

Maxim Integrated (MXIM)

\$52.98 (As of 03/10/20)

Price Target (6-12 Months): **\$56.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 09/30/19)

Prior Recommendation: Underperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:D

Value: C

Growth: C

Momentum: D

Summary

Maxim is benefitting from strong momentum across driver assistance in electric vehicles. Further, growing demand for 25G and 100G optical products is aiding its performance in the communications and data center market. Additionally, the company's strong momentum across factory automation and automated test equipment markets is a positive. Also, robust battery management systems are likely to contribute well to Maxim's top-line. Further, the company remains optimistic about its flexible manufacturing strategy and diversified product portfolio. However, overall soft demand environment remains a risk for Maxim's end-market performance. Further, weakness in the smartphone market and slowdown in auto production are headwinds. Also, sluggish consumer market remains a major concern. The stock has underperformed the industry over a year.

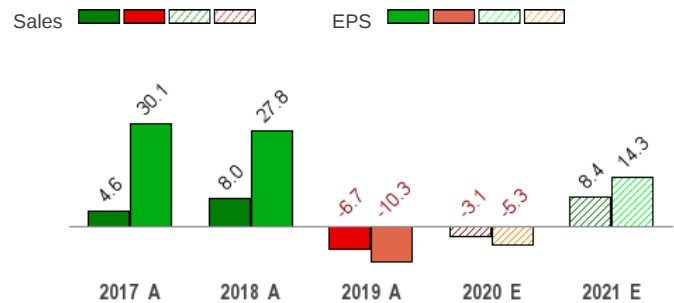
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$65.73 - \$49.58
20 Day Average Volume (sh)	1,940,639
Market Cap	\$14.3 B
YTD Price Change	-13.9%
Beta	1.42
Dividend / Div Yld	\$1.92 / 3.6%
Industry	Semiconductor - Analog and Mixed
Zacks Industry Rank	Bottom 30% (178 out of 253)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	5.7%
Last Sales Surprise	1.1%
EPS F1 Est- 4 week change	-1.3%
Expected Report Date	05/05/2020
Earnings ESP	-9.6%
P/E TTM	24.4
P/E F1	23.0
PEG F1	2.0
P/S TTM	6.5

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	597 E	595 E	610 E	635 E	2,430 E
2020	533 A	551 A	568 E	593 E	2,242 E
2019	639 A	577 A	542 A	557 A	2,314 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$0.65 E	\$0.65 E	\$0.68 E	\$0.73 E	\$2.63 E
2020	\$0.52 A	\$0.56 A	\$0.60 E	\$0.64 E	\$2.30 E
2019	\$0.75 A	\$0.60 A	\$0.52 A	\$0.57 A	\$2.43 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 03/10/2020. The reports text is as of 03/11/2020.

Overview

San Jose, California based Maxim Integrated Products, Inc. is an original equipment manufacturer (OEM) of semiconductor analog and mixed signal integrated circuits (ICs).

The company has a broad product portfolio that includes analog-to-digital converters, amplifiers and comparators, communications devices, data converters and management components, sensors and wireless products.

Maxim's 70+ product lines are primarily sold in the consumer, computing, industrial, automotive (formerly part of the Industrial segment) and communications markets which are the five primary end markets.

Its products have very extensive application in consumer goods like cordless phones, digital cameras and PDAs; data processing; industrial products; instrumentation products; medical instruments; and various communications gear and networking equipment.

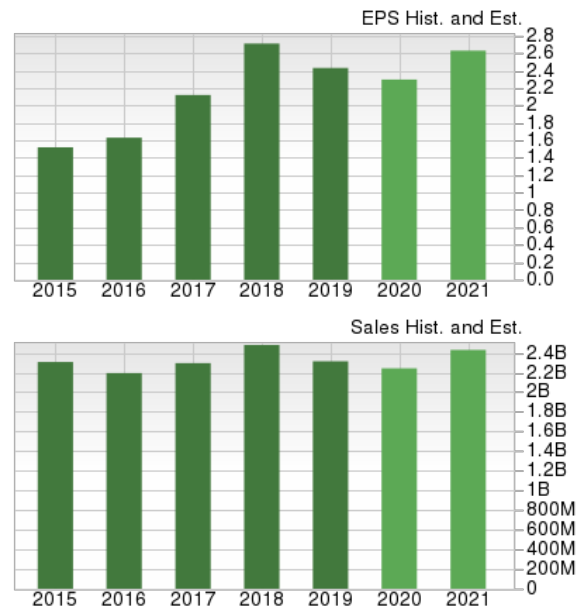
The company's products are sold in major five end-markets namely automotive, communications and data center, computing, consumer and industrial markets.

A significant percentage of the wafer manufacturing continues to be carried out at Maxim's three fabrication facilities, although increasing amounts are being outsourced to partner foundries — Epson, Powerchip and Maxchip.

The company has operations in the Asia/Pacific region, the U.S. and Europe. In fiscal 2019, the major part of total revenues came from China which accounted for 35% and the rest of Asia contributed 33%. The Europe and U.S. generated 18.5% and 11%, respectively. The rest of the world generated 2.5%.

Products are distributed in the U.S. and Canada through a direct sales force and support system. Products are sold through direct sales, applications organization and unaffiliated distributors. Distributors generated 46% of sales in fiscal 2019.

Avnet was the primary global distributor, accounting for around 22% of the company's revenues. Samsung, the only customer generated 10% of revenues alone.



Reasons To Buy:

▲ Maxim generates its revenues from the **analog market**, which comes with several inherent advantages. Analog products do not require leading edge manufacturing facilities, since the capacity can be used for longer periods of time than digital products. This reduces capital equipment costs, as large upfront costs are avoided, depreciation is less and profits are more stable when utilization rates drop lower. Being more differentiated, analog products are also less likely to become commoditized. The relatively longer life cycles ensure that older analog products can keep contributing to revenues for longer periods of time and generate higher margins (due to pricing power) than corresponding digital products. Moreover, Maxim's shifting to advanced node process technology development bodes well for its margin expansion.

Maxim has a solid portfolio that generates steady design wins, a strong core business that is highly profitable and well-diversified, and returns cash to investors at regular intervals.

▲ Multiple opportunities continue to unfold in the **industrial market**. Industrial automation, building controls, electrical meters, security devices and automobiles are not just the highest consumers of semiconductors, but also the areas with the greatest promise of growth. The company expects its factory automation product will continue to perform well in the long haul. Moreover, increasing deployment of Industry 4.0 control systems in factories across the world remains a key catalyst. Another segment that is currently showing promise is medical sector and is likely to aid Maxim's business growth. Utilities are moving toward greater automation and efficiencies in operation, another secular growth driver. Maxim's higher-integration smaller-footprint products have been popular in these markets. Maxim has also enhanced its capabilities in the industrial market through bolt-on acquisitions that have strengthened its position and offered more comprehensive solutions. Maxim's **consumer revenues** have picked up gradually due to diversification across customers, products and platforms. Revenues in this market have been improving due to diversification across a variety of markets. Management stated that new wins in the fast growing markets like fitness wearables, tablets and smartphones will continue to drive consumer revenues in the near term.

▲ Maxim's **automotive business** carries strategic importance, high growth opportunities. The increase in customer wins is particularly encouraging because it opens up possibilities of further design wins as new car models are prepped for the market. Infotainment, safety and driver assistance content, known as ADAS are long term drivers of the automotive business. The company's expertise in Automotive Safety Integrity Levels (ASIL) remains the key catalyst. Moreover, the company's ASIL compliant battery management system remains a market differentiator and will continue to sustain Maxim's momentum in the market. China is expected to bring further opportunities, as Chinese infrastructure spending boosts demand for its factory automation products. Recently, the company introduced a high-end version of BMS product for electric buses which has already gained momentum in China. Moreover, the company's ASIL compliant battery management system remains a market differentiator and will continue to sustain Maxim's momentum in the market. Management expects battery management systems to be a meaningful driver of revenue growth going forward. Additionally, there are **long term opportunities the communications and data center market**. Longer-term trends like the competitive nature of the communications service provider market that drive players to deploy more efficient and capable infrastructure are intact. It is now apparent that IP-based networks are better than traditional voice-based networks in this respect; therefore, there will be long-term demand for convergence technologies that could be beneficial for companies like Maxim. The company is focusing on communications interface circuits to drive growth in this segment. Maxim is also seeing growing customer wins in the cloud and data center market for its highly integrated, high-current power management solutions and 40-gig and 100-gig optical products. It is also poised to take advantage of a leading cloud computing customer's demand for smaller and more power-efficient solutions to reduce overall cost of ownership. Cloud and datacenters will likely be significant growth drivers for Maxim in the communications and data center market.

Reasons To Sell:

- ▼ **Revenue growth** is usually an area of concern for analog companies, since products take longer to design and stay relevant longer. Maxim is no different from others in this respect. While the business model supports stronger margins, the longer lead times for customized devices require a relatively longer sales cycle than digital products.
- ▼ **Customer concentration** is a big problem for Maxim. Being designed into Samsung devices means that the company is likely to see very strong growth rates when Samsung does well that skew its overall results. A typical analog company, especially one that has diversified end markets, usually sees moderate and steady growth rates if market conditions permit. However, Samsung is changing all that by generating 10% of the company's total revenues alone in fiscal 2019. No other customer has contributed this much. As a result, Samsung's projections and announcements, especially those related to its high-end models where Maxim has greater exposure, have a significant impact on it. On the positive side, Samsung has many new products scheduled to be launched, so there is a lot of opportunity for Maxim, if it is able to capitalize on it.
- ▼ Maxim derives a major portion of its revenues from outside the U.S. Thus, an economic condition which impacts foreign currency exchange rates does result in transaction exposure, which leads to profit fluctuation. Exposure to **foreign currency translation** impacts and poses a threat to its growth.

This problem with Maxim is that it is exacerbated by the concentration of its mobility revenue at Samsung, which could only be mitigated once its diversification strategy takes off.

Last Earnings Report

Maxim Surpasses Earnings & Revenue Estimates in Q2

Maxim Integrated Products, Inc. reported second-quarter fiscal 2020 adjusted earnings of 56 cents per share, which surpassed the Zacks Consensus Estimate by 3 cents. Notably, the figure declined 6.7% year over year but increased 7.7% on a sequential basis.

Revenues of \$551.07 million surpassed the Zacks Consensus Estimate of \$545.07 million and came within the company's guided range of \$525-\$565 million. The figure declined 4.5% year over year but increased 3.4% on a sequential basis.

The sequential increase can be attributed to the company's improving end-market performance in industrial, automotive and communications, and data center markets.

End Market in Detail

Industrial: The company generated 30% of total revenues from this market during the reported quarter. Revenues in this market improved 7% from the fiscal first quarter, driven by factory automation and automated test equipment markets.

Automotive: This market accounted for 26% of the company's revenues during the fiscal second quarter. Revenues were up 5% on a sequential basis, primarily driven by double-digit growth in secular growth areas of BMS and driver assistance systems.

Going forward, the company expects growth in ADAS applications in power management and point-to-point serial link data communication products.

Consumer: Maxim generated 24% of revenues from this market. Revenues in this market declined 15% sequentially due to sluggishness in the smartphone market and seasonal decline in other customer electronics.

Communications and Data Center: Revenues from this market, which now includes computing, accounted for 20% of total revenues, up 25% from the fiscal first quarter. This was driven by strong ramp in the demand for 25G optical products for base stations and 100G optical products for data center applications.

Operating Details

Non-GAAP gross margin was 66%, expanding 10 basis points (bps) from the year-ago quarter.

Non-GAAP operating expenses of \$187.9 million decreased 0.1% year over year. However, as a percentage of revenues, the figure expanded 150 bps from the prior-year quarter.

Per the company, operating margin came in at 30.7%, down from 31.6% in the year-ago quarter.

Balance Sheet & Cash Flow

At the end of the fiscal second quarter, cash, cash equivalents and short-term investments were \$1.78 billion, down \$10 million from the prior quarter.

Further, long-term debt was \$993.3 million at the end of fiscal second quarter compared with \$992.9 million at fiscal first quarter-end.

During the quarter under review, cash flow from operations was \$237.5 million, up from \$141.3 million in the previous quarter. The company utilized \$13.7 million for capital expenditure during the fiscal second quarter. Maxim spent \$108 million in repurchasing shares and made dividend payment of \$130 million (48 cents per share).

Guidance

For third-quarter fiscal 2020, earnings per share are expected in the range of 57-65 cents on an adjusted basis.

Further, Maxim expects revenues in the range of \$555-\$595 million.

Non-GAAP gross margin is expected within 65.5-67.5%.

Management expects the industrial market to exhibit seasonal sequential and year-over-year growth in the fiscal third quarter.

Further, the automotive market is expected to improve from the fiscal second quarter, backed by growth in driver assistance and the infotainment business. Maxim expects to experience sequential growth in revenues from the communications and data center market. Further, the company is likely to witness solid demand for 100G and 25G optical products, which are essential for 4G and 5G base station applications.

However, revenues from the consumer market are anticipated to be flat sequentially in the fiscal third quarter.

Quarter Ending 12/2019

Report Date	Jan 28, 2020
Sales Surprise	1.10%
EPS Surprise	5.66%
Quarterly EPS	0.56
Annual EPS (TTM)	2.17

Recent News

On **Jan 7, 2020**, Maxim's Volterra Semiconductor filed a lawsuit against Monolithic Power Systems which describes the infringement of its patents related to the coupled inductor technology by the latter's MPS DC-to-DC power converter products.

On **Nov 20, 2019**, Maxim rolled out a solid-state blood-pressure monitoring solution which is comprised of a complete integrated optical sensor module, a microcontroller sensor hub and a sensing algorithm. The solution allows users to measure blood pressure by placing their finger on the device in which it is embedded.

On **Nov 1, 2019**, Maxim unveiled MAX6078A voltage reference IC, the MAX16155 nanoPower supervisor and the MAX16160 voltage monitor which expanded its analog product portfolio.

Valuation

Maxim Integrated Products shares are down 14.1% in the past six-month period and 3.4% over the trailing 12-month period. While stocks in the Zacks sub-industry are down 11.1%, the same in the Zacks Computer & Technology sector up 1.8% in the past six-month period. Over the past year, the Zacks sub-industry is down 1.1% and the sector is up 7.7%.

The S&P 500 index is down 3.9% in the past six-month period while the same is up 2.2% in the past year.

The stock is currently trading at 20.74X forward 12-month earnings, which compares to 18.43X for the Zacks sub-industry, 19.52X for the Zacks sector and 16.58X for the S&P 500 index.

Over the past five years, the stock has traded as high as 26.31X and as low as 15.27X, with a 5-year median of 19.83X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$56 price target reflects 21.96X forward 12-month earnings.

The table below shows summary valuation data for MXIM

Valuation Multiples - MXIM					
		Stock	Sub-Industry	Sector	S&P 500
P/E F 12M	Current	20.74	18.43	19.52	16.58
	5-Year High	26.31	22.8	22.04	19.34
	5-Year Low	15.27	13.42	16.87	15.18
	5-Year Median	19.83	18.16	19.34	17.42
P/S F 12M	Current	6	3.81	3.24	3.05
	5-Year High	7.48	4.52	3.58	3.44
	5-Year Low	3.52	2.81	2.30	2.54
	5-Year Median	5.5	3.70	3.07	3.01
EV/EBITDA TTM	Current	24.71	10.91	11.18	11.04
	5-Year High	28.89	14.57	12.67	12.87
	5-Year Low	9.27	8.34	7.68	8.49
	5-Year Median	12.75	11.75	10.59	10.79

As of 03/10/2020

Industry Analysis Zacks Industry Rank: Bottom 30% (178 out of 253)



Top Peers

Cirrus Logic, Inc. (CRUS)	Outperform
Analog Devices, Inc. (ADI)	Neutral
Monolithic Power Systems, Inc. (MPWR)	Neutral
MaxLinear, Inc (MXL)	Neutral
Semtech Corporation (SMTC)	Neutral
Skyworks Solutions, Inc. (SWKS)	Neutral
Texas Instruments Incorporated (TXN)	Neutral
Silicon Laboratories, Inc. (SLAB)	Underperform

Industry Comparison Industry: Semiconductor - Analog And Mixed				Industry Peers		
	MXIM Neutral	X Industry	S&P 500	SLAB Underperform	SMTC Neutral	TXN Neutral
VGM Score	D	-	-	F	D	D
Market Cap	14.27 B	5.42 B	20.21 B	3.89 B	2.43 B	104.72 B
# of Analysts	10	8.5	13	5	7	12
Dividend Yield	3.62%	0.00%	2.18%	0.00%	0.00%	3.21%
Value Score	C	-	-	F	D	D
Cash/Price	0.12	0.11	0.05	0.19	0.11	0.05
EV/EBITDA	15.58	16.24	12.36	25.28	19.01	15.06
PEG Ratio	1.91	1.52	1.78	1.63	1.74	2.37
Price/Book (P/B)	8.27	3.47	2.77	3.46	3.53	11.77
Price/Cash Flow (P/CF)	18.38	15.45	11.04	23.33	17.11	17.27
P/E (F1)	22.29	21.72	16.09	26.06	21.74	22.09
Price/Sales (P/S)	6.54	3.99	2.17	4.65	4.27	7.28
Earnings Yield	4.34%	4.61%	6.20%	3.83%	4.60%	4.52%
Debt/Equity	0.58	0.55	0.70	0.33	0.26	0.60
Cash Flow (\$/share)	2.88	2.91	7.01	3.80	2.15	6.49
Growth Score	C	-	-	D	D	B
Hist. EPS Growth (3-5 yrs)	13.72%	13.72%	10.85%	16.50%	11.83%	20.28%
Proj. EPS Growth (F1/F0)	-5.47%	6.47%	6.14%	5.39%	13.99%	-3.15%
Curr. Cash Flow Growth	-14.31%	-10.25%	6.09%	-16.69%	-2.21%	-4.66%
Hist. Cash Flow Growth (3-5 yrs)	2.00%	22.53%	8.52%	13.23%	-13.66%	8.82%
Current Ratio	6.60	2.78	1.24	6.85	4.35	4.13
Debt/Capital	36.52%	36.52%	42.57%	24.83%	20.63%	37.32%
Net Margin	35.93%	3.29%	11.69%	2.30%	8.71%	34.83%
Return on Equity	33.82%	12.86%	16.74%	8.85%	10.64%	56.21%
Sales/Assets	0.59	0.48	0.54	0.51	0.54	0.81
Proj. Sales Growth (F1/F0)	-3.10%	2.43%	3.71%	8.35%	6.79%	-1.08%
Momentum Score	D	-	-	B	C	F
Daily Price Chg	6.13%	7.50%	4.87%	10.61%	11.75%	6.74%
1 Week Price Chg	-1.51%	-3.01%	-0.67%	-1.33%	-4.36%	-0.86%
4 Week Price Chg	-16.83%	-21.12%	-15.65%	-12.81%	-27.98%	-14.22%
12 Week Price Chg	-12.50%	-16.63%	-13.60%	-22.37%	-26.58%	-11.78%
52 Week Price Chg	-0.30%	5.07%	-2.27%	10.45%	-32.77%	5.26%
20 Day Average Volume	1,940,639	767,287	2,778,843	435,300	589,431	5,763,437
(F1) EPS Est 1 week change	-1.33%	-0.50%	0.00%	0.00%	-1.04%	-0.60%
(F1) EPS Est 4 week change	-1.33%	-1.23%	-0.16%	0.00%	-2.93%	-0.60%
(F1) EPS Est 12 week change	3.24%	-2.93%	-0.57%	-4.87%	-2.93%	1.87%
(Q1) EPS Est Mthly Chg	-2.29%	-2.29%	-0.49%	0.00%	-8.44%	-1.54%

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	D
VGM Score	D

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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