

Marvell Technology (MRVL)

\$25.43 (As of 05/01/20)

Price Target (6-12 Months): \$27.00

Long Term: 6-12 Months	Zacks Recor (Since: 05/07/1		Neutral perform	
Short Term: 1-3 Months	Zacks Rank:	Zacks Rank: (1-5)		
	Zacks Style So	VGM:F		
	Value: D	Growth: F	Momentum: C	

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)	8,575,716
Market Cap	\$17.1 B
YTD Price Change	-4.3%
Beta	1.02
Dividend / Div Yld	\$0.24 / 0.9%
Industry	Semiconductor - Communications
Zacks Industry Rank	Top 15% (37 out of 253)

Last EPS Surprise	6.3%
Last Sales Surprise	0.9%
EPS F1 Est- 4 week change	-4.5%
Expected Report Date	06/04/2020
Earnings ESP	-7.1%
P/E TTM	38.5
P/E F1	29.9
PEG F1	4.1
P/S TTM	6.3

Price, Consensus & Surprise



Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2022	803 E	840 E	898 E	902 E	3,444 E
2021	676 E	688 E	770 E	826 E	2,958 E
2020	662 A	657 A	662 A	718 A	2,699 A
EDC E	4!				

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2022	\$0.28 E	\$0.31 E	\$0.36 E	\$0.36 E	\$1.32 E
2021	\$0.14 E	\$0.16 E	\$0.24 E	\$0.31 E	\$0.85 E
2020	\$0.16 A	\$0.16 A	\$0.17 A	\$0.17 A	\$0.66 A
*Quarterly	y figures may no	add up to annu	ual.		

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 05/01/2020. The reports text is as of 05/04/2020.

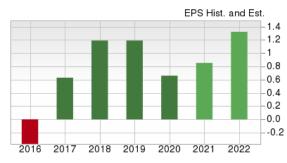
Overview

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.

designing, developing and marketing side, which reduces operational and financial risk.

- Being a fabless company, it does not have to own or operate foundries for the production of silicon. Instead, it works with independent merchant foundries and chip assemblers for the manufacturing of products. Marvell's customers are original equipment manufacturers ("OEM's") 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
- ▲ 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 can be considered as a below-average leveraged company as its current total debt to total capital ratio of 0.14 is significantly lower than the industry average of 0.22. The company significantly reduced its long-term debt in the fourth quarter of fiscal 2020 to \$1.44 billion as of Jan 31, 2020 from \$2.04 billion as of Oct 31, 2019. Though its low cash balance in comparison with debt is a concern, the company's strong cash-flow generation capabilities have helped it serve financial obligations efficiently. As of Jan 31, 2020, Marvell had cash and equivalents of \$648 million and has generated \$714 million of adjusted free cash flow in the trailing 12 months. Moreover, its times interest earned ratio of 10.3X compares favorably with the industry average of -2.1. This signifies the company's ability to generate enough operating income to service its financial obligations without any problems.
- ▲ Marvell's strong operating and free cash flows have helped it return cash through regular quarterly dividend payment and share repurchases. In fiscal 2020, the company generated \$360 million of operating cash flow and \$714 million of adjusted free cash flow. During the fiscal it distributed \$160 million in dividend payments and bought back \$364 million worth of its common stocks. In fiscal 2019, the company generated operating and free cash flows of \$597 million and \$1 billion, respectively, and returned \$252 million to shareholders through share repurchases and dividend payouts. Share repurchases and dividend payments are good way of returning cash to investors while boosting the company's earnings. The company's ability to generate solid free cash flow is expected to help it sustain current share repurchases and dividend payout level, at least in the near-term.

Zacks Equity Research: MRVL

We believe solid demand

products and increasing

for Marvell's 4G LTE

5G adoptions across

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.

01/2020		
Mar 04, 2020		
0.92%		
6.25%		
0.17		
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 Apr 16, Marvell announced that its QLogic Fibre Channel and FastLinQ Ethernet adapter solutions will enable NVMe over Fabrics (NVMe-oF) technology in VMwarevSphere 7.0, displaying its continued efforts to strengthen its end-to-end Ethernet storage capabilities.

On Mar 9, Marvell announced the dual 400GbE PHY transceiver with 100GbE serial electrical I/O capabilities, designed for secured high-density optical infrastructure.

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 4.3% year to date while they have jumped 4.1% over the trailing 12 months. Stocks in the Zacks sub-industry fell 4.1% while the Zacks Computer & Technology sector declined 5.1% in the year to date period. Over the past year, while the Zacks sub-industry increased 4.6%, the sector gained 3.4%.

The S&P 500 Index is down 12.1% year to date and 3.7% in the past year.

The stock is currently trading at 26.14X forward 12-month earnings, which compares with 41.06X for the Zacks sub-industry, 22.32X for the Zacks sector and 20.18X 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 23.19X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$27 price target reflects 27.45X forward 12-months earnings.

The table below shows summary valuation data for MRVL

Valuation Multiples - MRVL						
		Stock	Sub-Industry	Sector	S&P 500	
	Current	26.14	41.06	22.32	20.18	
P/E F 12M	5-Year High	90.66	50.78	22.32	20.18	
	5-Year Low	11.46	13.63	16.71	15.19	
	5-Year Median	23.19	23.29	19.23	17.44	
	Current	5.53	5.15	3.41	3.19	
P/Sales F12M	5-Year High	6.43	5.54	3.59	3.44	
	5-Year Low	1.41	1.39	2.32	2.54	
	5-Year Median	3.47	3.29	3.1	3.01	
	Current	6.61	6.46	3.8	2.81	
EV/Sales TTM	5-Year High	7.60	7.14	4.44	3.45	
	5-Year Low	0.57	0.55	2.58	2.16	
	5-Year Median	3.27	2.95	3.57	2.82	

As of 05/01/2020

Industry Analysis Zacks Industry Rank: Top 15% (37 out of 253)

■ Industry Price Industry 1.2k 1.1k 1k -14 600 -V -8

Top Peers

Company (Ticker)	Rec R	ank
QUALCOMM Incorporated (QCOM)	Outperform	3
Broadcom Inc. (AVGO)	Neutral	3
Cirrus Logic, Inc. (CRUS)	Neutral	3
NVIDIA Corporation (NVDA)	Neutral	3
Silicon Motion Technology Corporation (SIMO)	Neutral	2
STMicroelectronics N.V. (STM)	Neutral	3
Texas Instruments Incorporated (TXN)	Neutral	3
Xilinx, Inc. (XLNX)	Neutral	4

Industry Comparison Industr	Industry: Semiconductor - Communications			Industry Peers		
	MRVL	X Industry	S&P 500	AVGO	QCOM	SIMO
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Outperform	Neutra
Zacks Rank (Short Term)	3	-	-	3	3	2
VGM Score	G	-	-	С	C	Α
Market Cap	17.06 B	5.42 B	20.61 B	103.83 B	85.09 B	1.51 E
# of Analysts	12	5	14	12	9	Ę
Dividend Yield	0.94%	0.45%	2.11%	5.01%	3.28%	3.33%
Value Score	D	-	-	С	D	В
Cash/Price	0.04	0.17	0.06	0.06	0.13	0.2
EV/EBITDA	12.73	17.54	11.87	15.25	9.32	10.09
PEG Ratio	4.11	1.88	2.47	1.06	1.16	1.88
Price/Book (P/B)	1.97	2.59	2.67	4.26	19.15	2.80
Price/Cash Flow (P/CF)	22.46	21.23	10.66	8.00	18.85	20.48
P/E (F1)	29.99	29.79	19.01	12.27	20.48	13.18
Price/Sales (P/S)	6.32	3.40	2.10	4.58	3.44	3.04
Earnings Yield	3.34%	3.36%	5.05%	8.15%	4.88%	7.58%
Debt/Equity	0.17	0.12	0.72	1.74	2.98	0.00
Cash Flow (\$/share)	1.19	1.19	7.01	33.97	4.17	2.15
Growth Score	F	-	-	С	C	Α
Hist. EPS Growth (3-5 yrs)	8.01%	21.38%	10.88%	25.01%	-8.91%	5.64%
Proj. EPS Growth (F1/F0)	29.04%	101.39%	-7.32%	-0.58%	4.33%	21.69%
Curr. Cash Flow Growth	-24.70%	-17.76%	5.92%	8.07%	-22.34%	-44.00%
Hist. Cash Flow Growth (3-5 yrs)	6.05%	9.15%	8.55%	48.32%	-10.62%	8.52%
Current Ratio	2.16	2.95	1.23	1.56	1.76	4.49
Debt/Capital	14.22%	10.30%	43.84%	63.52%	74.86%	0.00%
Net Margin	58.70%	13.46%	11.08%	11.64%	16.36%	16.56%
Return on Equity	2.74%	4.84%	16.44%	32.46%	63.16%	14.83%
Sales/Assets	0.26	0.61	0.54	0.31	0.74	0.72
Proj. Sales Growth (F1/F0)	9.58%	6.28%	-1.42%	3.90%	-15.06%	20.01%
Momentum Score	С	-	-	В	В	Α
Daily Price Chg	-3.64%	-3.64%	-2.39%	-1.59%	-0.38%	-4.23%
1 Week Price Chg	4.53%	4.65%	-1.74%	-0.40%	-0.17%	1.04%
4 Week Price Chg	18.06%	19.98%	17.07%	14.58%	15.66%	15.18%
12 Week Price Chg	3.84%	3.84%	-18.53%	-15.04%	-13.18%	-10.22%
52 Week Price Chg	8.22%	20.21%	-9.82%	-14.00%	-9.72%	16.18%
20 Day Average Volume	8,575,716	276,941	2,641,413	2,665,766	9,312,363	339,593
(F1) EPS Est 1 week change	-2.17%	-0.67%	0.00%	0.00%	0.00%	7.99%
(F1) EPS Est 4 week change	-4.46%	-2.23%	-6.62%	-3.46%	-17.39%	10.74%
(F1) EPS Est 12 week change	-11.94%	-7.53%	-13.28%	-9.71%	-12.64%	3.11%
(Q1) EPS Est Mthly Chg	-2.13%	0.00%	-11.97%	-1.88%	-32.00%	8.86%

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.

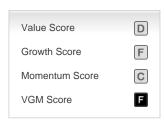
Zacks Rank

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.



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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