

Lam Research (LRCX)

\$296.60 (As of 02/26/20)

Price Target (6-12 Months): **\$341.00**

Long Term: 6-12 Months

Zacks Recommendation: **Outperform**
(Since: 01/28/20)

Prior Recommendation: Neutral

Short Term: 1-3 Months

Zacks Rank: (1-5) **2-Buy**
Zacks Style Scores: VGM:B
Value: B | Growth: C | Momentum: B

Summary

Lam Research continues to ride on the back of robust equipment demand and solid execution. Moreover, rising adoption of 3D architectures continues to drive the performance of the company's non-memory segments. Further, advanced packaging technology inflections are acting as tailwinds. Also, both etch and deposition technologies are expected to expand the company's addressable market. Additionally, Lam Research is benefiting from the transition to new data-enabled economy, in which DRAM and NAND are continuously gaining from density growth. Management remains optimistic about the improving wafer fabrication equipment environment. Notably, the stock has outperformed the industry it belongs to over a year. However, end-market cyclicality, the ongoing U.S.-China trade war and foreign currency fluctuations remain major headwinds.

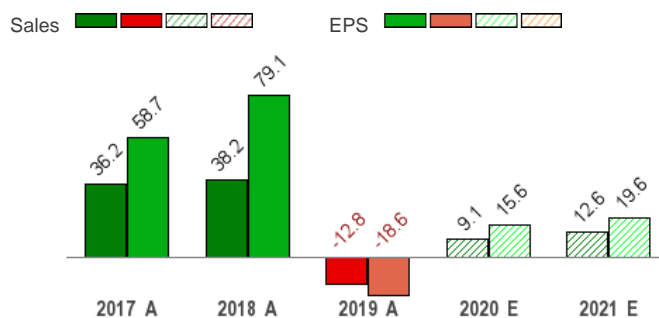
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$344.32 - \$163.60
20 Day Average Volume (sh)	1,988,586
Market Cap	\$43.2 B
YTD Price Change	1.4%
Beta	1.64
Dividend / Div Yld	\$4.60 / 1.6%
Industry	Semiconductor Equipment - Wafer Fabrication
Zacks Industry Rank	Top 5% (13 out of 254)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	5.3%
Last Sales Surprise	3.2%
EPS F1 Est- 4 week change	10.1%
Expected Report Date	04/22/2020
Earnings ESP	0.0%
P/E TTM	20.4
P/E F1	17.6
PEG F1	1.5
P/S TTM	4.5

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	2,794 E	2,942 E	3,109 E	3,232 E	11,857 E
2020	2,166 A	2,584 A	2,804 E	3,011 E	10,530 E
2019	2,331 A	2,523 A	2,439 A	2,361 A	9,654 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$4.57 E	\$4.91 E	\$5.30 E	\$5.70 E	\$20.12 E
2020	\$3.18 A	\$4.01 A	\$4.57 E	\$5.06 E	\$16.82 E
2019	\$3.36 A	\$3.87 A	\$3.70 A	\$3.62 A	\$14.55 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 02/26/2020. The reports text is as of 02/27/2020.

Overview

Established in 1980 and headquartered in Fremont, CA, Lam Research Corporation supplies wafer fabrication equipment and services to the semiconductor industry. Its products are used by semiconductor manufacturers in front-end and WLP processes, creating memory, microprocessors, and other logic integrated circuits for a broad range of electronic devices.

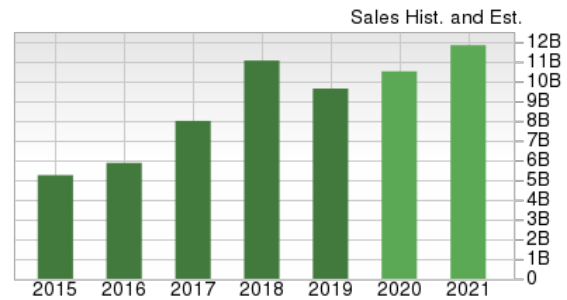
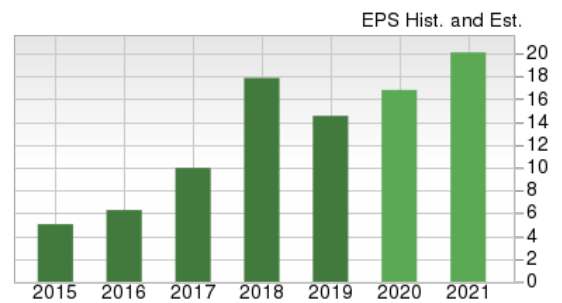
The MOS process of making integrated circuits involve the deposition of many layers of materials on a semiconductor wafer. Each layer is prepared using a pattern on a photomask, cleaning off the excess material and then exposing to light sources to change the chemical composition of the layer. The final wafer is then planarized, cut into individual die, electrical leads attached and packaged.

Lam's product offerings in deposition and etch address numerous critical steps in the fabrication process with the goal of reducing defect rates, improving yields, lowering costs and reducing the processing time.

In fiscal 2019, Lam served three market segments—Memory, Foundry and Logic/Integrated device manufacturing which generated 70% (down from 78% in fiscal 2018), 20% (up from 14%) and 10% (up from 8%), of its revenues, respectively.

The revenue distribution by geography in fiscal 2019 was as follows — Taiwan 17% (up from 13% in fiscal 2018), Japan 20% (up from 17%), China 22% (up from 16%), Korea 23% (down from 35%), U.S accounted for 8% (up from 7%), Europe 4% (down from 5%) and South East Asia accounted for 6% (down from 7%).

For fiscal 2019, the customers that accounted for greater than 10% of total revenues include Micron Technology, Inc.; Samsung Electronics Company, Ltd.; SK hynix Inc., and Toshiba, Inc.



Reasons To Buy:

- ▲ Traditionally, Lam Research has **high exposure to the memory segment**, which should see tremendous growth over the next few years. The strength is driven by cloud computing, big data, mobile devices and IoT. These phenomena have greatly increased the volume of data on information networks that can be stored, processed and analysed to increase efficiency or drive additional sales depending on the circumstances and the business model of companies. Since storage is the starting point of this digital economy, there is a huge demand for memory chips, particularly the more efficient variety.
- ▲ **Technological advancements** in the areas of multi-patterning, 3D device architecture and advanced packaging technologies are playing to Lam's strengths. Technology transitions help to increase the efficiency of semiconductor manufacturing processes. Since new manufacturing techniques necessitate spending on new equipment, these changes usually lead to increased investment in manufacturing equipment. For the providers of equipment such as Lam, the challenge is to stay abreast of these changes and have the equipment on offer when customers are ready to purchase. Lam's R&D efforts have enabled it to capitalize on these trends, so it should remain a prime beneficiary, particularly since these technological inflections will be more etch and deposition intensive, which are Lam's strong points. Consequently, the company may be able to capture a larger share of total WFE spending over the next few years.
- ▲ Management expects **logic and foundry demand to continue to remain strong** in the second half of the year. There are twin positives in this business with not just the leading edge but also the trailing edge contributing. IoT, auto, wearables, low-end phones, and so forth are leading to a resurgence of 28-nanometer demand. At the same time, the company has a huge installed base of process modules and a lot of these are being upgraded. While not as strong as 3D NAND, there are technology inflections in this segment too. The transition of the DRAM market to 10nm and FinFET is resulting in a sizeable increase in multi-patterning steps. Lam has the necessary next generation products that can facilitate this transition.
- ▲ Lam Research has a **strong balance sheet**, with cash and short term investments of approximately \$4.9 billion at the end of fiscal second-quarter 2020. Additionally, management returned \$166.7 million through dividend. The company regularly repurchases shares to ensure a steady share count after dilution from stock option vesting. The shareholder friendly strategy makes the stock more attractive.

Lam's exposure to memory and opportunity in logic & foundry are positives. Also, etch and deposition portfolio should gain momentum.

Risks

- The semiconductor equipment industry has historically been very **cyclical**. It fluctuates highly with respect to timing and length of the cycles. During the down cycle, there could be decreased demand from consumers. The company has a high fixed cost structure, so margins suffer substantially when sales decline. At the same time, it is mandatory for the structure to generate sales to support increases in customer demand. Additionally, Lam Research has to spend a significant amount of money on R&D to maintain its lead in innovation and generate margins that are high enough to continue this expenditure. Lam Research makes significant R&D investments focused on leading-edge deposition, plasma etch, single-wafer clean and other semiconductor manufacturing requirements.
 - On the memory front, there are **concerns related to oversupply and overcapacity of memory chips** in the upcoming years. Yield and output seems to be improving over time as cutting-edge technologies mature, potentially leading to an oversupply situation in two years time. This could depress prices and curb equipment spending, impacting Lam's growth.
 - The semiconductor capital equipment industry experiences rapid changes and is **highly competitive** globally. It faces significant competition from the likes of Applied Materials, Hitachi, Tokyo Electron and many more in this space. To compete effectively, considerable financial resources are required to strengthen and augment product and services portfolio as well as maintain customer service and support locations worldwide. Semiconductor manufacturers assess capital equipment suppliers, and the ability to do well in the marketplace depends upon how well the existing products are maintained and enhanced while new ones are launched to meet customer requirements on a timely basis. Also, once a semiconductor manufacturer has selected a particular supplier's equipment and qualified it for production, the manufacturer generally maintains it as long as the supplier's products perform according to specifications at the installed base. So the companies find it difficult to sell to a given customer that has qualified a competitor's equipment. At the same time, the companies have to continue to meet the expectations of their existing customers via the delivery of high-quality and cost-efficient spare parts amid competition from third-party spare parts providers. Lam Research faces significant competition in all its product and service categories.
 - Lam Research derives a major portion of its revenues from outside the U.S. This is natural because a lot of the semiconductor facilities using its manufacturing equipment are located in Asian countries. However, this exposes the company to foreign currency translation impacts and poses a threat to its growth. The company also faces other risks like local legislation, monetary devaluation, exchange control restrictions and unstable political conditions, which may hamper revenue growth and impact its financial position.
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Last Earnings Report

Lam Research Q2 Earnings & Revenues Beat Estimates

Lam Research Corporation reported second-quarter fiscal 2020 non-GAAP earnings of \$4.01 per share, which beat the Zacks Consensus Estimate of \$3.81. Also, the figure increased 26.1% sequentially.

Moreover, adjusted revenues increased 19.3% sequentially and 2.4% year over year to \$2.58 billion. The reported revenues also surpassed the Zacks Consensus Estimate by 3.2%.

Management remains optimistic about the improving wafer fabrication equipment environment. The company witnessed better-than-expected WFE spending in 2019, driven by strength in foundry and logic.

For 2020, management expects WFE spend in the mid-to-high \$50-billion range, driven by sustained strong spending in foundry and logic, and an improved spending in memory. Overall, management expects spending in memory and foundry/logic segments to increase in 2020 on a year-over-year basis.

Top Line in Detail

China, Taiwan and Korea accounted for 29%, 26% and 18% of the company's total fiscal second-quarter revenues, respectively. On the contrary, the United States, Japan, Southeast Asia and Europe accounted for 9%, 8%, 7% and 3%, respectively.

Operating Details

Non-GAAP gross margin came in at 45.7%, which expanded 30 basis points (bps) sequentially.

Non-GAAP operating expenses were \$480.8 million, reflecting an increase of 11.6% sequentially. As a percentage of sales, research & development expenses marked an increase, while selling, general & administrative costs decreased.

Adjusted operating margin was 27.1%, up 160 bps sequentially. The increase was primarily due to lower-than-expected expenses.

Balance Sheet & Cash Flow

At the end of the fiscal second quarter, cash and cash equivalents, and short-term investments decreased to \$4.9 billion from \$5.8 billion in the fiscal first quarter.

Cash flow from operating activities was \$307.9 million, down from \$464 million in the fiscal first quarter. Capital expenditures were \$62.1 million, up from \$39.3 million in the fiscal first quarter.

During the quarter, Lam Research paid dividends of \$166.7 million.

Guidance

For third-quarter fiscal 2020, Lam Research projects revenues to be \$2.8 billion (+/- \$200 million).

Gross margin is projected at 46.5% (+/-1%) and operating margin is expected to be 28% (+/-1%).

Non-GAAP earnings are projected at \$4.55 (+/- 40 cents) per share on a share count of nearly 149 million.

Quarter Ending **12/2019**

Report Date	Jan 29, 2020
Sales Surprise	3.22%
EPS Surprise	5.25%
Quarterly EPS	4.01
Annual EPS (TTM)	14.51

Recent News

On **Dec 3, 2019**, Lam Research introduced edge yield solutions for high volume manufacturing with the Corvus etch and Coronus plasma bevel clean systems which are capable of improving device yield at the edge of the wafer. The move has strengthened the company's semiconductor manufacturing systems portfolio.

On **Nov 7, 2019**, Lam Research's Board of Directors approved a quarterly dividend of \$1.15 per share for the shareholders of the record as of Dec 11, 2019 which will be paid on Jan 8, 2020.

Valuation

Lam Research shares are up 45.9% in the past six-month period and 68.4% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 34.3% and 14.6% in the past six-month period, respectively. Over the past year, the Zacks sub-industry is up 59.2% and the sector is up 17.7%

The S&P 500 index is up 8.4% in the past six-month period and 11% in the past year.

The stock is currently trading at 15.61X forward 12-month earnings, which compares to 20.6X for the Zacks sub-industry, 20.91X for the Zacks sector and 17.81X for the S&P 500 index.

Over the past five years, the stock has traded as high as 18.35X and as low as 7.86X, with a 5-year median of 12.93X. Our Outperform recommendation indicates that the stock will perform better than the market. Our \$341 price target reflects 17.94X forward 12-month earnings.

The table below shows summary valuation data for LRCX

Valuation Multiples - LRCX					
		Stock	Sub-Industry	Sector	S&P 500
P/E F 12M	Current	15.61	20.6	20.91	17.81
	5-Year High	18.35	22.48	22.04	19.34
	5-Year Low	7.86	12.36	16.87	15.18
	5-Year Median	12.93	17.24	19.32	17.47
P/S F12M	Current	3.79	6.24	3.48	3.28
	5-Year High	4.38	6.44	3.58	3.43
	5-Year Low	1.6	3.63	2.3	2.54
	5-Year Median	2.52	4.81	3.02	3
EV/EBITDA TTM	Current	16.05	29.15	12.31	12
	5-Year High	17.19	30.42	12.61	12.87
	5-Year Low	4.21	9.68	7.68	8.48
	5-Year Median	7.42	19.7	10.53	10.77

As of 02/26/2020

Industry Analysis Zacks Industry Rank: Top 5% (13 out of 254)



Top Peers

Advanced Energy Industries, Inc. (AEIS)	Outperform
Applied Materials, Inc. (AMAT)	Outperform
Lam Research Corporation (LRCX)	Outperform
Agilent Technologies, Inc. (A)	Neutral
Analog Devices, Inc. (ADI)	Neutral
ASML Holding N.V. (ASML)	Neutral
KLA Corporation (KLAC)	Neutral
MKS Instruments, Inc. (MKS)	Neutral

Industry Comparison Industry: Semiconductor Equipment - Wafer Fabrication				Industry Peers		
	LRCX Outperform	X Industry	S&P 500	AMAT Outperform	ASML Neutral	MKSI Neutral
VGM Score	B	-	-	C	B	D
Market Cap	43.17 B	49.05 B	22.59 B	54.92 B	120.58 B	5.61 B
# of Analysts	9	7	13	10	3	5
Dividend Yield	1.55%	1.05%	1.92%	1.40%	0.69%	0.78%
Value Score	B	-	-	C	D	C
Cash/Price	0.10	0.08	0.04	0.07	0.04	0.09
EV/EBITDA	15.30	14.84	13.29	14.39	32.74	17.18
PEG Ratio	1.47	1.45	1.93	1.45	2.03	NA
Price/Book (P/B)	9.74	7.45	3.03	6.34	8.55	2.77
Price/Cash Flow (P/CF)	16.82	18.71	12.33	17.06	35.40	15.01
P/E (F1)	17.63	17.89	17.79	14.44	32.74	16.69
Price/Sales (P/S)	4.52	4.09	2.47	3.66	9.09	2.95
Earnings Yield	5.67%	5.59%	5.60%	6.92%	3.06%	5.99%
Debt/Equity	0.86	0.51	0.70	0.54	0.25	0.43
Cash Flow (\$/share)	17.63	5.80	7.02	3.51	8.09	6.86
Growth Score	C	-	-	C	A	D
Hist. EPS Growth (3-5 yrs)	34.37%	28.22%	10.85%	35.63%	22.07%	33.93%
Proj. EPS Growth (F1/F0)	15.62%	32.56%	6.79%	36.22%	26.95%	36.37%
Curr. Cash Flow Growth	-25.33%	-30.45%	6.53%	-35.58%	-4.32%	-27.43%
Hist. Cash Flow Growth (3-5 yrs)	23.38%	14.24%	8.38%	13.90%	14.58%	24.71%
Current Ratio	3.30	2.65	1.22	2.36	2.58	4.51
Debt/Capital	46.15%	33.72%	42.37%	35.25%	19.80%	30.11%
Net Margin	21.67%	20.25%	11.57%	18.83%	23.36%	7.39%
Return on Equity	45.72%	29.54%	16.80%	36.15%	22.93%	12.67%
Sales/Assets	0.78	0.71	0.54	0.79	0.56	0.56
Proj. Sales Growth (F1/F0)	9.07%	15.32%	4.06%	19.87%	10.78%	13.80%
Momentum Score	B	-	-	A	C	C
Daily Price Chg	1.50%	1.05%	-0.98%	1.61%	0.61%	1.06%
1 Week Price Chg	-6.63%	-5.25%	-0.94%	-3.86%	-3.26%	-5.08%
4 Week Price Chg	-0.54%	-1.93%	-6.27%	-0.02%	-3.32%	-6.66%
12 Week Price Chg	12.83%	6.39%	-3.33%	6.63%	6.14%	-3.32%
52 Week Price Chg	67.38%	54.87%	6.81%	54.23%	55.51%	23.43%
20 Day Average Volume	1,988,586	1,442,083	2,109,774	8,993,188	895,581	412,512
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	10.14%	5.71%	-0.08%	9.72%	0.00%	-0.71%
(F1) EPS Est 12 week change	10.60%	6.80%	-0.22%	9.72%	-6.15%	1.92%
(Q1) EPS Est Mthly Chg	13.13%	5.59%	-0.61%	11.19%	0.00%	3.59%

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	B
Growth Score	C
Momentum Score	B
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.

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