

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

Request to Approve Project for a Sales and Use Tax Exclusion¹

**Lam Research Corporation
Application No. 24-SM032**

Tuesday, July 16, 2024

Prepared By: *Katrina Walters-White, Program Analyst & Jeannie Yu, Program Analyst*

SUMMARY

Applicant – Lam Research Corporation

Location – Fremont, Alameda County; Livermore, Alameda County

Industry – Semiconductor Fabrication Equipment Manufacturing

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

Value of Qualified Property	Estimated Sales and Use Tax Exclusion (“STE”) Amount ²
\$23,600,000	\$1,991,840

Estimated Net Benefit ³	Dollar Value	Points Earned
Estimated Fiscal Benefits	\$10,585,958	5,315
Estimated Environmental Benefits	N/A	55
Additional Benefits	N/A	125
Total	\$10,585,958	5,495
Estimated Quantifiable Net Benefit	\$8,594,118	

Competitive Criteria Score – 90

Staff Recommendation – Approval

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 8.44%.

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).)

THE APPLICANT

Lam Research Corporation (the “Applicant”) is a Delaware corporation that formed in 1980 and is 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.

On March 17, 2020, the CAEATFA Board granted the Applicant an STE award for the purchase of up to \$119,617,224 in Qualified Property for an estimated STE value of \$10,000,000 to upgrade and expand its existing semiconductor fabrication equipment manufacturing facilities located in Fremont and Livermore. The Applicant completed the project at the end of 2021.

On March 16, 2021, the CAEATFA Board granted the Applicant an STE award for the purchase of up to \$22,900,000 in Qualified Property for an estimated STE value of \$1,946,500 to upgrade and expand its existing semiconductor fabrication equipment manufacturing facilities located in Fremont and Livermore. The Applicant completed the project at the end of 2021.

On June 21, 2022, the CAEATFA Board granted the Applicant an STE award for the purchase of up to \$23,500,000 in Qualified Property for an estimated STE value of \$1,997,500 to expand its semiconductor fabrication equipment manufacturing facility. The Applicant completed the project in the first half of 2023.

The corporate officers of the Applicant are:

Tim Archer, President & Chief Executive Officer
Doug Bettinger, EVP & Chief Financial Officer
Rick Gottscho, EVP & Strategic Advisor to the CEO
Pat Lord, EVP and Chief Operating Officer

THE PROJECT

The Applicant is requesting a sales and use tax exclusion (“STE”) award to upgrade and expand its semiconductor fabrication equipment manufacturing facilities located in Fremont and Livermore (the “Project”). The Applicant plans to further enhance its existing manufacturing, production, research and development, quality control, and prototyping equipment by building out its process labs and supporting infrastructure for process tools. The Applicant manufactures a number of products that are broken down into four main categories: 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.

The Applicant states its production process includes incorporating advanced materials such as krypton and Tungsten hexafluoride, which are advanced gases used in its dielectric etch and deposition manufacturing processes, respectively. According to the Applicant, these gases are commonly used in the semiconductor space but are expensive and hard to control, which requires

highly precise tools and methods when dispensed during production. As products are assembled with a variety of screws and bolts, the Applicant uses torque measuring devices that wirelessly communicate the amount of torque used during every significant phase of assembly to the operator's computer. These measurements are recorded in the event a product is returned with an issue; the Applicant can pinpoint what may have caused the defect. Furthermore, the Applicant will be using the "digital twin" concept to design digital version of the parts, components, and tools that its customers build. The Applicant states that using digital twins for equipment design and process development in the virtual world can reduce the cycles of learning in the physical world. This concept, when used with additive manufacturing, can create parts that cannot easily be created using conventional techniques.

ANTICIPATED COSTS OF QUALIFIED PROPERTY

The anticipated Qualified Property purchases are listed below:

Manufacturing/Production Equipment, Machinery & Related Property	\$6,250,000
Laboratory Devices & Instruments	\$3,000,000
Logistics, Storage Systems & Related Property	\$1,000,000
Quality Control/Testing Equipment & Related Property	\$1,100,000
Computers, IT & Robotics Property	\$1,000,000
Design, Engineering, Research & Development Property	\$7,000,000
Buildout of Facilities, Upgrades & Real Property Improvements	\$4,250,000
Total	<u>\$23,600,000</u>

Note: The Qualified Property purchases reported in the Application and shown here in staff's 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, as well as 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, the purchasing of the additional process and metrology tools for its facilities will begin in Q3 of 2024 and the upgrading of its existing production will continue for the next several years. Additionally, the completion of the Project build out is expected to occur in Q4 of 2026.

STATUS OF PERMITS/OTHER REQUIRED APPROVALS

According to the Applicant, all necessary building, installation, and operational permits for the Project have been secured, or will be obtained prior to the completion of the Project from the cities of Fremont and Livermore.

COMPETITIVE CRITERIA SCORE

The Applicant received 90 Competitive Criteria points as follows:

1. **Environmental Benefits (0 of 100 points)**. The Applicant does not have a Recycled Resource Extraction Project or Project that produces an Advanced Transportation Technology or an Alternative Source product, component, or system. Therefore, no points are awarded.
2. **Unemployment (0 of 50 points)**. The Applicant's Project's primary Facility is located in Alameda County, which has an average annual unemployment rate of 3.9%.⁴ When compared to the statewide average annual unemployment rate of 4.6%, the Project location earned the Applicant zero points.
3. **Job Creation (75 of 75 points)**. The Applicant anticipates the Project will support a total of 3,399 production-related jobs at its Facilities. CAEATFA estimates that approximately 39.89 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 75 points.
4. **California Headquarters (15 of 15 points)**. The Applicant has a California Corporate Headquarters, and, therefore, 15 points are awarded.
5. **Natural Disaster Relief (0 of 50 points)**. The Project is not to rebuild or relocate the Applicant's Facilities due to a fire, flood, storm, or earthquake identified in a state of emergency proclaimed by the Governor within two years of the time of application, and, therefore, zero points are awarded.
6. **Eligibility for Manufacturing and Research and Development Equipment Exemption (0 of 50 points)**. The Applicant is eligible to use one or more of the exemptions established pursuant to Section 6377.1 of the Revenue and Taxation Code, and, therefore, zero points are awarded.
7. **Emerging Strategic Industry (0 of 75 points)**. The Project's industry is not in an Emerging Strategic Industry, and, therefore, zero points are awarded.

⁴ Unemployment rates are based on data available in December 2023.

PROJECT EVALUATION

PROJECT BENEFITS

The Project received a Total Score of 5,495 points, which exceeds the required 1,000-point threshold, and a total Environmental Benefits Score of 55 points, which exceeds the 20-point threshold.

- A. Fiscal Benefits (5,315 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 \$10,585,958, resulting in a Fiscal Benefits score of 5,315.
- B. Environmental Benefits (55 points).** The Project earned an Environmental Benefits Score of 55. The Applicant received points in the following categories:

 - 1. Environmental Sustainability Plan (5 of 5 points).** The Applicant has an environmental sustainability plan that reduces energy and water usage, as well solid wastes, and greenhouse gas emissions.
 - 2. Energy Consumption (30 of 30 points).** The Applicant anticipates the Project will result in a 35% reduction in energy consumption compared to the Applicant's previous manufacturing process by adding a new scrubber system and enhancing its Variable Frequency Drive system.
 - 3. Water Use (20 of 30 points).** The Applicant anticipates the Project will result in a 20% reduction in water use relative to the Applicant's previous manufacturing process by implementing several water savings projects including a CA3 Acid Waste Neutralization, RGH Reclaim Process Water, and installing a new scrubber.
- C. Additional Benefits (125 points).** Applicants may earn additional points for their Total Score. The Applicant received 125 additional points.

 - 1. Production Jobs (75 of 75 points).** The Applicant anticipates the Project will support a total of 3,399 production-related jobs at its Facilities. CAEATFA estimates that approximately 39.89 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 75 points.
 - 2. 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 0.15 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.

3. **Unemployment (0 of 50 points).** The Applicant's Project is located in Alameda County, which has an average annual unemployment rate of 3.9%. When compared to the statewide average annual unemployment rate of 4.6%, the Project location earned the Applicant zero points.
4. **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 its product development and research.
5. **Benefits and Fringe Benefits (25 of 25 points).** The Applicant states it provides medical, health, dental and 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.

LEGAL QUESTIONNAIRE

Staff reviewed the Applicant's responses to the questions contained in the Legal Status portion of the Application. The responses did not disclose any information that raises questions concerning the financial viability or legal integrity of this Applicant.

CAEATFA FEES

In accordance with STE Program regulations,⁵ the Applicant has paid CAEATFA an Application Fee of \$10,000 and will pay CAEATFA an Administrative Fee of up to \$94,400.

RECOMMENDATION

Staff recommends the approval of Resolution No. 24-SM032-01 for Lam Research Corporation's purchase of qualifying tangible personal property in an amount not to exceed \$23,600,000, anticipated to result in an approximate STE value of \$1,991,840.

⁵ California Code of Regulations Title 4, Division 13, Section 10036

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

July 16, 2024

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 \$23,600,000 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 the date of this Resolution. The Executive Director may extend the thirty (30) days if necessary.