



## Lam Research (NYSE: LAM)

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Recommendation: **BUY**

Price Target: \$540.44

Upside: 9.1%

# Lam Research Overview



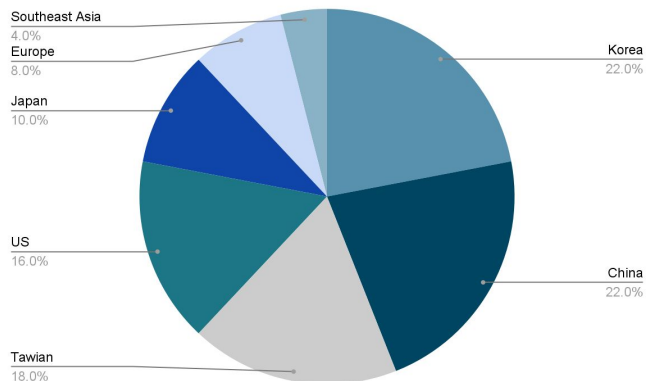
Lam's critical chip-processing capabilities link the visionary designs for the latest semiconductor devices with the companies that produce them. The company distinguishes itself against its competitors by its sheer market share which provides cost advantages allowing them to invest more in R&D.

## Company Description

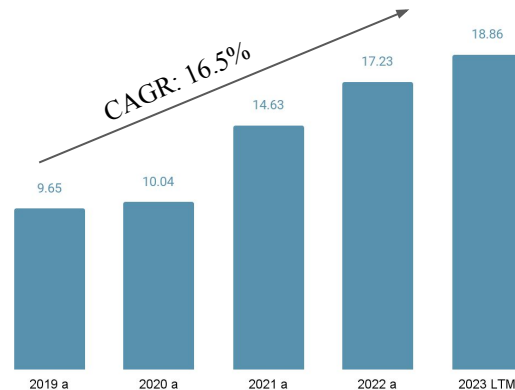
Lam Research (**Nasdaq:LRCX**) is a FORTUNE 500® company headquartered in Fremont, Calif., with operations around the globe.

Lam Research Corporation is a global supplier of innovative **wafer fabrication equipment** and services to the **semiconductor industry**.

## Revenue Geographic Segmentation



## Revenue Growth (in \$MM)



## Operating Statistics & Valuation Metrics

Gross Margin: 45%

TEV/EBITDA: 10.1x

EBITDA Margin: 31.7%

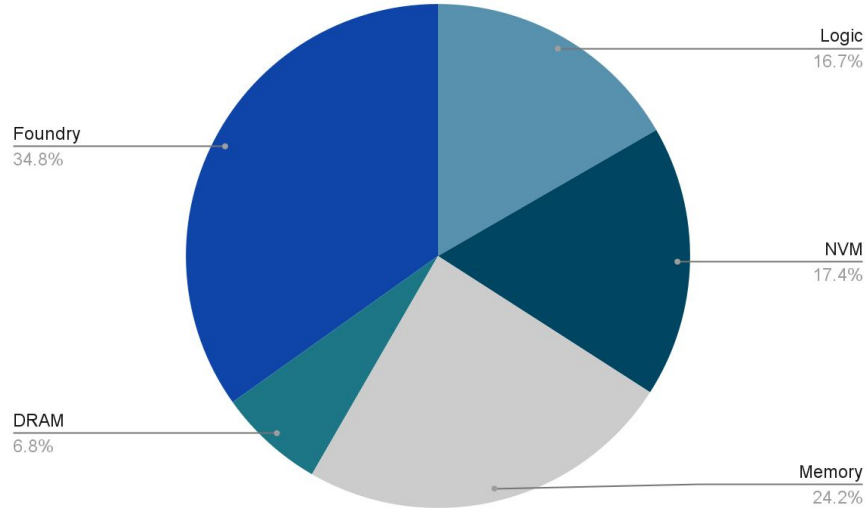
TEV/Revenue: 3.56x

ROE: 68%

P/E: 14.3

# Products Outlook

## Revenue System Segmentation



### Wafer Fabrication Equipment

WFE demand down due to supply chain related risks

### Extreme Ultraviolet Technology

Leading position in EUV, dry resistant tech growing

### ALD / ALE

LAM benefits from complex 3D tech, \$1 B opportunity across customers

# Investment Thesis



1

**Market Leader** - Virtually every **leading edge device** has been made using LAM's equipment

2

LAM is well positioned to benefit from **increase in semiconductor manufacturing**

3

LAM is **investing heavily in R&D** to offer innovative solutions

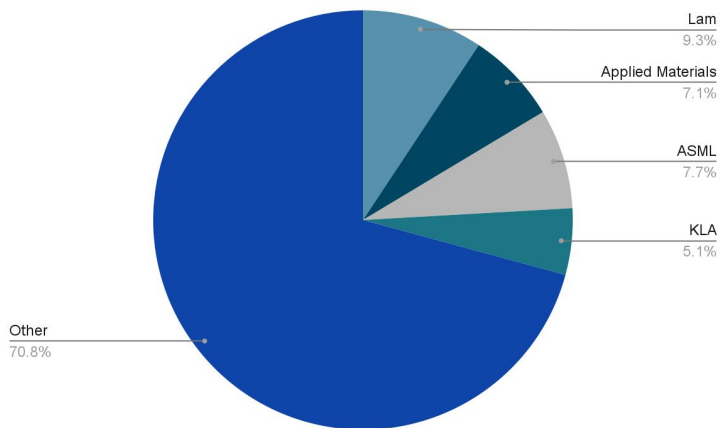
4

Long-term improved **gross margins** and **operational efficiency**

## Competitive Advantages

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1. Tailored tools for individual customer's chipmaking process flow
2. High switching costs
3. Scale advantages



## M&A Activity

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### Esgee Technologies

- Thermal Plasma

### SEMSYSCO

- Packaging Solutions

### Conventor and Novellus

- Semiconductor modeling software



## 70% of Semiconductor's Future Growth

Automotive

Computation

Data  
Storage

Wireless

## CHIPS Act

40 new projects in the US  
\$200 B in private investments  
200,000 Jobs created

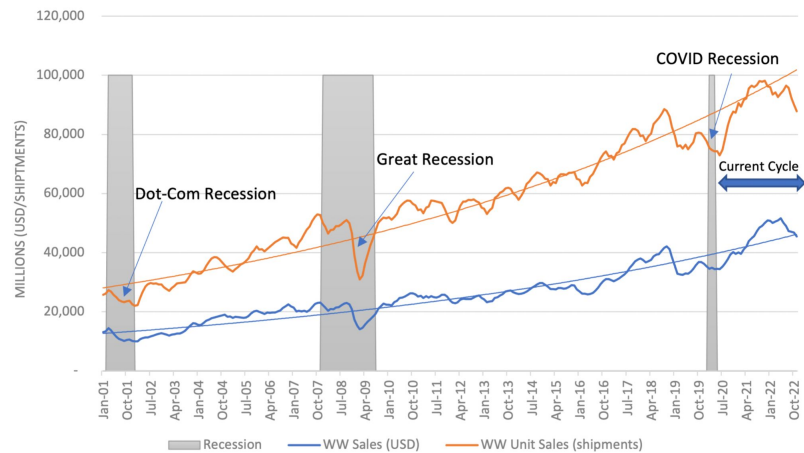
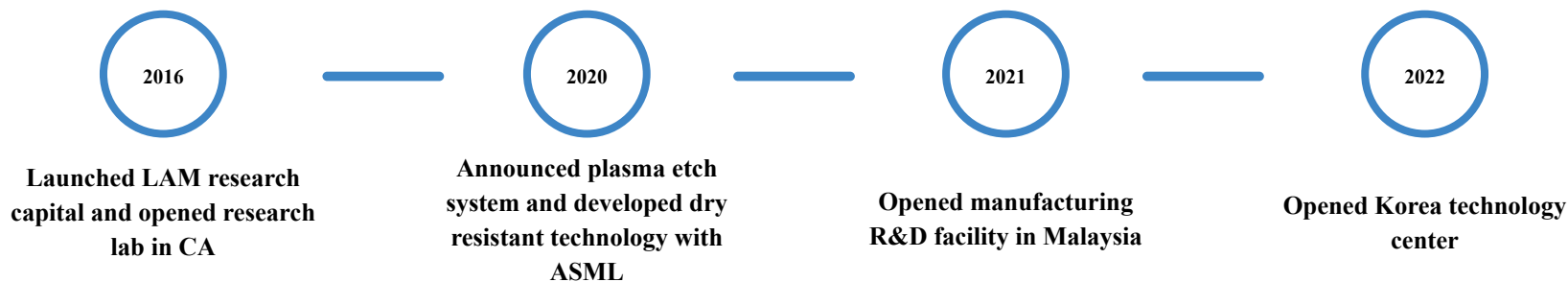


Figure: Sales and Unit Shipments 3 month moving average Jan. 2001- Nov. 2022



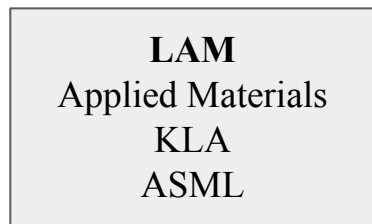
	2022	2021	2020
R&D	\$1,604,248	\$1,493,408	\$1,252,412
% of Revenue	9.3%	10.2%	12.5%

- From 2021 to 2022, R&D driven by increase of \$89 M due to hiring more employees for R&D and \$43 M in spending for supplies
- From 2020 to 2021, R&D driven by increase of \$137 M due to hiring more employees for R&D, \$49 M in outside service costs, and \$27 M in spending for supplies

## LAM Gross Margins

2020	2021	2022	2023
45.9%	46.5%	45.7%	45%

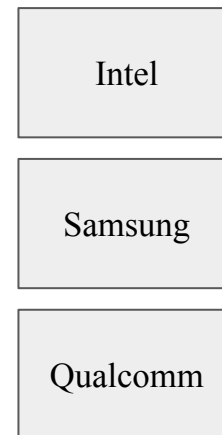
### Suppliers



### Semiconductor Manufacturing International Corporation (SMIC)



### Customers





## Valuation Considerations - Comps



Company	Market Cap	EV/ Revenue	EV/ EBITDA	Forward P/E
Applied Materials	94.5	3.7x	11.5x	12.8
KLA Corp	51.5	5.2x	11.9x	16.6
ASML Holding	250.9	10.7x	31.8x	29.7
LAM	66.5	3.5x	10x	13.6

10.3% Upside

Stock Price  
\$495.37

Intrinsic Value  
\$552.07

# Trading at a Discount → Buy Opportunity



DCF and Comps output a blended share price of \$540.44, a 9.1% upside, while giving 50% weight to each method.

## Enterprise Value

Cumulative Present Value of FCF	\$26,287,307.0
<b>Terminal Value</b>	
Terminal Year EBITDA	\$7,630,035.6
Exit Multiple	11.9x
<b>Terminal Value</b>	\$90,797,423.7
Discount Factor	51.25%
<b>Present Value of Terminal Value</b>	\$46,529,571.6
<i>% of Enterprise Value</i>	63.9%
<b>Enterprise Value</b>	\$72,816,878.7

## DCF Implied Equity Value and Share Price

Enterprise Value	\$72,816,878.7
<i>Less: Total Debt</i>	\$5,003,283.0
<i>Plus: Cash &amp; Cash Equivalents</i>	\$3,522,001.0
<b>Implied Equity Value</b>	\$71,335,596.7
Implied Share Price	<b>\$528.80</b>
Shares Outstanding	134,900

## Sensitivity Analysis

		WACC				
		8.8%	9.8%	10.8%	11.8%	12.8%
EV/EBITDA	528.80					
	9.9x	\$518.86	\$494.11	\$470.90	\$449.10	\$428.62
	10.9x	\$551.49	\$524.86	\$499.89	\$476.45	\$454.43
	11.9x	\$584.12	\$555.61	\$528.88	\$503.79	\$480.24
	12.9x	\$616.75	\$586.36	\$557.87	\$531.14	\$506.05
	13.9x	\$649.39	\$617.11	\$586.86	\$558.48	\$531.85

## Key Drivers

R&D  
Expense

Revenue  
Growth

Operating  
Margins

## What You Need to Believe

1

LAM Research is **undervalued**, with an upside of 9.1%.

2

The company distinguishes itself against its competitors by its sheer **market share** which provides **cost advantages** allowing them to invest more in **R&D**.

3

LAM well positioned to **mitigate supply chain/inflation risk** and take advantage of an increase in **semiconductor manufacturing**

Recommendation: **BUY**

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Questions?