UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended June 25, 2023

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to .

Commission file number: 0-12933

LAM RESEARCH CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**94-2634797**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
4650 Cushing Parkway, Fremont, California	**94538**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (510) 572-0200

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, Par Value $0.001 Per Share	**LRCX**	**The Nasdaq Stock Market (Nasdaq Global Select Market)**

Securities registered pursuant to Section 12(g) of the Act:
None
(Title of class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer”, “smaller reporting company”, and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant’s executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the Registrant’s Common Stock, $0.001 par value, held by non-affiliates of the Registrant, as of December 25, 2022, the last business day of the most recently completed second fiscal quarter, was $46,244,310,674. Common Stock held by each officer and director and by each person who owns 5% or more of the outstanding Common Stock has been excluded from this computation based on the assumption that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination of such status for other purposes.

As of August 10, 2023, the Registrant had 132,511,701 outstanding shares of Common Stock.

Documents Incorporated by Reference

Parts of the Registrant’s Proxy Statement for the Annual Meeting of Stockholders expected to be held on or about November 7, 2023, are incorporated by reference into Part III of this Form 10-K. Except as expressly incorporated by reference herein, the Registrant’s proxy statement shall not be deemed to be part of this report.

LAM RESEARCH CORPORATION

2023 ANNUAL REPORT ON FORM 10-K

TABLE OF CONTENTS

PART I

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

With the exception of historical facts, the statements contained in this discussion are forward-looking statements, which are subject to the safe harbor provisions created by the Private Securities Litigation Reform Act of 1995. Certain, but not all, of the forward-looking statements in this report are specifically identified as forward-looking, by use of phrases and words such as “believe,” “estimated,” “anticipate,” “expect,” “probable,” “intend,” “plan,” “aim,” “may,” “should,” “could,” “would,” “will,” “continue,” and other future-oriented terms. The identification of certain statements as “forward-looking” does not mean that other statements not specifically identified are not forward-looking. Forward-looking statements include but are not limited to statements that relate to: trends and opportunities in the global economic environment; trends and opportunities in the semiconductor industry, including in the end markets and applications for semiconductors, and in device complexity; growth or decline in the industry and the market for, and spending on, wafer fabrication equipment; the anticipated levels of, and rates of change in, margins, market share, served available market, capital expenditures, research and development expenditures, international sales, revenue (actual and/or deferred), operating expenses and earnings generally; management’s plans and objectives for our current and future operations and business focus; restructuring activities; business process improvements and initiatives; volatility in our quarterly results; the makeup of our customer base; customer and end user requirements and our ability to satisfy those requirements; customer spending and demand for our products and services, and the reliability of indicators of change in customer spending and demand; the effect of variability in our customers’ business plans or demand for our products and services; our competition, and our ability to defend our market share and to gain new market share; the success of joint development and collaboration relationships with customers, suppliers, or others; outsourced activities; our supply chain and the role of suppliers in our business, including the impacts of supply chain constraints and material costs; our leadership and competency, and our ability to facilitate innovation; our research and development programs, our ability to create sustainable differentiation; technology inflections in the industry and our ability to identify those inflections and to invest in research and development programs to meet them; our ability to deliver multi-product solutions; the resources invested to comply with evolving standards and the impact of such efforts; changes in state, federal and international tax laws, our estimated annual tax rate and the factors that affect our tax rates; legal and regulatory compliance; the estimates we make, and the accruals we record, in order to implement our critical accounting policies (including but not limited to the adequacy of prior tax payments, future tax benefits or liabilities, and the adequacy of our accruals relating to them); hedging transactions; debt or financing arrangements; our investment portfolio; our access to capital markets; uses of, payments of, and impact of interest rate fluctuations on, our debt; our intention to pay quarterly dividends and the amounts thereof, if any; our ability and intention to repurchase our shares; credit risks; controls and procedures; recognition or amortization of expenses; our ability to manage and grow our cash position; our strategic relevance with our customers; our ability to scale our operations to respond to changes in our business; the value of our patents; the materiality of potential losses arising from legal proceedings; the probability of making payments under our guarantees; the impact of the COVID-19 pandemic, and the sufficiency of our financial resources or liquidity to support future business activities

(including but not limited to operations, investments, debt service requirements, dividends, and capital expenditures). Such statements are based on current expectations and are subject to risks, uncertainties, and changes in condition, significance, value, and effect, including without limitation those discussed below under the heading “Risk Factors” within Item 1A and elsewhere in this report and other documents we file from time to time with the Securities and Exchange Commission (“SEC”), such as our quarterly reports on Form 10-Q and our current reports on Form 8-K. Such risks, uncertainties, and changes in condition, significance, value, and effect could cause our actual results to differ materially from those expressed in this report and in ways not readily foreseeable. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof and are based on information currently and reasonably known to us. We do not undertake any obligation to release the results of any revisions to these forward-looking statements, which may be made to reflect events or circumstances that occur after the date of this report or to reflect the occurrence or effect of anticipated or unanticipated events.

Item 1. Business

Incorporated in 1980, Lam Research Corporation (“Lam Research,” “Lam,” “we,” “our,” “us,” or the “Company”) is a Delaware corporation, headquartered in Fremont, California. We maintain a network of facilities throughout Asia, Europe, and the United States in order to meet the needs of our dynamic customer base.

Additional information about Lam Research is available on our website at www.lamresearch.com. The content on any website referred to in this Form 10-K is not a part of or incorporated by reference in this Form 10-K unless expressly noted.

Our Annual Report on Form 10-K, Quarterly Reports on Forms 10-Q, Current Reports on Forms 8-K, Proxy Statements and all other filings we make with the SEC are available on our website, free of charge, as soon as reasonably practical after we file them with or furnish them to the SEC and are also available online at the SEC’s website at www.sec.gov.

The Lam Research logo, Lam Research, and all product and service names used in this report are either registered trademarks or trademarks of Lam Research Corporation or its subsidiaries in the United States and/or other countries. All other marks mentioned herein are the property of their respective holders.

We are a global supplier of innovative wafer fabrication equipment and services to the semiconductor industry. We have built a strong global presence with core competencies in areas such as nanoscale applications enablement, chemistry, plasma and fluidics, advanced systems engineering, and a broad range of operational disciplines. Our products and services are designed to help our customers build smaller and better performing devices that are used in a variety of electronic products, including mobile phones, personal computers, servers, wearables, automotive vehicles, and data storage devices.

Our customer base includes leading semiconductor memory, foundry, and integrated device manufacturers ("IDMs") that make products such as non-volatile memory ("NVM"), dynamic random-access memory ("DRAM"), and logic devices. Their continued success is part of our commitment to driving semiconductor breakthroughs that define the next generation. Our core technical competency is integrating hardware, process, materials, software, and process control enabling results on the wafer.

Semiconductor manufacturing, our customers' business, involves the complete fabrication of multiple dies or integrated circuits ("ICs") on a wafer. This involves the repetition of a set of core processes and can require hundreds of individual steps. Fabricating these devices requires highly sophisticated process technologies to integrate an increasing array of new materials with precise control at the atomic scale. Along with meeting technical requirements, wafer processing equipment must deliver high productivity and be cost-effective.

Demand from cloud computing (the "Cloud"), the Internet of Things ("IoT"), and other markets is driving the need for increasingly powerful and cost-efficient semiconductors. At the same time, there are growing technical challenges with traditional two-dimensional scaling. These trends are driving significant inflections in semiconductor manufacturing, such as the increasing importance of vertical scaling strategies like three-dimensional ("3D") architectures as well as multiple patterning to enable shrinks.

We believe we are in a strong position with our leadership and expertise in deposition, etch, and clean to facilitate some of the most significant innovations in semiconductor device manufacturing. Several factors create opportunity for sustainable differentiation for us: (i) our focus on research and development, with several on-going programs relating to sustaining engineering, product and process development, and concept and feasibility; (ii) our ability to effectively leverage cycles of learning from our broad installed base; (iii) our collaborative focus with semi-ecosystem partners; (iv) our ability to identify and invest in the breadth of our product portfolio to meet technology inflections; and (v) our focus on delivering our multi-product solutions with a goal to enhance the value of Lam's solutions to our customers.

We also address processes for back-end wafer-level packaging ("WLP"), which is an alternative to traditional wire bonding and can offer a smaller form factor, increased interconnect speed and bandwidth, and lower power consumption, among other benefits. We offer advanced packaging solutions that support fan-out panel-level packaging, a process in which chips or chiplets are cut from a large format substrate sheet several times the size of a traditional silicon wafer, which increases yield and reduces waste and solutions that meet the need for 3D stacking of high bandwidth memory ("HBM"). In addition, our products are well-suited for related markets that rely on semiconductor processes and require production-proven manufacturing capability, such as complementary metal-oxide-semiconductor image sensors ("CIS") and micro-electromechanical systems ("MEMS").

Our Customer Support Business Group ("CSBG") provides products and services to maximize installed equipment performance, predictability, and operational efficiency. We offer a broad range of services to deliver value throughout the lifecycle of our equipment, including customer service, spares, upgrades, and new and refurbished non-leading edge products in our deposition, etch, and clean markets. Many of the technical advances that we introduce in our newest products are also available as upgrades, which provide customers with a cost-effective strategy for extending the performance and capabilities of their existing wafer fabrication lines. Service offerings include addressing productivity needs for our customers including, but not limited to, system uptime or availability optimization, throughput improvements, and defect reduction. Additionally, within CSBG, our Reliant® product line offers new and refurbished non-leading edge products in deposition, etch and clean markets for those applications that do not require the most advanced wafer processing capability.

Products

Market	Process/Application	Technology	Products
Deposition	Metal Films	Electrochemical Deposition ("ECD") (Copper & Other)	SABRE® family
		Chemical Vapor Deposition ("CVD") Atomic Layer Deposition ("ALD") (Tungsten)	ALTUS® family
	Dielectric Films	Plasma-enhanced CVD ("PECVD") ALD Gapfill High-Density Plasma CVD ("HDP-CVD")	VECTOR® family Striker® family SPEED® family
Etch	Conductor Etch	Reactive Ion Etch	Kiyo® family, Versys® Metal family
	Dielectric Etch	Reactive Ion Etch	Flex® family Vantex® family
	Through-silicon Via ("TSV") Etch	Deep Reactive Ion Etch	Syndion® family
Clean	Wafer Cleaning	Wet Clean	EOS®, DV-Prime®, Da Vinci®, SP Series
	Bevel Cleaning	Dry Plasma Clean	Coronus® family

Deposition Processes and Product Families

Deposition processes create layers of dielectric (insulating) and metal (conducting) materials used to build a semiconductor device. Depending on the type of material and structure being made, different techniques are employed. Electrochemical deposition creates the copper wiring (interconnect) that links devices in an integrated circuit ("IC" or "chip"). Plating of copper and other metals is also used for TSV and WLP applications. Tiny tungsten connectors and thin barriers are made with the precision of chemical vapor deposition and atomic layer deposition, which adds only a few layers of atoms at a time. Plasma-enhanced CVD, high-density plasma CVD, and ALD are used to form the critical insulating layers that isolate and protect all of these electrical structures. Lastly, post-deposition treatments such as ultraviolet thermal processing are used to improve dielectric film properties.

ALTUS® Product Family

Tungsten and/or Molybdenum deposition is used to form conductive features such as contacts, vias, and wordlines on a chip. These features are small, often narrow, and use only a small amount of metal, so minimizing resistance and achieving complete fill can be difficult. At these nanoscale dimensions, even slight imperfections can impact device performance or cause a chip to fail. Our ALTUS® systems combine CVD and ALD technologies to deposit the highly conformal or selective films as needed for advanced tungsten metallization applications in both logic and memory. The Multi-Station Sequential Deposition architecture enables nucleation layer formation and bulk CVD/ALD fill to be performed in the same chamber ("in situ"). Our ALD technologies are used in the deposition of barrier films to achieve high step coverage with reduced thickness at lower temperatures relative to a conventional process.

SABRE® Product Family

Copper deposition lays down the electrical wiring for most semiconductor devices. Even the smallest defect - say, a microscopic pinhole or dust particle - in these conductive structures can impact device performance, from loss of speed to complete failure. The SABRE® ECD product family, which helped pioneer the copper interconnect transition, offers the precision needed for copper damascene manufacturing in logic and memory. System capabilities include cobalt deposition for logic applications and copper deposition directly on various liner materials, which is important for next-generation metallization schemes. For advanced WLP applications, such as forming conductive bumps, redistribution layers, TSV filing, and wafer level bonding, the SABRE® 3D family combines Lam's SABRE Electrofill® technology with additional innovation to deliver the high-quality films needed at high productivity. The modular architecture can be configured with multiple plating and pre/post-treatment cells, providing flexibility to address a variety of packaging applications, including HBM.

SPEED® Product Family

Dielectric gapfill processes deposit critical insulation layers between conductive and/or active areas by filling openings of various aspect ratios between conducting lines and between devices. With advanced devices, the structures being filled can be very tall and narrow. As a result, high-quality dielectric films are especially important due to the ever-increasing possibility of cross-talk and device failure. Our SPEED® HDP-CVD products provide a multiple dielectric film solution for high-quality gapfill with industry-leading throughput and reliability. SPEED® products have excellent particle performance, and their design allows large batch sizes between cleans and faster cleans.

Striker® Product Family

The latest memory, logic, and imaging devices require extremely thin, highly conformal dielectric films for continued device performance improvement and scaling. For example, ALD films are critical for spacer-based multiple patterning schemes where the spacers help define critical dimensions, as well as for insulating liners and gapfill in high aspect ratio features, which have little tolerance for voids and even the smallest defect. The Striker® single-wafer ALD products provide dielectric film solutions for these challenging requirements through application-specific material, process and hardware options that deliver film technology and defect performance.

VECTOR® Product Family

Dielectric film deposition processes are used to form some of the most difficult-to-produce insulating layers in a semiconductor device, including those used in the latest transistors and 3D structures. In some applications, these films require dielectric films to be exceptionally smooth and defect free since slight imperfections are multiplied greatly in subsequent layers. Our VECTOR® PECVD products are designed to provide the performance and flexibility needed to create these enabling structures within a wide range of challenging device applications. As a result of its design, VECTOR® produces superior thin film quality, along with exceptional within-wafer and wafer-to-wafer uniformity.

Etch Processes and Product Families

Etch processes help create chip features by selectively removing dielectric (insulating), metal, silicon and poly silicon (conducting/semiconducting) materials that have been added during deposition. These processes involve fabricating increasingly small, complex, and narrow features using many types of materials. The primary technology, reactive ion etch, bombards the wafer surface with ions (charged particles) to remove material. For the smallest features, atomic-layer etching ("ALE") removes a few atomic layers of material at a time. While conductor etch processes precisely shape critical electrical components like transistors, dielectric etch forms the insulating structures that protect conducting parts.

Flex® Product Family

Dielectric etch carves patterns in insulating materials to create barriers between the electrically conductive parts of a semiconductor device. For advanced devices, these structures can be extremely tall and thin and involve complex, sensitive materials. Slight deviations from the target feature profile - even at the atomic level - can negatively affect electrical properties of the device. To precisely create these challenging structures, our Flex® product family offers differentiated technologies and application-focused capabilities for critical dielectric etch applications. Uniformity, repeatability, and tunability are enabled by a unique multi-frequency, small-volume, confined plasma design. Flex® offers in situ multi-step etch and continuous plasma capability that delivers high productivity with low defectivity.

Vantex® Product Family

Dielectric etch processes remove non-conductive materials during the manufacturing of a semiconductor device. Leading-edge memory devices have especially challenging structures, such as extremely deep holes and trenches, that must be manufactured with tight tolerances. Our latest dielectric etch system, Vantex® creates high aspect ratio device features while maintaining critical dimension ("CD") uniformity and selectivity. Vantex® is part of our Sense.i® platform and offers advanced RF technology and repeatable wafer-to-wafer performance enabled by Equipment

Intelligence® to meet the needs of advanced memory manufacturing, primarily in 3D NAND high aspect ratio hole, trench, contact, and capacitor cell applications.

Kiyo® Product Family

Conductor etch helps shape the electrically active materials used in the parts of a semiconductor device. Even a slight variation in these miniature structures can degrade device performance. In fact, these structures are so tiny and sensitive that etch processes push the boundaries of the basic laws of physics and chemistry. Our Kiyo® product family delivers the high-performance capabilities needed to precisely and consistently form these features precisely and with high productivity. Proprietary Hydra technology in Kiyo® products improves CD uniformity by correcting for incoming pattern variability, and atomic-scale variability control with production-worthy throughput is achieved with plasma-enhanced ALE capability.

Syndion® Product Family

Plasma etch processes used to remove single crystal silicon and other materials deep into the wafer are collectively referred to as deep silicon etch. These may be deep trenches for CMOS image sensors, trenches for power and other devices, TSVs for HBM and advanced packaging, and other high aspect ratio features. These are created by etching through multiple materials sequentially, where each new material involves a change in the etch process. The Syndion® etch product family is optimized for deep silicon etch, providing the fast process switching with depth and cross-wafer uniformity control required to achieve precision etch results. The systems support both conventional single-step etch and rapidly alternating process, which minimizes damage and delivers precise depth uniformity.

Table of Contents

Versys® Metal Product Family

Metal etch processes play a key role in connecting the individual components that form an IC, such as forming wires and electrical connections. These processes can also be used to drill through metal hardmasks that are used to form the wiring for advanced devices. To enable these critical etch steps, the Versys® Metal product family provides high-productivity capability on a flexible platform. Superior CD, profile uniformity, and uniformity control are enabled by a symmetrical chamber design with independent process tuning features.

Clean Processes and Product Families

Clean techniques are used between manufacturing steps to clear away particles, contaminants, residues and other unwanted material that could later lead to defects and to prepare the wafer surface for subsequent processing. Wet processing technologies can be used for wafer cleaning and etch applications. Plasma bevel cleaning is used to enhance die yield by removing unwanted materials from the wafer’s edge that could impact the device area.

Coronus® Product Family

Bevel cleaning removes unwanted masks, residues, and films from the edge of a wafer between manufacturing steps. If not cleaned, these materials become defect sources. For instance, they can flake off and re-deposit on the device area during subsequent processes. Even a single particle that lands on a critical part of a device can ruin the entire chip. By inserting bevel clean processes at strategic points, these potential defect sources can be eliminated and more functional chips produced. By combining the precise control and flexibility of plasma with technology that protects the active die area, the Coronus® bevel clean family cleans the wafer’s edge to enhance die yield. The systems provide active die area protection by using plasma processing with proprietary confinement technology. Applications include post-etch, pre- and post-deposition, pre-lithography, and metal film removal to prevent arcing during plasma etch or deposition steps.

DV-Prime®, Da Vinci®, EOS®, and SP Series Product Families

Wafer cleaning is performed repeatedly during semiconductor device manufacturing and is a critical process that affects product yield and reliability. Unwanted microscopic materials - some no bigger than the tiny structures themselves - need to be cleaned effectively. At the same time, these processes must selectively remove residues that are chemically similar to the device films. For advanced WLP, the wet clean steps used between processes that form the package and external wiring have surprisingly complex requirements. These processes are called on to completely remove specific materials and leave other fragile structures undisturbed. In IoT products that include power devices, MEMS and image sensors, there is a unique requirement for wafer backside wet etch to uniformly thin the silicon wafer while protecting the device side of the wafer.

Based on our pioneering single-wafer spin technology, the DV-Prime® and Da Vinci® products provide the process flexibility needed with high productivity to address a wide range of wafer cleaning steps throughout the manufacturing process flow. As the latest of Lam’s wet clean products, EOS® delivers exceptionally low on-wafer defectivity and high throughput to address progressively demanding wafer cleaning applications. With a broad range of process capability, our SP Series products deliver cost-efficient, production-proven wet clean and silicon wet etch solutions for challenging WLP and IoT applications.

Fiscal Periods Presented

All references to fiscal years apply to our fiscal years, which ended June 25, 2023, June 26, 2022, and June 27, 2021.

Research and Development

The market for semiconductor capital equipment is characterized by rapid technological change and product innovation. Our ability to achieve and maintain our competitive advantage depends in part on our continued and timely development of new products and enhancements to existing products. Accordingly, we devote a significant portion of our personnel and financial resources to research and development (“R&D”) programs and seek to maintain close and responsive relationships with our customers and suppliers.

We believe current challenges for customers at various points in the semiconductor manufacturing process present opportunities for us. We expect to continue to make substantial investments in R&D to meet our customers’ product needs, support our growth strategy and enhance our competitive position.

Marketing, Sales, and Service

Our marketing, sales, and service efforts are focused on building long-term relationships with our customers and targeting product and service solutions designed to meet their needs. These efforts are supported by a team of product marketing and sales professionals as well as equipment and process engineers who work closely with individual customers to develop solutions for their wafer processing needs. We maintain ongoing service relationships with our customers and have an extensive network of service engineers in place throughout the United States, China, Europe, India, Japan, Korea, Southeast Asia, and Taiwan. We believe that comprehensive support programs and close working relationships with customers are essential to maintaining high customer satisfaction and our competitiveness in the marketplace.

We provide standard warranties for our systems. The warranty provides that systems will be free from defects in material and workmanship and will conform to agreed-upon specifications. The warranty is limited to repair of the defect or replacement with new or like-new equivalent goods and is valid when the buyer provides prompt notification within the warranty period of the claimed defect or non-conformity and also makes the items available for inspection and repair. We also offer extended warranty packages to our customers to purchase as desired.

International Sales

A significant portion of our sales and operations occur outside the United States (“U.S.”) and, therefore, may be subject to certain risks, including but not limited to compliance with U.S. and international laws and regulations, including U.S. export restrictions; tariffs and other barriers; difficulties in staffing and managing non-U.S. operations; adverse tax consequences; foreign currency exchange rate fluctuations; changes in currency controls; and economic and political conditions. Any of these factors may have a material adverse effect on our business, financial position, and results of operations and cash flows. For geographical reporting, revenue is attributed to the geographic location in which the customers’ facilities are located. Refer to Note 20 of our Consolidated Financial Statements, included in Part II, Item 8 of this 2023 Form 10-K, for the attribution of revenue by geographic region.

Long-lived Assets

Refer to Note 20 of our Consolidated Financial Statements, included in Part II, Item 8 of this 2023 Form 10-K, for information concerning the geographic locations of long-lived assets.

Customers

Our customers include many of the world’s leading semiconductor manufacturers. Customers continue to establish joint ventures, alliances, and licensing arrangements which have the potential to positively or negatively impact our competitive position and market opportunities. Refer to Note 9 of our Consolidated Financial Statements, included in Part II, Item 8 of this report, for information concerning customer concentrations. Our most significant customers during the fiscal years ending June 25, 2023, June 26, 2022, and June 27, 2021 included Intel Corporation; Kioxia Corporation; Micron Technology, Inc.; Samsung Electronics Company, Ltd.; and Taiwan Semiconductor Manufacturing Company. Additionally, SK hynix Inc, and Yangtze Memory Technologies Co., Ltd. were significant customers during the fiscal years ending June 26, 2022, and June 27, 2021.

A material reduction in orders from our customers could adversely affect our results of operations and projected financial condition. Our business depends upon the expenditures of semiconductor manufacturers. Semiconductor manufacturers’ businesses, in turn, depend on many factors, including their economic capability, the current and anticipated market demand for ICs, and the availability of equipment capacity to support that demand.

Manufacturing

Our manufacturing operations mainly consist of assembling and testing components, sub-assemblies, and modules that are then integrated into finished systems prior to shipment to or at the location of our customers. The assembly and testing of our products is conducted predominately in cleanroom environments.

We have agreements with third parties to outsource certain aspects of our manufacturing, production warehousing, and logistics functions. These outsourcing contracts may provide us more flexibility to scale our operations up or down in a timely and cost-effective manner. We believe that we have selected reputable providers and have secured their performance on terms documented in written contracts. However, it is possible that one or more of these providers could fail to perform as we expect, and such failure could have an adverse impact on our business and have a negative effect on our operating results and financial condition. Overall, we believe we have effective mechanisms to manage risks associated with our outsourcing relationships. Refer to Note 17 of our Consolidated Financial Statements, included in Part II, Item 8 of this report, for further information concerning our outsourcing commitments, reported as a component of purchase obligations.

Certain components and sub-assemblies that we include in our products may only be obtained from a single supplier. In response to supply chain constraints, we are engaged in efforts to obtain and qualify alternative sources to supply these products and in some circumstances protect against potential supply challenges by carrying inventory in excess of current need. Any prolonged inability to obtain these components could have an adverse effect on our operating results and could unfavorably impact our customer relationships.

Compliance with Government Regulations

As a public company with global operations, we are subject to a variety of governmental regulations across multiple jurisdictions, including those related to export controls, financial and other disclosures, corporate governance, anti-trust, intellectual property, privacy, anti-bribery, anti-corruption, anti-boycott, tax, labor, health and safety, conflict minerals, human trafficking, the management of hazardous materials, and carbon emissions, among others. Each of these regulations imposes costs on our business and has the potential to divert our management’s time and attention from revenue-generating and other profit maximizing activities to those associated with compliance. Efforts to comply with new and changing regulations have resulted in, and are likely to continue to result in, decreased net income and increased capital expenditures. If we are alleged or found by a court or regulatory agency not to be in compliance with regulations, we may be subject to fines, restrictions on our actions, reputational damage, and harm to our competitive position, and our business, financial condition, and/or results of operations could be adversely affected. For additional details, please refer to “Legal, Regulatory and Tax Risks – We Are Exposed to Various Risks from Our Regulatory Environment” in Item 1A: Risk Factors.

Regulations that impact trade, including tariffs, export controls, taxes, trade barriers, sanctions, the termination or modification of trade agreements, trade zones, and other duty mitigation initiatives, have the potential to increase our manufacturing costs, decrease margins, reduce the competitiveness of our products, or inhibit our ability to sell products or purchase necessary equipment and supplies, which could have a material adverse effect on our business, results of operations, or financial conditions. For additional details regarding the impacts of compliance with trade laws and regulations, please refer to “Business and Operational Risks – Our Future Success Depends Heavily on International Sales and the Management of Global Operations” and “Legal, Regulatory and Tax Risks – Our Sales to Customers in China, a Significant Region for Us, Have Been Impacted, and are Likely to be Materially and Adversely Affected by Export License Requirements and Other Regulatory Changes, or Other Governmental Actions in the Course of the Trade Relationship Between the U.S. and China” in Item 1A: Risk Factors.

We are subject to income, transaction, and other taxes in the United States and various foreign jurisdictions that impact our tax rate and profitability. For additional details regarding the impacts of compliance with tax laws and regulations, please refer to “Legal, Regulatory and Tax Risks – Our Financial Results May Be Adversely Impacted by Higher than Expected Tax Rates or Exposure to Additional Tax Liabilities” in Item 1A: Risk Factors.

An important element of our management strategy is to review acquisition prospects that would complement our existing products, augment our market coverage and distribution ability, enhance our technological capabilities, or accomplish other strategic objectives. However, for regulatory reasons, we may not be successful in our attempts to acquire or dispose of businesses, products, or technologies. For additional details regarding the impacts of regulations on acquisitions or dispositions we may attempt, please refer to “Business and Operational Risks – If We Choose to Acquire or Dispose of Businesses, Product Lines, and Technologies, We May Encounter Unforeseen Costs and Difficulties That Could Impair Our Financial Performance” in Item 1A: Risk Factors.

We are subject to a variety of domestic and international governmental regulations related to the handling, discharge, and disposal of toxic, volatile, or otherwise hazardous chemicals. For additional details regarding the impacts of compliance with environmental laws and regulations, please refer to “Legal, Regulatory and Tax Risks – A Failure to Comply with Environmental Regulations May Adversely Affect Our Operating Results” in Item 1A: Risk Factors.

Environmental, Social, and Governance

We strive to incorporate environmental, social and governance ("ESG") considerations into everything we do – from our operations and workplace practices, to how we source our materials and design our products. Our ESG report for calendar year 2022 details, among other items, a number of ESG goals. One such goal is to achieve net zero emissions by 2050, which we intend to achieve in part by meeting a number of interim targets related to our environmental impact. There have been no material impacts to capital expenditures or our results of operations associated with this goal, and there are no material cash commitments associated with the goal as of the fiscal year ended June 25, 2023.

Information contained on our website or in our annual ESG Report is not incorporated by reference into this or any other report we file with the Securities and Exchange Commission, or the SEC. Refer to “Item 1A. Risk Factors” for a discussion of risks and uncertainties we face related to ESG.

Competition

The semiconductor capital equipment industry is characterized by rapid change and is highly competitive throughout the world. To compete effectively, we invest significant financial resources targeted to strengthen and enhance our product and services portfolio and to maintain customer service and support locations globally. Semiconductor manufacturers evaluate capital equipment suppliers in many areas, including but not limited to process performance, productivity, defect control, customer support, and overall cost of ownership, which can be affected by many factors such as equipment design, reliability, software advancements, and similar factors. Our ability to succeed in the marketplace depends upon our ability to manufacture and ship products on a timeline that meets our customers’ needs, maintain existing products, and introduce product enhancements and new products that meet customer requirements on a timely basis. In addition, semiconductor manufacturers must make a substantial investment to qualify and integrate new capital equipment into semiconductor production lines. As a result, once a semiconductor manufacturer has selected a particular supplier’s equipment and qualified it for production, the manufacturer generally maintains that selection for that specific production application and technology node as long as the supplier’s products demonstrate performance to specification in the installed base. Accordingly, we may experience difficulty in selling to a given customer if that customer has qualified a competitor’s equipment. We must also continue to meet the expectations of our installed base of customers through the delivery of high-quality and cost-efficient spare parts in the presence of competition from third-party spare parts providers.

We face significant competition with all of our products and services. Our primary competitor in the dielectric and metals deposition market is Applied Materials, Inc. For ALD and PECVD, we also compete against ASM International and Wonik IPS. In the etch market, our primary competitors are Applied Materials, Inc.; Hitachi, Ltd.; and Tokyo Electron, Ltd., and our primary competitors in the wet clean market are Screen Holding Co., Ltd.; Semes Co., Ltd.; and Tokyo Electron, Ltd.

We face competition from a number of established and emerging companies in the industry. We expect our competitors to continue to improve the design and performance of their current products and processes, to introduce new products and processes with enhanced price/performance characteristics, and to provide more comprehensive offerings of products. If our competitors make acquisitions or enter into strategic relationships with leading semiconductor manufacturers, or other entities, covering products similar to those we sell, our ability to sell our products to those customers could be adversely affected. Strategic investments to encourage local semiconductor manufacturing and supply chain in China could increase competition from domestic equipment manufacturers in China. Additionally, the U.S. Government has enacted a number of export controls regulating the sales of certain technologies to customers in China, which provides an advantage to our international competitors. There can be no assurance that we will continue to compete successfully in the future.

Patents and Licenses

Our policy is to seek patents on inventions relating to new or enhanced products and processes developed as part of our ongoing research, engineering, manufacturing, and support activities. We currently hold a number of U.S. and foreign patents and applications covering various aspects of our products and processes. Our patents, which cover material aspects of our past and present core products, have current durations ranging from approximately one to twenty years. We believe that, although the patents we own and may obtain in the future will be of value, they alone will not determine our success. Our success depends principally upon our research and development, engineering, marketing, support, and delivery skills. However, in the absence of patent protection, we may be vulnerable to competitors who attempt to imitate our products, manufacturing techniques, and processes and may be more limited in our ability to exclude competitors than would otherwise be the case. In addition, other companies and inventors may receive patents that contain claims applicable to our products and processes. The sale of products covered by patents of others could require licenses that may not be available on terms acceptable to us, or at all. For further discussion of legal matters, see Item 3, “Legal Proceedings,” of this report.

Human Capital

We endeavor to be a great place to work globally by investing in a multi-faceted strategy that is rooted in building an inclusive and diverse workplace. To support our employees, we tailor our programs to meet the unique cultural needs and priorities within different regions around the world.

As of August 10, 2023, we had approximately 17,200 regular full-time employees, of which over 28% were engaged in research and development. Approximately 45% of our regular full-time employees are located in the United States, 48% in Asia, and 7% in Europe.

Inclusion and Diversity

To achieve their full potential, we believe it is important for every employee to feel valued, included, and empowered. We embrace inclusion and diversity (“I&D”) and proactively create opportunities to attract, retain, develop, and reward our employees. I&D is one of our strategic focus areas for the company. The three core pillars of our strategy include fostering inclusion, increasing diversity, and sharing our progress. We employ an executive leader of I&D who is responsible for driving our I&D strategy, building partnerships, and aligning with best practices.

Employment, Recruitment and Development

Our talented people are what makes our success possible. Many of our recruitment efforts are carried out through partnerships with key universities. In fact, many of our senior executives began their careers with us right out of college, demonstrating that programs that recruit university students have the potential to contribute to our leadership pipeline. To tap into the best and brightest students, we prioritize core initiatives including an internship program, campus events, and thesis awards and scholarships. We accelerate employee development, broaden career opportunities, and expand professional networks for employees through our mentorship, coaching, and rotation programs. Additionally, we offer leadership development programs which are designed to scale leadership across our business by guiding managers to motivate, inspire, and lead employees through change.

Employee Engagement

Employee engagement (i.e. satisfaction) and voice are critical to Lam's culture. We conduct a global survey at a regular cadence to gather input from employees on culture, I&D, career opportunity, and manager effectiveness. We also solicit employee feedback through in-person and online employee forums, engagement sessions, all-employee meetings, conversations with managers, and our Human Resource Support and Employee Relations programs.

Total Rewards

Our Total Rewards program incorporates a comprehensive compensation and benefits package aimed at supporting employees' financial, physical, and mental well-being. We conduct an annual review of salaries and benefits packages using third-party benchmarking surveys to ensure that our offerings are aligned with the marketplace and attractive to top talent. We offer our employees a competitive 401(k) benefit, an employee stock purchase plan, and annual cash bonuses. Stock awards are offered to executives and select employees.

We recognize the importance of time away from work for personal reasons, and we offer annual paid holidays and time off. Additionally, we offer paid parental leave benefits for parents welcoming a new child to the family through birth, adoption, or foster care placement.

Employee Health and Safety

Prioritizing the health, safety, and well-being of our employees is critical to our ongoing success. We invest in education, awareness, monitoring, and prevention programs to help recognize and control safety hazards. Our goal is to apply our environmental health and safety ("EHS") policies, programs, and response plans to anywhere we operate and to extend them to anyone who works on our sites with the intent to provide a safe environment during both routine and extraordinary circumstances. People managers in field support, manufacturing, R&D, warehouse, and logistics operations undergo formal safety leadership training biannually to enhance their skills in safety management and communication. We screen contractors' safety performance and require contractor compliance with specified safety standards.

We monitor our safety performance at the enterprise, regional, and site levels. By using our global incident tracking system, our corporate EHS team can assess and monitor safety trends to report to business units and executive leadership as a part of quarterly reviews. We maintain multi-site certifications for ISO 45001, the globally recognized standard for occupational health and safety management systems.

Information about our Executive Officers

As of August 10, 2023, the executive officers of Lam Research were as follows:

Name	Age	Title
Timothy M. Archer	56	President and Chief Executive Officer
Douglas R. Bettinger	56	Executive Vice President and Chief Financial Officer
Patrick J. Lord	57	Executive Vice President and Chief Operating Officer
Neil J. Fernandes	56	Senior Vice President, Global Customer Operations
Ava M. Hahn	50	Senior Vice President, Chief Legal Officer and Secretary
Vahid Vahedi	57	Senior Vice President and Chief Technology Officer
Seshasayee (Sesha) Varadarajan	48	Senior Vice President Global Products Group

Timothy M. Archer has been our president and chief executive officer since December 2018. Prior to this, he served as our president and chief operating officer, from January 2018 to November 2018. Mr. Archer joined us in June 2012 as our executive vice president, chief operating officer. Prior to joining us, he spent 18 years at Novellus Systems, Inc., ("Novellus") in various technology development and business leadership roles, including most recently as chief operating officer from January 2011 to June 2012; executive vice president of Worldwide Sales, Marketing, and Customer Satisfaction from September 2009 to January 2011; and executive vice president of the PECVD and Electrofill Business Units from November 2008 to September 2009. His tenure at Novellus also included assignments as senior director of technology for Novellus Systems Japan from 1999 to 2001 and senior director of technology for the Electrofill Business Unit from April 2001 to April 2002. He started his career in 1989 at Tektronix, where he was responsible for process development for high-speed bipolar ICs. Mr. Archer currently serves on the International Board of Directors for SEMI, the global industry association representing the electronics manufacturing and design supply chain. From 2020 to 2022, Mr. Archer served as chairman of the board for the National GEM Consortium, a nonprofit organization that is dedicated to increasing the participation of underrepresented groups at the master's and doctoral levels in engineering and science. Mr. Archer completed the Program for Management Development at the Harvard Graduate School of Business and earned a B.S. degree in applied physics from the California Institute of Technology.

Douglas R. Bettinger is our executive vice president and chief financial officer with responsibility for Finance, Tax, Treasury, and Investor Relations. Prior to joining the Company in 2013, Mr. Bettinger served as senior vice president and chief financial officer of Avago Technologies from 2008 to 2013. From 2007 to 2008, he served as vice president of Finance and corporate controller at Xilinx, Inc., and from 2004 to 2007, he was chief financial officer at 24/7 Customer, a privately held company. Mr. Bettinger worked at Intel Corporation from 1993 to 2004, where he held several senior-level finance positions, including corporate planning and reporting controller and Malaysia site operations controller. Mr. Bettinger currently serves on the Board of Directors of Lattice Semiconductor Corporation, the SEMI Board of Industry Leaders, and the Industrial Advisory Board of the University of Wisconsin School of Engineering. Mr. Bettinger earned an M.B.A. degree in finance from the University of Michigan and a B.S. degree in economics from the University of Wisconsin in Madison.

Patrick J. Lord is our executive vice president and chief operating officer, a position he has held since March 2023. In this role, Dr. Lord is responsible for several functions including, Global Operations; Customer Support; Global Quality; Environmental Health and Safety; Information Technology; and Global Resilience, Security, and Transformation. Dr. Lord previously served as executive vice president of CSBG and Global Operations from September 2020 to February 2023; and senior vice president and general manager of CSBG from December 2016 to September 2020. Prior to that, Dr. Lord held the position of group vice president and deputy general manager of the Global Products Group from September 2013 to December 2016. He served as the head of the Direct Metals, GapFill, Surface Integrity Group, and Integrated Metals ("DGSI") Business Units between June 2012 and September 2013. Prior to our acquisition of Novellus in June 2012, Dr. Lord was senior vice president and general manager of the DGSI Business Units at Novellus. Additionally, Dr. Lord held the position of senior vice president of Business Development and Strategic Planning. He joined Novellus in 2001 and held a number of other positions, including senior vice president and general manager of the CMP Business Unit, senior director of Business Development, senior director of Strategic Marketing, and acting vice president of Corporate Marketing. Before joining Novellus, Dr. Lord spent six years at KLA-Tencor in various product marketing and management roles. He earned his Ph.D., M.S., and B.S. degrees in mechanical engineering from the Massachusetts Institute of Technology.

Neil J. Fernandes is our senior vice president of Global Customer Operations, a position he has held since March 2023. Previously, he was global vice president of business development and sales operations and held other senior sales and customer-focused leadership positions at Lam. He joined the company in 2012 through the acquisition of Novellus, where he was the vice president of sales operations. Prior to that role, he held range of management positions in product marketing and process engineering at Novellus, Gasonics and Watkins-Johnson. Neil earned an M.S. degree in mechanical engineering from the University of Texas at Austin and a B.E. in mechanical engineering from the Manipal Institute of Technology.

Ava M. Hahn is our senior vice president, chief legal officer and secretary. She joined us in January 2020 and is responsible for global legal matters, ethics and compliance, global trade and government affairs. Prior to joining us, Ms. Hahn served as executive vice president, chief compliance officer, general counsel and secretary of CA Technologies, an enterprise software company, from February 2019 to November 2019 (until its acquisition by Broadcom Corp.), general counsel and secretary of Aruba Networks from April 2013 to June 2016 (until its acquisition by Hewlett Packard Enterprise), general counsel and secretary of ShoreTel, Inc. from 2007 to 2013, and general counsel and secretary of Genesis Microchip from 2002 to 2007. Ms. Hahn also served as general counsel of venture capital firms Kleiner Perkins and Felicis Ventures. She started her career at the law firm of Wilson Sonsini Goodrich & Rosati, where she practiced corporate and securities law. Ms. Hahn earned a J.D. from Columbia Law School and a B.A. in history from the University of California at Berkeley.

Vahid Vahedi is our senior vice president and chief technology officer, a position he has held since March 2023. Dr. Vahedi previously served as senior vice president and general manager of the Etch business unit beginning February 2018; and group vice president of the Etch product group beginning March 2012. Previously, he served as vice president of Etch Business Product Management and Marketing, vice president of Dielectric Etch, vice president of Conductor and 3DIC Etch, and director of Conductor Etch Technology Development. He joined us in 1995. He earned his Ph.D., M.S., and B.S. degrees in electrical engineering and computer science from the University of California at Berkeley.

Sesha Varadarajan is our senior vice president of the Global Products Group, a position he has held since March 2023. Mr. Varadarajan previously served as senior vice president and general manager of the Deposition Business Unit beginning February 2018; and group vice president of the Deposition product group beginning September 2013. Previously, he served as the head of the PECVD/Electrofill Business Unit between June 2012 and September 2013. Prior to our acquisition of Novellus in June 2012, Mr. Varadarajan was senior vice president and general manager of Novellus' PECVD and Electrofill Business Units. He joined Novellus in 1999 as a process engineer with the Electrofill Business Unit and held various roles in that business unit before being appointed director of technology in 2004. Between 2006 and 2008, he worked in the PECVD Business Unit, initially as director of technology, until being promoted to product general manager. In 2009, he returned to the Electrofill Business Unit as vice president and general manager. In mid-2011, he was promoted to senior vice president and general manager, where he was also responsible for the PECVD Business Unit. Mr. Varadarajan earned an M.S. degree in manufacturing engineering and material science from Boston University and a B.S. degree in mechanical engineering from the University of Mysore.

Item 1A. Risk Factors

In addition to the other information in this Annual Report on Form 10-K ("2023 Form 10-K"), the following risk factors should be carefully considered in evaluating us and our business because such factors may significantly impact our business, operating results, and financial condition. As a result of these risk factors, as well as other risks discussed in our other SEC filings, our actual results could differ materially from those projected in any forward-looking statements. No priority or significance is intended by, nor should be attached to, the order in which the risk factors appear.

INDUSTRY AND CUSTOMER RISKS

The Semiconductor Capital Equipment Industry Is Subject to Variability and Periods of Rapid Growth or Decline; We Therefore Face Risks Related to Our Strategic Resource Allocation Decisions

The semiconductor capital equipment industry has historically been characterized by rapid changes in demand. Variability in our customers' business plans may lead to changes in demand for our equipment and services, which could negatively impact our results. The variability in our customers' investments during any particular period is dependent on several factors, including but not limited to electronics demand, economic conditions (both general and in the semiconductor and electronics industries), industry supply and demand, prices for semiconductors, and our customers' ability to develop and manufacture increasingly complex and costly semiconductor devices. The changes in demand may require our management to adjust spending and other resources allocated to operating activities.

During periods of rapid growth or decline in demand for our products and services, we face significant challenges in maintaining adequate financial and business controls, management processes, information systems, and procedures for training, assimilating, and managing our workforce, and in appropriately sizing our supply chain infrastructure and facilities, work force, and other components of our business on a timely basis. If we do not adequately meet these challenges during periods of increasing or declining demand, our gross margins and earnings may be negatively impacted.

We continuously reassess our strategic resource allocation choices in response to the changing business environment. If we do not adequately adapt to the changing business environment, we may lack the infrastructure and resources to scale up our business to meet customer expectations and compete successfully during a period of growth, or we may expand our capacity and resources too rapidly and/or beyond what is appropriate for the actual demand environment, resulting in excess fixed costs.

Especially during transitional periods, resource allocation decisions can have a significant impact on our future performance, particularly if we have not accurately anticipated industry changes. Our success will depend, to a significant extent, on the ability of our executive officers and other members of our senior management to identify and respond to these challenges effectively.

Future Declines in the Semiconductor Industry, and the Overall World Economic Conditions on Which It Is Significantly Dependent, Could Have a Material Adverse Impact on Our Results of Operations and Financial Condition

Our business depends on the capital equipment expenditures of semiconductor manufacturers, which in turn depend on the current and anticipated market demand for integrated circuits. With the consolidation of customers within the industry, the semiconductor capital equipment market may experience rapid changes in demand driven both by changes in the market generally and the plans and requirements of particular customers. The economic, regulatory, political, and business conditions occurring nationally, globally, or in any of our key sales regions, which are often unpredictable, have historically impacted customer demand for our products and normal commercial relationships with our customers, suppliers, and creditors. Additionally, in times of economic uncertainty, our customers' budgets for our products, or their ability to access credit to purchase them, could be adversely affected. This would limit their ability to purchase our products and services. As a result, changing economic, regulatory, political or business conditions can cause material adverse changes to our results of operations and financial condition, including but not limited to:

- a decline in demand for our products or services;
- an increase in reserves on accounts receivable due to our customers' inability to pay us;
- an increase in reserves on inventory balances due to excess or obsolete inventory as a result of our inability to sell such inventory;
- valuation allowances on deferred tax assets;
- restructuring charges;
- asset impairments including the potential impairment of goodwill and other intangible assets;
- a decline in the value of our investments;
- exposure to claims from our suppliers for payment on inventory that is ordered in anticipation of customer purchases that do not come to fruition;
- a decline in the value of certain facilities we lease to less than our residual value guarantee with the lessor; and
- challenges maintaining reliable and uninterrupted sources of supply.

Fluctuating levels of investment by semiconductor manufacturers may materially affect our aggregate shipments, revenues, operating results, and earnings. Where appropriate, we will attempt to respond to these fluctuations with cost management programs aimed at aligning our expenditures with anticipated revenue streams, which sometimes result in restructuring charges. Even during periods of reduced revenues, we must continue to invest in R&D and maintain extensive ongoing worldwide customer service and support capabilities to remain competitive, which may temporarily harm our profitability and other financial results.

We Have a Limited Number of Key Customers

Sales to a limited number of large customers constitute a significant portion of our overall revenue, shipments, cash flows, collections, and profitability. As a result, the actions of even one customer may subject us to variability in those areas that is difficult to predict. In addition, large customers may be able to negotiate requirements that result in decreased pricing, increased costs, and/or lower margins for us and limitations on our ability to share technology with others. Similarly, significant portions of our credit risk may, at any given time, be concentrated among a limited number of customers so that the failure of even one of these key customers to pay its obligations to us could significantly impact our financial results.

We Face a Challenging and Complex Competitive Environment

We face significant competition from multiple competitors, and with increased consolidation efforts in our industry, as well as the emergence and strengthening of new, regional competitors, we may face increasing competitive pressures. Other companies continue to develop systems and/or acquire businesses and products that are competitive to ours and may introduce new products and product capabilities that may affect our ability to sell and support our existing products. We face a greater risk if our competitors enter into strategic relationships with leading semiconductor manufacturers covering products similar to those we sell or may develop, as this could adversely affect our ability to sell products to those manufacturers.

We believe that to remain competitive we must devote significant financial resources to offer products that meet our customers' needs, to maintain customer service and support centers worldwide, and to invest in product and process R&D. Technological changes and developing technologies have required, and are expected to continue to require, new and costly investments. Certain of our competitors, including those that are created and financially backed by foreign governments, have substantially greater financial resources and more extensive engineering, manufacturing, marketing, and customer service and support resources than we do and therefore have the potential to offer customers a more comprehensive array of products and/or product capabilities and to therefore achieve additional relative success in the semiconductor equipment industry. These competitors may deeply discount or give away products similar to those that we sell, challenging or even exceeding our ability to make similar accommodations and threatening our ability to sell those products. We also face competition from our own customers, who in some instances have established affiliated entities that manufacture equipment similar to ours. In addition, we face competition from companies that exist in a more favorable legal or regulatory environment than we do, who are able to sell products for certain applications at certain customers that we are prohibited from selling to under applicable export controls, allowing the freedom of action in ways that we may be unable to match. In many cases speed to solution is necessary for customer satisfaction and our competitors may be better positioned to achieve these objectives. For these reasons, we may fail to continue to compete successfully worldwide.

In addition, our competitors may be able to develop products comparable or superior to those we offer or may adapt more quickly to new technologies or evolving customer requirements. In particular, while we continue to develop product enhancements that we believe will address future customer requirements, we may fail in a timely manner to complete the development or introduction of these additional product enhancements successfully, or these product enhancements may not achieve market acceptance or be competitive. Accordingly, competition may intensify, and we may be unable to continue to compete successfully in our markets, which could have a material adverse effect on our revenues, operating results, financial condition, and/or cash flows.

Once a Semiconductor Manufacturer Commits to Purchase a Competitor's Semiconductor Manufacturing Equipment, the Manufacturer Typically Continues to Purchase That Competitor's Equipment, Making It More Difficult for Us to Sell Our Equipment to That Customer

Semiconductor manufacturers must make a substantial investment to qualify and integrate wafer processing equipment into a semiconductor production line. We believe that once a semiconductor manufacturer selects a particular supplier's processing equipment, the manufacturer generally relies upon that equipment for that specific production line application for an extended period of time, especially for customers that are more focused on tool reuse. Accordingly, we expect it to be more difficult to sell our products to a given customer for a product line application if that customer initially selects a competitor's equipment for the same product line application.

We Depend on Creating New Products and Processes and Enhancing Existing Products and Processes for Our Success; Consequently, We Are Subject to Risks Associated with Rapid Technological Change

Rapid technological changes in semiconductor manufacturing processes subject us to increased pressure to develop technological advances that enable those processes. We believe that our future success depends in part upon our ability to develop and offer new products with improved capabilities and to continue to enhance our existing products. If new products or existing products have reliability, quality, design, or safety problems, our performance may be impacted by reduced orders, higher manufacturing costs, delays in acceptance of and payment for new products, and additional service and warranty expenses. We may be unable to develop and manufacture products successfully, or products that we introduce may fail in the marketplace. For more than 25 years, the primary driver of technology advancement in the semiconductor industry has been to shrink the lithography that prints the circuit design on semiconductor chips. That driver could be approaching its technological limit, leading semiconductor manufacturers to investigate more complex changes in multiple technologies in an effort to continue technology development. In addition, the emergence of “big data” and new tools such as machine learning and artificial intelligence that capitalize on the availability of large data sets is leading semiconductor manufacturers and equipment manufacturers to pursue new products and approaches that exploit those tools to advance technology development. In the face of uncertainty on which technology solutions will become successful, we will need to focus our efforts on developing the technology changes that are ultimately successful in supporting our customers’ requirements. Our failure to develop and offer the correct technology solutions in a timely manner with productive and cost-effective products could adversely affect our business in a material way. Our failure to commercialize new products in a timely manner could result in loss of market share, unanticipated costs, and inventory obsolescence, which would adversely affect our financial results.

In order to develop new products and processes and enhance existing products and processes, we expect to continue to make significant investments in R&D, to investigate the acquisition of new products and technologies, to invest in or acquire such businesses or technologies, and to pursue joint development relationships with customers, suppliers, or other members of the industry. Our investments and acquisitions may not be as successful as we may expect, particularly in the event that we invest in or acquire product lines and technologies that are new to us. We may find that acquisitions are not available to us, for regulatory or other reasons, and that we must therefore limit ourselves to collaboration and joint venture development activities, which do not have the same benefits as acquisitions. Pursuing development through collaboration and/or joint development activities rather than through an acquisition poses substantial challenges for management, including those related to aligning business objectives; sharing confidential information, intellectual property and data; sharing value with third parties; and realizing synergies that might have been available in an acquisition but are not available through a joint development project. We must manage product transitions and joint development relationships successfully, as the introduction of new products could adversely affect our sales of existing products and certain jointly developed technologies may be subject to restrictions on our ability to share that technology with other customers, which could limit our market for products incorporating those technologies. Future technologies, processes, or product developments may render our current product offerings obsolete, leaving us with non-competitive products, obsolete inventory, or both. Moreover, customers may adopt new technologies or processes to address the complex challenges associated with next-generation devices. This shift may result in a reduction in the size of our addressable markets or could increase the relative size of markets in which we either do not compete or have relatively low market share.

Strategic Alliances and Customer Consolidation May Have Negative Effects on Our Business

Semiconductor manufacturing companies from time to time enter into strategic alliances or consolidate with one another to expedite the development of processes and other manufacturing technologies and/or achieve economies of scale. The outcomes of such an alliance can be the definition of a particular tool set for a certain function and/or the standardization of a series of process steps that use a specific set of manufacturing equipment, while the outcomes of consolidation can lead to an overall reduction in the market for semiconductor manufacturing equipment as customers' operations achieve economies of scale and/or increased purchasing power based on their higher volumes. In certain instances, this could work to our disadvantage if a competitor's tools or equipment become the standard equipment for such functions or processes. Additional outcomes of such consolidation may include our customers re-evaluating their future supplier relationships to consider our competitors' products and/or gaining additional influence over the pricing of products and the control of intellectual property or data.

Similarly, our customers may partner with, or follow the lead of, educational or research institutions that establish processes for accomplishing various tasks or manufacturing steps. If those institutions utilize a competitor's equipment when they establish those processes, it is likely that customers will tend to use the same equipment in setting up their own manufacturing lines. Even if they select our equipment, the institutions and the customers that follow their lead could impose conditions on acceptance of that equipment, such as adherence to standards and requirements or limitations on how we license our proprietary rights, that increase our costs or require us to take on greater risk. These actions could adversely impact our market share and financial results.

BUSINESS AND OPERATIONAL RISKS

Our Revenues and Operating Results Are Variable

Our revenues and operating results may fluctuate significantly from quarter to quarter or year to year due to a number of factors, not all of which are in our control. We manage our expense levels based in part on our expectations of future revenues. Because our operating expenses are based in part on anticipated future revenues, and a certain amount of those expenses are relatively fixed, a change in the timing of recognition of revenue and/or the level of gross profit from a small number of transactions can unfavorably affect operating results in a particular quarter or year. Factors that may cause our financial results to fluctuate unpredictably include but are not limited to:

- legal, tax, accounting, or regulatory changes (including but not limited to changes in import/export regulations and tariffs, such as regulations imposed by the U.S. government restricting exports to China) or changes in the interpretation or enforcement of existing requirements;
- macroeconomic, industry, and market conditions, including those caused by the Russian invasion of Ukraine or bank failures, and geopolitical issues;
- changes in average selling prices, customer mix, and product mix;
- foreign currency exchange rate fluctuations;

- economic conditions in the electronics and semiconductor industries in general and specifically the semiconductor equipment industry;
- the size and timing of orders from customers;
- changes in our deferred revenue balance, including as a result of factors such as volume purchase agreements, multi-year service contracts, back orders, and down payments toward purchases;
- consolidation of the customer base, which may result in the investment decisions of one customer or market having a significant effect on demand for our products or services;
- procurement shortages;
- the failure of our suppliers or outsource providers to perform their obligations in a manner consistent with our expectations;
- manufacturing difficulties;
- customer cancellations or delays in shipments, installations, customer payments, and/or customer acceptances;
- the extent that customers continue to purchase and use our products and services in their business;
- our customers’ reuse of existing and installed products, to the extent that such reuse decreases their need to purchase new products or services;
- our ability to develop, introduce, and market new, enhanced, and competitive products in a timely manner;
- our competitors’ introduction of new products;
- legal or technical challenges to our products and technologies;
- transportation, communication, demand, information technology, or supply disruptions based on factors outside our control, such as strikes, acts of God, wars, terrorist activities, widespread outbreak of illness, natural or man-made disasters, or climate change;
- management of supply chain risks;
- rising inflation or interest rates; and
- changes in our estimated effective tax rate.

Our Future Success Depends Heavily on International Sales and the Management of Global Operations

Non-U.S. sales, as reflected in Part II Item 7. Results of Operations of this 2023 Form 10-K, accounted for approximately 91%, 92%, and 94% of total revenue in fiscal years 2023, 2022, and 2021, respectively. We expect that international sales will continue to account for a substantial majority of our total revenue in future years.

We are subject to various challenges related to international sales and the management of global operations including, but not limited to:

- domestic and international trade regulations, policies, practices, relations, disputes and issues;
- domestic and international tariffs, export controls and other barriers;
- developing customers and/or suppliers, who may have limited access to capital resources;
- global or national economic and political conditions;
- changes in currency controls;
- differences in the enforcement of intellectual property and contract rights in varying jurisdictions;
- our ability to respond to customer and foreign government demands for locally sourced systems, spare parts, and services and develop the necessary relationships with local suppliers;
- changes in and compliance with U.S. and international laws and regulations affecting foreign operations, including U.S. and international trade restrictions and sanctions, anti-bribery, anti-corruption, anti-boycott, environmental, tax, and labor laws;
- fluctuations in interest and foreign currency exchange rates;
- the need for technical support resources in different locations; and
- our ability to secure and retain qualified people, and effectively manage people, in all necessary locations for the successful operation of our business.

There is inherent risk, based on the complex relationships among China, Japan, Korea, Taiwan, and the United States, that political, diplomatic and national security influences can lead to trade disputes, impacts and/or disruptions, in particular those affecting the semiconductor industry. This can adversely affect our business with China, Japan, Korea, and/or Taiwan and perhaps the entire Asia Pacific region or global economy. A significant trade dispute, impact and/or disruption in any area where we do business could have a materially adverse impact on our future revenue and profits.

Tariffs, export controls, additional taxes, trade barriers, sanctions, the termination or modification of trade agreements, trade zones, and other duty mitigation initiatives, and any reciprocal retaliatory actions, can increase our manufacturing costs, decrease margins, reduce the competitiveness of our products, disrupt our supply chain operations, or inhibit our ability to sell products or provide services, which has had and in the future could have a material adverse effect on our business, results of operations, or financial conditions. Certain of our international sales depend on our ability to obtain export licenses from the U.S. or foreign governments, and our inability to obtain such licenses, or an expansion of the number or kinds of sales for which export licenses are required, has limited and could in the future further limit the market for our products and has had and could in the future have an adverse impact on our revenues. As is discussed below under the heading “Our Sales to Customers in China, a Significant Region for Us, Have Been Impacted, and are Likely to Be Materially and Adversely Affected by Export License Requirements and Other Regulatory Changes, or Other Governmental Actions in the Course of the Trade Relationship Between the U.S. and China,” the U.S. government has recently imposed new controls, including expanded export license requirements, that significantly impact trade with China. In addition, the U.S. government has an ongoing process of assessing technologies that may be subject to new or additional export controls, and it is possible that such additional controls, if and when imposed, could further adversely impact our ability to sell our products outside the U.S. The implementation by the U.S. government of broad export controls restricting access to our technology (such as recent controls limiting exports to China) may cause customers with international operations to reconsider their use of and reliance on our products, which could adversely impact our future revenue and profits. Furthermore, there are risks that foreign governments may, among other things, take retaliatory actions; insist on the use of local suppliers; compel companies to partner with local companies to design and supply equipment on a local basis, requiring the transfer of intellectual property rights and/or local manufacturing; utilize their influence over their judicial systems to respond to intellectual property disputes or issues; and provide special incentives to government-backed local customers to buy from local competitors, even if their products are inferior to ours; all of which could adversely impact our revenues and margins.

We are exposed to potentially adverse movements in foreign currency exchange rates. The majority of our sales and expenses are denominated in U.S. dollars. However, we are exposed to foreign currency exchange rate fluctuations primarily related to revenues denominated in Japanese yen and expenses denominated in euro, Korean won, Malaysian ringgit, and Indian rupee. Further, in periods in which the U.S. dollar is strong relative to the local currencies of our international customers, this can potentially reduce demand for our products, which may compound the adverse effect of foreign exchange translation on our revenue. Currently, we hedge certain anticipated foreign currency cash flows, primarily anticipated revenues denominated in Japanese yen and expenses dominated in euro, Korean won, Malaysian ringgit, and Indian rupee. In addition, we enter into foreign currency hedge contracts to minimize the short-term impact of the foreign currency exchange rate fluctuations on certain foreign currency denominated monetary assets and liabilities, primarily third-party accounts receivables, accounts payables, and intercompany receivables and payables. We believe these are our primary exposures to currency rate fluctuation. We expect to continue to enter into hedging transactions, for the purposes outlined, for the foreseeable future. However, these hedging transactions may not achieve their desired effect because differences between the actual timing of the underlying exposures and our forecasts of those exposures may leave us either over or under hedged on any given transaction. Moreover, by hedging these foreign currency denominated revenues, expenses, monetary assets, and liabilities, we may miss favorable currency trends that would have been advantageous to us but for the hedges. Additionally, we are exposed to short-term foreign currency exchange rate fluctuations on non-U.S. dollar-denominated monetary assets and liabilities (other than those currency exposures previously discussed), and currently we do not enter into foreign currency hedge contracts against these exposures. In addition, our currency hedges do not necessarily mitigate the potential negative impact of a strong U.S. dollar on demand for our products. Therefore, we are subject to potential unfavorable foreign currency exchange rate fluctuations to the extent that we transact business (including intercompany transactions) in these currencies.

The magnitude of our overseas business also affects where our cash is generated. Certain uses of cash, such as share repurchases, payment of dividends, or the repayment of our notes, can usually only be made with onshore cash balances. Since the majority of our cash is generated outside of the United States, this may impact certain business decisions and outcomes.

Our Business Relies on Technology, Data, Intellectual Property and Other Sensitive Information That is Susceptible to Cybersecurity and Other Threats or Incidents

Our business is dependent upon the use and protection of technology, data, intellectual property and other sensitive information, which may be owned by, or licensed to, us or third parties, such as our customers and vendors. We maintain and rely upon certain critical information systems for the creation, transmission, use and storage of much of this information, and for the effective operation of our business. These information systems include but are not limited to, telecommunications, the Internet, our corporate intranet, various computer hardware and software applications, (some of which may be integrated into the products that we sell or be required in order to provide the services that we offer), network communications, and email. These information systems may be owned and maintained by us, our outsourced providers, or third parties such as vendors, contractors, customers and Cloud providers. In addition, we make use of Software-as-a-Service (SaaS) products for certain important business functions that are provided by third parties and hosted on their own networks and servers, or third-party networks and servers, all of which rely on networks, email and/or the Internet for their function.

The technology, data, intellectual property and other sensitive information we seek to protect are subject to loss, release, misappropriation or misuse, and the information systems containing or transmitting such technology, data, intellectual property and other sensitive information are subject to disruption, breach or failure, in each case as a result of various possible causes. Such causes may include mistakes or unauthorized actions by our employees or contractors, phishing schemes and other third-party attacks, and degradation or loss of service or access to data due to viruses, malware, denial of service attacks, destructive or inadequate code, power failures, or physical damage to computers, hard drives, communication lines, or networking equipment. Such causes may also include the use of techniques that change frequently or may be disguised or difficult to detect, or designed to remain dormant until a triggering event, or that may continue undetected for an extended period of time.

We have experienced cybersecurity and other threats and incidents in the past. Although past threats and incidents have not resulted in a material adverse effect, we may incur material losses related to cybersecurity and other threats or incidents in the future. If we were subject to a cybersecurity or other incident, it could have a material adverse effect on our business. Such adverse effects might include:

- loss of (or inability to access, e.g. through ransomware) confidential and/or sensitive information stored on these critical information systems or transmitted to or from those systems;
- the disruption of the proper function of our products, services and/or operations;

- the failure of our or our customers’ manufacturing processes;
- errors in the output of our work or our customers’ work;
- the loss or public exposure of the personal or other confidential information of our employees, customers or other parties;
- the public release of customer financial and business plans, customer orders and operational results;
- exposure to claims from our employees or third parties who are adversely impacted by such incidents;
- misappropriation or theft of our or a customer’s, supplier’s or other party’s assets or resources, including technology data, intellectual property or other sensitive information and costs associated therewith;
- reputational damage;
- diminution in the value of our investment in research, development and engineering; or
- our failure to meet, or violation of, regulatory or other legal obligations, such as the timely publication or filing of financial statements, tax information and other required communications.

While we have implemented ISO 27001 compliant security procedures and virus protection software, intrusion prevention systems, identity and access control, and emergency recovery processes, and we carefully select our third-party providers of information systems, to mitigate risks to the information systems that we rely on and to the technology, data, intellectual property and other sensitive information we seek to protect, those security procedures and mitigation and protection systems cannot be guaranteed to be fail-safe, and we may still suffer cybersecurity and other incidents. It has been difficult and may continue to be difficult to hire and retain employees with substantial cybersecurity acumen. In addition, there have been and may continue to be instances of our policies and procedures not being effective in enabling us to identify risks, threats and incidents in a timely manner, or at all, or to respond expediently, appropriately and effectively when incidents occur and repair any damage caused by such incidents, and such occurrences could have a material adverse effect on our business.

We May Not Achieve the Expected Benefits of Our Restructuring Plans and Business Transformation Initiatives, and These Efforts Could Have a Material Adverse Effect on Our Business, Operations, Financial Condition, Results of Operations and Competitive Position

In January 2023 we announced that we are implementing a restructuring plan consisting of a workforce reduction, and that we anticipate undertaking, and may in the future undertake, additional business restructuring, realignment and transformation initiatives. We expect to incur material costs and charges in connection with these plans and initiatives. While the restructuring plan is intended to better align our cost structure with the current economic environment and future business opportunities, and our anticipated transformation initiatives have the goal of strengthening our operations and achieving operational efficiencies, there can be no assurance that we will be successful in these plans and initiatives. Implementation of these plans and initiatives may be costly and disruptive to our business, we may not be able to complete them at the cost or within the time frame contemplated, and we may not be able to obtain the anticipated benefits within the projected timing or at all. Restructuring and transformation may adversely affect our internal programs and our ability to recruit and retain skilled and motivated personnel, may result in a loss of continuity, loss of accumulated knowledge and/or inefficiency during transitional periods, may require a significant amount of management and other employees' time and focus, and may be distracting to employees and management, which may divert attention from operating and growing our business. Additionally, reductions in our workforce may cause a reduction in our production output capabilities which could impact our ability to manufacture or ship products to customers within a mutually beneficial timeline. If we fail to achieve some or all of the expected benefits, it could have a material adverse effect on our business, operations, financial condition, results of operations and competitive position. For more information about our restructuring plan, see Note 22 of our Consolidated Financial Statements in Part II, Item 8 of this 2023 Form 10-K.

Disruptions to Our Supply Chain and Outsource Providers Could Impact Our Ability to Meet Demand, Increase Our Costs, and Adversely Impact Our Revenue and Operating Results

Our supply chain has played and will continue to play a key role in our product development, manufacturing operations, field installation and support. Our business depends on our timely supply of products and services to meet the demand from our customers, which depends in significant part on the timely delivery of parts, materials and services, including components and subassemblies, from our direct suppliers to us, and to our direct suppliers by other companies. In addition, outsource providers have played and will continue to play a key role both in the manufacturing and customer-focused operations described above, and in many of our transactional and administrative functions, such as information technology, facilities management, and certain elements of our finance organization. These providers and suppliers might suffer financial setbacks, be acquired by third parties, become subject to exclusivity arrangements that preclude further business with us, or be unable to meet our requirements or expectation due to their independent business decisions or force majeure events that could interrupt or impair their continued ability to perform as we expect. We may also experience significant interruptions of our manufacturing operations, delays in our ability to deliver or install products or perform services or to recognize revenue, increased costs or customer order cancellations as a result of:

- the failure or inability to accurately forecast demand and obtain sufficient quantities of quality parts on a cost-effective basis;
- volatility in the availability and cost of parts, materials or services, including increased costs due to rising inflation or interest rates or other market conditions;
- difficulties or delays in obtaining required import or export approvals;

- shipment delays and increased costs of shipment due to transportation interruptions, capacity constraints, or fuel shortages;
- shortages of semiconductor or other components or materials as a result of increases in demand;
- information technology or infrastructure failures, including those of a third-party supplier or service provider; and
- transportation or supply disruptions based on factors outside our control, such as strikes, acts of God, wars, terrorist activities, widespread outbreak of illness, natural or man-made disasters, or climate change.

Demand for electronic products and other factors, such as the COVID-19 pandemic, have resulted in, and may in the future result in, a shortage of parts, materials and services needed to manufacture, deliver and install our products, as well as delays in and unpredictability of shipments due to transportation interruptions. Such shortages, delays and unpredictability have adversely impacted, and may in the future impact, our suppliers' ability to meet our demand requirements. Difficulties in obtaining sufficient and timely supply of parts, materials or services, and delays in and unpredictability of shipments due to transportation interruptions, have adversely impacted, and may in the future adversely impact, our manufacturing operations and our ability to meet customer demand. In addition, difficulties in obtaining parts, materials or services necessary to deliver or install products or perform services have adversely impacted, and may in the future adversely impact, our ability to recognize revenue, our gross margins on the revenue we recognize, and our other operating results. Although we are endeavoring to pass along some of the impact of increased costs to our customers to counteract adverse impacts to our gross margins and other operating results, such measures could be unsuccessful, or could have the effect of reducing demand, which would adversely impact our revenue.

Further, increased restrictions imposed on a class of chemicals known as per- and polyfluoroalkyl substances ("PFAS"), which are widely used in a large number of products, including parts and materials that are incorporated into our products, may negatively impact our supply chain due to the potentially decreased availability, or non-availability, of PFAS-containing products. Proposed regulations under consideration could require that we transition away from the usage of PFAS-containing products, which could adversely impact our business, operations, revenue, costs, and competitive position. There is no assurance that suitable replacements for PFAS-containing parts and materials will be available at similar costs, or at all.

Although we attempt to select reputable providers and suppliers and we attempt to secure their performance on terms documented in written contracts, it is possible that one or more of these providers or suppliers could fail to perform as we expect, or fail to secure or protect intellectual property rights, and such failure could have an adverse impact on our business. In some cases, the requirements of our business mandate that we obtain certain components and sub-assemblies included in our products from a single supplier or a limited group of suppliers. Where practical, we endeavor to establish alternative sources to mitigate the risk that the failure of any single provider or supplier will adversely affect our business, but this is not feasible in all circumstances. Some key parts are subject to long lead-times or available only from a single supplier or limited group of suppliers, and some sourcing or subassembly is provided by suppliers located in countries other than the countries where we conduct our manufacturing. There is therefore a risk that a prolonged inability to obtain certain components or secure key services could impair our ability to manage operations, ship products, and generate revenues, which could adversely affect our operating results and damage our customer relationships.

The COVID-19 Pandemic Adversely Impacted, and May in the Future Adversely Impact, Our Business, Operations, and Financial Results

The COVID-19 pandemic and efforts by national, state and local governments worldwide to control its spread resulted in measures aimed at containing the disease such as quarantines, travel bans, shutdowns, and shelter in place or “stay at home” orders, which collectively significantly restricted the movement of people and goods and the ability of businesses to operate. These restrictions and measures, incidents of confirmed or suspected infections within our workforce or those of our suppliers or other business partners, and our efforts to act in the best interests of our employees, customers, and suppliers, affected and in the future may affect our business and operations by, among other things, causing facility closures, production delays and capacity limitations; disrupting production by our supply chain; disrupting the transport of goods from our supply chain to us and from us to our customers; requiring modifications to our business processes; requiring the implementation of business continuity plans; requiring the development and qualification of alternative sources of supply; requiring the implementation of social distancing measures that impede manufacturing processes; disrupting business travel; disrupting our ability to staff our on-site manufacturing and research and development facilities; delaying capital expansion projects; and necessitating teleworking by portions of our workforce. These impacts caused and in the future may cause delays in product shipments and product development, increases in costs, and decreases in revenue, profitability and cash from operations, which caused and in the future may cause an adverse effect on our results of operations that may be material. The pandemic resulted at various times in significant disruption of global financial markets, increases in levels of unemployment, and economic uncertainty, which adversely impacted our business and may do so in the future, and may lead to significant negative impacts on customer spending, demand for our products, the ability of our customers to pay, our financial condition and the financial condition of our suppliers, and our access to external sources of financing to fund our operations and capital expenditures.

We Face Risks Related to the Disruption of Our Primary Manufacturing and R&D Facilities

While we maintain business continuity plans, our manufacturing and R&D facilities are concentrated in a limited number of locations. These locations are subject to disruption for a variety of reasons, such as natural or man-made disasters, widespread outbreaks of illness, war, terrorist activities, political or governmental unrest or instability, disruptions of our information technology resources, utility interruptions, the effects of climate change, or other events beyond our control. Such disruptions may cause delays in developing or shipping our products, in engaging with customers on new product applications, or in supporting customers, which could result in the loss of business or customer trust, adversely affecting our business and operating results.

We Are Subject to Risks Relating to Product Concentration and Lack of Product Revenue Diversification

We derive a substantial percentage of our revenues from a limited number of products. Our products are priced up to the tens of millions of dollars per system. As a result, the inability to recognize revenue on even a few systems can cause a significantly adverse impact on our revenues for a given quarter, and, in the longer term, the continued market acceptance of these products is critical to our future success. Our business, operating results, financial condition, and cash flows could therefore be adversely affected by:

- a decline in demand for even a limited number of our products;
- a failure to achieve continued market acceptance of our key products;
- export restrictions or other regulatory or legislative actions that could limit our ability to sell those products to key customers or customers within certain markets;
- an improved version of products being offered by a competitor in the markets in which we participate;
- increased pressure from competitors that offer broader product lines;
- increased pressure from regional competitors;
- technological changes that we are unable to address with our products; or
- a failure to release new or enhanced versions of our products on a timely basis.

In addition, the fact that we offer limited product lines creates the risk that our customers may view us as less important to their business than our competitors that offer additional products and/or product capabilities, including new products that take advantage of “big data” or other new technologies such as machine learning and artificial intelligence. This may impact our ability to maintain or expand our business with certain customers. Such product concentration may also subject us to additional risks associated with technology changes. Our business is affected by our customers’ use of our products in certain steps in their wafer fabrication processes. Should technologies change so that the manufacture of semiconductors requires fewer steps using our products, this could have a larger impact on our business than it would on the business of our less concentrated competitors.

We May Fail to Protect Our Critical Proprietary Technology Rights, Which Could Affect Our Business

Our success depends in part on our proprietary technology and our ability to protect key components of that technology through patents, copyrights, trade secrets and other forms of protection. Protecting our key proprietary technology helps us achieve our goals of developing technological expertise and new products and systems that give us a competitive advantage; increasing market penetration and growth of our installed base; and providing comprehensive support and service to our customers. As part of our strategy to protect our technology, we currently hold a number of U.S. and foreign patents and pending patent applications, and we keep certain information, processes, and techniques confidential and/or as trade secrets. However, other parties may challenge or attempt to invalidate or circumvent any patents the U.S. or foreign governments issue to us; these governments may fail to issue patents for pending applications; or we may lose trade secret protection over valuable information due to our or third parties' intentional or unintentional actions or omissions or even those of our own employees. Additionally, intellectual property litigation can be expensive and time-consuming and even when patents are issued, or trade secret processes are followed, the legal systems in certain of the countries in which we do business might not enforce patents and other intellectual property rights as rigorously or effectively as the United States or may favor local entities in their intellectual property enforcement. The rights granted or anticipated under any of our patents, pending patent applications, or trade secrets may be narrower than we expect or, in fact, provide no competitive advantages. Moreover, because we selectively file for patent protection in different jurisdictions, we may not have adequate protection in all jurisdictions based on such filing decisions. Any of these circumstances could have a material adverse impact on our business.

Our Ability to Attract, Retain, and Motivate Key Employees Is Critical to Our Success

Our ability to compete successfully depends in large part on our ability to attract, retain, and motivate key employees with the appropriate skills, experiences and competencies. This is an ongoing challenge due to intense competition for top talent, fluctuations in industry or business economic conditions, as well as increasing geographic expansion, and these factors in combination may result in cycles of hiring activity and workforce reductions. Our success in hiring depends on a variety of factors, including the attractiveness of our compensation and benefit programs, global economic or political and industry conditions, our organizational structure, global competition for talent and the availability of qualified employees, the availability of career development opportunities, the ability to obtain necessary authorizations for workers to provide services outside their home countries, and our ability to offer a challenging and rewarding work environment. We periodically evaluate our overall compensation and benefit programs and make adjustments, as appropriate, to maintain or enhance their competitiveness. If we are not able to successfully attract, retain, and motivate key employees, we may be unable to capitalize on market opportunities and our operating results may be materially and adversely affected.

If We Choose to Acquire or Dispose of Businesses, Product Lines, and Technologies, We May Encounter Unforeseen Costs and Difficulties That Could Impair Our Financial Performance

An important element of our management strategy is to review acquisition prospects that would complement our existing products, augment our market coverage and distribution ability, enhance our technological capabilities, or accomplish other strategic objectives. As a result, we may seek to make acquisitions of complementary companies, products, or technologies, or we may reduce or dispose of certain product lines or technologies that no longer fit our long-term strategies. For regulatory or other reasons, we may not be successful in our attempts to acquire or dispose of businesses, products, or technologies, resulting in significant financial costs, reduced or lost opportunities, and diversion of management’s attention. Managing an acquired business, disposing of product technologies, or reducing personnel entails numerous operational and financial risks, including difficulties in assimilating acquired operations and new personnel or separating existing business or product groups, diversion of management’s attention away from other business concerns, amortization of acquired intangible assets, adverse customer reaction to our decision to cease support for a product, and potential loss of key employees or customers of acquired or disposed operations. There can be no assurance that we will be able to achieve and manage successfully any such integration of potential acquisitions, disposition of product lines or technologies, or reduction in personnel, or that our management, personnel, or systems will be adequate to support continued operations. Any such inabilities or inadequacies could have a material adverse effect on our business, operating results, financial condition, and/or cash flows.

In addition, any acquisition could result in changes such as potentially dilutive issuances of equity securities, the incurrence of debt and contingent liabilities, the amortization of related intangible assets, and goodwill impairment charges, any of which could materially adversely affect our business, financial condition, results of operations, cash flows, and/or the price of our Common Stock.

LEGAL, REGULATORY AND TAX RISKS

Our Sales to Customers in China, a Significant Region for Us, Have Been Impacted, and are Likely to Be Materially and Adversely Affected by Export License Requirements and Other Regulatory Changes, or Other Governmental Actions in the Course of the Trade Relationship Between the U.S. and China

China represents a large and fast-developing market for the semiconductor equipment industry and therefore is important to our business. Revenue in China, which includes global customers and domestic Chinese customers with manufacturing facilities in China, represented approximately 26%, 31%, and 35% of our total revenue for fiscal years 2023, 2022, and 2021, respectively. The U.S. and China have historically had a complex relationship that has included actions that have impacted trade between the two countries. Recently, these actions have included an expansion of export license requirements imposed by the U.S. government, which have limited the market for our products, adversely impacted our revenues, and increased our exposure to foreign competition, and could potentially do so to an even greater extent in the future. Most recently, the U.S. government has enacted new rules aimed at restricting China’s ability to manufacture advanced semiconductors, which include restrictions on exports, reexports or transfers to, or shipping, transmitting, transferring, or facilitating such movement to, or performing services at, customer facilities in China engaged in certain technology end-uses, without appropriate authorizations obtained from U.S. authorities. In addition, the U.S. Department of Commerce has enacted new rules that have expanded export license requirements for U.S. companies to sell certain items to companies and other end-users in China that are designated as military end-users or have operations that could support military end uses; has added additional Chinese companies to its restricted entity list and unverified list under suspicion of military-civil fusion, support of Russia, or other factors associated with a broadening scope of national security concerns (including Semiconductor Manufacturing International Corporation, or SMIC, and related entities, and Yangtze Memory Technologies Co., Ltd., or YMTC, and related entities); and has expanded an existing rule (referred to as the foreign direct product rule) in a manner that could cause foreign-made wafers, chipsets, and certain related items produced with many of our products to be subject to U.S. licensing requirements if Huawei Technologies Co. Ltd (“Huawei”) or its affiliates are parties to a transaction involving the items. These rules have required and may require us to apply for and obtain additional export licenses to supply certain of our products to customers in China, such as SMIC, YMTC and ChangXin Memory Technologies, Inc., and there is no assurance that we will be issued licenses that we apply for on a timely basis or at all. In addition, our customers (including but not limited to Chinese customers) may require U.S. export licenses for the use of our products in order to manufacture products, including semiconductor wafers and integrated circuits, for those of their customers (i.e. Huawei and its affiliates) that are subject to the expanded foreign direct product rule, which may adversely impact the demand for our products. The U.S. Department of Commerce could in the future add additional Chinese companies to its restricted entity list or unverified list or take other actions that could expand licensing requirements or otherwise impact the market for our products and our revenue. The implementation, interpretation and impact on our business of these rules and other regulatory actions taken by the U.S. government is uncertain and evolving, and these rules, other regulatory actions or changes, and other actions taken by the governments of either the U.S. or China, or both, that have occurred and may occur in the future could materially and adversely affect our results of operations.

We Are Exposed to Various Risks from Our Regulatory Environment

We are subject to various risks related to (1) new, different, inconsistent, or even conflicting laws, rules, and regulations that may be enacted by legislative or executive bodies and/or regulatory agencies in the countries that we operate; (2) disagreements or disputes related to international trade; and (3) the interpretation and application of laws, rules, and regulations. As a public company with global operations, we are subject to the laws of multiple jurisdictions and the rules and regulations of various governing bodies, including those related to export controls, financial and other disclosures, corporate governance, privacy, anti-corruption, such as the Foreign Corrupt Practices Act and other local laws prohibiting corrupt payments to governmental officials, anti-boycott compliance, conflict minerals or other social responsibility legislation, immigration or travel regulations, antitrust regulations, and laws or regulations relating to carbon emissions, as well as other laws or regulations imposed in response to climate change concerns, among others. Each of these laws, rules, and regulations imposes costs on our business, including financial costs and potential diversion of our management’s attention associated with compliance, and may present risks to our business, including potential fines, restrictions on our actions, and reputational damage if we do not fully comply.

To maintain high standards of corporate governance and public disclosure, we intend to invest appropriate resources to comply with evolving standards. Changes in or ambiguous interpretations of laws, regulations, and standards may create uncertainty regarding compliance matters. Efforts to comply with new and changing regulations have resulted in, and are likely to continue to result in, reduced operating income, and a diversion of management’s time and attention from revenue-generating activities to compliance activities. If we are found by a court or regulatory agency not to be in compliance with the laws and regulations, our business, financial condition, and/or results of operations could be adversely affected.

Intellectual Property, Indemnity, and Other Claims Against Us Can Be Costly and We Could Lose Significant Rights That Are Necessary to Our Continued Business and Profitability

Third parties may assert infringement, misappropriation, unfair competition, product liability, breach of contract, or other claims against us. From time to time, other persons send us notices alleging that our products infringe or misappropriate their patent or other intellectual property rights. In addition, law enforcement authorities may seek criminal charges relating to intellectual property or other issues. We also face risks of claims arising from commercial and other relationships. In addition, our bylaws and other indemnity obligations provide that we will indemnify officers and members of our Board of Directors against losses that they may incur in legal proceedings resulting from their service to us. From time to time, in the normal course of business, we indemnify third parties with whom we enter into contractual relationships, including customers and suppliers, with respect to certain matters. We have agreed, under certain conditions, to hold these third parties harmless against specified losses, such as those arising from a breach of representations or covenants, other third-party claims that our products when used for their intended purposes infringe the intellectual property rights of such other third parties, or other claims made against certain parties. In such cases, it is our policy either to defend the claims or to negotiate licenses or other settlements on commercially reasonable terms. However, we may be unable in the future to negotiate necessary licenses or reach agreement on other settlements on commercially reasonable terms, or at all, and any litigation resulting from these claims by other parties may materially and adversely affect our business and financial results, and we may be subject to substantial damage awards and penalties. Moreover, although we have insurance to protect us from certain claims and cover certain losses to our property, such insurance may not cover us for the full amount of any losses, or at all, and may be subject to substantial exclusions and deductibles.

Our Financial Results May Be Adversely Impacted by Higher than Expected Tax Rates or Exposure to Additional Tax Liabilities

We are subject to income, transaction, and other taxes in the United States and various foreign jurisdictions, and significant judgment is required to determine worldwide tax liabilities. The amount of taxes we pay is subject to ongoing audits in various jurisdictions, and a material assessment by a governing tax authority could affect our profitability. As a global company, our effective tax rate is highly dependent upon the geographic composition of worldwide earnings and tax regulations governing each region. Changes in the split of earnings between countries with differing statutory tax rates, in the valuation allowance of deferred tax assets, in tax laws, in material audit assessments, or in expirations of agreements with tax authorities could adversely affect our effective tax rate. In particular, the carrying value of deferred tax assets, which are predominantly in the United States, is dependent upon our ability to generate future taxable income in the United States.

On August 16, 2022, the Inflation Reduction Act (the “IRA”) was signed into law. In general, the provisions of the IRA will be effective beginning with our fiscal year 2024, with certain exceptions. The IRA includes a new 15% corporate minimum tax. We have evaluated the potential impacts of the IRA and do not expect it to have a material impact on our effective tax rate. However, we expect future guidance from the Treasury Department and will further analyze when the guidance is issued.

Recommendations made by the Organization for Economic Co-operation and Development’s Base Erosion and Profit Shifting 2.0 (“BEPS 2.0”) project have the potential to lead to changes in the tax laws in numerous countries, including the implementation of a global minimum tax. Several countries around the world have enacted or proposed changes to their existing tax laws based on these recommendations. As each country in which we operate evaluates their alignment with the recommendations, the timing and ultimate impact of any such changes on our effective tax rate remain uncertain. When fully enacted, such changes could have a material impact on our effective tax rate. We will continue to monitor the progress of the BEPS 2.0 implementation.

In addition, the U.S. has made several corporate income tax proposals, including changes in the taxation of non-U.S. income. If enacted, such changes could have a material impact on our effective tax rate.

Increasing and Evolving Environmental Regulations May Adversely Affect Our Operating Results

We are subject to a variety of domestic and international governmental regulations related to the handling, discharge, sale, and disposal of toxic, volatile, or otherwise hazardous or potentially hazardous substances, and the regulatory environment is dynamic. Failure to comply with present or future environmental regulations (such as future regulations imposed on the use or sale of PFAS or PFAS-containing products) could result in fines being imposed on us, require us to undertake remediation activities, suspend production, and/or cease operations, or cause our customers to not accept our products. These regulations could require us to alter or discontinue our current operations in certain jurisdictions, acquire significant additional equipment, incur substantial other expenses to comply with environmental regulations, or take other actions. Compliance obligations, as well as any failure to comply with current or future regulations governing the use, handling, sale, transport, or disposal of hazardous or potentially hazardous substances (including, but not limited to, PFAS) could subject us to future costs and liabilities that may adversely affect our operating results, financial condition, and ability to operate our business.

Our Bylaws Designate the Court of Chancery of the State of Delaware as the Sole and Exclusive Judicial Forum for Certain Legal Actions Between the Company and its Stockholders, Which May Discourage Lawsuits with Respect to Such Claims

Our bylaws provide that, unless we consent otherwise, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for lawsuits asserting certain stockholder claims (including claims asserted derivatively for our benefit), such as claims against directors and officers for breach of a fiduciary duty, claims arising under any provision of the General Corporation Law of Delaware or our certificate of incorporation or our bylaws, or claims governed by the internal affairs doctrine. This is a general summary of the bylaw provision; you should refer to the language of the bylaws for details. While the forum provision does not generally apply to direct claims arising under the Securities Exchange Act of 1934 or the Securities Act of 1933, derivative lawsuits that assert legal claims arising under these statutes could fall within the provision, as recent court decisions have held.

As a Delaware corporation, Delaware law controls issues of our internal affairs, including duties that our directors, officers, employees, and others owe to the Company and its stockholders. We believe that our exclusive forum provision benefits us, and our stockholders, by permitting relatively prompt resolution of lawsuits concerning our internal affairs, promoting consistent application of Delaware law in these lawsuits, and reducing the possibility of duplicative, costly, multi-jurisdictional litigation with the potential for inconsistent outcomes. However, the forum provision limits a stockholder’s ability to bring a claim in a judicial forum that it believes may be more favorable than Delaware, and this could discourage the filing of such lawsuits.

FINANCIAL, ACCOUNTING AND CAPITAL MARKETS RISKS

The Market for Our Common Stock Is Volatile, Which May Affect Our Ability to Raise Capital or Make Acquisitions or May Subject Our Business to Additional Costs

The market price for our Common Stock is volatile and has fluctuated significantly over the past years. The trading price of our Common Stock could continue to be highly volatile and fluctuate widely in response to a variety of factors, many of which are not within our control or influence. These factors include but are not limited to the following:

- general market, semiconductor, or semiconductor equipment industry conditions;
- economic or political events, trends, and unexpected developments occurring nationally, globally, or in any of our key sales regions;
- macroeconomic, industry and market conditions, including those caused by the Russian invasion of Ukraine or bank failures; and geopolitical issues;
- variations in our quarterly operating results and financial condition, including our liquidity;
- variations in our revenues, earnings, or other business and financial metrics from forecasts by us or securities analysts or from those experienced by other companies in our industry;
- announcements of restructurings, reductions in force, departure of key employees, and/or consolidations of operations;
- margin trading, short sales, hedging and derivative transactions involving our Common Stock;
- government regulations;
- developments in, or claims relating to, patent or other proprietary rights;
- technological innovations and the introduction of new products by us or our competitors;
- commercial success or failure of our new and existing products; or
- disruptions of relationships with key customers or suppliers.

In addition, the stock market experiences significant price and volume fluctuations. Historically, we have witnessed significant volatility in the price of our Common Stock due in part to the price of and markets for semiconductors. These and other factors have adversely affected and may again adversely affect the price of our Common Stock, regardless of our actual operating performance. In the past, following volatile periods in the price of their stock, many companies became the object of securities class action litigation. If we are sued in a securities class action, we could incur substantial costs, and it could divert management’s attention and resources and have an unfavorable impact on our financial performance and the price for our Common Stock.

We May Incur Impairments to Goodwill or Long-lived Assets

We review our goodwill identified in business combinations for impairment annually or whenever events or changes in circumstances indicate that the carrying amount of these assets may exceed the fair value. We review all other long-lived assets, including finite-lived intangible assets, whenever events or changes in circumstance indicate that these assets may not be recoverable. The process of evaluating the potential impairment of goodwill and other long-lived assets requires significant judgement. Negative industry or economic trends, including reduced market prices of our Common Stock, reduced estimates of future cash flows, disruptions to our business, slower growth rates, or lack of growth in our relevant business units, could lead to impairment charges against our long-lived assets, including goodwill and other intangible assets.

When evaluating goodwill, if we conclude that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then a quantitative impairment test is performed and we may be required to record an impairment charge in that period, which could adversely affect our result of operations.

When evaluating other long-lived assets, if we conclude that the estimated undiscounted cash flows attributable to the assets are less than their carrying value, we recognize an impairment loss based on the excess of the carrying amount of the assets over their respective fair values, which could adversely affect our results of operations.

Our valuation methodology for assessing impairment requires management to make judgments and assumptions based on historical experience and to rely heavily on projections of future operating performance. We operate in a highly competitive environment and projections of future operating results and cash flows may vary significantly from actual results. Additionally, if our analysis indicates potential impairment, we may be required to record additional charges to earnings in our financial statements, which could negatively affect our results of operations.

Our Leverage and Debt Service Obligations May Adversely Affect Our Financial Condition, Results of Operations, and Earnings per Share

We have $5.0 billion in aggregate principal amount of senior unsecured notes outstanding. Additionally, we have funding available to us under our $1.5 billion commercial paper program and our $1.5 billion revolving credit facility, which serves as a backstop to our commercial paper program. Our revolving credit facility also includes an option to increase the amount up to an additional $600.0 million, for a potential total commitment of $2.1 billion. We may, in the future, decide to enter into additional debt arrangements.

In addition, we have entered, and in the future may enter, into derivative instrument arrangements to hedge against the variability of cash flows due to changes in the benchmark interest rate of fixed rate debt. We could be exposed to losses in the event of nonperformance by the counterparties to our derivative instruments.

Our indebtedness could have adverse consequences, including:

- risk associated with any inability to satisfy our obligations;
- a portion of our cash flows that may have to be dedicated to interest and principal payments and may not be available for operations, working capital, capital expenditures, expansion, acquisitions, or general corporate or other purposes; and
- impairment of our ability to obtain additional financing in the future.

Our ability to meet our expenses and debt obligations will depend on our future performance, which will be affected by financial, business, economic, regulatory, and other factors. Furthermore, our operations may not generate sufficient cash flows, to enable us to meet our expenses and service our debt. As a result, we may need to enter into new financing arrangements to obtain the necessary funds. If we determine it is necessary to seek additional funding for any reason, we may not be able to obtain such funding or, if funding is available, obtain it on acceptable terms. If we fail to make a payment on our debt, we could be in default on such debt, and this default could cause us to be in default on our other outstanding indebtedness.

Our Credit Agreements Contain Covenant Restrictions That May Limit Our Ability to Operate Our Business

We may be unable to respond to changes in business and economic conditions, engage in transactions that might otherwise be beneficial to us, or obtain additional financing because our debt agreements contain, and any of our other future similar agreements may contain, covenant restrictions that limit our ability to, among other things:

- incur additional debt, assume obligations in connection with letters of credit, or issue guarantees;
- create liens;
- enter into transactions with our affiliates;
- sell certain assets; and
- merge or consolidate with any person.

Our ability to comply with these covenants is dependent on our future performance, which will be subject to many factors, some of which are beyond our control, including prevailing economic conditions. In addition, our failure to comply with these covenants could result in a default under the Senior Notes, or our other debt, which could permit the holders to accelerate such debt. If any of our debt is accelerated, we may not have sufficient funds available to repay such debt, which could materially and negatively affect our financial condition and results of operation.

There Can Be No Assurance That We Will Continue to Declare Cash Dividends or Repurchase Our Shares at All or in Any Particular Amounts

Our Board of Directors has declared quarterly dividends since April 2014. Our intent to continue to pay quarterly dividends and to repurchase our shares is subject to capital availability and periodic determinations by our Board of Directors that cash dividends and share repurchases are in the best interest of our stockholders and are in compliance with all laws and agreements applicable to the declaration and payment of cash dividends or the repurchasing of shares by us. Future dividends and share repurchases may also be affected by, among other factors, our views on potential future capital requirements for investments in acquisitions and the funding of our research and development; legal risks; changes in federal, state, and international tax laws or corporate laws; contractual restrictions, such as financial or operating covenants in our debt arrangements; availability of onshore cash flow; and changes to our business model. Our dividend payments and share repurchases may change from time to time, and we cannot provide assurance that we will continue to declare dividends or repurchase shares at all or in any particular amounts. A reduction or suspension in our dividend payments or share repurchases could have a negative effect on the price of our Common Stock.

If One or More of Our Counterparty Financial Institutions Default on Their Obligations To Us or Fail, We May Incur Significant Losses.

As part of our hedging activities, we enter into transactions involving derivative financial instruments, which may include forward contracts, option contracts, collars and swaps with various financial institutions. In addition, we have significant amounts of cash, cash equivalents and other investments on deposit or in accounts with banks or other financial institutions both in and out of the United States. As a result, we are exposed to the risk of default by or failure of counterparty financial institutions, which may be heightened during economic downturns and periods of uncertainty in the financial markets. If one of our counterparties were to become insolvent or file for bankruptcy, our ability to recover losses incurred as a result of default, or our assets deposited or held in accounts with such counterparty, may be limited by the counterparty's liquidity or the applicable laws governing the insolvency or bankruptcy proceedings. In the event of default or failure of one or more of our counterparties, we could incur significant losses, which could negatively impact our results of operations and financial condition.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our executive offices and principal operating and R&D facilities are located in Fremont and Livermore, California; Tualatin, Oregon; Yongin, Gyeonggi Province, Korea; Bengaluru, India; Salzburg, Austria; and Villach, Austria. In addition, we lease or own properties for our service, technical support, and sales personnel throughout the United States, China, Europe, India, Japan, Korea, Southeast Asia, and Taiwan and lease or own manufacturing facilities located in California, Ohio, Oregon, Austria, Korea, Malaysia, and Taiwan. The Company owns two properties in Fremont, as well as the majority of the Tualatin facilities. The majority of the Fremont and Livermore facilities are held under finance leases expiring in September 2027. Our Fremont, Livermore, and Villach leases include options to renew or purchase the facilities. Our facilities lease obligations are subject to periodic increases. We believe that our existing facilities are well-maintained and in good operating condition.

Item 3. Legal Proceedings

Please refer to the subsection entities “Legal Proceedings” within Note 17: Commitments and Contingencies to our Consolidated Financial Statements included in Part II, Item 8 of this 2023 Form 10-K.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Stock Information

Our Common Stock is traded on the Nasdaq Global Select Market[SM] under the symbol “LRCX.” As of August 10, 2023, we had 439 stockholders of record.

Dividends

Our Board of Directors has declared quarterly dividends since April 2014. Our intent to continue to pay quarterly dividends is subject to capital availability and periodic determinations by our Board of Directors that cash dividends are in the best interest of our stockholders and are in compliance with all laws and agreements applicable to the declaration and payment of cash dividends by us. During fiscal year 2023, our quarterly dividend declared was $1.725 per share.

Repurchases of Company Shares

In May 2022, the Board of Directors authorized management to repurchase up to an additional $5.0 billion of Common Stock; this authorization supplements the remaining balance from any prior authorization. These repurchases can be conducted on the open market or as private purchases and may include the use of derivative contracts with large financial institutions, in all cases subject to compliance with applicable law. This repurchase program has no termination date and may be suspended or discontinued at any time.

Accelerated Share Repurchase Agreements

On June 2, 2022, we entered into an accelerated share repurchase agreement (the "June 2022 ASR") with two financial institutions to repurchase a total of $500 million of Common Stock. We took an initial delivery of approximately 717 thousand shares, which represented 75% of the prepayment amount divided by our closing stock price on June 2, 2022. The total number of shares received under the June 2022 ASR was based upon the average daily volume weighted average price of our Common Stock during the repurchase period, less an agreed upon discount. Final settlement of the June 2022 ASR occurred in September 2022, resulting in the receipt of approximately 433 thousand additional shares, which yielded a weighted-average share price of $435.20 for the transaction period.

Share repurchases, including those under the repurchase program, were as follows:

Period	Total Number of Shares Repurchased [1]	Average Price Paid per Share [2, 3]	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Amount Available Under Repurchase Program
	(in thousands, except per share data)			
Available balance as of June 26, 2022				$5,514,636
Quarter ended September 25, 2022	686	$ 433.47	675	5,409,654
Quarter ended December 25, 2022	1,133	$ 429.27	1,125	4,926,428
Quarter ended March 26, 2023	1,165	$ 477.15	1,017	4,443,010
March 27, 2023 - April 23, 2023	379	$ 508.62	377	4,251,363
April 24, 2023 - May 21, 2023	608	$ 535.36	603	3,928,585
May 22, 2023 - June 25, 2023	638	$ 615.18	636	3,537,217
Total	4,609	$ 560.47 (4)	4,433	$3,537,217

(1) During the fiscal year ended June 25, 2023, we acquired 176 thousand shares at a total cost of $85.4 million which we withheld through net share settlements to cover minimum tax withholding obligations upon the vesting of restricted stock unit awards granted under our equity compensation plans. The shares retained by us through these net share settlements are not a part of the Board-authorized repurchase program but instead are authorized under our equity compensation plan.

(2) Average price paid per share excludes the effect of accelerated share repurchase activities. See additional disclosure above regarding our accelerated share repurchase activity during the fiscal year.

(3) As of January 1, 2023, our net share repurchases are subject to a 1% excise tax under the Inflation Reduction Act. Excise tax incurred reduces the amount available under repurchase programs, as applicable, and is included in the cost of shares repurchased in the Consolidated Statement of Stockholders' Equity and the calculation of the average price paid per share.

(4) Average price paid per share presented is for the quarter ended June 25, 2023.

Cumulative Five-Year Return

The graph below compares Lam Research Corporation’s cumulative five-year total shareholder return on Common Stock with the cumulative total returns of the Philadelphia Semiconductor Sector Total Return Index, the Nasdaq Composite Total Return index, and the Standard & Poor’s (“S&P”) 500 (TR) index. The graph tracks the performance of a $100 investment in our Common Stock and in each of the indices (with the reinvestment of all dividends) for the five years ended June 25, 2023.

COMPARISON OF FIVE-YEAR CUMULATIVE TOTAL RETURN*

Among Lam Research Corporation, the Philadelphia Semiconductor Sector Total Return Index, the Nasdaq Composite Total Return Index, and the S&P 500 (TR) Index.

4791

*$100 invested on June 24, 2018 in stock or index, including reinvestment of dividends.

	June 24, 2018	June 30, 2019	June 28, 2020	June 27, 2021	June 26, 2022	June 25, 2023
Lam Research Corporation	$ 100.00	$ 110.38	$ 181.00	$ 381.27	$ 275.29	$ 377.48
Philadelphia Semiconductor Sector Total Return Index	$ 100.00	$ 108.74	$ 145.86	$ 249.32	$ 211.77	$ 277.14
Nasdaq Composite Total Return Index	$ 100.00	$ 105.24	$ 129.57	$ 192.09	$ 156.35	$ 183.37
S&P 500 (TR) Index	$ 100.00	$ 108.98	$ 113.68	$ 164.28	$ 152.31	$ 172.25

Item 6. [Reserved]

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations

The following discussion of our financial condition and results of operations contains forward-looking statements, which are subject to risks, uncertainties, and changes in condition, significance, value, and effect. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of certain factors, including but not limited to those discussed in “Risk Factors” and elsewhere in this 2023 Form 10-K and other documents we file from time to time with the Securities and Exchange Commission. (See “Cautionary Statement Regarding Forward-Looking Statements” in Part I of this 2023 Form 10-K.)

Management’s Discussion and Analysis of Financial Condition and Results of Operations (“MD&A”) provides a description of our results of operations and should be read in conjunction with our Consolidated Financial Statements and accompanying Notes to Consolidated Financial Statements included in Part II, Item 8 of this 2023 Form 10-K. MD&A consists of the following sections:

Executive Summary provides a summary of the key highlights of our results of operations and our management’s assessment of material trends and uncertainties relevant to our business.

Results of Operations provides an analysis of operating results.

Critical Accounting Policies and Estimates discusses accounting policies that reflect the more significant judgments and estimates used in the preparation of our Consolidated Financial Statements.

Liquidity and Capital Resources provides an analysis of cash flows, contractual obligations, and financial position.

Executive Summary

Lam Research Corporation is a global supplier of innovative wafer fabrication equipment and services to the semiconductor industry. We have built a strong global presence with core competencies in areas like nanoscale applications enablement, chemistry, plasma and fluidics, advanced systems engineering and a broad range of operational disciplines. Our products and services are designed to help our customers build smaller, and better performing devices that are used in a variety of electronic products, including mobile phones, personal computers, servers, wearables, automotive vehicles, and data storage devices.

Our customer base includes leading semiconductor memory, foundry, and integrated device manufacturers that make products such as NVM, DRAM, and logic devices. Their continued success is part of our commitment to driving semiconductor breakthroughs that define the next generation. Our core technical competency is integrating hardware, process, materials, software, and process control enabling results on the wafer.

Semiconductor manufacturing, our customers’ business, involves the complete fabrication of multiple dies or integrated circuits on a wafer. This involves the repetition of a set of core processes and can require hundreds of individual steps. Fabricating these devices requires highly sophisticated process technologies to integrate an increasing array of new materials with precise control at the atomic scale.

Along with meeting technical requirements, wafer processing equipment must deliver high productivity and be cost-effective.

Demand from cloud computing, 5G, the Internet of Things, and other markets is driving the need for increasingly powerful and cost-efficient semiconductors. At the same time, there are growing technical challenges with traditional two-dimensional scaling. These trends are driving significant inflections in semiconductor manufacturing, such as the increasing importance of vertical scaling strategies like three-dimensional architecture as well as multiple patterning to enable shrinks.

We believe we are in a strong position with our leadership and expertise in deposition, etch, and clean to facilitate some of the most significant innovations in semiconductor device manufacturing. Our Customer Support Business Group provides products and services to maximize installed equipment performance, predictability and operational efficiency. Several factors create opportunity for sustainable differentiation for us: (i) our focus on research and development, with several on-going programs relating to sustaining engineering, product and process development, and concept and feasibility; (ii) our ability to effectively leverage cycles of learning from our broad installed base; (iii) our collaborative focus with semi-ecosystem partners; (iv) our ability to identify and invest in the breadth of our product portfolio to meet technology inflections; and (v) our focus on delivering our multi-product solutions with a goal to enhance the value of Lam’s solutions to our customers.

During fiscal year 2023, customer demand weakened in the second half of the year due to wafer fabrication equipment spending reductions resulting primarily from incremental demand weakness in memory. In addition, the U.S. government’s restrictions on sales of equipment, parts, and service for specific technologies and customers in China further impacted equipment demand in the year. While we did experience supply chain constraints in the first half of fiscal year 2023, there were improvements and we were able to fulfill shipments of nearly all our outstanding back order systems in the second half of the year. As a result of the expected reduced business levels, we initiated a restructuring plan in the quarter-ended March 26, 2023 designed to better align the Company’s cost structure with our outlook. We incurred a charge for the workforce actions associated with the restructuring plan of approximately $107 million in fiscal year 2023. Over the course of calendar year 2023, we are projecting expenditures in the range of $250 million associated with various business process improvements and initiatives, inclusive of the fiscal year 2023 restructuring activity. Risks and uncertainties related to trade restrictions, supply chain challenges, and inflationary pressures may continue to negatively impact our revenue and gross margin. Over the longer term, we believe that secular demand for semiconductors combined with technology inflections in our industry, including 3D device scaling, multiple patterning, process flow, and advanced packaging chip integration, will drive sustainable growth and lead to an increase in the served available market for our products and services in the deposition, etch, and clean businesses.

The following table summarizes certain key financial information for the periods indicated below:

	Year Ended			Change			
	June 25, 2023	June 26, 2022	June 27, 2021	FY23 vs. FY22		FY22 vs. FY21	
	(in thousands, except per share data and percentages)						
Revenue	$17,428,516	$17,227,039	$14,626,150	$ 201,477	1.2 %	$2,600,889	17.8 %
Gross margin	$ 7,776,925	$ 7,871,807	$ 6,805,306	$ (94,882)	(1.2)%	$1,066,501	15.7 %
Gross margin as a percent of total revenue	44.6 %	45.7 %	46.5 %	(1.1)%		(0.8)%	
Total operating expenses	$ 2,602,065	$ 2,489,985	$ 2,323,283	$ 112,080	4.5 %	$ 166,702	7.2 %
Net income	$ 4,510,931	$ 4,605,286	$ 3,908,458	$ (94,355)	(2.0)%	$ 696,828	17.8 %
Net income per diluted share	$ 33.21	$ 32.75	$ 26.90	$ 0.46	1.4 %	$ 5.85	21.7 %

Fiscal year 2023 revenue was slightly higher than fiscal year 2022. Customer support-related revenue increased in fiscal year 2023 due to continued strength in specialty node investments, which was offset by a decline in our systems revenue as a result of semiconductor demand weakness, largely in the memory market. Gross margin as a percentage of revenue decreased due to inflationary cost pressures that led to higher spending on material costs, as well as costs associated with restructuring related activities, partially offset by favorable customer and product mix. The increase in operating expenses in fiscal year 2023 compared to fiscal year 2022 was driven by higher deferred compensation plan-related costs, restructuring-related charges, employee-related costs as a result of increased headcount, depreciation and amortization, and supplies, partially offset by a decrease in amortization of intangible assets as the intangible assets associated with the acquisition of Novellus have fully amortized.

Fiscal year 2022 revenue increased over 17% compared to fiscal year 2021, reflecting continued strong customer demand for semiconductor equipment. Gross margin as a percentage of revenue decreased due to inflationary cost pressures that led to higher spending on material costs, freight and logistics, and labor-related expenses, as well as unfavorable customer and product mix, partially offset by decreased variable compensation. The increase in operating expenses in fiscal year 2022 compared to fiscal year 2021 was mainly driven by higher employee-related costs as a result of increased headcount, supplies expense, rent, repair and utilities expense, and outside services spending, partially offset by lower deferred compensation plan-related costs.

We aim to balance the requirements of our customers with the availability of resources, as well as performance to our operational and financial objectives. As a result, from time to time, we exercise discretion and judgment as to the timing and prioritization of manufacturing and deliveries of products, which has impacted, including in the current fiscal year, and may in the future impact, the timing of revenue recognition with respect to such products.

Our cash and cash equivalents, investments, and restricted cash and investments balances totaled approximately $5.6 billion as of June 25, 2023, compared to $3.9 billion as of June 26, 2022. Cash flows provided from operating activities was $5.2 billion for fiscal year 2023 compared to $3.1 billion for fiscal year 2022. Cash flows provided from operating activities in fiscal year 2023 was primarily used for $2.0 billion in treasury stock purchases, including net share settlement on employee stock-based compensation; $908 million in dividends paid to our stockholders; and $502 million of capital expenditures.

Results of Operations

Revenue

	Year Ended		
	June 25, 2023	June 26, 2022	June 27, 2021
Revenue (in millions)	$ 17,429	$ 17,227	$ 14,626
China	26 %	31 %	35 %
Korea	20 %	23 %	27 %
Taiwan	20 %	17 %	14 %
Japan	10 %	9 %	9 %
United States	9 %	8 %	6 %
Southeast Asia	8 %	8 %	6 %
Europe	7 %	4 %	3 %

Revenue increased in fiscal year 2023 compared to fiscal year 2022 mainly due to higher revenue from CSBG related to strength in mature node equipment. Revenue increased in fiscal year 2022 compared to fiscal year 2021 primarily due to the increased investment by our customers in semiconductor capital equipment as well as from CSBG for spares, services, upgrades and mature node equipment. While the overall Asia region continued to account for a majority of our revenues, the U.S. and Europe regions increased in each of fiscal years 2023 and 2022 compared to the prior fiscal year as these regions prioritized domestic capacity investments for semiconductor manufacturing.

The deferred revenue balance was $1.8 billion as of June 25, 2023 compared to $2.2 billion as of June 26, 2022. Advance deposit additions from newer customers increased in fiscal year 2023, compared to fiscal year 2022, offsetting the decline in deferred balances related to shipments we completed of tools that had critical parts outstanding.

The following table presents our revenue disaggregated between system and customer support-related revenue:

	Year Ended		
	June 25, 2023	June 26, 2022	June 27, 2021
		(in thousands)	
Systems Revenue	$10,695,897	$11,322,271	$ 9,764,845
Customer support-related revenue and other	6,732,619	5,904,768	4,861,305
	$17,428,516	$17,227,039	$14,626,150

Please refer to Note 4: Revenue of our Consolidated Financial Statements in Part II, Item 8 of this 2023 Form 10-K for additional information regarding the composition of the two categories into which revenue has been disaggregated.

The percentage of leading- and non-leading-edge equipment and upgrade revenue from each of the markets we serve was as follows:

	Year Ended		
	June 25, 2023	June 26, 2022	June 27, 2021
Memory	42 %	60 %	61 %
Foundry	38 %	26 %	32 %
Logic/integrated device manufacturing	20 %	14 %	7 %

Gross Margin

	Year Ended			Change			
	June 25, 2023	June 26, 2022	June 27, 2021	FY23 vs. FY22		FY22 vs. FY21	
	(in thousands, except percentages)						
Gross margin	$ 7,776,925	$ 7,871,807	$ 6,805,306	$ (94,882)	(1.2)%	$1,066,501	15.7 %
Percent of revenue	44.6 %	45.7 %	46.5 %	(1.1)%		(0.8)%	

The decrease in gross margin as a percentage of revenue for fiscal year 2023 compared to fiscal year 2022 was due to inflationary cost pressures that led to higher spending on material costs, partially offset by favorable customer and product mix.

The decrease in gross margin as a percentage of revenue for fiscal year 2022 compared to fiscal year 2021 was due to inflationary cost pressures that led to higher spending on material costs, freight and logistics, and labor-related expenses, as well as unfavorable customer and product mix, partially offset by decreased variable compensation.

Research and Development

	Year Ended			Change			
	June 25, 2023	June 26, 2022	June 27, 2021	FY23 vs. FY22		FY22 vs. FY21	
	(in thousands, except percentages)						
Research & development	$ 1,727,162	$ 1,604,248	$ 1,493,408	$ 122,914	7.7 %	$ 110,840	7.4 %
Percent of revenue	9.9 %	9.3 %	10.2 %	0.6%		(0.9)%	

We continued to make significant R&D investments focused on leading-edge deposition, etch, clean, and other semiconductor manufacturing processes. The increase in R&D expense during fiscal year 2023 compared to fiscal year 2022 was primarily driven by an increase of $43 million in employee-related costs as a result of increased headcount, $26 million in deferred compensation plan-related costs, $22 million in spending for supplies, and $14 million of depreciation and amortization.

The increase in R&D expense during fiscal year 2022 compared to fiscal year 2021 was mainly driven by an increase of $89 million in employee-related costs due in part to increased headcount and $43 million in spending for supplies, partially offset by a decrease of $44 million in deferred compensation plan-related costs.

Selling, General, and Administrative

	Year Ended			Change			
	June 25, 2023	June 26, 2022	June 27, 2021	FY23 vs. FY22		FY22 vs. FY21	
	(in thousands, except percentages)						
Selling, general, and administrative ("SG&A")	$ 832,753	$ 885,737	$ 829,875	$ (52,984)	(6.0)%	$ 55,862	6.7 %
Percent of revenue	4.8 %	5.1 %	5.7 %	(0.3)%		(0.6)%	

The decrease in SG&A expense during fiscal year 2023 compared to fiscal year 2022 was primarily driven by a decrease of $44 million in amortization of intangible assets, as the intangible assets associated with the acquisition of Novellus have fully amortized, as well as from $12 million in lower employee-related costs, partially offset by $17 million in higher deferred compensation plan-related costs.

The increase in SG&A expense during fiscal year 2022 compared to fiscal year 2021 was primarily driven by an increase of $28 million in outside service costs, $28 million in spending for rent, repair and utilities, and $26 million in employee-related costs due in part to increased headcount, partially offset by a decrease of $29 million in deferred compensation plan-related costs.

Restructuring Charges, Net

	Year Ended			Change			
	June 25, 2023	June 26, 2022	June 27, 2021	FY23 vs. FY22		FY22 vs. FY21	
	(in thousands, except percentages)						
Restructuring charges, net	$ 120,316	$ —	$ —	$ 120,316	100.0 %	$ —	— %
Percent of revenue	0.7 %	— %	— %	0.7%		—%	

In fiscal year 2023, we initiated a restructuring plan designed to better align our cost structure with our outlook for the economic environment and business opportunities. Under the plan we terminated approximately 1,650 employees, incurring expenses related to employee severance and separation costs. Employee severance and separation costs primarily relate to severance, non-cash severance, including equity award compensation expense, pension and other termination benefits. Additionally, we made a strategic decision to relocate certain manufacturing activities to pre-existing facilities and incurred costs to move inventory and equipment and exit selected supplier arrangements.

During fiscal year 2023 net restructuring costs of $78 million and $42 million were recorded in restructuring charges, net - cost of goods sold, and restructuring charges, net - operating expenses, respectively of our Consolidated Financial Statements. Please refer to Note 22: Restructuring charges, net of our Consolidated Financial Statements in Part II, Item 8 of this 2023 Form 10-K for additional information.

Other Income (Expense), Net

Other income (expense), net, consisted of the following:

	Year Ended			Change			
	June 25, 2023	June 26, 2022	June 27, 2021	FY23 vs. FY22		FY22 vs. FY21	
	(in thousands, except percentages)						
Interest income	$ 138,984	$ 15,209	$ 19,687	$ 123,775	813.8 %	$ (4,478)	(22.7)%
Interest expense	(186,462)	(184,759)	(208,597)	$ (1,703)	0.9 %	$ 23,838	(11.4)%
Gains (losses) on deferred compensation plan related assets, net	20,186	(38,053)	61,838	$ 58,239	(153.0)%	$ (99,891)	(161.5)%
Foreign exchange (losses) gains, net	(7,078)	(723)	(6,962)	$ (6,355)	879.0 %	$ 6,239	(89.6)%
Other, net	(31,280)	19,618	22,815	$ (50,898)	(259.4)%	$ (3,197)	(14.0)%
	$ (65,650)	$ (188,708)	$ (111,219)	$ 123,058	(65.2)%	$ (77,489)	69.7 %

Interest income increased in fiscal year 2023 compared to fiscal year 2022 primarily because of higher yields and higher cash balances. Interest income decreased in fiscal year 2022 compared to fiscal year 2021 as a result of lower cash balances.

Interest expense in fiscal year 2023 was flat compared to fiscal year 2022. Interest expense decreased in fiscal year 2022 compared to fiscal year 2021 primarily due to the payoff of $800 million of senior notes in June 2021.

The gains or losses on deferred compensation plan related assets, net were driven by fluctuations in the fair market value of the underlying funds for all periods presented.

Foreign exchange fluctuations were primarily due to currency movements against portions of our unhedged balance sheet exposures for all periods presented.

The variation in other, net for the fiscal year 2023 compared to fiscal years 2022 and 2021 was primarily driven by fluctuations in the fair market value of equity investments.

Income Tax Expense

Our provision for income taxes and effective tax rate for the periods indicated were as follows:

	Year Ended			Change			
	June 25, 2023	June 26, 2022	June 27, 2021	FY23 vs. FY22		FY22 vs. FY21	
	(in thousands, except percentages)						
Income tax expense	$ 598,279	$ 587,828	$ 462,346	$ 10,451	1.8 %	$ 125,482	27.1 %
Effective tax rate	11.7 %	11.3 %	10.6 %	0.4%		0.7%	

The increase in the effective tax rate in fiscal year 2023 as compared to fiscal year 2022 and the increase in the effective tax rate in fiscal year 2022 compared to fiscal year 2021 was primarily due to the change in level and proportion of income in higher and lower tax jurisdictions.

International revenues account for a significant portion of our total revenues, such that a material portion of our pre-tax income is earned and taxed outside the United States. International pre-tax income is taxable in the United States at a lower effective tax rate than the federal statutory tax rate. Please refer to Note 7 of our Consolidated Financial Statements in Part II, Item 8 of this 2023 Form 10-K.

Beginning in our fiscal year 2023, a provision enacted as part of the 2017 Tax Cuts & Jobs Act requires us to capitalize research and experimental expenditures for tax purposes. Due to this provision, we expect our cash tax payments to increase significantly in the near term and stabilize in future years as the capitalized expenditures continue to amortize.

On August 16, 2022, the IRA was signed into law. In general, the provisions of the IRA will be effective beginning with our fiscal year 2024, with certain exceptions. The IRA includes a new 15% corporate minimum tax. The impact on income taxes due to changes in legislation is required under the authoritative guidance of Accounting Standard Codification (“ASC”) 740, Income Taxes, to be recognized in the period in which the law is enacted. We have evaluated the potential impacts of the IRA and do not expect it to have a material impact on our effective tax rate. However, we expect future guidance from the Treasury Department and will further analyze when the guidance is issued.

Deferred Income Taxes

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, as well as the tax effect of carryforwards. Our gross deferred tax assets were $1,303 million and $1,103 million at the end of fiscal years 2023 and 2022, respectively. These gross deferred tax assets were offset by gross deferred tax liabilities of $238 million and $234 million and a valuation allowance primarily representing our entire California deferred tax asset balance due to the single sales factor apportionment resulting in lower taxable income in California of $352 million and $309 million at the end of fiscal years 2023 and 2022, respectively. The change in gross deferred tax assets, gross deferred tax liabilities, and valuation allowance between fiscal year 2023 and 2022 is primarily due to increases in gross deferred tax assets for outside basis differences of foreign subsidiaries, tax credits, and capitalized research and experimental expenditures.

We evaluate if the deferred tax assets are realizable on a quarterly basis and will continue to assess the need for changes in valuation allowances, if any.

Uncertain Tax Positions

We re-evaluate uncertain tax positions on a quarterly basis. This evaluation is based on factors including, but not limited to, changes in facts or circumstances, changes in tax law, effectively settled issues under audit, and new audit activity. Any change in recognition or measurement would result in the recognition of a tax benefit or an additional charge to the tax provision.

Critical Accounting Policies and Estimates

A critical accounting policy is defined as one that has both a material impact on our financial condition and results of operations and requires us to make difficult, complex and/or subjective judgments, often as a result of the need to make estimates about matters that are inherently uncertain. The preparation of financial statements in conformity with U.S. generally accepted accounting principles (“GAAP”) requires management to make certain judgments, estimates and assumptions that could affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. We base our estimates and assumptions on historical experience and on various other assumptions we believe to be applicable and evaluate them on an ongoing basis to ensure they remain reasonable under current conditions. Actual results could differ significantly from those estimates, which could have a material impact on our business, results of operations, and financial condition. Our critical accounting estimates include:

- the recognition and valuation of revenue from arrangements with multiple performance obligations which impacts revenue;
- the valuation of inventory, which impacts gross margin;
- the valuation of warranty reserves, which impacts gross margin;
- the recognition and measurement of current and deferred income taxes, including the measurement of uncertain tax positions, which impact our provision for income tax expenses; and
- the valuation and recoverability of long-lived assets, which impacts gross margin and operating expenses when we record asset impairments or accelerate their depreciation or amortization.

We believe that the following critical accounting policies reflect the more significant judgments and estimates used in the preparation of our consolidated financial statements regarding the critical accounting estimates indicated above. See Note 2: Summary of Significant Accounting Policies of our Consolidated Financial Statements in Part II, Item 8 of this 2023 Form 10-K for additional information regarding our accounting policies.

Revenue Recognition: We recognize revenue when promised goods or services are transferred to customers in an amount that reflects the consideration to which we expect to be entitled in exchange for those goods or services by following a five-step process, (1) identify the contract with a customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to the performance obligations in the contract, and (5) recognize revenue when or as we satisfy a performance obligation, as further described below.

Identify the contract with a customer. We generally consider documentation of terms with an approved purchase order as a customer contract, provided that collection is considered probable, which is assessed based on the creditworthiness of the customer as determined by credit checks, payment histories, and/or other circumstances.

Identify the performance obligations in the contract. Performance obligations include sales of systems, spare parts, and services. In addition, our customer contracts contain provisions for installation and training services which have been deemed immaterial in the context of the contract.

Determine the transaction price. The transaction price for our contracts with customers consists of both fixed and variable consideration provided it is probable that a significant reversal of revenue will not occur when the uncertainty related to variable consideration is resolved. Fixed consideration includes amounts to be contractually billed to the customer while variable consideration includes estimates for discounts and credits for future usage which are based on contractual terms outlined in volume purchase agreements and other factors known at the time. We generally invoice customers at shipment and for professional services either as provided or upon meeting certain milestones. Customer invoices are generally due within 30 to 90 days after issuance. Our contracts with customers typically do not include significant financing components as the period between the transfer of performance obligations and timing of payment are generally within one year.

Allocate the transaction price to the performance obligations in the contract. For contracts that contain multiple performance obligations, we allocate the transaction price to the performance obligations in the contract on a relative standalone selling price basis. Standalone selling prices are based on multiple factors including, but not limited to historical discounting trends for products and services and pricing practices in different geographies.

Recognize revenue when or as we satisfy a performance obligation. Revenue for systems and spares are recognized at a point in time, which is generally upon shipment or delivery. Revenue from services is recognized over time as services are completed or ratably over the contractual period of generally one year or less.

Inventory Valuation: Our policy is to assess the valuation of all inventories including manufacturing raw materials, work-in-process, finished goods, and spare parts in each reporting period. Obsolete inventory or inventory in excess of management’s estimated usage requirement is written down to its estimated net realizable value if less than cost. Estimates of market value include but are not limited to management’s forecasts related to our future manufacturing schedules, customer demand, technological and/or market obsolescence, general semiconductor market conditions, and possible alternative uses. If future customer demand or market conditions are less favorable than our projections, additional inventory write-downs may be required and would be reflected in cost of goods sold in the period in which the revision is made.

Warranty: We record a provision for estimated warranty expenses to cost of sales for each system when we recognize revenue. We periodically monitor the performance and cost of warranty activities, if actual costs incurred are different than our estimates, we may recognize adjustments to provisions in the period in which those differences arise or are identified. We do not maintain general or unspecified reserves; all warranty reserves are related to specific systems.

Income Taxes: Deferred income taxes reflect the net tax effect of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, as well as the tax effect of carryforwards. We record a valuation allowance to reduce our deferred tax assets to the amount that is more likely than not to be realized. Realization of our net deferred tax assets is dependent on future taxable income. We believe it is more likely than not that such assets will be realized; however, ultimate realization could be negatively impacted by market conditions and other variables not known or anticipated at this time. In the event that we determine that we will not be able to realize all or part of our net deferred tax assets, an adjustment will be charged to earnings in the period such determination is made. Likewise, if we later determine that it is more likely than not that the deferred tax assets will be realized, then the previously provided valuation allowance will be reversed.

We recognize the benefit from a tax position only if it is more likely than not that the position will be sustained upon audit based solely on the technical merits of the tax position. Our policy is to include interest and penalties related to uncertain tax positions as a component of income tax expense.

Long-lived Assets: We review goodwill at least annually for impairment during the fourth quarter of each fiscal year and if certain events or indicators of impairment occur between annual impairment tests. The process of evaluating the potential impairment of goodwill requires significant judgment. When reviewing goodwill for impairment, we first perform a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. In performing a qualitative assessment, we consider business conditions and other factors including, but not limited to (i) adverse industry or economic trends, (ii) restructuring actions and lower projections that may impact future operating results, (iii) sustained decline in share price, and (iv) overall financial performance and other events affecting the reporting units. If we conclude that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then a quantitative impairment test is performed by estimating the fair value of the reporting unit and comparing it to its carrying value, including goodwill allocated to that reporting unit.

We determine the fair value of our reporting units by using an income approach. Under the income approach, we determine fair value based on estimated future cash flows of each reporting unit, discounted by an estimated weighted-average cost of capital, which reflects the overall level of inherent risk of a reporting unit and the rate of return an outside investor would expect to earn.

In estimating the fair value of a reporting unit, we make estimates and judgments about the future cash flows of our reporting units, including estimated growth rates and assumptions about the economic environment. Although our cash flow forecasts are based on assumptions that are consistent with the plans and estimates we are using to manage the underlying businesses, there is significant judgment involved in determining the cash flows attributable to a reporting unit. In addition, we make certain judgments about allocating shared assets to the estimated balance sheets of our reporting units. Changes in judgment on these assumptions and estimates could result in a goodwill impairment charge.

If after completing the quantitative assessment the carrying value of a reporting unit exceeds its fair value, we would record an impairment charge equal to the excess of the carrying value of the reporting unit over its fair value, up to the amount of the goodwill assigned to the reporting unit.

For other long-lived assets, we review them whenever events or changes in circumstances indicate the carrying value of an asset or asset group may not be recoverable. If such indicators are present, we determine whether the sum of the estimated undiscounted cash flows attributable to the assets is less than their carrying value. If the sum is less, we recognize an impairment loss based on the excess of the carrying amount of the assets over their respective fair values. Fair value is determined by discounted future cash flows, appraisals or other methods. We recognize an impairment charge to the extent the present value of anticipated net cash flows attributable to the asset is less than the asset's carrying value. The fair value of the asset then becomes the asset's new carrying value, which we depreciate over the remaining estimated useful life of the asset. Assets to be disposed of are reported at the lower of the carrying amount or fair value. In addition, for fully amortized intangible assets, we de-recognize the gross cost and accumulated amortization in the period we determine the intangible asset no longer enhances future cash flows.

Recent Accounting Pronouncements

For a description of recent accounting pronouncements, including the expected dates of adoption and estimated effects, if any, on our consolidated financial statements, see Note 3: Recent Accounting Pronouncements of our Consolidated Financial Statements, included in Part II, Item 8 of this 2023 Form 10-K.

Liquidity and Capital Resources

Total gross cash, cash equivalents, investments, and restricted cash and investments balances were $5.6 billion at the end of fiscal year 2023 compared to $3.9 billion at the end of fiscal year 2022. This increase was primarily due to cash provided by operating activities, partially offset by Common Stock repurchases in connection with our stock repurchase program, dividends paid, and capital expenditures.

Cash Flow from Operating Activities

Net cash provided by operating activities of $5.2 billion during fiscal year 2023 consisted of (in thousands):

Net income	$	4,510,931
Non-cash charges:		
Depreciation and amortization		342,432
Deferred income taxes		(172,061)
Equity-based compensation expense		286,600
Changes in operating asset and liability accounts		158,738
Other		52,298
	$	5,178,938

Significant changes in operating asset and liability accounts, net of foreign exchange impact, included the following sources of cash: decreases in accounts receivable of $1.5 billion, deferred profit of $163 million, and prepaid expenses and other assets of $136 million; partially offset by the following uses of cash: increase in inventories of $962 million, and decreases in accounts payable of $522 million, and accrued expenses and other liabilities of $109 million.

Cash Flow from Investing Activities

Net cash used for investing activities during fiscal year 2023 was $535 million, primarily consisting of $502 million in capital expenditures and $120 million net cash disbursed for business acquisitions, partially offset by proceeds from sales and maturities of available-for-sale securities of $98 million.

Cash Flow from Financing Activities

Net cash used for financing activities during fiscal year 2023 was $2.8 billion, primarily consisting of $2.0 billion in Common Stock repurchases, including net share settlement on employee stock-based compensation; and $908 million of dividends paid; partially offset by $121 million of stock issuance and treasury stock reissuances associated with our employee stock-based compensation plans.

Liquidity

Given that the semiconductor industry is highly competitive and has historically experienced rapid changes in demand, we believe that maintaining sufficient liquidity reserves is important to support sustaining levels of investment in R&D and capital infrastructure. Anticipated cash flows from operations based on our current business outlook, combined with our current levels of cash, cash equivalents, and short-term investments as of June 25, 2023, are expected to be sufficient to support our anticipated levels of operations, investments, debt service requirements, capital expenditures, capital redistributions, and dividends through at least the next twelve months. However, factors outside of our control, including uncertainty in the global economy and the semiconductor industry, as well as disruptions in credit markets, have in the past, are currently, and could in the future, impact customer demand for our products, as well as our ability to manage normal commercial relationships with our customers, suppliers, and creditors.

In the longer term, liquidity will depend to a great extent on our future revenues and our ability to appropriately manage our costs based on demand for our products and services. While we have substantial cash balances, we may require additional funding and need or choose to raise the required funds through borrowings or public or private sales of debt or equity securities. We believe that, if necessary, we will be able to access the capital markets on terms and in amounts adequate to meet our objectives. However, domestic and global macroeconomic and political conditions could cause disruptions to the capital markets and otherwise make any financing more challenging, and there can be no assurance that we will be able to obtain such financing on commercially reasonable terms or at all.

Off-Balance Sheet Arrangements and Contractual Obligations

We have certain obligations to make future payments under various contracts, some of which are recorded on our balance sheet and some of which are not. Certain obligations that are recorded on our balance sheet in accordance with GAAP include our long-term debt, operating leases and finance leases; refer to Notes 14 and 15 of our Consolidated Financial Statements in Part II, Item 8 of this 2023 Form 10-K for further discussion. Our off-balance sheet arrangements and our transition tax liability are presented as purchase obligations, refer to Note 17 of our Consolidated Financial Statements in Part II, Item 8 of this 2023 Form 10-K for further discussion.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Investments

We maintain an investment portfolio of various holdings, types, and maturities. As of June 25, 2023, our mutual funds are classified as trading securities. Investments classified as trading securities are recorded at fair value based upon quoted market prices. Any material differences between the cost and fair value of trading securities are recognized as other income (expense), net in our Consolidated Statement of Operations. All of our other investments are classified as available-for-sale and consequently are recorded in the Consolidated Balance Sheets at fair value with unrealized gains or losses reported as a separate component of accumulated other comprehensive income, net of tax.

Interest Rate Risk

Fixed-Income Securities

Our investments in various interest-earning securities carry a degree of market risk for changes in interest rates. At any time, a sharp rise in interest rates could have a material adverse impact on the fair value of our fixed-income investment portfolio. Conversely, declines in interest rates could have a material adverse impact on interest income for our investment portfolio. We target to maintain a conservative investment policy, which focuses on the safety and preservation of our capital by limiting default risk, market risk, reinvestment risk, and concentration risk. As of June 25, 2023, our fixed income securities total $37.6 million. Market changes with hypothetical parallel shifts in the yield curve of plus or minus 50 basis points (“BPS”), 100 BPS, and 150 BPS, with a minimum interest rate of zero BPS, are not significant.

We mitigate default risk by investing in high credit quality securities and by positioning our portfolio to respond appropriately to a significant reduction in a credit rating of any investment issuer or guarantor. The portfolio includes only marketable securities with active secondary or resale markets to achieve portfolio liquidity and maintain a prudent amount of diversification.

Long-Term Debt

As of June 25, 2023, we had $5.0 billion in principal amount of fixed-rate long-term debt outstanding, with a fair value of $4.4 billion. The fair value of our Notes is subject to interest rate risk and market risk. Generally, the fair value of Notes will increase as interest rates fall and decrease as interest rates rise. The interest and market value changes affect the fair value of our Notes but do not impact our financial position, cash flows, or results of operations due to the fixed nature of the debt obligations. We do not carry the Notes at fair value but present the fair value of the principal amount of our Notes for disclosure purposes.

Equity Price Risk

Publicly Traded Securities

The values of our investments in publicly traded securities, including mutual funds related to our obligations under our deferred compensation plans, are subject to market price risk. As of June 25, 2023, our publicly traded securities total $106.7 million. Potential fluctuations in the price of each security in the portfolio of plus or minus 10%, 15%, or 25% are not significant.

Foreign Currency Exchange (“FX”) Risk

We conduct business on a global basis in several major international currencies. As such, we are potentially exposed to adverse as well as beneficial movements in foreign currency exchange rates. The majority of our revenues and expenses are denominated in U.S. dollars. However, we are exposed to foreign currency exchange rate fluctuations on non-U.S. dollar transactions or cash flows.

We enter into foreign currency forward contracts to minimize the short-term impact of exchange rate fluctuations on certain foreign currency denominated monetary assets and liabilities, primarily cash, third-party accounts receivable, accounts payable, and intercompany receivables and payables. In addition, we hedge certain anticipated foreign currency cash flows.

To protect against adverse movements in value of anticipated non-U.S. dollar transactions or cash flows, we enter into foreign currency forward and option contracts that generally expire within 12 months and no later than 24 months. The option contracts include collars, an option strategy that is comprised of a combination of a purchased put option and a written call option with the same expiration dates and notional amounts but with different strike prices. These foreign currency hedge contracts are designated as cash flow hedges and are carried on our balance sheet at fair value, with the effective portion of the contracts' gains or losses included in accumulated other comprehensive income (loss) and subsequently recognized in earnings in the same period the hedged revenue and/or expense is recognized. We also enter into foreign currency forward contracts to hedge the gains and losses generated by the remeasurement of certain non-U.S.-dollar denominated monetary assets and liabilities, primarily cash, third-party accounts receivable, accounts payable, and intercompany receivables and payables. The change in fair value of these balance sheet hedge contracts is recorded into earnings as a component of other income (expense), net, and offsets the change in fair value of the foreign currency denominated monetary assets and liabilities also recorded in other income (expense), net, assuming the hedge contract fully covers the hedged items. The unrealized gain of our outstanding forward and option contracts that are designated as cash flow hedges, as of June 25, 2023, and the change in fair value of these cash flow hedges assuming a hypothetical foreign currency exchange rate movement of plus or minus 10 percent and plus or minus 15 percent are not significant.

The unrealized loss of our outstanding foreign currency forward contracts that are designated as balance sheet hedges, as of June 25, 2023, and the change in fair value of these balance sheet hedges, assuming a hypothetical foreign currency exchange rate movement of plus or minus 10 percent and plus or minus 15 percent are not significant. These changes in fair values would be offset in other income (expense), net, by corresponding change in fair values of the foreign currency denominated monetary assets and liabilities, assuming the hedge contract fully covers the intercompany and trade receivable balances.

Item 8. Financial Statements and Supplementary Data

There were no retrospective changes to the Consolidated Statements of Operation for any quarters in the two most recent fiscal years that would require disclosure under Item 302 of Regulation S-K.

Index to Consolidated Financial Statements

LAM RESEARCH CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

	Year Ended		
	June 25, 2023	June 26, 2022	June 27, 2021
Revenue	$17,428,516	$17,227,039	$14,626,150
Cost of goods sold	9,573,425	9,355,232	7,820,844
Restructuring charges, net - cost of goods sold	78,166	—	—
Total cost of goods sold	9,651,591	9,355,232	7,820,844
Gross margin	7,776,925	7,871,807	6,805,306
Research and development	1,727,162	1,604,248	1,493,408
Selling, general, and administrative	832,753	885,737	829,875
Restructuring charges, net - operating expenses	42,150	—	—
Total operating expenses	2,602,065	2,489,985	2,323,283
Operating income	5,174,860	5,381,822	4,482,023
Other income (expense), net	(65,650)	(188,708)	(111,219)
Income before income taxes	5,109,210	5,193,114	4,370,804
Income tax expense	(598,279)	(587,828)	(462,346)
Net income	$ 4,510,931	$ 4,605,286	$ 3,908,458
Net income per share:			
Basic	$ 33.30	$ 32.92	$ 27.22
Diluted	$ 33.21	$ 32.75	$ 26.90
Number of shares used in per share calculations:			
Basic	135,472	139,899	143,609
Diluted	135,834	140,628	145,320

See Notes to Consolidated Financial Statements

LAM RESEARCH CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands)

	Year Ended		
	June 25, 2023	June 26, 2022	June 27, 2021
Net income	$ 4,510,931	$ 4,605,286	$ 3,908,458
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustment	6,858	(50,342)	14,398
Cash flow hedges:			
Net unrealized gains during the period	10,413	30,849	22,139
Net gains reclassified into net income	(9,411)	(29,054)	(3,468)
	1,002	1,795	18,671
Available-for-sale investments:			
Net unrealized gains (losses) during the period	1,491	(4,638)	(4,098)
Net (gains) losses reclassified into net income	(158)	1,390	786
	1,333	(3,248)	(3,312)
Defined benefit plans, net change in unrealized component	83	5,941	326
Other comprehensive income (loss), net of tax	9,276	(45,854)	30,083
Comprehensive income	$ 4,520,207	$ 4,559,432	$ 3,938,541

See Notes to Consolidated Financial Statements

LAM RESEARCH CORPORATION
CONSOLIDATED BALANCE SHEETS
(in thousands, except per share data)

	June 25, 2023	June 26, 2022
ASSETS:		
Cash and cash equivalents	$ 5,337,056	$ 3,522,001
Investments	37,641	135,731
Accounts receivable, less allowance of $5,344 as of June 25, 2023 and $5,606 as of June 26, 2022	2,823,376	4,313,818
Inventories	4,816,190	3,966,294
Prepaid expenses and other current assets	214,149	347,391
Total current assets	13,228,412	12,285,235
Property and equipment, net	1,856,672	1,647,587
Restricted cash and investments	250,316	251,534
Goodwill	1,622,489	1,515,113
Intangible assets, net	168,454	101,850
Other assets	1,655,300	1,394,313
Total assets	$18,781,643	$17,195,632
LIABILITIES AND STOCKHOLDERS' EQUITY:		
Trade accounts payable	$ 470,702	$ 1,011,208
Accrued expenses and other current liabilities	2,010,637	1,974,272
Deferred profit	1,695,221	1,571,898
Current portion of long-term debt and finance lease obligations	8,358	7,381
Total current liabilities	4,184,918	4,564,759
Long-term debt and finance lease obligations, less current portion	5,003,183	4,998,449
Income taxes payable	882,084	931,117
Other long-term liabilities	501,286	422,941
Total liabilities	10,571,471	10,917,266
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, at par value of $0.001 per share; authorized - 5,000 shares, none outstanding	—	—
Common stock, at par value of $0.001 per share; authorized 400,000 shares as of June 25, 2023 and June 26, 2022; issued and outstanding 133,297 shares as of June 25, 2023, and 136,975 shares as of June 26, 2022	133	137
Additional paid-in capital	7,809,002	7,414,916
Treasury stock, at cost, 161,380 shares as of June 25, 2023, and 157,087 shares as of June 26, 2022	(21,530,353)	(19,481,429)
Accumulated other comprehensive loss	(100,706)	(109,982)
Retained earnings	22,032,096	18,454,724
Total stockholders' equity	8,210,172	6,278,366
Total liabilities and stockholders' equity	$18,781,643	$17,195,632

See Notes to Consolidated Financial Statements

LAM RESEARCH CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended		
	June 25, 2023	June 26, 2022	June 27, 2021
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net income	$ 4,510,931	$ 4,605,286	$ 3,908,458
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	342,432	333,739	307,151
Deferred income taxes	(172,061)	(257,438)	(151,477)
Equity-based compensation expense	286,600	259,064	220,164
Other, net	52,298	(44,751)	(17,392)
Changes in operating asset and liability accounts:			
Accounts receivable, net of allowance	1,452,256	(1,287,680)	(928,928)
Inventories	(961,968)	(1,351,344)	(792,591)
Prepaid expenses and other assets	136,016	(53,121)	(59,189)
Trade accounts payable	(522,200)	167,884	184,615
Deferred profit	163,467	604,573	508,008
Accrued expenses and other liabilities	(108,833)	123,462	409,344
Net cash provided by operating activities	5,178,938	3,099,674	3,588,163
CASH FLOWS FROM INVESTING ACTIVITIES:			
Capital expenditures and intangible assets	(501,568)	(546,034)	(349,096)
Business acquisitions, net of cash acquired	(119,955)	—	—
Purchases of available-for-sale securities	—	(567,819)	(3,389,388)
Proceeds from maturities of available-for-sale securities	91,295	190,269	2,381,758
Proceeds from sales of available-for-sale securities	6,837	1,543,434	1,472,152
Other, net	(11,171)	(7,575)	(42,155)
Net cash (used for) provided by investing activities	(534,562)	612,275	73,271

	Year Ended		
	June 25, 2023	June 26, 2022	June 27, 2021
CASH FLOWS FROM FINANCING ACTIVITIES:			
Principal payments on long-term debt and finance lease obligations and payments for debt issuance costs	$ (23,206)	$ (11,889)	$ (862,060)
Treasury stock purchases	(2,017,012)	(3,865,663)	(2,697,704)
Dividends paid	(907,907)	(815,290)	(726,992)
Reissuances of treasury stock related to employee stock purchase plan	109,899	108,178	97,764
Proceeds from issuance of common stock	11,111	5,682	24,123
Other, net	(3,552)	45	(2,113)
Net cash used for financing activities	(2,830,667)	(4,578,937)	(4,166,982)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	128	(30,227)	7,215
Net increase (decrease) in cash, cash equivalents and restricted cash	1,813,837	(897,215)	(498,333)
Cash, cash equivalents and restricted cash at beginning of year	3,773,535	4,670,750	5,169,083
Cash, cash equivalents and restricted cash at end of year	$ 5,587,372	$ 3,773,535	$ 4,670,750
Schedule of non-cash transactions			
Accrued payables for stock repurchases, including applicable excise tax	$ 45,486	$ 46	$ 20,005
Accrued payables for capital expenditures	31,899	80,296	61,392
Dividends payable	231,267	205,615	185,431
Transfers of finished goods inventory to property and equipment	76,856	75,068	80,252
Supplemental disclosures:			
Cash payments for interest	$ 174,745	$ 175,528	$ 203,932
Cash payments for income taxes, net	809,748	807,669	518,567

Reconciliation of cash, cash equivalents, and restricted cash	June 25, 2023	June 26, 2022	June 27, 2021
Cash and cash equivalents	$ 5,337,056	$ 3,522,001	$ 4,418,263
Restricted cash and cash equivalents	250,316	251,534	252,487
Total cash, cash equivalents, and restricted cash	$ 5,587,372	$ 3,773,535	$ 4,670,750

See Notes to Consolidated Financial Statements

LAM RESEARCH CORPORATION

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(in thousands, except per common share data)

	Common Stock Shares	Common Stock	Additional Paid-in Capital	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total
Balance at June 28, 2020	145,331	$ 145	$6,695,858	$(12,949,889)	$ (94,211)	$11,520,591	$5,172,494
Issuance of common stock	1,089	1	24,122	—	—	—	24,123
Purchase of treasury stock	(5,819)	(5)	—	(2,717,622)	—	—	(2,717,627)
Reissuance of treasury stock	484	—	76,954	20,810	—	—	97,764
Equity-based compensation expense	—	—	220,164	—	—	—	220,164
Effect of conversion of convertible notes	1,416	2	24,869	—	—	—	24,871
Reclassification from temporary to permanent equity	—	—	10,995	—	—	—	10,995
Adoption of ASU 2018-18	—	—	—	—	—	1,157	1,157
Net income	—	—	—	—	—	3,908,458	3,908,458
Other comprehensive income	—	—	—	—	30,083		30,083
Cash dividends declared ($5.20 per common share)	—	—	—	—	—	(745,294)	(745,294)
Balance at June 27, 2021	142,501	143	7,052,962	(15,646,701)	(64,128)	14,684,912	6,027,188
Issuance of common stock	795	1	5,681	—	—	—	5,682
Purchase of treasury stock	(6,574)	(7)	—	(3,845,697)	—	—	(3,845,704)
Reissuance of treasury stock	253	—	97,209	10,969	—	—	108,178
Equity-based compensation expense	—	—	259,064	—	—	—	259,064
Net income	—	—	—	—	—	4,605,286	4,605,286
Other comprehensive loss	—	—	—	—	(45,854)	—	(45,854)
Cash dividends declared ($6.00 per common share)	—	—	—	—	—	(835,474)	(835,474)
Balance at June 26, 2022	136,975	137	7,414,916	(19,481,429)	(109,982)	18,454,724	6,278,366
Issuance of common stock	615	1	11,110	—	—	—	11,111
Purchase of treasury stock	(4,609)	(5)	—	(2,062,447)	—	—	(2,062,452)
Reissuance of treasury stock	316	—	96,376	13,523	—	—	109,899
Equity-based compensation expense	—	—	286,600	—	—	—	286,600
Net income	—	—	—	—	—	4,510,931	4,510,931

See Notes to Consolidated Financial Statements

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
June 25, 2023

Note 1: Company and Industry Information

The Company designs, manufactures, markets, refurbishes, and services semiconductor processing equipment used in the fabrication of integrated circuits. Semiconductor manufacturing, our customers' business, involves the complete fabrication of multiple dies or integrated circuits on a wafer. This involves the repetition of a set of core processes and can require hundreds of individual steps. Fabricating these devices requires highly sophisticated process technologies to integrate an increasing array of new materials with precise control at the atomic scale. Along with meeting technical requirements, wafer processing equipment must deliver high productivity and be cost-effective.

The Company sells its products and services primarily to companies involved in the production of semiconductors in the United States, China, Europe, Japan, Korea, Southeast Asia, and Taiwan.

The semiconductor industry is cyclical in nature and has historically experienced periodic downturns and upturns. Today's leading indicators of changes in customer investment patterns, such as electronics demand, memory pricing, and foundry utilization rates, may not be any more reliable than in prior years. Demand for the Company's equipment can vary significantly from period to period as a result of various factors including, but not limited to, economic conditions; supply, demand, and prices for semiconductors; customer capacity requirements; and the Company's ability to develop and market competitive products. For these and other reasons, the Company's results of operations for fiscal years 2023, 2022, and 2021 may not necessarily be indicative of future operating results.

Note 2: Summary of Significant Accounting Policies

The preparation of financial statements in conformity with GAAP requires management to make judgments, estimates, and assumptions that could affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. The Company bases its estimates and assumptions on historical experience and on various other assumptions it believes to be applicable and evaluates them on an ongoing basis to ensure they remain reasonable under current conditions. Actual results could differ significantly from those estimates.

Revenue Recognition: The Company recognizes revenue when promised goods or services are transferred to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services by following a five-step process, (1) identify the contract with a customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to the performance obligations in the contract, and (5) recognize revenue when or as the Company satisfies a performance obligation, as further described below.

Identify the contract with a customer. The Company generally considers documentation of terms with an approved purchase order as a customer contract provided that collection is considered probable, which is assessed based on the creditworthiness of the customer as determined by credit checks, payment histories, and/or other circumstances.

Identify the performance obligations in the contract. Performance obligations include sales of systems, spare parts, and services. In addition, customer contracts contain provisions for installation and training services which have been deemed immaterial in the context of the contract.

Determine the transaction price. The transaction price for the Company's contracts with its customers consists of both fixed and variable consideration provided it is probable that a significant reversal of revenue will not occur when the uncertainty related to variable consideration is resolved. Fixed consideration includes amounts to be contractually billed to the customer while variable consideration includes estimates for discounts and credits for future usage which are based on contractual terms outlined in volume purchase agreements and other factors known at the time. The Company generally invoices customers at shipment and for professional services either as provided or upon meeting certain milestones. Customer invoices are generally due within 30 to 90 days after issuance. The Company's contracts with customers typically do not include significant financing components as the period between the transfer of performance obligations and timing of payment are generally within one year.

Allocate the transaction price to the performance obligations in the contract. For contracts that contain multiple performance obligations, the Company allocates the transaction price to the performance obligations on a relative standalone selling price basis. Standalone selling prices are based on multiple factors including, but not limited to historical discounting trends for products and services and pricing practices in different geographies.

Recognize revenue when or as the Company satisfies a performance obligation. Revenue for systems and spares are recognized at a point in time, which is generally upon shipment or delivery. Revenue from services is recognized over time as services are completed or ratably over the contractual period of generally one year or less.

Inventory Valuation: Inventories are stated at the lower of cost or net realizable value using standard costs that approximate actual costs on a first-in, first-out basis. Finished goods are reported as inventories until the point of title transfer to the customer.

Unless specified in the terms of sale, title generally transfers at the physical transfer of the products to the freight carriers. Transfer of title for shipments to Japanese customers occurs at the time of customer acceptance.

Management evaluates the need to record adjustments for impairment of inventory at least quarterly. The Company’s policy is to assess the valuation of all inventories including manufacturing raw materials, work-in-process, finished goods, and spare parts in each reporting period. Obsolete inventory or inventory in excess of management’s estimated usage requirement is written down to its estimated market value if less than cost. Estimates of market value include but are not limited to management’s forecasts related to the Company’s future manufacturing schedules, customer demand, technological and/or market obsolescence, general semiconductor market conditions, and possible alternative uses. If future customer demand or market conditions are less favorable than the Company’s projections, additional inventory write-downs may be required and would be reflected in cost of goods sold in the period in which the revision is made.

Warranty: Typically, the sale of semiconductor capital equipment includes providing parts and service warranties to customers as part of the overall price of the system. The Company provides standard warranties for its systems. The Company records a provision for estimated warranty expenses to cost of sales for each system when it recognizes revenue. The Company does not maintain general or unspecified reserves; all warranty reserves are related to specific systems. All actual or estimated parts and labor costs incurred in subsequent periods are charged to those established reserves on a system-by-system basis.

While the Company periodically monitors the performance and cost of warranty activities, if actual costs incurred are different than its estimates, the Company may recognize adjustments to provisions in the period in which those differences arise or are identified. In addition to the provision of standard warranties, the Company offers customer-paid extended warranty services. Revenues for extended maintenance and warranty services with a fixed payment amount are recognized on a straight-line basis over the term of the contract. Related costs are recorded as incurred.

Equity-based Compensation — Employee Stock Plans: The Company recognizes the fair value of equity-based compensation expense. The Company determines the fair value of its RSUs, excluding market-based performance RSUs, based upon the fair market value of Company’s Common Stock at the date of grant, discounted for dividends. The Company estimates the fair value of its market-based performance RSUs using a Monte Carlo simulation model at the date of the grant. The Company estimates the fair value of its stock options using a Black-Scholes option valuation model. This model requires the input of subjective assumptions, including expected stock price volatility and the estimated life of each award. The Company amortizes the fair value of equity-based awards over the vesting periods of the award, and the Company has elected to use the straight-line method of amortization.

Income Taxes: Deferred income taxes reflect the net tax effect of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, as well as the tax effect of carryforwards. The Company records a valuation allowance to reduce its deferred tax assets to the amount that is more likely than not to be realized. Realization of its net deferred tax assets is dependent on future taxable income. The Company believes it is more likely than not that such assets will be realized; however, ultimate realization could be negatively impacted by market conditions and other variables not known or anticipated at this time. In the event that the Company determines that it will not be able to realize all or part of its net deferred tax assets, an adjustment will be charged to earnings in the period such determination is made. Likewise, if the Company later determines that it is more likely than not that the deferred tax assets will be realized, then the previously provided valuation allowance will be reversed.

The Company recognizes the benefit from a tax position only if it is more likely than not that the position will be sustained upon audit based solely on the technical merits of the tax position. The Company’s policy is to include interest and penalties related to uncertain tax positions as a component of income tax expense.

Goodwill and Intangible Assets: The valuation of intangible assets acquired in a business combination requires the use of management estimates including but not limited to estimating future expected cash flows from assets acquired and determining discount rates. Management’s estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable, and as a result, actual results may differ from estimates. Estimates associated with the accounting for acquisitions may change as additional information becomes available. The Company amortizes intangible assets with estimable useful lives over their respective estimated useful lives.

Goodwill represents the amount by which the purchase price in each business combination exceeds the fair value of the net tangible and identifiable intangible assets acquired. Each component of the Company for which discrete financial information is available and for which management regularly reviews the results of operations is considered a reporting unit. All goodwill acquired in a business combination is assigned to one or more reporting units as of the acquisition date. Goodwill is assigned to the Company’s reporting units that are expected to benefit from the synergies of the combination. The goodwill assigned to a reporting unit is the difference between the acquisition consideration assigned to the reporting unit on a relative fair value basis and the fair value of acquired assets and liabilities that can be specifically attributed to the reporting unit.

The Company reviews goodwill at least annually for impairment during the fourth quarter of each fiscal year and if certain events or indicators of impairment occur between annual impairment tests. The process of evaluating the potential impairment of goodwill requires significant judgment. When reviewing goodwill for impairment, the Company first performs a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. In performing a qualitative assessment, it considers business conditions and other factors including, but not limited to (i) adverse industry or economic trends, (ii) restructuring actions and lower projections that may impact future operating results, (iii) sustained decline in share price, and (iv) overall financial performance and other events affecting the reporting units. If the Company concludes that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then a quantitative impairment test is performed by estimating the fair value of the reporting unit and comparing it to its carrying value, including goodwill allocated to that reporting unit. The Company did not record impairments of goodwill during the years ended June 25, 2023, June 26, 2022, or June 27, 2021.

The Company determines the fair value of its reporting units by using an income approach. Under the income approach, the Company determines fair value based on estimated future cash flows of each reporting unit, discounted by an estimated weighted-average cost of capital, which reflects the overall level of inherent risk of a reporting unit and the rate of return an outside investor would expect to earn.

In estimating the fair value of a reporting unit, the Company makes estimates and judgments about the future cash flows of its reporting units, including estimated growth rates and assumptions about the economic environment. Although the Company’s cash flow forecasts are based on assumptions that are consistent with the plans and estimates it is using to manage the underlying businesses, there is significant judgment involved in determining the cash flows attributable to a reporting unit. In addition, the Company makes certain judgments about allocating shared assets to the estimated balance sheets of its reporting units. Changes in judgment on these assumptions and estimates could result in a goodwill impairment charge.

If after completing the quantitative assessment the carrying value of a reporting unit exceeds its fair value, the Company would record an impairment charge equal to the excess of the carrying value of the reporting unit over its fair value, up to the amount the goodwill assigned to the reporting unit.

Impairment of Long-lived Assets (Excluding Goodwill): The Company reviews intangible assets whenever events or circumstances indicate that the carrying value of an asset or asset group may not be recoverable. If such indicators are present, the Company determines whether the sum of the estimated undiscounted cash flows attributable to the assets is less than their carrying value. If the sum is less, the Company recognizes an impairment loss based on the excess of the carrying amount of the assets over their respective fair values. Fair value is determined by discounted future cash flows, appraisals, or other methods. The Company recognizes an impairment charge to the extent the fair value attributable to the asset are less than the asset’s carrying value. The fair value of the asset then becomes the asset’s new carrying value, which the Company depreciates over the remaining estimated useful life of the asset. Assets to be disposed of are reported at the lower of the carrying amount or fair value. For the periods presented, there was no impairment of long-lived assets. In addition, for fully amortized intangible assets, we derecognize the gross cost and accumulated amortization in the period we determine the intangible asset no longer enhances future cash flows.

Fiscal Year: The Company follows a 52/53-week fiscal reporting calendar, and its fiscal year ends on the last Sunday of June each year. The Company’s most recent fiscal years ended June 25, 2023, June 26, 2022, and June 27, 2021, and each included 52 weeks.

Principles of Consolidation: The Consolidated Financial Statements include the accounts of the Company and its wholly owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

Cash Equivalents and Investments: Investments purchased with an original maturity of three months or less are considered cash equivalents. The Company also invests in certain mutual funds, which include equity and fixed-income securities, related to its obligations under its deferred compensation plan, and such investments are classified as trading securities on the consolidated balance sheets. All of the Company's other investments are classified as available-for-sale at the respective balance sheet dates. The Company accounts for its investment portfolio at fair value. Investments classified as trading securities are recorded at fair value based upon quoted market prices. Differences between the cost and fair value of trading securities are recognized as other income (expense), net in the Consolidated Statement of Operations. The investments classified as available-for-sale are recorded at fair value based upon quoted market prices, and difference between the cost and fair value of available-for-sale securities is presented as a component of accumulated other comprehensive income (loss). Following the fiscal year 2021 adoption of Accounting Standard Codification Topic 326, under Subtopic 326-30, the Company evaluates its investments with fair value less than amortized cost by first considering whether the Company has the intent to sell the security or whether it is more likely than not that the Company will be required to sell the security before recovery of its amortized cost basis. In either such situation, the difference between fair value and amortized cost is recognized as a loss in the income statement. Where such sales are not likely to occur, the Company considers whether a portion of the loss is the result of a credit loss. To the extent such losses are the result of credit losses, those amounts are recognized in the income statement. All other differences between fair value and amortized cost are recognized in other comprehensive income. No such losses were recognized through the income statement during the years ended June 25, 2023, June 26, 2022 and June 27, 2021.

Allowance for Expected Credit Losses: The Company maintains an allowance for expected losses resulting from the inability of its customers to make required payments. The Company evaluates its allowance for expected credit losses based on a combination of factors. In circumstances where specific invoices are deemed uncollectible, the Company provides a specific allowance against the amount due to reduce the net recognized receivable to the amount it reasonably believes will be collected. The Company also provides allowances based on its write-off history. Bad debt expense was not material for fiscal years ended June 25, 2023, June 26, 2022, and June 27, 2021.

Property and Equipment: Property and equipment is stated at cost. Equipment is depreciated by the straight-line method over the estimated useful lives of the assets, generally three to five years. Furniture and fixtures are depreciated by the straight-line method over the estimated useful lives of the assets, generally five years. Software is amortized by the straight-line method over the estimated useful lives of the assets, generally three to five years. Buildings are depreciated by the straight-line method over the estimated useful lives of the assets, generally twenty-five years. Leasehold improvements are generally amortized by the straight-line method over the shorter of the life of the related asset or the term of the underlying lease. Amortization of finance leases is included with depreciation expense.

Derivative Financial Instruments: In the normal course of business, the Company’s financial position is routinely subjected to market risk associated with interest rate and foreign currency exchange rate fluctuations. The Company’s policy is to mitigate the effect of interest rate fluctuations on certain proposed debt instruments and exchange rate fluctuations on certain foreign currency denominated business exposures. The Company has a policy that allows the use of derivative financial instruments to hedge foreign currency exchange rate fluctuations on forecasted revenue and expenses and net monetary assets or liabilities denominated in various foreign currencies. The Company carries derivative financial instruments (derivatives) on the balance sheet at their fair values. The Company does not use derivatives for trading or speculative purposes. The Company does not believe that it is exposed to more than a nominal amount of credit risk in its interest rate and foreign currency hedges, as counterparties are large, global and well-capitalized financial institutions. The Company maintains an active currency hedging program and believes there is minimal risk that appropriate derivatives to maintain the Company’s hedging program would not be available in the future.

To hedge foreign currency risks, the Company uses foreign currency exchange forward and option contracts, where possible and prudent. These hedge contracts are valued using standard valuation formulas with assumptions about future foreign currency exchange rates derived from existing exchange rates, interest rates, and other market factors.

The Company considers its most current forecast in determining the level of foreign currency denominated revenue and expenses to hedge as cash flow hedges. The Company combines these forecasts with historical trends to establish the portion of its expected volume to be hedged. The revenue and expenses are hedged and designated as cash flow hedges to protect the Company from exposures to fluctuations in foreign currency exchange rates. If the underlying forecasted transaction does not occur, or it becomes probable that it will not occur, the related hedge gains and losses on the cash flow hedge are reclassified from accumulated other comprehensive income (loss) to other income (expense), net on the Consolidated Statement of Operations at that time.

Leases: Lease expense for operating leases is recognized on a straight-line basis over the lease term. The Company includes renewals and terminations in the calculation of the right-of-use asset and liability when the provision is reasonably certain to be exercised. The Company uses its incremental borrowing rate based on the information available at commencement date in determining the present value of future lease payments when the rate implicit in the lease is unknown.

The Company has elected the following practical expedients and accounting policy elections for accounting under ASC 842: (i) leases with an initial lease term of 12 months or less are not recorded on the balance sheet; and (ii) lease and non-lease components of a contract are accounted for as a single lease component.

Guarantees: The Company has certain finance leases that contain provisions whereby the properties subject to the finance leases may be remarketed at lease expiration. The Company has guaranteed to the lessor an amount approximating the lessor’s investment in the property. Also, the Company’s guarantees generally include certain indemnifications to its lessors for environmental matters, potential overdraft protection obligations to financial institutions related to one of the Company’s subsidiaries, indemnifications to the Company’s customers for certain infringement of third-party intellectual property rights by its products and services, indemnifications for its officers and directors, and the Company’s warranty obligations under sales of its products.

Foreign Currency Translation: The Company’s non-U.S. subsidiaries that operate in a local currency environment, where that local currency is the functional currency, primarily generate and expend cash in their local currency. Accordingly, all balance sheet accounts of these local functional currency subsidiaries are translated into U.S. dollars at the fiscal period-end exchange rate, and income and expense accounts are translated into U.S. dollars using average rates in effect for the period, except for costs related to those balance sheet items that are translated using historical exchange rates. The resulting translation adjustments are recorded as cumulative translation adjustments and are a component of accumulated other comprehensive income (loss). Remeasurement adjustments are recorded in other income (expense), net, where the U.S. dollar is the functional currency.

Note 3: Recent Accounting Pronouncements

Recently Adopted or Effective

In March 2020, the Financial Accounting Standards Board (the “FASB”) issued Accounting Standards Update (“ASU”) 2020-04, “Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting.” The ASU provides temporary optional expedients and exceptions for applying generally accepted accounting principles to contract modifications and hedging relationships, subject to meeting certain criteria, that reference the London Interbank Offered Rate (“LIBOR”) or another reference rate expected to be discontinued. In January 2021, the FASB issued ASU 2021-01, “Reference Rate Reform (Topic 848),” which permits entities to apply optional expedients in Topic 848 to derivative instruments modified because of discounting transition resulting from reference rate reform. In December 2022, the FASB issued ASU 2022-06, “Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848,” extending the relief offered in this series of ASUs through December 31, 2024.

In October 2021, the FASB issued ASU No. 2021-08, “Business Combinations (Topic 805), Accounting for Contract Assets and Contract Liabilities from Contracts with Customers,” which requires contract assets and contract liabilities (e.g., deferred revenue) acquired in a business combination to be recognized and measured by the acquirer on the acquisition date in accordance with ASC 606, “Revenue from Contracts with Customers” as if the acquirer had originated the contracts. The guidance is applied prospectively to acquisitions occurring on or after the effective date. The Company early adopted ASU No. 2021-08 during the quarter ended December 25, 2022. The adoption of the new standard did not have a material impact on the Company’s Consolidated Financial Statements.

In November 2021, the FASB issued ASU 2021-10, “Government Assistance (Topic 832): Disclosures by Business Entities about Government Assistance,” which requires business entities to make annual disclosures, including the nature of transactions and the related accounting policy used to account for the transactions, significant terms and conditions, and line items affected, about transactions with a government (including government assistance) that are accounted for by analogizing to a grant or contribution accounting model. The Company prospectively adopted ASU 2021-10 in the fiscal year ended June 25, 2023. The adoption of the new standard did not have a material impact on the Company’s Consolidated Financial Statements. Refer to Note 17: Commitments and Contingencies for additional information regarding the Company’s government assistance.

In December 2022, the Company executed Amendment No. 1 To Second Amended and Restated Credit Agreement, the primary purpose of which was to change the reference rate for borrowings under the Credit Agreement by replacing LIBOR with the Secured Overnight Financing Rate (“SOFR”). The Company applied practical expedients provided in Topic 848 allowing for the changes in contractual terms to be accounted for prospectively. These modifications had no significant impact on the Company’s Consolidated Financial Statements. Refer to Note 14: Long-term Debt and Other Borrowings for further information regarding the terms of the Credit Agreement.

Updates Not Yet Effective

There are no new accounting pronouncements not yet adopted or effective that are expected to have a material impact on the Company’s Consolidated Financial Statements.

Note 4: Revenue

Deferred Revenue

Revenue of $1,984.6 million included in deferred profit at June 26, 2022 was recognized during fiscal year 2023, representing the majority of the $2,198.1 million of deferred revenue as of June 26, 2022.

The following table summarizes the transaction price for contracts that have not yet been recognized as revenue as of June 25, 2023 and when the Company expects to recognize the amounts as revenue:

	Less than 1 Year	1-3 Years	More than 3 Years	Total
		(in thousands)		
Deferred revenue	$ 1,624,427	$ 183,045 (1)	$ 30,435 (1)	$ 1,837,907

(1) This amount is reported in Deferred profit on the Company's Consolidated Balance Sheets as the customers can demand the liability to be performed at any time.

Disaggregation of Revenue

The following table presents the Company’s revenue disaggregated between system and its customer-support related revenue:

	Year Ended		
	June 25, 2023	June 26, 2022	June 27, 2021
		(in thousands)	
Systems Revenue	$ 10,695,897	$ 11,322,271	$ 9,764,845
Customer support-related revenue and other	6,732,619	5,904,768	4,861,305
	$ 17,428,516	$ 17,227,039	$ 14,626,150

Systems revenue includes sales of new leading-edge equipment in deposition, etch and clean markets.

Customer support-related revenue includes sales of customer service, spares, upgrades, and non-leading-edge equipment from the Company's Reliant product line.

The Company operates in one reportable business segment: manufacturing and servicing of wafer processing semiconductor manufacturing equipment. Refer to Note 20: Segment, Geographic Information, and Major Customers; for additional information regarding the Company's evaluation of reportable business segments and the disaggregation of revenue by the geographic regions in which the Company operates.

Additionally, the Company serves three primary markets: memory, foundry, and logic/integrated device manufacturing. The following table presents the percentages of leading- and non-leading-edge equipment and upgrade revenue to each of the primary markets the Company serves:

	Year Ended		
	June 25, 2023	June 26, 2022	June 27, 2021
Memory	42 %	60 %	61 %
Foundry	38 %	26 %	32 %
Logic/integrated device manufacturing	20 %	14 %	7 %

Note 5: Equity-based Compensation Plan

The Company has stock plans that provide for grants of equity-based awards to eligible participants, including stock options and restricted stock units, of the Company's Common Stock. An option is a right to purchase Common Stock at a set price. An RSU award is an agreement to issue a set number of shares of Common Stock at the time of vesting. The Company also has an employee stock purchase plan that allows employees to purchase its Common Stock at a discount through payroll deductions.

The Lam Research Corporation 2015 Stock Incentive Plan (the "Plan") was approved by the stockholders and provides for the grant of non-qualified equity-based awards to eligible employees, consultants, advisors, and non-employee directors of the Company and its subsidiaries. As of the date of stockholder approval 19,232,068 authorized shares were available for issuance under the Plan; as of June 25, 2023, 7,265,101 shares remain available for future issuance to satisfy stock option exercises and vesting of awards.

The Company recognized the following equity-based compensation expense and benefits in the Consolidated Statements of Operations:

	Year Ended		
	June 25, 2023	June 26, 2022	June 27, 2021
		(in thousands)	
Equity-based compensation expense	$ 286,600	$ 259,064	$ 220,164
Income tax benefit recognized related to equity-based compensation	$ 25,794	$ 37,466	$ 49,313
Income tax benefit realized from the exercise and vesting of options and RSUs	$ 46,495	$ 72,564	$ 97,275

The estimated fair value of the Company’s equity-based awards, less expected forfeitures, is amortized over the awards’ vesting terms on a straight-line basis.

Restricted Stock Units

During the fiscal years 2023, 2022, and 2021, the Company issued both service-based RSUs and market-based performance RSUs (“PRSUs”). Service-based RSUs typically vest annually over a period of 3 years or less. Market-based PRSUs generally vest three years from the grant date if certain performance criteria are achieved and require continued employment. Based upon the terms of such awards, the number of shares that can be earned over the performance periods is based on the Company’s Common Stock price performance compared to the market price performance of a designated benchmark index, ranging from 0% to 150% of target. The designated benchmark index was the Philadelphia Semiconductor Total Return Index (“XSOX”). The stock price performance or market price performance is measured using the average closing price for the 50-trading days prior to the dates the performance period begins and ends. The target number of shares represented by the market-based PRSUs is increased by 2% of target for each 1% that Common Stock price performance exceeds the market price performance of the designated benchmark index. Market-based PRSUs utilize the XSOX, which index gives effect to the reinvestment of dividends paid on its constituent holdings, as the benchmark; and accordingly, the Company's Common Stock price performance was adjusted for the reinvestment of dividends on Common Stock on the ex-dividend date. The result of the vesting formula is rounded down to the nearest whole number. Total stockholder return is a measure of stock price appreciation in this performance period.

The following table summarizes the Company’s combined service-based RSUs and market-based PRSUs:

	Number of Shares (in thousands)		Weighted-Average Grant Date Fair Value
Outstanding, June 26, 2022	1,101	$	475.33
Granted	600		466.96
Vested	(544)		412.24
Forfeited or canceled	(79)		505.06
Outstanding, June 25, 2023	1,078	$	498.79

Of the 1.1 million shares outstanding at June 25, 2023, 896.0 thousand are service-based RSUs and 182.0 thousand are market-based PRSUs. The fair value of the Company’s service-based RSUs was calculated based on the fair market value of the Company’s stock at the date of grant, discounted for dividends. The fair value of the Company’s market-based PRSUs granted during fiscal years 2023, 2022, and 2021 was calculated using a Monte Carlo simulation model at the date of the grant, resulting in a weighted average grant-date fair value per share of $466.19, $488.68, and $640.69, respectively. The total fair value of service-based RSUs and market-based RSUs that vested during fiscal years 2023, 2022, and 2021 was $224.4 million, $195.1 million, and $177.4 million, respectively.

As of June 25, 2023, the Company had $424.1 million of total unrecognized compensation expense which is expected to be recognized over a weighted-average remaining period of approximately 2.2 years.

Stock Options

The Company granted stock options with a 7-year maximum contractual term to a limited group of executive officers during fiscal years 2023, 2022, and 2021. Stock options typically vest over a period of three years or less. The Company had 174.8 thousand options outstanding at June 25, 2023 with a weighted-average exercise price of $362.83 per share, of which 109.7 thousand were exercisable with a weighted-average exercise price of $272.59 per share. As of June 25, 2023, the Company had $10.7 million of total unrecognized compensation expense related to unvested stock options granted and outstanding which is expected to be recognized over a weighted-average remaining period of 2.3 years.

ESPP

The Company has an employee stock purchase plan (the “ESPP”) which allows employees to designate a portion of their base compensation to be deducted and used to purchase the Company’s Common Stock at a purchase price per share of the lower of 85% of the fair market value of the Company’s Common Stock on the first or last day of the applicable purchase period. Typically, each offering period lasts 12 months and contains one interim purchase date.

During fiscal year 2023, approximately 315.8 thousand shares of the Company’s Common Stock were sold to employees under the ESPP. At June 25, 2023, approximately 5.4 million shares were available for purchase, and the Company had $8.9 million of total unrecognized compensation cost, which is expected to be recognized over a remaining period of less than six months.

Note 6: Other Income (Expense), Net

The significant components of other income (expense), net, were as follows:

	Year Ended		
	June 25, 2023	June 26, 2022	June 27, 2021
		(in thousands)	
Interest income	$ 138,984	$ 15,209	$ 19,687
Interest expense	(186,462)	(184,759)	(208,597)
Gains (losses) on deferred compensation plan related assets, net	20,186	(38,053)	61,838
Foreign exchange (losses) gains, net	(7,078)	(723)	(6,962)
Other, net	(31,280)	19,618	22,815
	$ (65,650)	$ (188,708)	$ (111,219)

Interest income in the year ended June 25, 2023, increased compared to the year ended June 26, 2022, primarily as a result of higher yields and higher cash balances. Interest income decreased in the year ended June 26, 2022, compared to the year ended June 27, 2021, as a result of lower cash balances.

Interest expense in the year ended June 25, 2023, was flat compared to the year ended June 26, 2022. The decrease in interest expense in the year ended June 26, 2022, compared to the year ended June 27, 2021, was primarily due to the payoff of $800 million of senior notes in June 2021.

The gains or losses on deferred compensation plan related assets, net in fiscal years 2023, 2022 and 2021 were driven by fluctuations in the fair market value of the underlying funds.

The variations in other, net for the year ended June 25, 2023 compared to the years ended June 26, 2022 and June 27, 2021 were primarily driven by fluctuations in the fair market value of equity investments.

Note 7: Income Taxes

The components of income before income taxes were as follows:

	Year Ended		
	June 25, 2023	**June 26, 2022**	**June 27, 2021**
		(in thousands)	
United States	$ 151,759	$ 87,933	$ 120,161
Foreign	4,957,451	5,105,181	4,250,643
	$ 5,109,210	$ 5,193,114	$ 4,370,804

Significant components of the provision (benefit) for income taxes attributable to income before income taxes were as follows:

	Year Ended		
	June 25, 2023	June 26, 2022	June 27, 2021
		(in thousands)	
Federal:			
Current	$ 541,416	$ 620,344	$ 437,525
Deferred	(136,178)	(226,895)	(139,531)
	405,238	393,449	297,994
State:			
Current	32,082	20,759	13,560
Deferred	(2,813)	(19,096)	(8,324)
	29,269	1,663	5,236
Foreign:			
Current	196,842	204,163	162,738
Deferred	(33,070)	(11,447)	(3,622)
	163,772	192,716	159,116
Total provision for income taxes	$ 598,279	$ 587,828	$ 462,346

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, as well as the tax effect of carryforwards. Significant components of the Company's net deferred tax assets and liabilities were as follows:

	June 25, 2023	June 26, 2022
	(in thousands)	
Deferred tax assets:		
Tax carryforwards	$ 359,505	$ 315,396
Allowances and reserves	192,374	194,410
Equity-based compensation	9,600	8,845
Inventory valuation differences	57,675	52,323
Outside basis differences of foreign subsidiaries	527,139	421,056
R&D capitalization	36,618	—
Operating lease liabilities	50,867	50,294
Finance lease assets	32,905	35,754
Intangible assets	4,108	889
Other	31,773	23,955
Gross deferred tax assets	1,302,564	1,102,922
Valuation allowance	(352,377)	(308,724)
Net deferred tax assets	950,187	794,198
Deferred tax liabilities:		
Capital assets	(121,948)	(114,644)
Amortization of goodwill	(12,515)	(13,789)
Right-of-use assets	(50,867)	(50,294)
Finance lease liabilities	(50,534)	(52,379)
Other	(1,974)	(2,395)
Gross deferred tax liabilities	(237,838)	(233,501)
Net deferred tax assets	$ 712,349	$ 560,697

The change in gross deferred tax assets, gross deferred tax liabilities, and valuation allowance between fiscal year 2023 and 2022 is primarily due to increases in gross deferred tax assets for outside basis differences of foreign subsidiaries, tax credits, and capitalized research and experimental expenditures.

The Company has an accounting policy election to record deferred taxes related to Global Intangible Low-Taxed Income ("GILTI").

Realization of the Company's net deferred tax assets is based upon the weighting of available evidence, including such factors as the recent earnings history and expected future taxable income. The Company believes it is more likely than not that such deferred tax assets will be realized with the exception of $352.4 million primarily related to California deferred tax assets. At June 25, 2023, the

Company continued to record a valuation allowance to offset the entire California deferred tax asset balance due to the single sales factor apportionment resulting in lower taxable income in California.

At June 25, 2023, the Company had federal net operating loss carryforwards of $12.9 million. If not utilized, these losses will begin to expire in fiscal year 2024, and are subject to limitation on their utilization.

At June 25, 2023, the Company had state net operating loss carryforwards of $171.4 million. If not utilized, these losses will begin to expire in fiscal year 2024, and are subject to limitation on their utilization.

At June 25, 2023, the Company had foreign net operating loss carryforwards of $19.6 million. All of these losses can be carried forward indefinitely, and are subject to limitation on their utilization.

At June 25, 2023, the Company had state tax credit carryforwards of $530.3 million. Substantially all of these credits can be carried forward indefinitely.

A reconciliation of income tax expense provided at the federal statutory rate (21% in fiscal years 2023, 2022, and 2021) to actual income tax expense is as follows:

	Year Ended		
	June 25, 2023	June 26, 2022	June 27, 2021
		(in thousands)	
Income tax expense computed at federal statutory rate	$ 1,072,934	$ 1,096,692	$ 917,869
State income taxes, net of federal tax benefit	(23,252)	(35,584)	(33,478)
Foreign income taxed at different rates	(430,314)	(407,989)	(365,886)
Settlements and reductions in uncertain tax positions	(28,968)	(51,227)	(13,613)
Tax credits	(103,019)	(96,440)	(86,709)
State valuation allowance, net of federal tax benefit	49,073	43,502	39,477
Equity-based compensation	15,816	(13,168)	(45,764)
Other permanent differences and miscellaneous items	46,009	52,042	50,450
	$ 598,279	$ 587,828	$ 462,346

Effective from fiscal year 2022, the Company has a 15-year tax incentive ruling in Malaysia for one of its foreign subsidiaries. The statutory tax rate in Malaysia is 24%. The tax incentive provides exemptions on foreign income earned and is contingent upon meeting certain conditions. The Company expects to apply for renewals upon expiration. The impact of the tax incentive decreased worldwide taxes by approximately $576.0 million for fiscal year 2023. The benefit of the tax incentive on diluted earnings per share was approximately $4.24 in fiscal year 2023.

Earnings of the Company’s foreign subsidiaries included in consolidated retained earnings that are indefinitely reinvested in foreign operations aggregated to approximately $1.1 billion at June 25, 2023. If these earnings were remitted to the United States, they would be subject to foreign withholding taxes of approximately $171.1 million at the current statutory rates. The potential tax expense associated with these foreign withholding taxes would be offset by $136.9 million of foreign tax credits that would be generated in the United States upon remittance.

On August 16, 2022, the IRA was signed into law. In general, the provisions of the IRA will be effective beginning with the Company’s fiscal year 2024, with certain exceptions. The IRA includes a new 15% corporate minimum tax. The impact on income taxes due to changes in legislation is required under the authoritative guidance of ASC 740, Income Taxes, to be recognized in the period in which the law is enacted. The Company has evaluated the potential impacts of the IRA and does not expect it to have a material impact on the effective tax rate. However, the Company expects future guidance from the Treasury Department and will further analyze when the guidance is issued.

The Company’s gross uncertain tax positions were $640.2 million, $617.4 million, and $566.8 million as of June 25, 2023, June 26, 2022, and June 27, 2021, respectively. During fiscal year 2023, gross uncertain tax positions increased by $22.8 million. The amount of uncertain tax positions that, if recognized, would impact the effective tax rate was $550.1 million, $539.6 million, and $504.4 million, as of June 25, 2023, June 26, 2022, and June 27, 2021, respectively.

The aggregate changes in the balance of gross uncertain tax positions were as follows:

		(in thousands)
Balance as of June 28, 2020	$	476,695
Settlements and effective settlements with tax authorities		(1,443)
Lapse of statute of limitations		(8,456)
Increases in balances related to tax positions taken during prior periods		15,986
Decreases in balances related to tax positions taken during prior periods		(2,746)
Increases in balances related to tax positions taken during current period		86,735
Balance as of June 27, 2021		566,771
Settlements and effective settlements with tax authorities		(14,440)
Lapse of statute of limitations		(8,021)
Increases in balances related to tax positions taken during prior periods		6,468
Decreases in balances related to tax positions taken during prior periods		(28,376)
Increases in balances related to tax positions taken during current period		94,971
Balance as of June 26, 2022		617,373
Settlements and effective settlements with tax authorities		(50,238)
Lapse of statute of limitations		(22,103)
Increases in balances related to tax positions taken during prior periods		5,841
Decreases in balances related to tax positions taken during prior periods		(4,316)
Increases in balances related to tax positions taken during current period		93,615
Balance as of June 25, 2023	$	640,172

The Company recognizes interest expense and penalties related to the above uncertain tax positions within income tax expense. The Company had accrued $74.4 million, $61.2 million, and $54.6 million cumulatively for gross interest and penalties as of June 25, 2023, June 26, 2022, and June 27, 2021, respectively.

The Company is subject to audits by state and foreign tax authorities. The Company is unable to make a reasonable estimate as to when cash settlements, if any, with the relevant taxing authorities will occur.

The Company files U.S. federal, U.S. state, and foreign income tax returns. As of June 25, 2023, tax years 2005-2023 remain subject to examination in the jurisdictions where the Company operates. The Internal Revenue Service (“IRS”) has examined the Company’s U.S. federal income tax return for the fiscal year ended June 24, 2018. As of September 25, 2022, the IRS has proposed adjustments resulting in a tax liability increase of approximately $50.0 million, which was previously reserved. The Company has agreed to pay the amount and has made a partial cash settlement in the September quarter with the remaining settlement expected to be paid based on the IRS requirements.

The IRS is examining the Company’s U.S. federal income tax returns for the fiscal years ended June 30, 2019, and June 28, 2020. To date, no significant adjustments have been proposed by the IRS. The

Company is unable to make a reasonable estimate as to when cash settlements, if any, with the IRS will occur.

The Company is in various stages of examinations in connection with all of its tax audits worldwide, and it is difficult to determine when these examinations will be settled. It is reasonably possible that over the next 12-month period the Company may experience an increase or decrease in its uncertain tax positions as a result of tax examinations or lapses of statutes of limitation. The change in uncertain tax positions as a result of lapses of statutes of limitation may range up to $9.2 million.

Note 8: Net Income per Share

Basic net income per share is computed by dividing net income by the weighted-average number of common shares outstanding during the period. Diluted net income per share is computed using the treasury stock method, for dilutive stock options, restricted stock units, and convertible notes.

The following table reconciles the inputs to the basic and diluted computations for net income per share.

	Year Ended		
	June 25, 2023	June 26, 2022	June 27, 2021
	(in thousands, except per share data)		
Numerator:			
Net income	$ 4,510,931	$ 4,605,286	$ 3,908,458
Denominator:			
Basic average shares outstanding	135,472	139,899	143,609
Effect of potential dilutive securities:			
Employee stock plans	362	729	1,168
Convertible notes	—	—	543
Diluted average shares outstanding	135,834	140,628	145,320
Net income per share - basic	$ 33.30	$ 32.92	$ 27.22
Net income per share - diluted	$ 33.21	$ 32.75	$ 26.90

For purposes of computing diluted net income per share, weighted-average common shares do not include potentially dilutive securities that are anti-dilutive under the treasury stock method. The impact from potentially dilutive securities, including options and RSUs, was not material for fiscal years ended June 25, 2023, June 26, 2022, and June 27, 2021.

Note 9: Financial Instruments

Fair Value

The Company defines fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities required or permitted to be recorded at fair value, the Company considers the principal or most advantageous market in which it would transact, and it considers assumptions that market participants would use when pricing the asset or liability.

A fair value hierarchy has been established that prioritizes the inputs to valuation techniques used to measure fair value. The level of an asset or liability in the hierarchy is based on the lowest level of input that is significant to the fair value measurement. Assets and liabilities carried at fair value are classified and disclosed in one of the following three categories:

Level 1: Valuations based on quoted prices in active markets for identical assets or liabilities with sufficient volume and frequency of transactions.

Level 2: Valuations based on observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active for identical assets or liabilities, or model-derived valuations techniques for which all significant inputs are observable in the market or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3: Valuations based on unobservable inputs to the valuation methodology that are significant to the measurement of fair value of assets or liabilities and based on non-binding, broker-provided price quotes and may not have been corroborated by observable market data.

The Company engages with pricing vendors to provide fair values for a majority of its Level 1 and Level 2 investments. The vendors provide either a quoted market price or use observable inputs without applying significant adjustments in their pricing. Significant observable inputs include interest rates and yield curves observable at commonly quoted intervals, volatility and credit risks. The fair value of derivative contracts is determined using observable market inputs such as the foreign currency rates, forward rate curves, currency volatility and interest rates and considers nonperformance risk of the Company and its counterparties.

The Company’s primary financial instruments include its cash, cash equivalents, investments, restricted cash and investments, long-term investments, accounts receivable, accounts payable, long-term debt and leases, and foreign currency related derivative instruments. The estimated fair value of cash, time deposits, accounts receivable, and accounts payable approximates their carrying value due to the short period of time to their maturities. The estimated fair values of lease obligations approximate their carrying value as the majority of these obligations have interest rates that adjust to market rates on a periodic basis. Refer to Note 14: Long Term Debt and Other Borrowings for additional information regarding the fair value of the Company’s senior notes.

Investments

Equity Investments measured at fair value on a non-recurring basis

As of June 25, 2023 and June 26, 2022, equity investments of $118.4 million and $125.2 million, respectively, were recognized in other assets in the Consolidated Balance Sheets.

Net gains resulting from the application of the measurement alternative to the Company’s equity investments were immaterial in the fiscal years ended 2023, 2022, and 2021. During the fiscal year 2022, one of the Company’s equity investees became publicly traded and the market value of that investee fluctuated throughout the fiscal year; the Company liquidated its position in this equity investee during the last quarter of the fiscal year ended June 26, 2022 and recognized an immaterial cumulative gain on disposition.

Debt and Equity Investments measured at fair value on a recurring basis

The following tables set forth the Company’s cash, cash equivalents, investments, restricted cash and investments, and other assets measured at fair value on a recurring basis as of June 25, 2023, and June 26, 2022:

	June 25, 2023							
					(Reported Within)			
	Cost	Unrealized Gain	Unrealized (Loss)	Fair Value	Cash and Cash Equivalents	Investments	Restricted Cash & Investments	Other Assets
	(in thousands)							
Level 1:								
Money market funds	$2,223,642	$ —	$ —	$2,223,642	$ 2,223,642	$ —	$ —	$ —
Mutual funds	96,646	12,092	(2,069)	106,669	—	—	—	106,669
Level 1 Total	2,320,288	12,092	(2,069)	2,330,311	2,223,642	—	—	106,669
Level 2:								
Corporate notes and bonds	38,033	—	(392)	37,641	—	37,641	—	—
Level 2 Total	38,033	—	(392)	37,641	—	37,641	—	—
Total subject to fair value hierarchy	$2,358,321	$ 12,092	$ (2,461)	$2,367,952				
Cash				2,132,811	2,132,522	—	289	—
Time deposits				1,230,919	980,892	—	250,027	—
Total				$5,731,682	$ 5,337,056	$ 37,641	$ 250,316	$106,669

	June 26, 2022							
					(Reported Within)			
	Cost	Unrealized Gain	Unrealized (Loss)	Fair Value	Cash and Cash Equivalents	Investments	Restricted Cash & Investments	Other Assets
	(in thousands)							
Level 1:								
Money market funds	$ 712,076	$ —	$ —	$ 712,076	$ 712,076	$ —	$ —	$ —
Mutual funds	84,851	12,027	(1,659)	95,219	—	—	—	95,219
Level 1 Total	796,927	12,027	(1,659)	807,295	712,076	—	—	95,219
Level 2:								
Corporate notes and bonds	137,859	—	(2,128)	135,731	—	135,731	—	—
Level 2 Total	137,859	—	(2,128)	135,731	—	135,731	—	—
Total subject to fair value hierarchy	$ 934,786	$ 12,027	$ (3,787)	$ 943,026				
Cash				1,017,253	1,015,747	—	1,506	—
Time deposits				2,044,206	1,794,178	—	250,028	—
Total				$4,004,485	$ 3,522,001	$ 135,731	$ 251,534	$ 95,219

The Company accounts for its investment portfolio at fair value. Realized gains (losses) for investment sales are specifically identified. Management assesses the fair value of investments in debt securities that are not actively traded through consideration of interest rates and their impact on the present value of the cash flows to be received from the investments.

The Company evaluates its investments with fair value less than amortized cost by first considering whether the Company has the intent to sell the security or whether it is more likely than not that the Company will be required to sell the security before recovery of its amortized cost basis. In either such situation, the difference between fair value and amortized cost is recognized as a loss in the income statement. Where such sales are not likely to occur, the Company considers whether a portion of the loss is the result of a credit loss. To the extent such losses are the result of credit losses, those amounts are recognized in the income statement. All other differences between fair value and amortized cost are recognized in other comprehensive income. No such losses were recognized through the income statement during the twelve months ended June 25, 2023, and June 26, 2022.

Gross realized gains/(losses) from sales of investments were insignificant in the fiscal years 2023, 2022, and 2021.

The following is an analysis of the Company’s investments in unrealized loss positions.:

	June 25, 2023					
	Unrealized Losses Less than 12 Months		Unrealized Losses 12 Months or Greater		Total	
	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss
	(in thousands)					
Mutual funds	$ —	$ —	$ 30,356	$ (2,069)	$ 30,356	$ (2,069)
Corporate notes and bonds	9,105	(6)	26,517	(386)	35,622	(392)
	$ 9,105	$ (6)	$ 56,873	$ (2,455)	$ 65,978	$ (2,461)

The amortized cost and fair value of cash equivalents, investments, and restricted investments with contractual maturities as of June 25, 2023, are as follows:

	Cost	Fair Value
	(in thousands)	
Due in one year or less	$ 3,489,100	$ 3,488,721
Due after one year through five years	3,494	3,481
	$ 3,492,594	$ 3,492,202

The Company has the ability, if necessary, to liquidate its investments in order to meet the Company’s liquidity needs in the next 12 months. Accordingly, those investments with contractual maturities greater than 12 months from the date of purchase nonetheless are classified as short-term on the accompanying Consolidated Balance Sheets.

Derivative Instruments and Hedging

The Company carries derivative financial instruments (“derivatives”) on its Consolidated Balance Sheets at their fair values. The Company enters into foreign currency forward contracts and foreign currency options with financial institutions with the primary objective of reducing volatility of earnings and cash flows related to foreign currency exchange rate fluctuations. In addition, the Company enters into interest rate swap arrangements to manage interest rate risk. The counterparties to these derivatives are large, global financial institutions that the Company believes are creditworthy, and therefore, it does not consider the risk of counterparty nonperformance to be material.

Under the master netting agreements with the respective counterparties to the Company’s derivative contracts, subject to applicable requirements, the Company is allowed to net settle transactions of the same currency with a single net amount payable by one party to the other. However, the Company has elected to present the derivative assets and derivative liabilities on a gross basis on its balance sheet. As of June 25, 2023 and June 26, 2022, the potential effect of rights of offset associated with the above foreign exchange and interest rate contracts would be immaterial to the Consolidated Balance Sheets.

Cash Flow Hedges

The Company’s financial position is routinely subjected to market risk associated with foreign currency exchange rate fluctuations on non-U.S. dollar transactions or cash flows. The Company’s policy is to mitigate the foreign exchange risk arising from the fluctuations in the value of these non-U.S. dollar denominated transactions or cash flows through a foreign currency cash flow hedging program, using forward contracts and foreign currency options that generally expire within 12 months and no later than 24 months. These hedge contracts are designated as cash flow hedges and are carried on the Company’s balance sheet at fair value with the effective portion of the contracts’ gains or losses included in accumulated other comprehensive income (loss) and subsequently recognized in revenue/expense in the same period the hedged items affect earnings.

In addition, the Company has entered into interest rate swap agreements to hedge against the variability of cash flows due to changes in certain benchmark interest rates on fixed rate debt. These instruments are designated as cash flow hedges at inception and are settled in conjunction with the issuance of debt. The effective portion of the contracts’ gains or losses is included in accumulated other comprehensive income (loss) and is amortized into income as the hedged item affects earnings.

At inception and at each quarter-end, hedges are tested prospectively and retrospectively for effectiveness using regression analysis. Changes in the fair value of foreign exchange contracts due to changes in time value are included in the assessment of effectiveness. To qualify for hedge accounting, the hedge relationship must meet criteria relating to both the derivative instrument and the hedged item. These criteria include identification of the hedging instrument, the hedged item, the nature of the risk being hedged, and how the hedging instrument’s effectiveness in offsetting the exposure to changes in the hedged item’s fair value or cash flows will be measured.

To receive hedge accounting treatment, all hedging relationships are formally documented at the inception of the hedge, and the hedges must be tested to demonstrate an expectation of providing highly effective offsetting changes to future cash flows on hedged transactions. When derivative instruments are designated and qualify as effective cash flow hedges, the Company recognizes effective changes in the fair value of the hedging instrument within accumulated other comprehensive income (loss) until the hedged exposure is realized. Consequently, the Company's results of operations are not subject to fluctuation as a result of changes in the fair value of the derivative instruments. If hedges are not highly effective or if the Company does not believe that the underlying hedged forecasted transactions will occur, the Company may not be able to account for its derivative instruments as cash flow hedges. If this were to occur, future changes in the fair values of the Company's derivative instruments would be recognized in earnings. Additionally, related amounts previously recorded in other comprehensive income would be reclassified to earnings immediately. There were no material gains or losses during the fiscal years ended June 25, 2023, June 26, 2022, or June 27, 2021 associated with forecasted transactions that did not occur, nor any ineffectiveness recognized in the same periods.

As of June 25, 2023, the fair value of outstanding cash flow hedges was not material. Additionally, as of June 25, 2023, the Company had an immaterial net gain or loss accumulated in other comprehensive income, net of tax, related to foreign exchange cash flow hedges and interest rate contracts which it expects to reclassify from other comprehensive income into earnings over the next 12 months.

The following table provides the total notional value of cash flow hedge instruments outstanding as of June 25, 2023:

	June 25, 2023
	(In thousands)
Buy Contracts	$ 269,827
Sell Contracts	168,233

The effect of derivative instruments designated as cash flow hedges on the Company's Consolidated Statements of Operations, including accumulated other comprehensive income ("AOCI"), was as follows:

	Location of Gain (Loss) Recognized in or Reclassified into Income	Year Ended June 25, 2023 Gain Recognized in AOCI	Year Ended June 25, 2023 Gain (Loss) Reclassified from AOCI into Income	Year Ended June 26, 2022 Gain (Loss) Recognized in AOCI	Year Ended June 26, 2022 Gain (Loss) Reclassified from AOCI into Income
Derivatives in Cash Flow Hedging Relationships			**(in thousands)**		
Foreign exchange contracts	Revenue	$ 11,801	$ 1,810	$ 57,058	$ 45,057
Foreign exchange contracts	Cost of goods sold	1,804	3,002	(23,414)	(11,410)
Foreign exchange contracts	R&D	—	(5)	(1,948)	(10)
Foreign exchange contracts	SG&A	418	140	(6,914)	(2,434)
Interest rate contracts	Other income (expense), net	—	(1,091)	—	(4,238)
		$ 14,023	$ 3,856	$ 24,782	$ 26,965

Balance Sheet Hedges

The Company also enters into foreign currency forward contracts to hedge fluctuations associated with foreign currency denominated monetary assets and liabilities, primarily cash, third-party accounts receivable, accounts payable, and intercompany receivables and payables. These forward contracts are not designated for hedge accounting treatment. Therefore, the change in the carrying value of these derivatives is recorded as a component of other income (expense), net and offsets the change in fair value of the foreign currency denominated assets and liabilities related to remeasurement, which are also recorded in other income (expense), net. As of June 25, 2023 and June 26, 2022, the fair value of outstanding balance sheet hedges was not material.

The following table provides the total notional value of balance sheet hedge instruments outstanding as of June 25, 2023:

	June 25, 2023
	(In thousands)
Buy Contracts	$ 268,166
Sell Contracts	166,723

The effect of the Company's balance sheet hedge derivative instruments on the Company's Consolidated Statements of Operations was as follows:

Derivatives Not Designated as Hedging Instruments:	Location of (Loss) Gain Recognized in Income	Year Ended June 25, 2023 (Loss) Recognized in Income	Year Ended June 26, 2022 Gain Recognized in Income
		(in thousands)	
Foreign exchange contracts	Other income (expense), net	$ (9,544)	$ 14,362

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents, investments, restricted cash and investments, trade accounts receivable, and derivative financial instruments used in hedging activities. Cash is placed on deposit at large, global financial institutions. Such deposits may be in excess of insured limits. Management believes that the financial institutions that hold the Company's cash are creditworthy and, accordingly, minimal credit risk exists with respect to these balances.

The Company's overall portfolio of available-for-sale securities must maintain an average minimum rating of "AA-" or "Aa3" as rated by Standard and Poor's, Fitch Ratings, or Moody's Investor Services. To ensure diversification and minimize concentration, the Company's policy limits the amount of credit exposure with any one financial institution or commercial issuer.

The Company is exposed to credit losses in the event of nonperformance by counterparties on foreign currency and interest rate hedge contracts that are used to mitigate the effect of exchange rate and interest rate fluctuations and on contracts related to structured share repurchase arrangements. These counterparties are large, global financial institutions and, to date, no such counterparty has failed to meet its financial obligations to the Company.

Credit risk evaluations, including trade references, bank references, and Dun & Bradstreet ratings, are performed on all new customers, and the Company monitors its customers' financial condition and payment performance. In general, the Company does not require collateral on sales.

As of June 25, 2023, three customers accounted for approximately 32%, 13% and 10% of accounts receivable, respectively. As of June 26, 2022, two customers accounted for approximately 20%, and 14% of accounts receivable, respectively. No other customers accounted for more than 10% of accounts receivable, respectively. The Company's balance and transactional activity for its allowance for doubtful accounts is not material as of and for the twelve months ended June 25, 2023, June 26, 2022, and June 27, 2021. Refer to Note 20: Segment, Geographic Information, and Major Customers for additional information regarding customer concentrations.

Note 10: Inventories

Inventories are stated at the lower of cost (first-in, first-out method) or net realizable value. System shipments to customers in Japan, for which title does not transfer until customer acceptance, are classified as finished goods inventory and carried at cost until title transfers. Inventories consist of the following:

	June 25, 2023	June 26, 2022
	(in thousands)	
Raw materials	$ 3,196,988	$ 2,401,490
Work-in-process	325,611	471,348
Finished goods	1,293,591	1,093,456
	$ 4,816,190	$ 3,966,294

Note 11: Property and Equipment

Property and equipment, net, is presented in the table below.

	June 25, 2023	June 26, 2022
	(in thousands)	
Manufacturing and engineering equipment	$ 1,802,627	$ 1,588,805
Buildings and improvements	1,286,849	1,124,381
Computer and computer-related equipment	174,084	177,198
Land	98,739	84,733
Office equipment, furniture and fixtures	83,108	70,642
	3,445,407	3,045,759
Less: accumulated depreciation and amortization	(1,642,456)	(1,440,325)
	$ 1,802,951	$ 1,605,434

The Company has excluded $53.7 million, and $42.2 million of finance right-of-use assets recorded within property and equipment, net from the table above for the years ended June 25, 2023 and June 26, 2022, respectively. See Note 15: Leases for additional information regarding these finance lease right-of-use assets. Depreciation expense, excluding amortization of finance lease right of use assets, during fiscal years 2023, 2022, and 2021 was $282.8 million, $248.2 million, and $229.8 million, respectively.

Note 12: Goodwill and Intangible Assets

Goodwill

The balance of goodwill was $1.6 billion and $1.5 billion as of June 25, 2023 and June 26, 2022, respectively. As of June 25, 2023 and June 26, 2022, $65.4 million and $62.0 million, respectively, of the goodwill balance is tax deductible, and the remaining balance is not tax deductible due to purchase accounting and applicable foreign law. No goodwill impairments were recognized in fiscal years 2023, 2022, or 2021. Refer to Note 21: Business Combinations for additional information regarding the Company’s goodwill balance.

Intangible Assets

The following table provides details of the Company’s intangible assets, other than goodwill:

	June 25, 2023			June 26, 2022		
	Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net
			(in thousands)			
Customer relationships	$ 644,138	$ (631,420)	$ 12,718	$ 633,252	$ (627,376)	$ 5,876
Existing technology	717,331	(674,549)	42,782	676,924	(664,278)	12,646
Patents and other intangible assets	199,532	(116,659)	82,873	167,821	(84,493)	83,328
Intangible assets subject to amortization	1,561,001	(1,422,628)	138,373	1,477,997	(1,376,147)	101,850
In process research and development	30,081	—	30,081	—	—	—
Total intangible assets	$1,591,082	$(1,422,628)	$ 168,454	$1,477,997	$(1,376,147)	$ 101,850

The Company recognized $51.5 million, $78.0 million, and $70.6 million in intangible asset amortization expense during fiscal years 2023, 2022, and 2021, respectively. No intangible asset impairments were recognized in fiscal years 2023, 2022, or 2021.

The estimated future amortization expense of intangible assets as of June 25, 2023, is reflected in the table below. The table excludes $18.9 million of capitalized costs for intangible assets that have not yet been placed into service.

Fiscal Year	Amount
	(in thousands)
2024	$ 42,007
2025	27,423
2026	17,307
2027	12,797
2028	9,259
Thereafter	10,678
	$ 119,471

Refer to Note 21: Business Combinations for additional information regarding the Company’s intangible assets.

Note 13: Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consist of the following:

	June 25, 2023	June 26, 2022
	(in thousands)	
Accrued compensation	$ 481,354	$ 481,070
Warranty reserves	256,781	232,248
Income and other taxes payable	460,630	465,601
Dividend payable	231,267	205,615
Restructuring	8,014	—
Other	572,591	589,738
	$ 2,010,637	$ 1,974,272

Note 14: Long Term Debt and Other Borrowings

As of June 25, 2023, and June 26, 2022, the Company’s outstanding debt consisted of the following:

	June 25, 2023		June 26, 2022	
	Amount (in thousands)	Effective Interest Rate	Amount (in thousands)	Effective Interest Rate
Fixed-rate 3.80% Senior Notes Due March 15, 2025 (“2025 Notes”)	$ 500,000	3.87 %	$ 500,000	3.87 %
Fixed-rate 3.75% Senior Notes Due March 15, 2026 ("2026 Notes")	750,000	3.86 %	750,000	3.86 %
Fixed-rate 4.00% Senior Notes Due March 15, 2029 ("2029 Notes")	1,000,000	4.09 %	1,000,000	4.09 %
Fixed-rate 1.90% Senior Note Due June 15, 2030 ("2030 Notes")	750,000	2.01 %	750,000	2.01 %
Fixed-rate 4.875% Senior Notes Due March 15, 2049 ("2049 Notes")	750,000	4.93 %	750,000	4.93 %
Fixed-rate 2.875% Senior Note Due June 15, 2050 ("2050 Notes")	750,000	2.93 %	750,000	2.93 %
Fixed-rate 3.125% Senior Note Due June 15, 2060 ("2060 Notes")	500,000	3.18 %	500,000	3.18 %
Total Senior Notes outstanding, at par	5,000,000		5,000,000	
Unamortized discount	(32,934)		(35,549)	
Fair value adjustment - interest rate contracts	3,050 (1)		4,835 (1)	
Unamortized bond issuance costs	(6,189)		(6,827)	
Other financing arrangements	1,438		—	
Total debt outstanding, at carrying value	$ 4,965,365		$ 4,962,459	
Reported as:				
Current portion of long-term debt	$ 421		$ —	
Long-term debt	$ 4,964,944		$ 4,962,459	

(1) This amount represents a cumulative fair value gain for discontinued hedging relationships, net of an immaterial amount of amortization as of the periods presented.

The Company's contractual cash obligations relating to its outstanding debt as of June 25, 2023, were as follows:

Payments Due by Fiscal Year:	Principal	Interest
	(in thousands)	
2024	$ —	$ 175,125
2025	500,000	169,425
2026	750,000	147,922
2027	—	128,000
2028	—	128,000
Thereafter	3,750,000	1,786,213
Total	$ 5,000,000	$ 2,534,685

Senior Notes

On May 5, 2020, the Company completed a public offering of $750 million aggregate principal amount of the Company's Senior Notes due June 15, 2030 (the "2030 Notes"), $750 million aggregate principal amount of the Company's Senior Notes due June 15, 2050 (the "2050 Notes"), and $500 million aggregate principal amount of the Company's Senior Notes due June 15, 2060 (the "2060 Notes"). The Company pays interest at an annual rate of 1.90%, 2.875%, and 3.125%, on the 2030, 2050, and 2060 Notes, respectively, on a semi-annual basis on June 15 and December 15 of each year.

On March 4, 2019, the Company completed a public offering of $750 million aggregate principal amount of the Company's Senior Notes due March 15, 2026 (the "2026 Notes"), $1.0 billion aggregate principal amount of the Company's Senior Notes due March 15, 2029 (the "2029 Notes"), and $750 million aggregate principal amount of the Company's Senior Notes due March 15, 2049 (the "2049 Notes"). The Company pays interest at an annual rate of 3.75%, 4.00%, and 4.875%, on the 2026, 2029, and 2049 Notes, respectively, on a semi-annual basis on March 15 and September 15 of each year.

On March 12, 2015, the Company completed a public offering of $500 million aggregate principal amount of the Company's Senior Notes due March 15, 2025 (the "2025 Notes"). The Company pays interest at an annual rate of 3.80% on the 2025 Notes on a semi-annual basis on March 15 and September 15 of each year.

The Company may redeem the 2025, 2026, 2029, 2030, 2049, 2050, and 2060 Notes (collectively the "Senior Notes") at a redemption price equal to 100% of the principal amount of such series ("par"), plus a "make whole" premium as described in the indenture in respect to the Senior Notes and accrued and unpaid interest before December 15, 2024 for the 2025 Notes, before January 15, 2026 for the 2026 Notes, before December 15, 2028 for the 2029 Notes, before March 15, 2030 for the 2030 Notes, before September 15, 2048 for the 2049 Notes, before December 15, 2049 for the 2050 Notes, and before December 15, 2059 for the 2060 Notes. The Company may redeem the Senior Notes at par, plus accrued and unpaid interest at any time on or after December 24, 2024 for the 2025 Notes, on or after January 15, 2026 for the 2026 Notes, on or after December 15, 2028 for the 2029 Notes, on or after March 15, 2030 for the 2030 Notes, on or after September 15, 2048 for the 2049 Notes, on or after December 15, 2049 for the 2050 Notes, and on or after December 15, 2059 for the 2060 Notes. In addition, upon the occurrence of certain events, as described in the indenture, the Company will be required to make an offer to repurchase the Senior Notes at a price equal to 101% of the principal amount of the respective note, plus accrued and unpaid interest.

Selected additional information regarding the Senior Notes outstanding as of June 25, 2023, is as follows:

	Remaining Amortization period	Fair Value of Notes (Level 2)
	(years)	(in thousands)
2025 Notes	1.7	$ 488,620
2026 Notes	2.7	$ 730,725
2029 Notes	5.7	$ 969,760
2030 Notes	7.0	$ 624,825
2049 Notes	25.7	$ 730,500
2050 Notes	27.0	$ 525,233
2060 Notes	37.0	$ 340,365

Revolving Credit Facility

On March 12, 2014, the Company established an unsecured Credit Agreement. This agreement was amended on November 10, 2015 (the “Amended and Restated Credit Agreement”), October 13, 2017 (the “2nd Amendment”), February 25, 2019 (the “3rd Amendment”), June 17, 2021 (the “Second Amended and Restated Credit Agreement”), and December 7, 2022 (“Amendment No.1 to Second Amended and Restated Credit Agreement”). The Second Amended and Restated Credit Agreement provides for a $1.50 billion revolving credit facility with a syndicate of lenders, along with an expansion option that will allow the Company, subject to certain requirements, to request an increase in the facility of up to an additional $600.0 million, for a potential total commitment of

$2.10 billion. The facility matures on June 17, 2026. The Amendment No.1 To Second Amended and Restated Credit Agreement replaces the benchmark reference rate, LIBOR, with term SOFR equal to the term rate determined by the Chicago Mercantile Exchange term SOFR administrator plus 0.10% ("adjusted term SOFR"), with no change to the amount or timing of contractual cash flows.

Interest on amounts borrowed under the credit facility is, at the Company's option, based on (1) a base rate, defined as the greatest of (a) prime rate, (b) Federal Funds rate plus 0.5%, or (c) adjusted term SOFR plus 1.0%, plus a spread of 0.00% to 0.30%, or (2) adjusted term SOFR, plus a spread of 0.805% to 1.30%, in each case plus a facility fee, with such spread and facility fee determined based on the rating of the Company's non-credit enhanced, senior unsecured long-term debt. Such spreads and such facility fees are further subject to sustainability adjustments as described in the Amendment No. 1 to Second Amended and Restated Credit Agreement, in each case based on the Company's performance of certain energy savings and health and safety standards metrics. Principal and any accrued and unpaid interest are due and payable upon maturity. Additionally, the Company will pay the lenders a quarterly commitment fee that varies based on the Company's credit rating. As of June 25, 2023, the Company had no borrowings outstanding under the credit facility and was in compliance with all financial covenants.

Commercial Paper Program

On November 13, 2017, the Company established a commercial paper program (the "CP Program") under which the Company may issue unsecured commercial paper notes on a private placement basis up to a maximum aggregate principal amount of $1.25 billion. In July 2021, the Company amended the CP Program size to a maximum aggregate amount outstanding at any time of $1.50 billion. The net proceeds from the CP Program will be used for general corporate purposes, including repurchases of the Company's Common Stock from time to time under the Company's stock repurchase program. Amounts available under the CP Program may be re-borrowed. The CP Program is backstopped by the Company's Revolving Credit Arrangement. As of June 25, 2023, the Company had no outstanding borrowings under the CP Program.

Interest Cost

The following table presents the amount of interest cost recognized relating to both the contractual interest coupon and amortization of the debt discount, issuance costs, and effective portion of interest rate contracts with respect to the Senior Notes, convertible notes, and the revolving credit facility during the fiscal years ended June 25, 2023, June 26, 2022, and June 27, 2021.

	Year Ended		
	June 25, 2023	June 26, 2022	June 27, 2021
		(in thousands)	
Contractual interest coupon	$ 175,128	$ 175,128	$ 197,367
Amortization of interest discount	2,862	2,767	3,934
Amortization of issuance costs	1,376	1,351	1,639
Effect of interest rate contracts, net	2,545	2,455	2,070
Total interest cost recognized	$ 181,911	$ 181,701	$ 205,010

Note 15: Leases

The Company leases certain office spaces, manufacturing and warehouse spaces, equipment, and vehicles. While the majority of the Company's lease arrangements are operating leases, the Company has certain leases that qualify as finance leases.

The components of lease expense were as follows for the years ended June 25, 2023, June 26, 2022, and June 27, 2021:

	Year Ended		
	June 25, 2023	June 26, 2022	June 27, 2021
		(in thousands)	
Financing lease cost:			
Amortization of right-of-use assets	$ 7,899	$ 7,439	$ 7,131
Interest on lease liabilities	863	658	697
Total finance lease cost	$ 8,762	$ 8,097	$ 7,828
Operating lease cost	$ 75,660	$ 69,250	$ 51,519
Variable lease cost	227,726	259,041	219,040

Variable lease payments are expensed as incurred and are not included within the right of use asset and lease liability calculation. Variable lease payments primarily include costs associated with the Company’s third-party logistics arrangements that contain one or more embedded leases. Variable lease costs will fluctuate based on factory output and material receipt volumes. Short-term rental expense, for agreements less than one year in duration, were immaterial for the twelve months ended June 25, 2023, June 26, 2022, and June 27, 2021, respectively.

Supplemental cash flow information related to leases was as follows as of June 25, 2023, June 26, 2022, and June 27, 2021:

	Year Ended		
	June 25, 2023	**June 26, 2022**	**June 27, 2021**
		(in thousands)	
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows paid for operating leases	$ 74,397	$ 64,808	$ 63,895
Financing cash flows paid for principal portion of finance leases	14,985	11,513	5,952
Right-of-use assets obtained in exchange for lease obligations:			
Operating leases	$ 91,592	$ 121,580	$ 48,993
Finance leases	20,161	13,868	29,497

Supplemental balance sheet information related to leases was as follows as of June 25, 2023 and June 26, 2022:

	June 25, 2023	June 26, 2022
	(in thousands)	
Operating leases		
Other assets	$ 242,656	$ 226,648
Accrued expenses and other current liabilities	$ 64,682	$ 54,110
Other long-term liabilities	172,886	164,613
Total operating lease liabilities	$ 237,568	$ 218,723
Finance Leases		
Property and Equipment, net	$ 53,721	$ 42,153
Current portion of long-term debt and lease liabilities	$ 7,937	$ 7,381
Long-term debt and lease liabilities, less current portion	38,239	35,990
Total finance lease liabilities	$ 46,176	$ 43,371

	June 25, 2023		June 26, 2022	
	Weighted-Average Remaining Lease Term	Weighted-Average Discount Rate	Weighted-Average Remaining Lease Term	Weighted-Average Discount Rate
	(in years)		(in years)	
Operating leases	4.9	3.80 %	5.4	3.05 %
Finance leases	5.2	2.56 %	6.4	2.01 %

As of June 25, 2023, the maturities of lease liabilities are as follows:

	Operating Leases	Finance Leases
	(in thousands)	
2024	$ 72,035	$ 8,796
2025	53,620	7,867
2026	41,303	7,429
2027	30,264	7,025
2028	22,748	12,617
Thereafter	44,718	5,444
Total lease payments	$ 264,688	$ 49,178
Less imputed interest	(27,120)	(3,002)
Total	$ 237,568	$ 46,176

Selected Leases and Related Guarantees

The Company leases the some of its administrative, research and development and manufacturing facilities, regional sales/service offices, and certain equipment under non-cancelable leases. Certain of the Company's facility leases for buildings located at its Fremont, California headquarters; Tualatin, Oregon campus; and certain other facility leases provide the Company with options to extend the leases for additional periods or to purchase the facilities. Certain of the Company's facility leases provide for periodic rent increases based on the general rate of inflation.

The Company has finance leases for certain improved properties in Fremont and Livermore, California (the "California Facility Leases"). The Company is required to maintain cash collateral in an aggregate of approximately $250 million in separate interest-bearing accounts as security for the Company's obligations. These amounts are recorded with other restricted cash and investments in the Company's Consolidated Balance Sheets as of June 25, 2023 and June 26, 2022.

During the seven-year term of the California Facility Leases and when the terms of the California Facility Leases expire, the property subject to the California Facility Leases may be re-marketed. The Company has guaranteed to the lessor that each property will have a certain minimum residual value. The aggregate maximum guarantee made by the Company under the California Facility Leases is $298.4 million. During the fiscal year ended June 25, 2023, the Company recognized an immaterial liability associated with one of the leased properties in other long-term liabilities in its Consolidated Balances Sheets, as a result of an annual assessment of potential liability under the residual value guarantee arrangements.

Note 16: Retirement and Deferred Compensation Plans

Employee Savings and Retirement Plan

The Company maintains a 401(k) retirement savings plan for its eligible employees in the United States. Each participant in the plan may elect to contribute from 1% to 75% of annual eligible earnings to the plan, subject to statutory limitations. The Company makes matching employee contributions in cash to the plan at the rate of 50% of the first 6% of earnings contributed. Employees participating in the 401(k) retirement savings plan are fully vested in the Company matching contributions, and investments are directed by participants. The Company made matching contributions of $34.7 million, $32.6 million, and $26.9 million, in fiscal years 2023, 2022, and 2021, respectively.

Deferred Compensation Arrangements

The Company has an unfunded, non-qualified deferred compensation plan whereby executives may defer a portion of their compensation. Participants earn a return on their deferred compensation based on their allocation of their account balance among various mutual funds. The Company controls the investment of these funds, and the participants remain general creditors of the Company. Participants are able to elect the payment of benefits on a specified date at least three years after the opening of a deferral sub-account or upon retirement. Distributions are made in the form of lump sum or annual installments over a period of up to 20 years as elected by the participant. If no alternate election has been made, a lump sum payment will be made upon termination of a participant’s employment with the Company. As of June 25, 2023, and June 26, 2022, the liability of the Company to the plan participants was $318.0 million and $280.0 million, respectively, which was recorded in accrued expenses and other current liabilities and other long-term liabilities on the Consolidated Balance Sheets. As of June 25, 2023, and June 26, 2022, the Company had investments in the aggregate amount of $318.1 million and $291.3 million, respectively, which correlate to the deferred compensation obligations, which were recorded in other assets on the Consolidated Balance Sheets.

Post-Retirement Healthcare Plan

The Company maintains a post-retirement healthcare plan for certain executive and director retirees. Coverage continues through the duration of the lifetime of the retiree or the retiree’s spouse, whichever is longer. The benefit obligation was $33.2 million and $31.2 million as of June 25, 2023, and June 26, 2022, respectively.

Note 17: Commitments and Contingencies

The Company has certain obligations to make future payments under various contracts; some of these are recorded on its balance sheet and some are not. Obligations that are recorded on the Company's balance sheet include the Company's operating and finance lease obligations. Obligations that are not recorded on the Company's balance sheet include contractual relationships for purchase obligations and certain guarantees. The Company's commitments relating to off-balance sheet agreements are included in the tables below. These amounts exclude $582.8 million of liabilities related to uncertain tax positions (see Note 7: Income Taxes for further discussion) as of the end of the fiscal year because the Company is unable to reasonably estimate the ultimate amount or time of settlement.

Other Guarantees

The Company has issued certain indemnifications to its lessors for taxes and general liability under some of its agreements. The Company has entered into insurance contracts that are intended to limit its exposure to such indemnifications. As of June 25, 2023, the Company had not recorded any liability on its Consolidated Financial Statements in connection with these indemnifications, as it does not believe that it is probable that any material amounts will be paid under these guarantees.

Generally, the Company indemnifies, under pre-determined conditions and limitations, its customers for infringement of third-party intellectual property rights by the Company's products or services. The Company seeks to limit its liability for such indemnity to an amount not to exceed the sales price of the products or services subject to its indemnification obligations. The Company does not believe that it is probable that any material amounts will be paid under these guarantees.

The Company provides guarantees and standby letters of credit to certain parties as required for certain transactions initiated during the ordinary course of business. As of June 25, 2023, the maximum potential amount of future payments that the Company could be required to make under these arrangements and letters of credit was $141.6 million. The Company does not believe, based on historical experience and information currently available, that it is probable that any material amounts will be required to be paid.

In addition, the Company has entered into indemnification agreements with its directors, officers and certain other employees, consistent with its Bylaws and Certificate of Incorporation; and under local law, the Company may be required to provide indemnification to its employees for actions within the scope of their employment. Although the Company maintains insurance contracts that cover some of the potential liability associated with these indemnification agreements, there is no guarantee that all such liabilities will be covered. The Company does not believe, based on historical experience and information currently available, that it is probable that any material amounts will be required to be paid under such indemnification agreements or statutory obligations.

Purchase Obligations

Purchase obligations consist of non-cancelable significant contractual obligations either on an annual basis or over multi-year periods. The contractual cash obligations and commitments table presented below contains the Company's minimum obligations at June 25, 2023, under these arrangements and others. For obligations with cancellation provisions, the amounts included in the following table were limited to the non-cancelable portion of the agreement terms or the minimum cancellation fee. Actual expenditures will vary based on the volume of transactions and length of contractual service provided.

The Company's commitments related to these agreements as of June 25, 2023, were as follows:

Payments Due by Fiscal Year:	Purchase Obligations
	(in thousands)
2024	$ 659,074
2025	81,294
2026	3,504
2027	890
2028	359
Thereafter	320
Total	$ 745,441

Transition Tax Liability

On December 22, 2017, the "Tax Cuts & Jobs Act" was signed into law. Among other items, this U.S. tax reform assessed a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred. As a result, the Company recognized a total transition tax of $868.4 million and elected to pay the one-time tax over a period of 8 years, commencing in the twelve months ended June 30, 2019. As of September 25, 2022, this one-time tax was adjusted, resulting in a total tax liability increase of approximately $50.0 million, which was spread over the same 8-year period (see Note 7: Income Taxes for further discussion).

The Company's remaining obligation related to this arrangement as of June 25, 2023, were as follows:

Payments Due by Fiscal Year [1]:	Transition Tax
	(in thousands)
2024	$ 137,783
2025	183,710
2026	229,638
Total	$ 551,131

(1) The Company may choose to apply existing tax credits, thereby reducing the actual cash payment.

Warranties

The Company provides standard warranties on its systems. The liability amount is based on actual historical warranty spending activity by type of system, customer, and geographic region, modified for any known differences such as the impact of system reliability improvements. As of June 25, 2023, warranty reserves totaling $29.9 million were recognized in other long-term liabilities, the remainder were included in accrued expenses and other current liabilities in the Company's Consolidated Balance Sheets.

Changes in the Company's product warranty reserves were as follows:

	Year Ended	
	June 25, 2023	June 26, 2022
	(in thousands)	
Balance at beginning of period	$ 256,258	$ 191,758
Warranties issued during the period	272,281	295,167
Settlements made during the period	(240,841)	(272,954)
Changes in liability for warranties issued during the period	(14,270)	14,951
Changes in liability for pre-existing warranties	13,235	27,336
Balance at end of period	$ 286,663	$ 256,258

Government Assistance

In the fiscal year ended June 25, 2023, the Company received government assistance from various domestic and international governments in the form of cash grants or refundable tax credits (collectively "Grant" or "Grants"). The Grants typically specify conditions that must be met in order for the Grants to be earned, such as employment or employee retention targets; completion of employee training; or the construction or acquisition of property and equipment and are often time-bound. If conditions are not satisfied or if the duration period for the arrangement is not met, the Grants are often subject to reduction, repayment, or termination.

The Company's policy is to recognize a benefit in the Consolidated Statement of Operations, as a reduction to the expense the individual Grant is designed to compensate for, over the duration of the program when the Company has reasonable assurance that it will comply with the conditions under the Grant and that the Grant will be received. Grants related to investments in property and equipment are recognized as a reduction to the cost basis of the underlying assets with an ongoing reduction to depreciation expense over the assets estimated useful life.

During the fiscal year ended June 25, 2023, the Company received an insignificant amount related to Grants. To the extent amounts have been received by the Company in advance of completion of the conditions, they have been recognized in accrued expense and other liabilities, or other long-term liabilities in the Consolidated Balance Sheets, as appropriate.

Legal Proceedings

While the Company is not currently a party to any legal proceedings that it believes material, the Company is either a defendant or plaintiff in various actions that have arisen from time to time in the normal course of business, including intellectual property claims. The Company accrues for a liability when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Significant judgment is required in both the determination of probability and the determination as to whether a loss is reasonably estimable. Based on current information, the Company does not believe that a material loss from known matters is probable and therefore has not recorded an accrual of any material amount for litigation or other contingencies related to existing legal proceedings.

Note 18: Stock Repurchase Program

In May 2022, the Board of Directors authorized the Company to repurchase up to an additional $5.0 billion of Common Stock; this authorization supplements the remaining balances from any prior authorizations. These repurchases can be conducted on the open market or as private purchases and may include the use of derivative contracts with large financial institutions, in all cases subject to compliance with applicable law. This repurchase program has no termination date and may be suspended or discontinued at any time.

Repurchases under the repurchase program were as follows during the periods indicated:

Period	Total Number of Shares Repurchased		Total Cost of Repurchase [3]		Average Price Paid Per Share [1,3]		Amount Available Under Repurchase Program
			(in thousands, except per share data)				
Available balance as of June 26, 2022						$	5,514,636
Quarter ended September 25, 2022	675 [2]	$	104,982	$	432.74	$	5,409,654
Quarter ended December 25, 2022	1,125	$	483,226	$	429.42	$	4,926,428
Quarter ended March 26, 2023	1,017	$	483,418	$	475.18	$	4,443,010
Quarter ended June 25, 2023	1,616	$	905,793	$	560.43	$	3,537,217

(1) Average price paid per share excludes the effect of accelerated share repurchase activities. See additional disclosure below regarding the Company's accelerated share repurchase activity during the fiscal year.

(2) Includes shares received at final settlement of accelerated share repurchase agreements; see additional disclosures below regarding the Company's accelerated share repurchase activity during the fiscal year.

(3) As of January 1, 2023, the Company's net share repurchases are subject to a 1% excise tax under the Inflation Reduction Act. Excise tax incurred reduces the amount available under the repurchase program, as applicable, and is included in the cost of shares repurchased in the Consolidated Statement of Stockholders' Equity and the calculation of the average price paid per share.

In addition to the shares repurchased under the Board-authorized repurchase program shown above, the Company acquired 176 thousand shares at a total cost of $85.4 million during the 12 months ended June 25, 2023, which the Company withheld through net settlements to cover minimum tax withholding obligations upon the vesting of restricted stock unit awards granted under the Company's equity compensation plans. The shares retained by the Company through these net share settlements are not a part of the Board-authorized repurchase program but instead are authorized under the Company's equity compensation plan.

Accelerated Share Repurchase Agreements

On June 2, 2022, the Company entered into an accelerated share repurchase agreement (the "June 2022 ASR") with two financial institutions to repurchase a total of $500 million of Common Stock. The Company took an initial delivery of approximately 717 thousand shares, which represented 75% of the prepayment amount divided by our closing stock price on June 2, 2022. The total number of shares received under the June 2022 ASR was based upon the average daily volume weighted average price of the Company's Common Stock during the repurchase period, less an agreed upon discount. Final settlement of the June 2022 ASR occurred in September 2022, resulting in the receipt of approximately 433 thousand additional shares, which yielded a weighted-average share price of $435.20 for the transaction period.

Note 19: Comprehensive Income (Loss)

The components of accumulated other comprehensive loss, net of tax at the end of June 25, 2023, as well as the activity during the fiscal year ended June 25, 2023, were as follows:

	Accumulated Foreign Currency Translation Adjustment	Accumulated Unrealized Gain or Loss on Cash Flow Hedges	Accumulated Unrealized Holding Gain or Loss on Available-For-Sale Investments	Accumulated Unrealized Components of Defined Benefit Plans	Total
			(in thousands)		
Balance as of June 26, 2022	$ (81,755)	$ (12,330)	$ (1,637)	$ (14,260)	$ (109,982)
Other comprehensive income before reclassifications	6,858	10,413	1,491	83	18,845
Gains reclassified from accumulated other comprehensive income (loss) to net income (1)	—	(9,411)	(158)	—	(9,569)
Net current-period other comprehensive income (loss)	6,858	1,002	1,333	83	9,276
Balance as of June 25, 2023	$ (74,897)	$ (11,328)	$ (304)	$ (14,177)	$ (100,706)

(1) Amount of after-tax gain reclassified from accumulated other comprehensive income into net income is not material individually or in the aggregate, or to any individual location in our Consolidated Statement of Operations.

Tax related to other comprehensive income, and the components thereto, for the years ended June 25, 2023, June 26, 2022, and June 27, 2021 was not material.

Note 20: Segment, Geographic Information, and Major Customers

The Company operates in one reportable business segment: manufacturing and servicing of wafer processing semiconductor manufacturing equipment. The Company's material operating segments qualify for aggregation due to their customer base and similarities in economic characteristics, nature of products and services, and processes for procurement, manufacturing, and distribution.

The Company operates in seven geographic regions: United States, China, Europe, Japan, Korea, Southeast Asia, and Taiwan. For geographical reporting, revenue is attributed to the geographic location in which the customers' facilities are located, while long-lived assets; which includes property and equipment, net, and recognized right of use assets reported in other assets in the Consolidated Balance Sheets as of June 25, 2023 and June 26, 2022; are attributed to the geographic locations in which the assets are located.

Revenues and long-lived assets by geographic region were as follows:

	Year Ended		
	June 25, 2023	**June 26, 2022**	**June 27, 2021**
Revenue:		**(in thousands)**	
China	$ 4,462,663	$ 5,411,502	$ 5,137,886
Korea	3,551,742	4,037,467	3,924,685
Taiwan	3,477,862	2,936,482	2,117,999
Japan	1,758,364	1,624,573	1,363,907
United States	1,665,136	1,147,346	672,716
Southeast Asia	1,354,471	1,357,648	945,478
Europe	1,158,278	712,021	463,479
Total revenue	$ 17,428,516	$ 17,227,039	$ 14,626,150

	June 25, 2023	June 26, 2022	June 27, 2021
Long-lived assets:		**(in thousands)**	
United States	$ 1,367,534	$ 1,276,274	$ 1,137,490
Southeast Asia	339,415	248,029	129,881
Korea	215,898	183,809	62,502
Europe	93,732	77,658	77,661
Taiwan	65,432	72,845	47,279
China	8,865	7,214	9,301
Japan	8,452	8,406	13,149
	$ 2,099,328	$ 1,874,235	$ 1,477,263

In fiscal year 2023, two customers accounted for approximately 22% and 16% of total revenues, respectively. In fiscal year 2022, four customers accounted for approximately 21%, 12%, 12%, and 11% of total revenues, respectively. In fiscal year 2021, three customers accounted for approximately 25%, 12%, and 10% of total revenues, respectively. No other customers accounted for more than 10% of total revenues.

Note 21: Business Combinations

In November 2022, the Company completed two business combination transactions acquiring the outstanding shares of two separate private companies in cash transactions collectively valued at $153.8 million as of the respective purchase dates. The Company's preliminary assessment of acquisition date fair value of the assets acquired and liabilities assumed resulted in the recognition of $102.2 million of goodwill and $81.2 million of intangible assets; all other assets acquired and all liabilities assumed were immaterial. The preliminary fair value of net tangible liabilities assumed and intangible assets acquired was based on preliminary valuations, estimates, and assumptions which are subject to change within the measurement period (up to one year from the acquisition date). The Company expensed all associated costs, as incurred, in selling, general, and administrative expense in the Consolidated Statement of Operations for the year ended June 25, 2023.

The following table is a summary of the preliminary fair value estimates of the identifiable intangible assets and their useful lives:

	Weighted-Average Useful Life	Estimated Purchase Date Fair Value
		(in thousands)
Existing technology	7 years	$ 40,294
Customer relationships	8 years	10,835
In process research and development	Indefinite	30,081
		$ 81,210

Note 22: Restructuring Charges, Net

The Company records employee severance and separation costs that meet the requirements for recognition in accordance with the relevant guidance of ASC 420, Exit or Disposal Cost Obligations, or ASC 712, Compensation - Non-retirement Post-employment Benefits, as applicable. For involuntary termination benefits that are not provided under the terms of an ongoing benefit arrangement, the liability for the current fair value of expected future costs associated with a management-approved restructuring plan is recognized in the period in which the plan is communicated to the employees and the plan is not expected to change significantly. For ongoing benefit arrangements, inclusive of statutory requirements, employee termination costs are accrued when the existing situation or set of circumstances indicates that an obligation has been incurred, it is probable the benefits will be paid, and the amount can be reasonably estimated. Termination benefits associated with employees that elected to voluntarily terminate as part of the restructuring plan are recorded when the employee irrevocably accepts the offer and the amount can be reasonably estimated. If applicable, the Company records such costs into operating expense over the terminated employees' future service period beyond any minimum or legally required retention period. The majority of restructuring charges that have been incurred but not yet paid are recorded in Accrued expenses and other current liabilities in the Consolidated Balance Sheets.

In the fiscal year ended June 25, 2023, the Company initiated a restructuring plan designed to better align the Company's cost structure with its outlook for the economic environment and business opportunities. Under the plan the Company terminated approximately 1,650 employees, incurring expenses related to employee severance and separation costs. Employee severance and separation costs primarily relate to severance, non-cash severance, including equity award compensation expense, pension and other termination benefits. Additionally, the Company made a strategic decision to relocate certain manufacturing activities to pre-existing facilities and incurred charges to move inventory and equipment and exit selected supplier arrangements.

During the fiscal year ended June 25, 2023, net restructuring costs of $78.2 million and $42.2 million were recorded in restructuring charges, net - cost of goods sold, and restructuring charges, net - operating expenses, respectively in the Consolidated Statements of Operations.

The Company anticipates the restructuring plan to be substantially complete by December 24, 2023, and estimates that incremental restructuring charges totaling approximately $18 million will be incurred in the fiscal quarters ending September 24, 2023 and December 24, 2023.

The following table is a summary of the activity related to the restructuring plan:

	Severance and Benefits	Other	Total
		(in thousands)	
Restructuring expense	$ 107,063	$ 13,253	$ 120,316
Cash payments	(96,047)	(12,378)	(108,425)
Non-cash activities	(3,027)	(629)	(3,656)
Restructuring liability as of June 25, 2023	$ 7,989	$ 246	$ 8,235

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Lam Research Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Lam Research Corporation (the Company) as of June 25, 2023 and June 26, 2022, the related consolidated statements of operations, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended June 25, 2023, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at June 25, 2023 and June 26, 2022, and the results of its operations and its cash flows for each of the three years in the period ended June 25, 2023, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of June 25, 2023, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated August 15, 2023 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the account or disclosure to which it relates.

Inventory - Valuation

Description of the Matter	The Company’s inventories totaled $4.8 billion as of June 25, 2023, representing 26% of total assets. As explained in Note 2 to the consolidated financial statements, the Company assesses the valuation of all inventories including manufacturing raw materials, work-in-process, finished goods, and spare parts in each reporting period. Obsolete inventory or inventory in excess of management’s estimated usage requirement is written down to its estimated net realizable value if less than cost. Auditing management’s estimates for excess and obsolete inventory involved subjective auditor judgment because management’s assessment of whether a write down is required and the measurement of any excess of cost over net realizable value is judgmental and considers a number of qualitative factors that are affected by market and economic conditions outside the Company’s control.
How We Addressed the Matter in Our Audit	We evaluated and tested the Company’s processes and the design and operating effectiveness of internal controls addressing the identified audit risks. This included controls over management’s assessment of inventory valuation, including the development of forecasted usage of inventories and consideration of how factors outside of the Company’s control might affect management’s judgment related to the valuation of excess and obsolete inventory. Our audit procedures included, among others, evaluating the significant assumptions (e.g., forecasts related to the Company’s future manufacturing schedules, customer demand, technological and/or market obsolescence, and possible alternative uses) and the underlying data used in management’s excess and obsolete inventory valuation assessment. We evaluated inventory levels compared to forecasted demand, historical sales and specific product considerations. We also assessed the historical accuracy of management’s estimates.

/s/ Ernst & Young LLP

We have served as the Company’s auditor since 1981.

San Jose, California
August 15, 2023

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Lam Research Corporation

Opinion on Internal Control Over Financial Reporting

We have audited Lam Research Corporation’s internal control over financial reporting as of June 25, 2023, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Lam Research Corporation (the Company) maintained, in all material respects, effective internal control over financial reporting as of June 25, 2023, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of June 25, 2023 and June 26, 2022, the related consolidated statements of operations, comprehensive income, stockholders’ equity and cash flows for each of the three years in the period ended June 25, 2023, and the related notes and our report dated August 15, 2023 expressed an unqualified opinion thereon.

Basis for Opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management’s Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

San Jose, California
August 15, 2023

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Design of Disclosure Controls and Procedures and Internal Control over Financial Reporting

We maintain disclosure controls and procedures and internal control over final reporting that are designed to comply with Rule 13a-15 of the Exchange Act. In designing and evaluating the controls and procedures associated with each, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives and that the effectiveness of controls cannot be absolute because the cost to design and implement a control to identify errors or mitigate the risk of errors occurring should not outweigh the potential loss caused by the errors that would likely be detected by the control. Moreover, we believe that a control system cannot be guaranteed to be 100% effective all of the time. Accordingly, a control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system’s objectives will be met.

Disclosure Controls and Procedures

As required by Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), as of June 25, 2023, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rule 13a-15(e). Based upon that evaluation, our Chief Executive Officer and our Chief Financial Officer each concluded that our disclosure controls and procedures are effective, as of June 25, 2023, at the reasonable assurance level.

We intend to review and evaluate the design and effectiveness of our disclosure controls and procedures on an ongoing basis and to correct any material deficiencies that we may discover. Our goal is to ensure that our senior management has timely access to material information that could affect our business.

Changes in Internal Control over Financial Reporting

There has been no change in our internal control over financial reporting during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management’s Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate “internal control over financial reporting”, as that term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Management conducted an evaluation of the effectiveness of internal control over financial reporting based on the framework in Internal Control — Integrated Framework used by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework). Based on that evaluation, management has concluded that the Company’s internal control over financial reporting was effective as of June 25, 2023, at providing reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP.

Ernst & Young LLP, an independent registered public accounting firm, audited the financial statements included in this 2023 Form 10-K and has issued an attestation report on the Company's internal control over financial reporting, as stated in their report, which is included in Part II, Item 8 of this 2023 Form 10-K.

Effectiveness of Controls

While we believe the present design of our disclosure controls and procedures and internal control over financial reporting is effective at the reasonable assurance level, future events affecting our business may cause us to modify our disclosure controls and procedures or internal control over financial reporting.

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

We have omitted from this 2023 Form 10-K certain information required by Part III because we, as the Registrant, will file a definitive proxy statement with the SEC within 120 days after the end of our fiscal year, pursuant to Regulation 14A, as promulgated by the SEC, for our Annual Meeting of Stockholders expected to be held on or about November 7, 2023, (the “Proxy Statement”), and certain information included in the Proxy Statement is incorporated into this report by reference.

Item 10. Directors, Executive Officers and Corporate Governance

For information regarding our executive officers, see Part I, Item 1 of this 2023 Form 10-K under the caption “Information about our Executive Officers,” which information is incorporated into Part III by reference.

The information concerning our directors required by this Item is incorporated by reference to our Proxy Statement under the heading “Voting Proposals — Proposal No. 1: Election of Directors — 2023 Nominees for Director.”

The information concerning our audit committee and audit committee financial experts required by this Item is incorporated by reference to our Proxy Statement under the headings “Governance Matters — Corporate Governance — Board Committees” and “Governance Matters — Corporate Governance — Board Committees — Audit Committee.”

The Company has adopted a Corporate Code of Ethics that applies to all employees, officers, and directors of the Company. Our Code of Ethics is publicly available on the Investor Relations page of our website at http://investor.lamresearch.com. To the extent required by law, any amendments to, or waivers from, any provision of the Code of Ethics will promptly be disclosed to the public. To the extent permitted by applicable legal requirements, we intend to make any required public disclosure by posting the relevant material on our website in accordance with SEC rules.

Item 11. Executive Compensation

The information required by this Item is incorporated by reference to our Proxy Statement under the headings “Compensation Matters — Executive Compensation and Other Information,” “Compensation Matters — CEO Pay Ratio,” and “Governance Matters — Director Compensation.”

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this Item is incorporated by reference to our Proxy Statement under the headings “Stock Ownership — Security Ownership of Certain Beneficial Owners and Management” and “Compensation Matters — Securities Authorized for Issuance Under Equity Compensation Plans.”

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this Item is incorporated by reference to our Proxy Statement under the headings “Audit Matters — Certain Relationships and Related Party Transactions” and “Governance Matters — Corporate Governance — Director Independence Policies.”

Item 14. Principal Accountant Fees and Services

The information required by this Item is incorporated by reference to our Proxy Statement under the headings “Audit Matters — Relationship with Independent Registered Public Accounting Firm –– Fees Billed by Ernst & Young LLP” and “Audit Matters –– Relationship with Independent Registered Public Accounting Firm –– Policy on Audit Committee Pre-Approval of Audit and Non-Audit Services.”

PART IV

Item 15. Exhibit and Financial Statement Schedules

(a) The following documents are filed as part of this Annual Report on Form 10-K.

Item 16. Form 10-K Summary

None

LAM RESEARCH CORPORATION

ANNUAL REPORT ON FORM 10-K
FOR THE FISCAL YEAR ENDED JUNE 25, 2023

EXHIBIT INDEX

Exhibit	Description
3.1	Restated Certificate of Incorporation of the Registrant, (including Certificate and Designation, Preferences and Rights of Series A Junior Participating Preferred Stock), dated November 22, 2016 which is incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q filed on January 30, 2017 (SEC File No. 000-12933).
3.2	Bylaws of the Registrant, as amended and restated, dated May 11, 2022 which is incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on May 11, 2022 (SEC File No. 000-12933).
4.1	Indenture (including Form of Notes), dated as of February 13, 2015, between Registrant and The Bank of New York Mellon Trust Company, N.A. which is incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-3 filed on February 13, 2015 (SEC File No. 333-202110).
4.2	First Supplemental Indenture, dated as of March 12, 2015, by and between Lam Research Corporation and The Bank of New York Mellon Trust Company, N.A., as trustee which is incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on March 12, 2015 (SEC File No. 000-12933).
4.3	Second Supplemental Indenture, dated as of June 7, 2016, by and between Lam Research Corporation and The Bank of New York Mellon Trust Company, N.A., as trustee which is incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on June 7, 2016 (SEC File No. 000-12933).
4.4	Third Supplemental Indenture, dated as of March 4, 2019 by and between Lam Research Corporation and the Bank of New York Mellon Trust Company, N.A. as trustee which is incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on March 4, 2019 (SEC File No. 000-12933).
4.5	Fourth Supplemental Indenture, dated as of May 5, 2020 by and between Lam Research Corporation and the Bank of New York Mellon Trust Company, N.A. as trustee which is incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on May 5, 2020 (SEC File No. 000-12933).
4.6	Description of Common Stock, which is incorporated by reference to Exhibit 4.8 to the Registrant's Annual Report on Form 10-K filed on August 18, 2020 (SEC File No. 000-12933).
10.1*	Form of Indemnification Agreement which is incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended April 3, 1988 (SEC File No. 000-12933).
10.2*	Form of Indemnification Agreement which is incorporated by reference to Exhibit 10.148 to the Registrant's Current Report on Form 8-K filed on November 13, 2008 (SEC File No. 000-12933).
10.3*	Form of Indemnification Agreement which is incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on June 4, 2012 (SEC File No. 000-12933).
10.4*	Form of Novellus Directors and Officers Indemnification Agreement which is incorporated by reference to Exhibit 10.1 to Novellus' Current Report on Form 10-Q filed on August 13, 2002 (SEC File No. 000-17157).
10.5*	Novellus Amended Executive Voluntary Deferred Compensation Plan, as amended which is incorporated by reference to Exhibit 10.28 to Novellus' Quarterly Report on Form 10-Q filed on November 5, 2008 (SEC File No. 000-17157).
10.6*	Novellus Accelerated Stock Vesting Retirement Plan Summary which is incorporated by reference to Exhibit 10.30 to Novellus' Quarterly Report on Form 10-Q filed on November 2, 2010 (SEC File No. 000-17157).
10.7*	Novellus Systems, Inc. 2011 Stock Incentive Plan, as amended July 18, 2012 which is incorporated by reference to Exhibit 10.172 to the Registrant's Annual Report on Form 10-K filed on August 22, 2012 (SEC File No. 000-12933).
10.8*	Form of Nonstatutory Stock Option Award Agreement (U.S. Participants) — Lam Research Corporation 2007 Stock Incentive Plan which is incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed on February 6, 2014 (SEC

Table of Contents

Exhibit	Description
10.15*	Lam Research Corporation 2007 Stock Incentive Plan, as amended, which is incorporated by reference to Exhibit 4.15 to the Registrant’s Annual Report on Form 10-K filed on August 27, 2013 (SEC File No. 000-12933).
10.16*	Lam Research Corporation Elective Deferred Compensation Plan which is incorporated by reference to Exhibit 4.16 to the Registrant’s Annual Report on Form 10-K filed on August 19, 2011 (SEC File No. 000-12933)
10.17*	Lam Research Corporation Elective Deferred Compensation Plan II which is incorporated by reference to Exhibit 4.17 to the Registrant’s Annual Report on Form 10-K filed on August 19, 2011 (SEC File No. 000-12933)
10.18	Lam Research Corporation 1999 Employee Stock Purchase Plan, as amended which is incorporated by reference to Exhibit 4.1 to the Registrant’s Form S-8 filed on April 30, 2019 (SEC File No. 333-231138).
10.19*	2004 Executive Incentive Plan, as Amended and Restated which is incorporated by reference to Exhibit 10.1 to the Registrant’s Current Report on Form 8-K filed on February 9, 2023 (SEC File No. 000-12933).
10.20	2015 Stock Incentive Plan which is incorporated by reference to Exhibit 4.24 to the Registrant’s Current Report on Form 8-K filed on November 5, 2015 (SEC File No. 000-12933).
10.21*	Form of Market-Based-Based Performance Restricted Stock Unit Award Agreement (U.S. Participants) - 2015 Stock Incentive Plan which is incorporated by reference to Exhibit 10.1 to the Registrant’s Quarterly Report on Form 10-Q filed on October 23, 2018 (SEC File No 000-12933).
10.22*	Form of Restricted Stock Unit Agreement (U.S. Participants) - 2015 Stock Incentive Plan which is incorporated by reference to Exhibit 10.1 to the Registrant’s Quarterly Report on Form 10-Q filed on April 30, 2019 (SEC File No. 000-12933).
10.23*	Form of Restricted Stock Unit Agreement (Outside Directors) - 2015 Stock Incentive Plan which is incorporated by reference to Exhibit 10.3 to the Registrant’s Quarterly Report on Form 10-Q filed on April 30, 2019 (SEC File No. 000-12933).
10.24*	Form of Market-Based Performance Restricted Stock Unit Award Agreement (U.S. Participants) - 2015 Stock Incentive Plan which is incorporated by reference to Exhibit 10.4 to the Registrant’s Quarterly Report on Form 10-Q filed on April 30, 2019 (SEC File No. 000-12933).
10.25*	Form of Market-Based Performance Restricted Stock Unit Award Agreement (U.S. Participants) - 2015 Stock Incentive Plan which is incorporated by reference to Exhibit 10.1 to the Registrant’s Quarterly Report on Form 10-Q filed on April 28, 2020 (SEC File No. 000-12933).
10.26*	Executive Severance Policy which is incorporated by reference to Exhibit 10.1 to the Registrant’s Current Report on Form 8-K filed on December 28, 2020 (SEC File No. 000-12933).
10.27*	Executive Change in Control Policy which is incorporated by reference to Exhibit 10.2 to the Registrant’s Current Report on Form 8-K filed on December 28, 2020 (SEC File No. 000-12933).
10.28	Amendment No. 1 to Second Amended and Restated Credit Agreement dated December 7, 2022, among Lam Research Corporation, as borrower, the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent, which is incorporated by reference to Exhibit 10.2 to the Registrant’s Quarterly Report on Form 10-Q filed on January 30, 2023 (SEC File No. 000-12933).
10.29*	Form of Option Award Agreement (U.S. Participants) - 2015 Stock Incentive Plan which is incorporated by reference to Exhibit 10.29 to the Registrant's Annual Report on Form 10-K filed on August 17, 2021 (SEC File No. 000-12933).
10.30*	Form of Restricted Stock Unit Agreement (U.S. Participants) - 2015 Stock Incentive Plan which is incorporated by reference to Exhibit 10.30 to the Registrant's Annual Report on

Exhibit	Description
10.39*	Lam Research Corporation Senior Executive Transition Policy which is incorporated by reference to Exhibit 10.1 to the Registrant's Current report on Form 8-K filed on May 11, 2022 (SEC File No. 000-12933)
10.40*	Form of Restricted Stock Unit Agreement (U.S. Participants) - 2015 Stock Incentive Plan which is incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on January 30, 2023 (SEC File No. 000-12933).
21	Subsidiaries of the Registrant.
23	Consent of Independent Registered Public Accounting Firm.
24	Power of Attorney (See Signature page)
31.1	Rule 13a — 14(a) / 15d — 14(a) Certification (Principal Executive Officer)
31.2	Rule 13a — 14(a) / 15d — 14(a) Certification (Principal Financial Officer)
32.1	Section 1350 Certification — (Principal Executive Officer)
32.2	Section 1350 Certification — (Principal Financial Officer)
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

___

* Indicates management contract or compensatory plan or arrangement.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: August 15, 2023	LAM RESEARCH CORPORATION (Registrant)
	By: /s/ Timothy M. Archer
	Timothy M. Archer
	President and Chief Executive Officer

Table of Contents

POWER OF ATTORNEY AND SIGNATURES

By signing this Annual Report on Form 10-K below, I hereby appoint each of Timothy M. Archer and Douglas R. Bettinger, jointly and severally, as my attorney-in-fact to sign all amendments to this Form 10-K on my behalf and to file this Form 10-K (including all exhibits and other related documents) with the Securities and Exchange Commission. I authorize each of my attorneys-in-fact to (1) appoint a substitute attorney-in-fact for himself and (2) perform any actions that he believes are necessary or appropriate to carry out the intention and purpose of this Power of Attorney. I ratify and confirm all lawful actions taken directly or indirectly by my attorneys-in-fact and by any properly appointed substitute attorneys-in-fact.

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signatures	Title	Date
Principal Executive Officer		
/s/ Timothy M. Archer	President, Chief Executive Officer and Director	August 15, 2023
Timothy M. Archer		
Principal Financial Officer		
/s/ Douglas R. Bettinger	Executive Vice President and Chief Financial Officer	August 15, 2023
Douglas R. Bettinger		
Principal Accounting Officer		
/s/ Christina C. Correia	Corporate Vice President and Chief Accounting Officer	August 15, 2023
Christina C. Correia		

Other Directors

Signatures	Title	Date	Signatures	Title	Date
/s/ Abhijit Y. Talwalkar Abhijit Y. Talwalkar	Chairman	August 15, 2023	/s/ Bethany J. Mayer Bethany J. Mayer	Director	August 15, 2023
/s/ Sohail U. Ahmed Sohail U. Ahmed	Director	August 15, 2023	/s/ Jyoti K. Mehra Jyoti K. Mehra	Director	August 15, 2023
/s/ Eric K. Brandt Eric K. Brandt	Director	August 15, 2023	/s/ Lih Shyng Tsai Lih Shyng (Rick L.) Tsai	Director	August 15, 2023
/s/ Michael R. Cannon Michael R. Cannon	Director	August 15, 2023	/s/ Leslie F. Varon Leslie F. Varon	Director	August 15, 2023
/s/ Ho Kyu Kang Ho Kyu Kang	Director	August 15, 2023			