

## Lam Research (LRCX)

**\$240.00** (As of 03/31/20)

Price Target (6-12 Months): **\$252.00**

Long Term: 6-12 Months

**Zacks Recommendation:**

**Neutral**

(Since: 03/30/20)

Prior Recommendation: Outperform

Short Term: 1-3 Months

**Zacks Rank:** (1-5)

**3-Hold**

Zacks Style Scores:

VGM:B

Value: B

Growth: B

Momentum: D

## Summary

Lam Research continues to ride on the back of robust equipment demand and solid execution. Moreover, rising adoption of 3D architectures remains positive. It 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 serviceable addressable market. Additionally, Lam Research continues to benefit from its transition to new data-enabled economy, in which DRAM and NAND continue to gain from density growth. Notably, the stock has outperformed the industry it belongs to over the past year. However, cyclicality, the ongoing U.S.-China trade war and foreign currency fluctuations remain major headwinds.

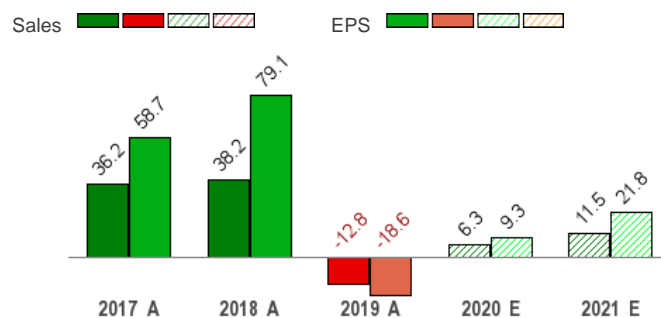
## Price, Consensus & Surprise



## Data Overview

52 Week High-Low	\$344.32 - \$171.04
20 Day Average Volume (sh)	2,912,119
Market Cap	\$34.9 B
YTD Price Change	-17.9%
Beta	1.50
Dividend / Div Yld	\$4.60 / 1.9%
Industry	<a href="#">Semiconductor Equipment - Wafer Fabrication</a>
Zacks Industry Rank	Top 18% (46 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	-5.4%
Expected Report Date	04/22/2020
Earnings ESP	-18.9%
P/E TTM	16.5
P/E F1	15.1
PEG F1	1.3
P/S TTM	3.7

## Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	2,695 E	2,861 E	3,042 E	3,173 E	11,446 E
2020	2,166 A	2,584 A	2,686 E	2,806 E	10,261 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	\$4.29 E	\$4.61 E	\$4.98 E	\$5.37 E	\$19.38 E
2020	\$3.18 A	\$4.01 A	\$4.18 E	\$4.63 E	\$15.91 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 03/31/2020. The reports text is as of 04/01/2020.

## 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.

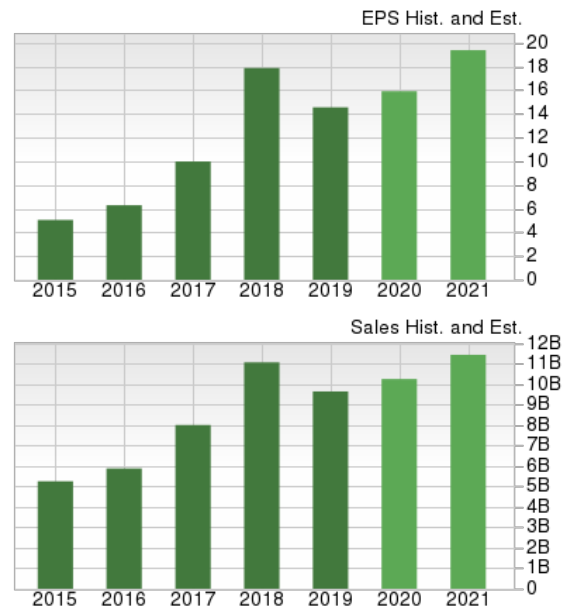
Lam's product offerings in deposition and etch address numerous critical steps in the fabrication process with the goal of reducing defect rates, improving yields, lowering costs and reducing the processing time.

In fiscal 2019, Lam served three market segments—Memory, Foundry and Logic/Integrated device manufacturing which generated 78% (up from 67% in 2018), 14% (down from 27% in 2018) and 8% (up from 6% in 2018), of its revenues, respectively.

The revenue distribution by geography in fiscal 2019 was as follows —Korea 14% (up from 35% in 2018), Taiwan 13% (down from 13% in 2018), Japan 9% (up from 17% in 2018), China 33% (up from 16% in 2018), U.S accounted for 11% (down from 7% in 2018), Europe 5% (down from 5% in 2018) and South East Asia accounted for 7% ( up from 7% in 2018).

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

Being a leading producer of specialized equipment, most of the competition comes from other large equipment makers, such as KLA-Tencor Corporation and Applied Materials, Inc.



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## Reasons To Buy:

- ▲ Traditionally, Lam Research has high exposure to the memory segment, which is likely to 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 pick up 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. Management has said that 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 more than 35K 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 \$3.6 billion at the end of fiscal second quarter. Additionally, management returned \$168 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.

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## Reasons To Sell:

- ▼ 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.

The cyclical nature of the semiconductor industry, the high fixed cost structure, weakness in DRAM spending because of the prevalent decline in PCs and product concentration are negatives.

## Last Earnings Report

### Lam Research Q2 Earnings & Revenues Beat Estimates

Lam Research 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%.

Following the better-than-expected fiscal second-quarter results, its share price rose 6.3% in after-hours trading.

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 March 16, 2020, Lam Research provided business update on account of the coronavirus outbreak. The company has temporarily stopped on-site work at its Fremont and Livermore locations for three weeks effective March 17, 2020.

On Mar 3, 2020, Lam Research unveiled Sense.i platform which is a plasma etch technology and system solution. The company aims to offer unparalleled system intelligence and high-density architecture to the chipmakers with the help of the new platform.

## Valuation

Lam Research shares are up 5.2% in the six-month period and 30.3% over the trailing 12-month period. Stocks in the Zacks sub-industry are up 7.6% but down 0.5% in the Zacks Computer & Technology sector in the six-month period, respectively. Over the past year, the Zacks sub-industry is up 33.1% but the sector is down 2.5%

The S&P 500 index is down 9% in the six-month period and 8.7% in the past year.

The stock is currently trading at 13.23X forward 12-month earnings, which compares to 18.87X for the Zacks sub-industry, 19X for the Zacks sector and 16.13X 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 12.9X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$252 price target reflects 14.4X 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 F12M	Current	13.23	18.87	19	16.13
	5-Year High	18.35	22.48	22.02	19.34
	5-Year Low	7.86	12.36	16.85	15.18
	5-Year Median	12.9	17.19	19.3	17.44
P/S F12M	Current	3.22	5.27	2.95	2.75
	5-Year High	4.38	6.44	3.59	3.43
	5-Year Low	1.6	3.63	2.3	2.54
	5-Year Median	2.54	4.81	3.02	3
EV/EBITDA TTM	Current	12.91	22.81	9.93	9.4
	5-Year High	17.31	30.58	12.84	12.88
	5-Year Low	4.04	9.4	7.59	8.27
	5-Year Median	7.38	19.65	10.61	10.78

As of 03/31/2020

## Industry Analysis Zacks Industry Rank: Top 18% (46 out of 254)



## Top Peers

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

Industry Comparison Industry: Semiconductor Equipment - Wafer Fabrication				Industry Peers		
	LRCX Neutral	X Industry	S&P 500	AMAT Neutral	ASML Outperform	MKSI Neutral
<b>VGM Score</b>	<b>B</b>	-	-	<b>C</b>	<b>B</b>	<b>D</b>
Market Cap	34.93 B	38.50 B	17.97 B	42.08 B	110.19 B	4.47 B
# of Analysts	9	7	13	10	3	5
Dividend Yield	1.92%	1.30%	2.37%	1.83%	0.76%	0.98%
<b>Value Score</b>	<b>B</b>	-	-	<b>C</b>	<b>D</b>	<b>C</b>
Cash/Price	0.13	0.11	0.06	0.10	0.05	0.12
EV/EBITDA	12.32	16.47	10.93	11.07	29.87	13.89
PEG Ratio	1.23	1.18	1.74	1.18	1.96	NA
Price/Book (P/B)	7.88	6.34	2.39	4.86	7.81	2.19
Price/Cash Flow (P/CF)	13.61	14.93	9.48	13.07	32.35	11.88
P/E (F1)	14.76	14.79	14.84	11.72	31.50	13.66
Price/Sales (P/S)	3.66	3.23	1.91	2.80	8.30	2.35
Earnings Yield	6.63%	6.77%	6.65%	8.53%	3.18%	7.32%
Debt/Equity	0.86	0.58	0.70	0.54	0.25	0.43
Cash Flow (\$/share)	17.63	5.80	7.01	3.51	8.09	6.86
<b>Growth Score</b>	<b>B</b>	-	-	<b>C</b>	<b>A</b>	<b>D</b>
Hist. EPS Growth (3-5 yrs)	34.37%	28.22%	10.89%	35.63%	22.07%	33.93%
Proj. EPS Growth (F1/F0)	9.33%	25.50%	1.29%	28.59%	20.56%	31.95%
Curr. Cash Flow Growth	-25.33%	-30.45%	6.03%	-35.58%	-4.32%	-27.42%
Hist. Cash Flow Growth (3-5 yrs)	23.38%	14.24%	8.55%	13.90%	14.58%	24.72%
Current Ratio	3.30	2.65	1.24	2.36	2.58	4.51
Debt/Capital	46.15%	36.54%	42.36%	35.25%	19.80%	30.11%
Net Margin	21.67%	20.25%	11.64%	18.83%	23.36%	7.39%
Return on Equity	45.72%	29.54%	16.74%	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)	6.29%	14.24%	1.61%	17.71%	10.78%	10.85%
<b>Momentum Score</b>	<b>D</b>	-	-	<b>F</b>	<b>D</b>	<b>D</b>
Daily Price Chg	-5.99%	-3.23%	-2.05%	-3.13%	-2.38%	-1.80%
1 Week Price Chg	28.38%	23.48%	12.32%	18.58%	16.90%	6.98%
4 Week Price Chg	-17.66%	-18.16%	-18.09%	-21.05%	-7.97%	-15.55%
12 Week Price Chg	-18.99%	-22.31%	-24.90%	-25.64%	-12.43%	-25.07%
52 Week Price Chg	30.25%	21.02%	-18.55%	11.78%	34.98%	-14.08%
20 Day Average Volume	2,912,119	2,284,026	4,222,189	12,707,887	1,655,933	536,503
(F1) EPS Est 1 week change	-0.15%	-1.31%	-0.18%	-3.91%	-2.47%	-3.24%
(F1) EPS Est 4 week change	-5.44%	-5.24%	-3.16%	-5.60%	-5.03%	-3.24%
(F1) EPS Est 12 week change	4.58%	2.77%	-4.36%	3.58%	-11.03%	-1.39%
(Q1) EPS Est Mthly Chg	-8.47%	-3.35%	-2.63%	-6.71%	0.00%	-1.66%

## 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>B</b>
Growth Score	<b>B</b>
Momentum Score	<b>D</b>
VGM Score	<b>B</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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