76	16.64	10.55	13.68	7.88	8.5
PEG Ratio	3.66	1.46	1.71	1.02	0.86	1.80
Price/Book (P/B)	1.73	2.05	2.28	3.84	16.51	2.59
Price/Cash Flow (P/CF)	18.84	16.56	8.96	6.90	15.63	17.97
P/E (F1)	26.72	21.91	14.34	10.66	16.23	12.62
Price/Sales (P/S)	5.57	2.87	1.78	4.13	3.04	3.04
Earnings Yield	3.88%	4.63%	6.84%	9.38%	6.16%	7.91%
Debt/Equity	0.17	0.17	0.70	1.74	2.98	0.0
Cash Flow (\$/share)	1.19	1.41	7.01	33.97	4.17	2.1
Growth Score	F	-	-	C	D	C
Hist. EPS Growth (3-5 yrs)	8.01%	22.06%	10.95%	25.01%	-8.91%	5.64%
Proj. EPS Growth (F1/F0)	31.69%	87.65%	1.08%	3.25%	13.50%	17.46%
Curr. Cash Flow Growth	-24.70%	-16.84%	5.92%	8.07%	-22.34%	-44.00%
Hist. Cash Flow Growth (3-5 yrs)	6.05%	7.60%	8.55%	48.32%	-10.62%	8.52%
Current Ratio	2.16	2.80	1.24	1.56	1.76	4.4
Debt/Capital	14.22%	14.22%	42.29%	63.52%	74.86%	0.00%
Net Margin	58.70%	1.83%	11.69%	11.64%	17.31%	14.08%
Return on Equity	2.74%	4.70%	16.74%	32.46%	66.54%	12.33%
Sales/Assets	0.26	0.61	0.54	0.31	0.73	0.6
Proj. Sales Growth (F1/F0)	10.46%	5.26%	1.56%	5.09%	-11.31%	19.36%
Momentum Score	F	-	-	С	D	C
Daily Price Chg	-0.97%	0.00%	-1.59%	-1.18%	-4.10%	1.05%
1 Week Price Chg	19.71%	16.04%	12.26%	20.01%	9.33%	17.93%
4 Week Price Chg	-10.03%	-8.03%	-22.86%	-14.52%	-17.61%	3.80%
12 Week Price Chg	-14.06%	-19.64%	-30.01%	-23.51%	-27.45%	-24.47%
52 Week Price Chg	6.96%	10.47%	-23.87%	-22.43%	12.74%	-7.55%
20 Day Average Volume	11,451,245	566,546	4,256,776	5,863,834	15,051,213	446,40
(F1) EPS Est 1 week change	-2.89%	0.00%	-0.04%	-0.12%	0.00%	0.00%
(F1) EPS Est 4 week change	-4.66%	-4.48%	-4.29%	-6.47%	0.00%	-6.75%
(F1) EPS Est 12 week change	-7.83%	-3.13%	-5.40%	-6.07%	5.75%	-4.65%
(Q1) EPS Est Mthly Chg	44.06%	0.00%	-5.90%	-4.23%	0.00%	-9.899

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	D
Growth Score	F
Momentum Score	F
VGM Score	F

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.