

**CALIFORNIA ALTERNATIVE ENERGY AND
ADVANCED TRANSPORTATION FINANCING AUTHORITY**

Board Meeting Date: Tuesday, June 17, 2025

Request to Approve Project for a Sales and Use Tax Exclusion¹

**Lam Research Corporation
Application No. 25-SM029**

Prepared By: *Jeannie Yu, Program Analyst*

SUMMARY

Applicant: Lam Research Corporation

Location: Fremont, Alameda County; Livermore, Alameda County

Industry: Semiconductor Fabrication Equipment Manufacturing

Project: Expansion of Existing Semiconductor and Fabrication Equipment
Manufacturing Facilities (Advanced Manufacturing)

Project Pool: General & Large

Value of Qualified Property	Estimated Sales and Use Tax Exclusion (“STE”) Amount ²
\$137,000,000	\$11,617,600

Estimated Net Benefit ³	Dollar Value	Points Earned ⁴
Estimated Fiscal Benefits	\$19,451,319	1,674
Estimated Environmental Benefits	N/A	33
Additional Benefits	N/A	146
Total	\$19,451,319	1,852
Estimated Quantifiable Net Benefit	\$7,833,719	N/A

¹ All capitalized terms not defined in this document are defined in the STE Program’s statutes and regulations.

² This amount is calculated based on the average statewide sales tax rate of 8.48%.

³ Applications that earn a Total Score of at least 1,000 points and an Environmental Benefits Score of over 20 points may be recommended for approval. (California Code of Regulations Title 4, Division 13, Section 10033(c)(6).)

⁴ Dollar values and point values in the staff summary may not add up correctly due to rounding in the Application worksheet.

Previous Awards and Status: Four previous awards

- Award 1: App No. 20-SM014, Award Year 2020; 100% Expended; Complete; Compliant on Required Reports.
- Award 2: App No. 21-SM012, Award Year 2021; 100% Expended; Complete; Compliant on Required Reports
- Award 3: App No. 22-SM041, Award Year 2022; 100% Expended; Complete; Compliant on Required Reports
- Award 4: 2024 24-SM032, 89% expended; Active; Compliant on Required Reports

Staff Recommendation: Approval

THE APPLICANT

Lam Research Corporation (the “Applicant”) is a Delaware corporation that formed in 1980 and publicly traded on the NASDAQ under the ticker symbol LRCX. The Applicant manufactures equipment used to produce semiconductor chips by some of the largest chip manufacturers in the world. Some of the Applicant’s customers include Intel, Micron, and Samsung.

The corporate officers of the Applicant are:

- Tim Archer, President & Chief Executive Officer
- Doug Bettinger, Executive Vice President & Chief Financial Officer
- Pat Lord, Executive Vice President and Chief Operating Officer

THE PROJECT

Lam Research Corporation requests a sales and use tax exclusion (“STE”) award to expand its existing semiconductor fabrication equipment manufacturing and research and development facilities located in Fremont and Livermore (the “Project”).

According to the Applicant, it plans to further enhance its advanced research, design, manufacturing, production, quality control/testing and assembly facilities by building out additional labs and supporting infrastructure, purchasing additional tools in support of its lab facilities, and upgrading existing production related property.

The Applicant manufactures a number of products used in four categories of the semiconductor manufacturing process : 1) Deposition, 2) Etch, 3) Strip & Clean, and 4) Mass Metrology. According to the Applicant, the first three categories are key products in the making of a microchip, also known as the “water fabrication process” and the mass metrology products allow users to measure the change in the mass after the key steps are performed.

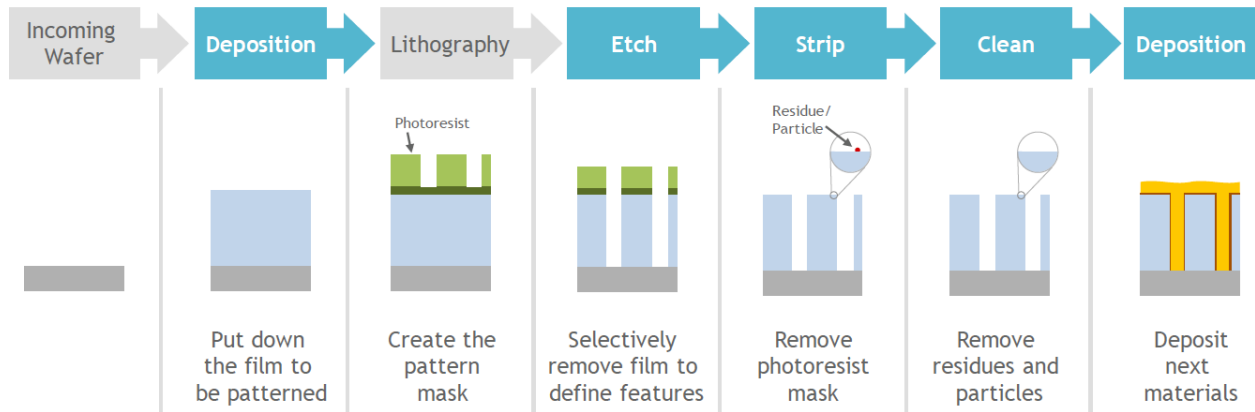


Figure 1: Wafer Fabrication Process

Etching is a microfabrication technique that facilitates the formation of chip features by selectively removing layers, such as insulating and conducting materials, from the surface of a wafer. This process is essential for creating vertical, column-like structures that are utilized to interconnect chips and are integral to microelectromechanical systems (MEMS). To assist with etching, the Applicant's Sense.i™ Platform provides essential capabilities that are crucial for enhancing uniformity and etch profile control for maximizing yield and reduced wafer costs. This platform empowers semiconductor manufacturers to gather and analyze data, recognize patterns and trends, and implement targeted actions for continuous improvement. It also features autonomous calibration and maintenance to reduce downtime, and machine learning algorithms to minimize process variations and optimize wafer output.

To complement with the Sense.i™ Platform, the Applicant introduced Vantex™, the newest advancement in dielectric etch technology. This technology offers enhanced scalability for both current and future generations of NAND and DRAM memory devices, including those used in personal computers, servers, and mobile devices. By enabling chip manufacturers to focus on 3D memory architectures, this technology aims to lower the cost per bit as they transition from one node to the next, facilitating an increase in vertical device dimensions while simultaneously minimizing lateral critical dimensions.

Lastly, the Applicant has recently expanded on 3D NAND flash memory etching with the launch of Lam Cryo™ 3.0, marking the third generation of its trusted cryogenic etch technology. Lam Cryo 3.0 is more efficient and sustainable than conventional dielectric processes, etching 2.5 times faster, consuming up to 40% less energy consumption per wafer, and reducing emissions by up to 90%.

Anticipated Costs of Qualified Property

Anticipated Qualified Property Purchases	Cost
Manufacturing Equipment, Machinery & Related Property	\$42,225,000
Laboratory Devices & Instruments	\$19,900,000
Logistics, Storage Systems & Related Property	\$3,000,000
Quality Control/Testing Equipment & Related Property	\$4,500,000
Computers/IT & Robotics Property	\$5,000,000
Design, Engineering, R&D Property	\$30,125,000
Buildout of Facilities, Upgrades & Real Property Improvements	\$32,250,000
Total	\$137,000,000

Note: The Qualified Property purchases reported in the Application and shown here in the staff report are estimated costs. In accordance with the Regulatory Agreement, a finalized Project equipment list will be prepared detailing the value of the Project equipment actually acquired, and the estimated tax benefit realized pursuant to Revenue and Tax Code Section 6010.8. Variance from the costs shown in the Application and in this report may occur prior to the closing due to increased costs of certain components of the Project over original estimates, and other reasons. In addition, those costs may vary after closing due to increased costs, common design and equipment modifications during construction, differences in equipment due to future changes in statute or regulation, or for other reasons.

Timeline

According to the Applicant, it will continue to build out additional labs and supporting infrastructure with construction anticipated to commence in 2025. The Applicant expects to purchase additional tools for its lab facilities throughout 2026, and other equipment through mid-2028.

Status of Permits/Other Required Approvals

According to the Applicant, the building permits for the expansion have been secured through the City of Fremont. As the buildout progresses, the Applicant will timely secure any additional permits as needed.

PROJECT EVALUATION

Project Benefits

The Project received a Total Score of 1,852 points, which exceeds the required 1,000-point threshold, and includes an Environmental Benefits Score of 33 points, exceeding the 20-point threshold.

- 1. Fiscal Benefits (1,674 points).** The net present value of the total fiscal benefits over the lifetime of the Qualified Property is derived from the Applicant's sales and use taxes, personal income taxes paid by the firm's employees, firm taxes on profits, property taxes, and other indirect fiscal benefits of the Applicant. The total fiscal benefits amount to \$19,451,319, resulting in a Fiscal Benefits score of 1,674.
- 2. Environmental Benefits (33 points).** The Project earned an Environmental Benefits Score of 33. The Applicant received points in the following categories:

- A. Environmental Sustainability Plan (5 of 5 points).** The Applicant has an environmental sustainability plan that describes energy saving methods through installation of energy efficient equipment.
- B. Energy Consumption (28 of 30 points).** The Applicant anticipates the Project will result in a 28% reduction in energy consumption compared to the Applicant's previous manufacturing process by installing return air handler fan setbacks.
- 3. Additional Benefits (145 points).** Applicants may earn "Additional Benefits" points in the categories listed below. The Applicant received 145 Additional Benefits points.
- A. Production Jobs (55 of 75 points).** The Applicant anticipates the Project will support a total of 3,143 production-related jobs at its Facilities. CAEATFA estimates that approximately 106.87 of these jobs will be attributable to a marginal increase in jobs created due to the STE. Based on the amount of STE per estimated number of jobs created, the Applicant earned 55 points.
- B. Construction Jobs (0 of 75 points).** The Applicant anticipates the Project will support a total of 13 construction jobs at its Facilities. CAEATFA estimates that approximately 0.43 of these jobs will be attributable to a marginal increase in jobs created due to the STE. Based on the amount of STE per estimated number of jobs created, the Applicant earned zero points.
- C. Unemployment (0 of 50 points).** The Applicant's Project is located in Alameda County, which has an average annual unemployment rate of 4.7%. When compared to the statewide average annual unemployment rate of 5.3%,⁵ the Project location earned the Applicant zero points.
- D. Research and Development Facilities (25 of 25 points).** The Applicant has verified that it has a facility located in California that performs research and development functions related to semiconductors and related components.
- E. Benefits and Fringe Benefits (25 of 25 points).** The Applicant states it provides medical, health, dental & vision benefits, bonuses, retirement contributions, dependent care & assistance reimbursement, transportation subsidies, education reimbursement, gym subsidies, employee discounts and paid leave to its employees, earning the Applicant 25 points.
- F. Emerging Strategic Industry (40 of 40 points).** The Project's industry, semiconductor fabrication equipment manufacturing, is in an Emerging Strategic Industry, as defined by CAEATFA, 40 points are awarded.

⁵ Unemployment rates are based on data available in October 2024.

LEGAL STATUS QUESTIONNAIRE

The Applicant had nothing to report for the questions contained in the Legal Status portion of the Application.

CAEATFA FEES

In accordance with STE Program regulations,⁶ the Applicant paid CAEATFA an Application Fee of \$10,000 and will pay CAEATFA an Administrative Fee of up to \$350,000 should the Applicant be approved for an award.

RECOMMENDATION

Staff recommends the approval of Resolution No. 25-SM029-01 for Lam Research Corporation's purchase of qualifying tangible personal property in an amount not to exceed \$137,000,000, anticipated to result in an approximate STE value of \$11,617,600. The initial term of the Regulatory Agreement will be for a period of three years, until June 17, 2028, and the remainder shall be for a period of six years, until June 17, 2031, for providing annual compliance reports.

⁶ California Code of Regulations Title 4, Division 13, Section 10036

**RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF A
REGULATORY AGREEMENT WITH LAM RESEARCH CORPORATION**

June 17, 2025

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority”) has received the Application of **Lam Research Corporation** (the “Applicant”) for financial assistance under the Sales and Use Tax Exclusion Program, as established in Public Resources Code Section 26011.8; and

WHEREAS, the Applicant qualifies as a Participating Party under Public Resources Code Section 26011.8 and Revenue and Taxation Code Section 6010.8; and

WHEREAS, the Applicant’s qualifying tangible personal property meets the requirements of a Project under Public Resources Code Section 26011.8 and Revenue and Taxation Code Section 6010.8 (the “Project”); and

WHEREAS, after the Authority approves an Application, the Authority enters into a Regulatory Agreement, as described in Authority Regulations Section 10035(a), with the Applicant for the Project; and

WHEREAS, the Applicant has stated the Project has an estimated cost not to exceed \$137,000,000 over a period of three (3) years; and

WHEREAS, the Applicant asserts that this form of financial assistance will enable it to avail itself of the benefits of an exclusion from sales and use taxes relative to the Project pursuant to Revenue and Taxation Code Section 6010.8; and

WHEREAS, the approval of the terms of the Regulatory Agreement and authority for the Executive Director or Chair of the Authority to execute the necessary documents to effectuate the Regulatory Agreement is now sought;

NOW, THEREFORE, BE IT RESOLVED by the California Alternative Energy and Advanced Transportation Financing Authority, as follows:

Section 1. The Regulatory Agreement includes a Project within the meaning of Public Resources Code Section 26003(a)(8)(B).

Section 2. The Regulatory Agreement constitutes financial assistance within the meaning of Public Resources Code Section 26003(a)(6).

Section 3. The Applicant is a participating party within the meaning of Public Resources Code Section 26003(a)(7).

Section 4. The Executive Director or Chair of the Authority (the “Authorized Signatories”) are hereby authorized for and on behalf of the Authority to approve any changes to the Project as the Authorized Signatories deem appropriate, provided that

the amount of the qualifying tangible personal property to be purchased for the Project may not be increased above the amount approved by the Authority.

Section 5. The proposed form of the Regulatory Agreement between the Applicant and the Authority, as filed with the Authority prior to this public meeting, is hereby approved. For, on behalf and in the name of the Authority, the Authorized Signatories are hereby authorized and directed to execute, acknowledge, and deliver to the Applicant the Regulatory Agreement in substantially the form filed with or approved by the Authority.

The Regulatory Agreement may contain insertions, deletions or changes as the Authorized Signatories executing the Regulatory Agreement may require or approve, including particular information inserted in substantial conformance with the staff summary and in the Application to the Authority. The approval of the Regulatory Agreement will be conclusively evidenced by the execution and delivery of the final Regulatory Agreement.

The Authority understands and agrees that, pursuant to the terms of the Regulatory Agreement, the obligations of the Applicant, under some circumstances, may be carried out or assumed by a successor or assignee entity, or by an affiliate of the Applicant.

Section 6. Each of the Authorized Signatories, acting alone, is hereby authorized and directed to do any and all ministerial acts, including, without limitation, the execution and delivery of any and all documents and certificates they may deem necessary or advisable to consummate the Regulatory Agreement and otherwise effectuate the purposes of this Resolution.

Section 7. The Applicant shall ensure that all of the qualifying tangible personal property acquired as part of the Project that is listed in the semi-annual reports provided to the Authority pursuant to the Regulatory Agreement will be installed, maintained and operated in compliance with all applicable local, state and federal laws.

Section 8. The Regulatory Agreement shall only apply to qualifying tangible personal property acquired as part of the Project that the Applicant certifies will be installed, maintained and operated at facilities physically located within the State of California.

Section 9. Neither the adoption by the Authority of this Resolution for the Applicant nor the Regulatory Agreement may be referred to in any application before any governmental agency as evidence of the feasibility, practicality or suitability of the Project and may not be referred to in any application for any required permission or authority to acquire, construct or operate the Project.

Section 10. This Resolution is effective immediately and will remain in full force and effect unless the Regulatory Agreement is not executed within thirty (30) days of

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the date of this Resolution. The Executive Director may extend the thirty (30) days if necessary.