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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 27, 2021

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. ☒

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 27, 2020, the last business day of the most recently completed second fiscal quarter, was $53,314,078,151. 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 12, 2021, the Registrant had 141,953,681 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 8, 2021, 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
2021 ANNUAL REPORT ON FORM 10-K
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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 and the semiconductor industry; the anticipated levels of, and rates of change in, margins, market share, served addressable 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; volatility in our quarterly results; customer and end user requirements and our ability to satisfy those requirements; customer capital spending and their 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 equipment and services; changes in demand for our products and in our market share resulting from, among other things, any changes in our customers' proportion of capital expenditure (with respect to certain technology inflections); hedging transactions; debt or financing arrangements; our competition, and our ability to defend our market share and to gain new market share; our ability to obtain and qualify alternative sources of supply; changes in state, federal and international tax laws, our estimated annual tax rate and the factors that affect our tax rates; anticipated growth or decline in the industry and the total market for wafer fabrication equipment, our growth relative thereto and the resulting impact on us from such growth or decline; the success of joint development and collaboration relationships with customers, suppliers, or others; outsourced activities; the role of component suppliers in our business; our leadership and competency, and our ability to facilitate innovation; our ability to continue to, including the underlying factors that, create sustainable differentiation; the resources invested to comply with evolving standards and the impact of such efforts; 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); 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 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 ("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 competency 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. 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
	Film Treatment	Ultraviolet Thermal Processing ("ULTP")	SOLA® family
Etch	Conductor Etch	Reactive Ion Etch	Kiyo® family, Versys® Metal family
	Dielectric Etch	Reactive Ion Etch	Flex® 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 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 films needed for advanced tungsten metallization applications. 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 and redistribution layers, and for filling TSVs, 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.

SOLA® Product Family

Dielectric materials designed to meet the insulation requirements of logic chips often have attributes that make them unusually difficult to use. These films are easily damaged and vulnerable to losing some of their insulating capability, which can lead to poor device performance. To enable these applications, some films can be stabilized - and others enhanced to improve device performance - using specialized post-deposition film treatments available with Lam's SOLA® UVTP product family. SOLA® products offer process flexibility through independent control of temperature, wavelength, and intensity at each station of the wafer path, enabled by Multi-Station Sequential Processing architecture.

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.

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 create an electrical defect that impacts device performance. In fact, these structures are so tiny that etch processes are pushing 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 conductive features with high productivity. Proprietary Hydra technology in Kiyo® products improves critical dimension (“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, 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.

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 pattern features too small for conventional masks, allowing continued shrinking of feature dimensions. To enable these critical etch steps, the Versys® Metal product family provides high-productivity capability on a flexible platform. Superior CD and profile uniformity 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, including emerging 3D structures. 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 27, 2021, June 28, 2020, and June 30, 2019.

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 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; compliance with U.S. and international laws and regulations, including U.S. export restrictions; 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 2021 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 2021 Form 10-K, for information concerning the geographic locations of long-lived assets.

Customers

Our customers include all 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 27, 2021, June 28, 2020, and June 30, 2019 included Intel Corporation; Kioxia Corporation; Micron Technology, Inc.; Samsung Electronics Company, Ltd.; SK hynix Inc.; Taiwan Semiconductor Manufacturing Company; and Yangtze Memory Technologies Co., Ltd.

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 provide us more flexibility to scale our operations up or down in a timely and cost-effective manner, enabling us to respond quickly to any changes in our business. 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. We believe that, in many cases, we could obtain and qualify alternative sources to supply these products. Nevertheless, 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 Region of Growing Significance to Us, Could 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.

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 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. 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 12, 2021, we had approximately 14,100 regular full-time employees, of which over 29% were engaged in research and development. Approximately 56% of our regular full-time employees are located in the United States, 38% in Asia, and 6% 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. In 2020, we added 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, new college graduate rotation 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, several financial benefits were added to support our employees through the pandemic, including, but not limited to, pay continuity for those affected by closures, expanded medical and family care leave options for employees with COVID-19 related absences, and funding for home office provisions.

Employee Health and Safety, Pandemic Response

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 applies to anywhere we operate and extends 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 and achieved validation for two new sites.

We have taken a holistic approach in response to the COVID-19 pandemic, safeguarding our employees and caring for our communities by implementing strict procedures consistent with medical guidelines and best practices for the health and safety of on-site workers; enabling staff to work remotely; and providing enhanced employee benefits to support physical and mental health.

Information about our Executive Officers

As of August 12, 2021, the executive officers of Lam Research were as follows:

Name	Age	Title
Timothy M. Archer	54	President and Chief Executive Officer
Douglas R. Bettinger	54	Executive Vice President, Chief Financial Officer, and Chief Accounting Officer
Richard A. Gottscho	69	Executive Vice President, Chief Technology Officer
Patrick J. Lord	55	Executive Vice President, CSBG and Global Operations
Ava M. Hahn	48	Senior Vice President, Chief Legal Officer and Secretary
Scott G. Meikle	59	Senior Vice President, Global Customer Operations
Vahid Vahedi	55	Senior Vice President and General Manager, Etch Business Unit
Seshasayee (Sesha) Varadarajan	46	Senior Vice President and General Manager, Deposition Business Unit

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 serves 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, chief financial officer, and chief accounting officer with responsibility for Finance, Tax, Treasury, Information Technology, 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 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.

Richard A. Gottscho is our executive vice president, chief technology officer, a position he has held since May 2017. Dr. Gottscho previously served as executive vice president, Global Products Group beginning in August 2010; and group vice president and general manager, Etch Businesses beginning in March 2007. He joined us in January 1996 and has held various director and vice president roles spanning across deposition, etch, and clean products. Prior to joining us, he was a member of Bell Laboratories for 15 years, where he headed research departments in electronics materials, electronics packaging, and flat panel displays. In 2016, Dr. Gottscho was elected to the U.S. National Academy of Engineering. He is the recipient of many awards, including the American Vacuum Society's Peter Mark Memorial Award, the Plasma Science and Technology Division Prize, the Dry Process Symposium Nishizawa Award, and the Tegal Thinker Award. He is a fellow of the American Physical and American Vacuum Societies. He has authored numerous papers, patents, and lectures, and has served on editorial boards of peer-reviewed technical publications and program committees for major conferences in plasma science and engineering. He served as vice-chair of a National Research Council study on plasma science. Dr. Gottscho earned Ph.D. and B.S. degrees in physical chemistry from the Massachusetts Institute of Technology and Pennsylvania State University, respectively.

Patrick J. Lord is our executive vice president of CSBG and Global Operations, a position he has held since September 2020. Dr. Lord was 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.

Ava M. Hahn is our senior vice president, chief legal officer. She joined us in January 2020 and is responsible for global legal matters. 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.

Scott G. Meikle is our senior vice president of Global Customer Operations, a position he has held since September 2017. Before joining us, he was an independent consultant for a year and director, special projects at Micron Technology, Inc. for seven months. Prior to that time, he spent over five and a half years at Inotera Memories, Inc., most recently as its president from August 2012 to December 2015. Dr. Meikle started his career in process R&D and advanced to various leadership roles in business operations across multiple geographies for Micron Technology, and has over 25 years of experience in the memory devices sector of the semiconductor industry. He earned his Ph.D. and M. Eng. degrees in engineering physics from Shizuoka University and McMaster University, respectively, and a B.S. degree in physics from the University of Calgary.

Vahid Vahedi is our senior vice president and general manager of the Etch Business Unit, a position he has held since February 2018. Prior to that time, he was group vice president of the Etch product group since 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 and general manager of the Deposition Business Unit, a position he has held since February 2018. Prior that time, he was group vice president of the Deposition product group since 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 ("2021 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. Many of the following risk factors have been, and could be further, exacerbated by the COVID-19 pandemic and any worsening of the global business and economic environment as a result. 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. The industry environment has moved toward being more characterized by variability across segments and customers, accentuated by consolidation within the industry. 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. For example, the COVID-19 outbreak has impacted and could further impact our ability to meet the demand for our products due to production, sourcing, logistics and other challenges resulting from quarantines, shelter in place or "stay at home" orders, facility closures, workforce challenges, and travel and logistics restrictions in connection with the outbreak.

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, 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, 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; compliance with specific environmental, social, and corporate governance standards; 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 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 customer 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 business 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

Increasingly, semiconductor manufacturing companies are entering into strategic alliances or consolidating 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.

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 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, 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.

BUSINESS AND OPERATIONAL RISKS

The COVID-19 Outbreak Has Adversely Impacted, and May Continue to Adversely Impact, Our Business, Operations, and Financial Results

The COVID-19 outbreak and efforts by national, state and local governments worldwide to control its spread have resulted in widespread measures aimed at containing the disease such as quarantines, travel bans, shutdowns, and shelter in place or "stay at home" orders, which collectively have 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, have affected and are affecting 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 require changes to existing 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 a large proportion of our workforce. These impacts have caused and are expected to continue to cause delays in product shipments and product development, increases in costs, and decreases in revenue, profitability and cash from operations, which have caused and are expected to cause an adverse effect on our results of operations that may be material. The potential duration and impact of the outbreak on the global economy and on our business are difficult to predict and cannot be estimated with any degree of certainty, but the outbreak has resulted in significant disruption of global financial markets, increases in levels of unemployment, and economic

uncertainty, which has adversely impacted our business and may continue to do so, 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.

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:

- 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;
- changes in average selling prices, customer mix, and product mix;
- 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;
- legal, tax, accounting, or regulatory changes (including but not limited to changes in import/export regulations and tariffs) or changes in the interpretation or enforcement of existing requirements;
- changes in our estimated effective tax rate; and
- foreign currency exchange rate fluctuations.

For example, the COVID-19 outbreak has impacted and could further impact our ability to meet the demand for our products due to production, sourcing, logistics and other challenges resulting from quarantines, shelter in place or stay at home orders, facility closures, workforce challenges, and travel and logistics restrictions in connection with the outbreak.

Certain Critical Information Systems, That We Rely on for the Operation of Our Business and Products That We Sell, Are Susceptible to Cybersecurity and Other Threats or Incidents

We maintain and rely upon certain critical information systems 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. All of these information systems are subject to disruption, breach or failure from various sources, including those using 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. Those sources 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.

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 and 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 information of our employees, customers or other parties;
- the public release of customer orders, financial and business plans, and operational results;
- exposure to claims from 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 our technology, data, intellectual property and other sensitive information, 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 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 approximately $15 million 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 Depend on a Limited Number of Key Suppliers and Outsource Providers, and We Run the Risk That They Might Not Perform as We Expect

Outsource providers and component suppliers have played and will continue to play a key role in our product development, manufacturing operations, field installation and support, and 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.

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. 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. For example, the COVID-19 outbreak has impacted and could further impact our manufacturing operations, supply chain, and customer support due to production, sourcing, logistics and other challenges resulting from quarantines, stay at home orders, facility closures, workforce challenges, and travel and logistics restrictions in connection with the outbreak.

We Face Risks Related to the Disruption of Our Primary Manufacturing Facilities

While we maintain business continuity plans, our manufacturing 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, 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 shipping our products, which could result in the loss of business or customer trust, adversely affecting our business and operating results. For example, the COVID-19 outbreak has impacted and could further impact our manufacturing operations, supply chain, and customer support due to production, sourcing, logistics and other challenges resulting from quarantines, “stay at home” orders, facility closures, workforce challenges, and travel and logistics restrictions in connection with the outbreak.

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 Operation of this 2021 Form 10-K, accounted for approximately 94%, 92%, and 92% of total revenue in fiscal years 2021, 2020, and 2019, 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.

For example, the COVID-19 outbreak has impacted and could further impact our manufacturing operations, supply chain, and customer support due to production, sourcing, logistics and other challenges resulting from quarantines, stay at home orders, facility closures, workforce challenges, and travel and logistics restrictions in connection with the outbreak.

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 might lead to trade disputes, impacts and/or disruptions, in particular those affecting the semiconductor industry. This would 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, or the termination or modification of trade agreements, trade zones, and other duty mitigation initiatives, may 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. 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, could potentially limit the market for our products and adversely impact our revenues. As is discussed below under the heading “Our Sales to Customers in China, a Region of Growing Significance to Us, Could 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 expanded export license requirements that impact trade with China. In addition, the U.S. government is in the process of assessing which “emerging and foundational” technologies may be subject to new or additional export controls under the 2018 Export Control Reform Act, and it is possible that such controls, if and when imposed, could adversely impact our ability to sell our products outside the U.S. Furthermore, there are risks that foreign governments may, among other things, 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. 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. 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 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.

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.

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 Region of Growing Significance to Us, Could 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 35%, 31%, and 22% of our total revenue for fiscal years 2021, 2020, and 2019, 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. For example, over the course of calendar year 2020, the U.S. Department of Commerce enacted a new rule that 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, added additional Chinese companies to its restricted entity list (including Semiconductor Manufacturing International Corporation, or SMIC, and related entities), and 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 specified customers in China, such as SMIC (where those products would not otherwise require an export license to China), 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 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.

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. Our effective tax rate could be adversely affected by changes in the split of earnings between countries with differing statutory tax rates, in the valuation allowance of deferred tax assets, in tax laws, by material audit assessments, or by changes in or expirations of agreements with tax authorities. These factors could affect our profitability. In particular, the carrying value of deferred tax assets, which are predominantly in the United States, is dependent on our ability to generate future taxable income in the United States.

Recommendations made by the Organization for Economic Co-operation and Development's Base Erosion and Profit Shifting project have the potential to lead to changes in the tax laws in numerous countries. In addition, President Joseph Biden has made several corporate income tax proposals, including a significant increase to the U.S. corporate income tax rate and changes in the taxation of non-U.S. income. If enacted, such changes could have a material impact on our effective tax rate.

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.

A Failure to Comply with 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, and disposal of toxic, volatile, or otherwise hazardous chemicals. Failure to comply with present or future environmental regulations 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 our current operations, acquire significant additional equipment, incur substantial other expenses to comply with environmental regulations, or take other actions. Any failure to comply with regulations governing the use, handling, sale, transport, or disposal of hazardous substances could subject us to future liabilities that may adversely affect our operating results, financial condition, and ability to operate our business.

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 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;
- 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 the alternative reference rate reform (e.g. LIBOR transition);
- 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, the Convertible 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.

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; and Villach, Austria. The majority of the Fremont and Livermore facilities are held under finance leases expiring in September 2027. The Villach facilities are held under finance leases expiring in calendar year 2021. Our Fremont, Livermore, and Villach leases include options to renew or purchase the facilities. 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 and Taiwan. In 2020, we announced the establishment of a new owned advanced technology production facility in Malaysia and the facility began production in July 2021. The Company owns

two properties in Fremont, as well as the majority of the Tualatin 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 2021 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 12, 2021, we had 476 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 2021, our quarterly dividend declared was $1.30 per share.

Repurchases of Company Shares

In November 2020, 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 February 11, 2021, we entered into an accelerated share repurchase agreement (the "February 2021 ASR") with a financial institution to repurchase a total of $500 million of Common Stock. We took an initial delivery of approximately 655 thousand shares, which represented 75% of the prepayment amount divided by our closing stock price on February 11, 2021. The total number of shares received under the February 2021 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 February 2021 ASR occurred during May 2021, resulting in the receipt of approximately 213 thousand additional shares, which yielded a weighted-average share price of approximately $575.74 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)	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 28, 2020				$ 1,773,427
Quarter ended September 27, 2020	1,359	$ 343.71	1,344	1,311,429
Quarter ended December 27, 2020	1,797	$ 405.00	1,789	5,586,944
Quarter ended March 28, 2021	1,731	$ 536.75	1,474	4,661,845
March 29, 2021 - April 25, 2021	3	$ 637.73	—	4,661,845
April 26, 2021 - May 23, 2021	552	$ 598.19	547	4,461,850
May 24, 2021 - June 27, 2021	377	$ 639.02	375	4,222,220
Total (3)	5,819	$ 619.80	5,529	$ 4,222,220

(1) During the fiscal year ended June 27, 2021, we acquired 290 thousand shares at a total cost of $166.4 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 repurchases. See additional disclosure above regarding our accelerated share repurchase activity during the fiscal year.

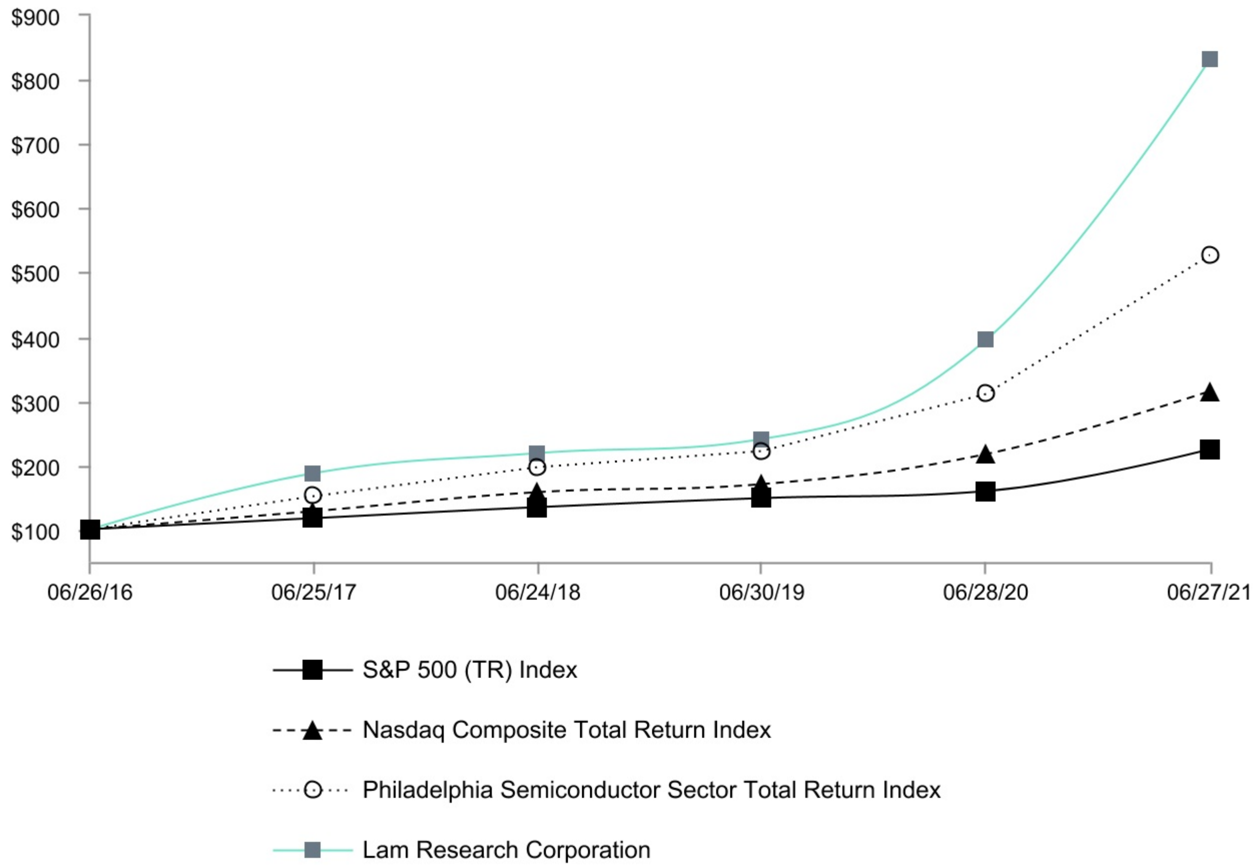
(3) Average price paid per share presented is for the quarter ended June 27, 2021.

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 27, 2021.

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.



*$100 invested on June 26, 2016 in stock or June 30, 2016 in index, including reinvestment of dividends. Indexes calculated on month-end basis.

	June 26, 2016	June 25, 2017	June 24, 2018	June 30, 2019	June 28, 2020	June 27, 2021
Lam Research Corporation	$ 100.00	$ 187.10	$ 218.21	$ 240.87	$ 394.96	$ 831.99
Philadelphia Semiconductor Sector Total Return Index	$ 100.00	$ 152.21	$ 196.53	$ 222.68	$ 310.27	$ 526.91
Nasdaq Composite Total Return Index	$ 100.00	$ 128.30	$ 158.57	$ 170.91	$ 216.96	$ 315.10
S&P 500 (TR) Index	$ 100.00	$ 117.90	$ 134.84	$ 148.89	$ 160.06	$ 225.36

Item 6. ***[Reserved]***

The Company has elected to early adopt the amendments to Items 301 and 302 of Regulation S-K contained in SEC Release No. 33-10890. As a result, the disclosure previously provided in Part II, Item 6 is no longer required. There were no retrospective changes to the Consolidated Statements of Operations for any quarters in the two most recent fiscal years that would require disclosure under Item 302, as amended.

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 2021 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 2021 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 2021 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, faster, 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. We aim to increase our strategic relevance with our customers by contributing more to their continued success. 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 the Cloud, 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 scaling. These trends are driving significant inflections in semiconductor manufacturing, such as the increasing importance of vertical 3D scaling strategies as well as multiple patterning to enable shrinks.

We believe we are in a strong position with our leadership and competency in deposition, etch, and clean to facilitate some of the most significant innovations in semiconductor device manufacturing. We have a broad portfolio of products that provide complementary processing steps used throughout semiconductor manufacturing. Our Customer Support Business Group focuses attention on delivering solutions that meet our customers' technical requirements and productivity needs during the equipment lifecycle. 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 ecosystem partners; and (iv) our focus on delivering our multi-product solutions with a goal to enhance the value of Lam's solutions to our customers.

Throughout the 2021 fiscal year, there was an increase in wafer fabrication equipment spending by semiconductor manufacturers, driven by the robust secular demand for semiconductors in a number of markets including high-performance computing, personal computers, and 5G networks. Customer demand was strong, and we continued to increase our production output levels as we operated under COVID-19-related safety protocols. While we have seen improvements in both our own operations and those of our

suppliers, we experienced higher costs of goods sold related to freight and logistics during the year. Risks and uncertainties related to the COVID-19 pandemic remain, which may continue to negatively impact our revenue and gross margin. Over the longer term, we believe that secular demand for semiconductors will continue to drive sustainable growth for our products and services, and that technology inflections in our industry, including 3D device scaling, multiple patterning, process flow, and advanced packaging chip integration, will lead to an increase in the served addressable 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 27, 2021	June 28, 2020	June 30, 2019	FY21 vs. FY20		FY20 vs. FY19	
	(in thousands, except per share data and percentages)						
Revenue	$ 14,626,150	$ 10,044,736	$ 9,653,559	$ 4,581,414	45.6 %	$ 391,177	4.1 %
Gross margin	$ 6,805,306	$ 4,608,693	$ 4,358,459	$ 2,196,613	47.7 %	$ 250,234	5.7 %
Gross margin as a percent of total revenue	46.5 %	45.9 %	45.1 %	0.6%		0.8%	
Total operating expenses	$ 2,323,283	$ 1,934,891	$ 1,893,727	$ 388,392	20.1 %	$ 41,164	2.2 %
Net income	$ 3,908,458	$ 2,251,753	$ 2,191,430	$ 1,656,705	73.6 %	$ 60,323	2.8 %
Net income per diluted share	$ 26.90	$ 15.10	$ 13.70	$ 11.80	78.1 %	$ 1.40	10.2 %

Fiscal year 2021 revenue increased 46% compared to fiscal year 2020, reflecting stronger customer demand for semiconductor equipment. Gross margin as a percentage of revenue increased primarily due to customer and product mix, partially offset by higher costs incurred in freight and logistics as well as start-up expenses for our new Malaysia manufacturing facility. The increase in operating expenses in fiscal year 2021 compared to fiscal year 2020 was mainly driven by higher employee-related costs as a result of increased headcount, outsourcing services, deferred compensation plan-related costs, and supplies, partially offset by lower travel expenses and miscellaneous costs.

Fiscal year 2020 revenue increased 4% compared to fiscal year 2019, reflecting stronger customer demand for semiconductor equipment. Gross margin as a percentage of revenue increased primarily due to customer and product mix as well as lower amortization expense related to intangibles acquired through business combinations, partially offset by lower factory and field utilization. The increase in operating expenses in fiscal year 2020 compared to fiscal year 2019 was mainly driven by higher employee-related costs as a result of increased headcount and outsourcing services, partially offset by lower travel expense, miscellaneous costs and restructuring charges.

Our cash and cash equivalents, investments, and restricted cash and investments balances totaled approximately $6.0 billion as of June 27, 2021, compared to $7.0 billion as of June 28, 2020. Cash flow provided from operating activities was $3.6 billion for fiscal year 2021 compared to $2.1 billion for fiscal year 2020. Cash flow provided from operating activities in fiscal year 2021 was primarily used for $2.7 billion in treasury stock purchases, including net share settlement on employee stock-based compensation; $862 million of principal payments on debt instruments; $727 million in dividends paid to our stockholders; and $349 million of capital expenditures. These cash outflows were partially offset by $122 million of treasury stock reissuance and Common Stock issuance resulting from our employee equity-based compensation programs.

Results of Operations

Revenue

	Year Ended		
	June 27, 2021	June 28, 2020	June 30, 2019
Revenue (in millions)	$ 14,626	$ 10,045	$ 9,654
China	35 %	31 %	22 %
Korea	27 %	24 %	23 %
Taiwan	14 %	19 %	17 %
Japan	9 %	9 %	20 %
United States	6 %	8 %	8 %
Southeast Asia	6 %	6 %	6 %
Europe	3 %	3 %	4 %

Revenue increased in fiscal year 2021 compared to fiscal years 2020 and 2019, primarily due to the increased investment by our customers in semiconductor capital equipment as well as higher revenue from our Customer Support Business Group for spares, services, upgrades and mature node equipment. The overall Asia region continued to account for a majority of our revenues as a substantial amount of the worldwide capacity investments for semiconductor manufacturing continued to occur in this region.

The deferred revenue balance was $1.1 billion as of June 27, 2021 compared to $537 million as of June 28, 2020, driven by increases in volume purchases for our systems, customer down payments for future tool deliveries, and additional deferrals related to tools pending full delivery and future servicing of our existing installed base.

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

	Year Ended		
	June 27, 2021	June 28, 2020	June 30, 2019
	(in thousands)		
Systems Revenue	$ 9,764,845	$ 6,625,130	$ 6,451,104
Customer support-related revenue and other	4,861,305	3,419,606	3,202,455
	$ 14,626,150	$ 10,044,736	$ 9,653,559

Please refer to Note 4: Revenue of our Consolidated Financial Statements in Part II, Item 8 of this 2021 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 to each of the markets we serve was as follows:

	Year Ended		
	June 27, 2021	June 28, 2020	June 30, 2019
Memory	61 %	58 %	70 %
Foundry	32 %	31 %	20 %
Logic/integrated device manufacturing	7 %	11 %	10 %

Gross Margin

	Year Ended			Change			
	June 27, 2021	June 28, 2020	June 30, 2019	FY21 vs. FY20		FY20 vs. FY19	
	(in thousands, except percentages)						
Gross margin	$ 6,805,306	$ 4,608,693	$ 4,358,459	$ 2,196,613	47.7 %	$ 250,234	5.7 %
Percent of revenue	46.5 %	45.9 %	45.1 %	0.6%		0.8%	

The increase in gross margin as a percentage of revenue for fiscal year 2021 compared to fiscal year 2020 was primarily related to customer and product mix, partially offset by increased spending on freight and logistics due in significant part to COVID-19 disruptions, start-up expenses for our Malaysia manufacturing facility, and deferred compensation plan-related costs.

The increase in gross margin as a percentage of revenue for fiscal year 2020 compared to fiscal year 2019 was primarily due to customer and product mix as well as lower amortization expense related to intangibles acquired through business combinations, partially offset by lower factory and field utilization.

Research and Development

	Year Ended			Change			
	June 27, 2021	June 28, 2020	June 30, 2019	FY21 vs. FY20		FY20 vs. FY19	
	(in thousands, except percentages)						
Research & development	$ 1,493,408	$ 1,252,412	$ 1,191,320	$ 240,996	19.2 %	$ 61,092	5.1 %
Percent of revenue	10.2 %	12.5 %	12.3 %	(2.3)%		0.2%	

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 2021 compared to fiscal year 2020 was mainly driven by an increase of $137 million in employee-related costs due in part to increased headcount, $49 million in outside service costs, $32 million in deferred compensation plan-related costs, and $27 million in spending for supplies.

The increase in R&D expense during fiscal year 2020 compared to fiscal year 2019 was mainly driven by an increase of $50 million in employee-related costs due to increased headcount, $19 million in outsourcing service costs, and $10 million in spending for supplies, partially offset by a decrease of $7 million in travel expense and $5 million in restructuring charges.

Selling, General, and Administrative

	Year Ended			Change			
	June 27, 2021	June 28, 2020	June 30, 2019	FY21 vs. FY20		FY20 vs. FY19	
	(in thousands, except percentages)						
Selling, general, and administrative ("SG&A")	$ 829,875	$ 682,479	$ 702,407	$ 147,396	21.6 %	$ (19,928)	(2.8)%
Percent of revenue	5.7 %	6.8 %	7.3 %	(1.1)%		(0.5)%	

The increase in SG&A expense during fiscal year 2021 compared to fiscal year 2020 was primarily due to a $97 million increase in employee-related costs due in part to increased headcount, $37 million in outside service costs, and $21 million in deferred compensation plan-related costs, partially offset by a $9 million decrease in travel and entertainment costs.

The decrease in SG&A expense during fiscal year 2020 compared to fiscal year 2019 was primarily due to a $17 million decrease in spending for customer-related sales costs, a $9 million decrease in spending for supplies, a $9 million decrease in restructuring charges, and a $6 million decrease in spending for travel and entertainment, partially offset by an increase of $25 million in spending for rent, repair and utilities.

Other Expense, Net

Other expense, net, consisted of the following:

	Year Ended			Change			
	June 27, 2021	June 28, 2020	June 30, 2019	FY21 vs. FY20		FY20 vs. FY19	
	(in thousands, except percentages)						
Interest income	$ 19,687	$ 85,433	$ 98,771	$ (65,746)	(77.0)%	$ (13,338)	(13.5)%
Interest expense	(208,597)	(177,440)	(117,263)	$ (31,157)	17.6 %	$ (60,177)	51.3 %
Gains on deferred compensation plan related assets, net	61,838	5,999	10,464	$ 55,839	930.8 %	$ (4,465)	(42.7)%
Foreign exchange (losses) gains, net	(6,962)	(3,317)	826	$ (3,645)	109.9 %	$ (4,143)	(501.6)%
Other, net	22,815	(9,499)	(10,959)	$ 32,314	(340.2)%	$ 1,460	(13.3)%
	$ (111,219)	$ (98,824)	$ (18,161)	$ (12,395)	12.5 %	$ (80,663)	444.2 %

Interest income decreased in fiscal year 2021 compared to fiscal year 2020 as a result of lower yield. Interest income decreased in fiscal year 2020 compared to fiscal year 2019 as a result of lower yield, offset by a higher cash balance.

Interest expense increased in fiscal year 2021 compared to fiscal year 2020 primarily due to the full-year impact of the issuance of the $2.0 billion senior notes in fiscal year 2020. Interest expense increased in fiscal year 2020 compared to fiscal year 2019 primarily due to the full-year impact of the issuance of the $2.5 billion of senior notes in fiscal year 2019 and the issuance of $2.0 billion senior notes in fiscal year 2020.

Gains on deferred compensation plan related assets in the periods presented were driven by an improvement in the fair market value of the underlying funds.

The gains in other, net for the fiscal year 2021 compared to fiscal years 2020 and 2019 were primarily driven by private 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 27, 2021	June 28, 2020	June 30, 2019	FY21 vs. FY20		FY20 vs. FY19	
	(in thousands, except percentages)						
Income tax expense	$ 462,346	$ 323,225	$ 255,141	$ 139,121	43.0 %	$ 68,084	26.7 %
Effective tax rate	10.6 %	12.6 %	10.4 %	(2.0)%		2.2%	

The decrease in the effective tax rate in fiscal year 2021 as compared to fiscal year 2020 was primarily due to a cumulative income tax benefit reversal due to a court ruling in fiscal year 2020, as outlined below.

The increase in the effective tax rate in fiscal year 2020 as compared to fiscal year 2019 was primarily due to a cumulative income tax benefit reversal due to a court ruling in fiscal year 2020, as outlined below.

In November 2019, the U.S. Court of Appeals for the Ninth Circuit (“Ninth Circuit”) rejected the en banc appeal petitioned by Altera Corporation (“Altera”) in July 2019. In that quarter, we evaluated the impact of the decision and viewed the denial as an indication that Altera’s position of excluding stock-based compensation expense in an intercompany cost-sharing arrangement was unlikely to be sustained upon further litigation. As a result, we reversed $75 million of net tax assets associated with stock-based compensation benefits related to previous years in the Condensed Consolidated Financial Statements in the three months ended December 29, 2019 and we no longer reflected a net tax benefit within our financial statements related to excluding stock-based compensation from our intercompany cost-sharing arrangement. In February 2020, Altera petitioned the Supreme Court of the United States ("SCOTUS") to hear their case. In June 2020, the SCOTUS denied the petition.

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 2021 Form 10-K.

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 $736 million and $575 million at the end of fiscal years 2021 and 2020, respectively. These gross deferred tax assets were offset by gross deferred tax liabilities of $152 million and $196 million and a valuation allowance of $277 million and $245 million at the end of fiscal years 2021 and 2020, respectively. The change in gross deferred tax assets, gross deferred tax liabilities, and valuation allowance between fiscal year 2021 and 2020 is primarily due to increases in gross deferred tax assets for outside basis differences of foreign subsidiaries, allowances and reserves, and tax credits, and decreases in gross deferred tax liabilities for convertible debt.

As of our fiscal year ended June 27, 2021, we continue 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. The valuation allowances were $277 million and $245 million at the end of fiscal years 2021 and 2020, respectively.

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 2021 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 2021 Form 10-K.

Liquidity and Capital Resources

Total gross cash, cash equivalents, investments, and restricted cash and investments balances were $6.0 billion at the end of fiscal year 2021 compared to $7.0 billion at the end of fiscal year 2020. This decrease was primarily due to Common Stock repurchases in connection with our stock repurchase program, dividends paid, and principal payments on long-term debt, partially offset by cash provided by operating activities.

Cash Flow from Operating Activities

Net cash provided by operating activities of $3.6 billion during fiscal year 2021 consisted of (in thousands):

Net income	$ 3,908,458
Non-cash charges:	
Depreciation and amortization	307,151
Deferred income taxes	(151,477)
Equity-based compensation expense	220,164
Changes in operating asset and liability accounts	(678,741)
Other	(17,392)
	$ 3,588,163

Significant changes in operating asset and liability accounts, net of foreign exchange impact, included the following uses of cash: increases in accounts receivable of $929 million, inventories of $793 million, and prepaid expenses and other assets of $59 million; partially offset by the following sources of cash: increases in deferred profit of $508 million, accrued expenses and other liabilities of $409 million, and accounts payable of $185 million.

Cash Flow from Investing Activities

Net cash provided by investing activities during fiscal year 2021 was $73 million, primarily consisting of net sales/maturities of available for sale securities of $465 million, partially offset by capital expenditures of $349 million.

Cash Flow from Financing Activities

Net cash used for financing activities during fiscal year 2021 was $4.2 billion, primarily consisting of $2.7 billion in Common Stock repurchases, including net share settlement on employee stock-based compensation; $862 million of principal payments on debt instruments; and $727 million of dividends paid; partially offset by $122 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 27, 2021, 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, uncertainty in the global economy and the semiconductor industry, as well as disruptions in credit markets, have in the past, 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, the ongoing COVID-19 pandemic has in the past caused disruption in the capital markets, and were it to do the same in the future, that could 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. Obligations that are recorded on our balance sheet in accordance with GAAP include our long-term debt, operating leases and finance leases which are outlined in the following table. Our off-balance sheet arrangements are presented as purchase obligations in the table. Our contractual obligations and commitments as of June 27, 2021, relating to these agreements and our guarantees are included in the following table based on their contractual maturity date.

The amounts in the table below exclude $527 million of net liabilities related to uncertain tax positions as we are unable to reasonably estimate the ultimate amount or time of settlement. See Note 7 of our Consolidated Financial Statements in Part II, Item 8 of this 2021 Form 10-K for further discussion.

	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
			(in thousands)		
Operating leases	$ 173,150	$ 48,487	$ 55,530	$ 30,505	$ 38,628
Financing leases	42,648	11,870	12,320	10,214	8,244
Purchase obligations	818,186	660,201	114,046	40,724	3,215
Long-term debt and interest expense	7,903,936	175,125	350,250	1,586,347	5,792,214
One-time transition tax on accumulated unrepatriated foreign earnings (1)	659,954	69,469	199,723	390,762	—
Other long-term liabilities (2)	280,342	11,704	42,079	9,453	217,106
Total	$ 9,878,216	$ 976,856	$ 773,948	$ 2,068,005	$ 6,059,407

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

(2) Certain tax-related liabilities and post-retirement benefits classified as other non-current liabilities on the Consolidated Balance Sheet are included in the "More than 5 Years" category due to the uncertainty in the timing and amount of future payments. Additionally, the balance excludes contractual obligations recorded in our Consolidated Balance Sheet as current liabilities and the long-term portion of operating leases.

Operating Leases

We lease most of our administrative and regional sales/service offices as well as certain equipment under non-cancelable operating leases. Certain of our facility leases for buildings located in Fremont, California; Tualatin, Oregon; and certain other facility leases provide us with an option to extend the leases for additional periods or to purchase the facilities. Certain of our facility leases provide for periodic rent increases based on the general rate of inflation.

Financing Leases

Financing leases reflect building and office equipment lease obligations. The amounts in the table above include the interest portion of payment obligations. Certain of our facility leases for buildings located in Fremont and Livermore, California provide us with an option to extend the leases for additional periods or to purchase the facilities. Certain of our facility leases provide for periodic rent increases based on the general rate of inflation. In addition to amounts included in the table above, we have guaranteed residual values for certain of our Fremont and Livermore facility leases of up to $298 million. See Note 15 to our Consolidated Financial Statements in Part II, Item 8 of this 2021 Form 10-K for further discussion.

Purchase Obligations

Purchase obligations consist of significant contractual obligations either on an annual basis or over multi-year periods related to our outsourcing activities or other material commitments, including vendor-consigned inventories. The contractual cash obligations and commitments table presented above contains our minimum obligations at June 27, 2021, under these arrangements and others. For obligations with cancellation provisions, the amounts included in the preceding 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. On April 1, 2021 we entered into a $1.4 billion five-year electrostatic chuck supply contract (the “Supplier Contract”), under which we are obligated, in certain circumstances, to a minimum purchase penalty obligation not to exceed $180 million. Due to the uncertainty in the timing and amount of future payments, the cash obligations and commitments table presented above excludes the minimum purchase obligation under the Supplier Contract.

Capital Expenditure Requirements

We are in the process of expanding our global production footprint, with expansion of our Ohio manufacturing facility as well as construction of a manufacturing facility in Malaysia and a technology center in Korea. Anticipated capital expenditures associated with these projects for buildings and equipment for fiscal year 2022 are expected to be approximately $201 million. These capital expenditures will be funded through existing cash and cash equivalents, investments, and cash generated from operations.

Income Taxes

During the December 2017 quarter, a one-time transition tax on accumulated unrepatriated foreign earnings, estimated at $991 million, was recognized associated with the December 2017 U.S. tax reform. In accordance with SAB 118, we finalized the amount of the transition tax during the period ended December 23, 2018. The final amount was $868 million. We elected to pay the one-time transition tax over a period of eight years with 8% of the transition tax to be paid each September 15 for years 2018 through 2022, and 15%, 20%, and 25%, respectively, to be paid each September 15 for years 2023 through 2025.

Long-Term Debt

On May 5, 2020, we 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”). We pay 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, we completed a public offering of $750 million aggregate principal amount of the Company’s Senior Notes due March 15, 2026 (the “2026 Notes”), $1 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”). We pay interest at an annual rate of 3.75%, 4.00%, and 4.875%, respectively on the 2026, 2029 and 2049 Notes, on a semi-annual basis on March 15 and September 15 of each year.

On June 7, 2016, we completed a public offering of $800 million aggregate principal amount of Senior Notes due June 15, 2021, (the “2021 Notes”). During the year ended June 27, 2021, $800 million principal value of 2021 Notes were settled upon maturity.

On March 12, 2015, we completed a public offering of $500 million aggregate principal amount of Senior Notes due March 15, 2025 (the “2025 Notes”). We pay 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.

We 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. We 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, we 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.

In June 2012, with the acquisition of Novellus, we assumed $700 million in aggregate principal amount of 2.625% Convertible Senior Notes due May 2041. On May 21, 2021, the 2041 Notes then outstanding were redeemed pursuant to Section 6.01 of the underlying indenture at a price equal to outstanding principal plus accrued and unpaid interest.

During fiscal year 2021, 2020, and 2019, we made $859 million, $668 million, and $117 million, respectively, in principal payments on long-term debt and finance/capital leases.

Revolving Credit Arrangements

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”), and June 17, 2021 (the “Second Amended and Restated Credit Agreement). Among other things, the Second Amended and Restated Credit Agreement provides for a $250 million increase in the Company’s revolving credit facility, from $1.25 billion to $1.50 billion 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 million, for a potential total commitment of $2.10 billion. The facility matures on June 17, 2026.

Interest on amounts borrowed under the credit facility is, at our option, based on (1) a base rate, defined as the greatest of (a) prime rate, (b) Federal Funds rate plus 0.5%, or (c) one-month London Interbank Offered Rate (“LIBOR”) plus 1.0%, plus a spread of 0.00% to 0.30%, or (2) a LIBOR rate 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 our non-credit enhanced, senior unsecured long-term debt. Such spreads and such facility fees are further subject to sustainability adjustments as described in the 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 is due and payable upon maturity. Additionally, we will pay the lenders a quarterly commitment fee that varies based on our credit rating. The Second Amended and Restated Credit Agreement incorporates provisions for the replacement of LIBOR or other reference rates with alternative reference rates under certain circumstances, including when, or if, such reference rates cease to be available. The Second Amended and Restated Credit Agreement contains affirmative covenants, negative covenants, financial covenants, and events of default. As of June 27, 2021, we had no borrowings outstanding under the Second Amended and Restated Credit Agreement and were in compliance with all financial covenants.

Commercial Paper Program

On November 13, 2017, we established a commercial paper program (the “CP Program”) under which we may issue unsecured commercial paper notes on a private placement basis up to a maximum aggregate amount outstanding at any time of $1.25 billion. Individual maturities may vary but cannot not exceed 397 days from the date of issue. In July 2021, we amended the CP Program size to a maximum aggregate amount outstanding at any time of $1.5 billion. The net proceeds from the CP Program will be used for general corporate purposes, including repurchases of our Common Stock from time to time under our stock repurchase program. If at any time, funds are not available under favorable terms under the CP Program, we may utilize the Amended Credit Agreement for funding. Amounts available under the CP Program may be re-borrowed. The CP Program is backstopped by our Revolving Credit Arrangement. As of June 27, 2021, we had no outstanding borrowings under the CP Program.

Other Guarantees

We have issued certain indemnifications to our lessors for taxes and general liability under some of our agreements. We have entered into certain insurance contracts that may limit our exposure to such indemnifications. As of June 27, 2021, we had not recorded any liability on our Consolidated Financial Statements in connection with these indemnifications, as we do not believe, based on information available, that it is probable that we will pay any material amounts under these guarantees.

Generally, we indemnify, under pre-determined conditions and limitations, our customers for infringement of third-party intellectual property rights by our products or services. We seek to limit our liability for such indemnity to an amount not to exceed the sales price of the products or services subject to our indemnification obligations. We do not believe, based on information available, that it is probable that we will pay any material amounts under these guarantees.

We provide guarantees and standby letters of credit to certain parties as required for certain transactions initiated during the ordinary course of business. As of June 27, 2021, the maximum potential amount of future payments that we could be required to make under these arrangements and letters of credit was $74 million. We do not believe, based on historical experience and information currently available, that it is probable that any material amounts will be required to be paid.

We have entered into indemnification agreements with our officers and directors, consistent with our Bylaws and Certificate of Incorporation; and under local law, we may be required to provide indemnification to our employees for actions within the scope of their employment. Although we maintain 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. We do 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.

Item 7A. *Quantitative and Qualitative Disclosures About Market Risk*

Investments

We maintain an investment portfolio of various holdings, types, and maturities. As of June 27, 2021, 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 is recognized as other 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 a capital preservation-focused investment policy, which focuses on the safety and preservation of our capital by limiting default risk, market risk, reinvestment risk, and concentration risk. The following table presents the hypothetical fair values of fixed-income securities that would result from selected potential decreases and increases in interest rates. Market changes reflect immediate 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.

The hypothetical fair values as of June 27, 2021,were as follows:

	Valuation of Securities Given an Interest Rate Decrease of X Basis Points			Fair Value as of June 27, 2021	Valuation of Securities Given an Interest Rate Increase of X Basis Points		
	(150 BPS)	(100 BPS)	(50 BPS)	—%	50 BPS	100 BPS	150 BPS
				(in thousands)			
U.S. Treasury and agencies	$ 204,944	$ 204,944	$ 204,944	$ 204,792	$ 204,336	$ 203,880	$ 203,424
Government-sponsored enterprises	3,518	3,518	3,518	3,505	3,477	3,449	3,421
Foreign government bonds	33,093	33,093	33,093	33,012	32,905	32,798	32,691
Corporate notes and bonds	1,049,766	1,049,722	1,049,230	1,045,098	1,039,800	1,034,503	1,029,206
Mortgage backed securities - residential	5,777	5,753	5,728	5,677	5,619	5,562	5,505
Mortgage backed securities - commercial	18,977	18,973	18,918	18,788	18,643	18,498	18,353
Total	$ 1,316,075	$ 1,316,003	$ 1,315,431	$ 1,310,872	$ 1,304,780	$ 1,298,690	$ 1,292,600

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 27, 2021, we had $5.0 billion in principal amount of fixed-rate long-term debt outstanding, with a fair value of $5.6 billion. The fair value of our Notes is subject to interest rate risk, market risk, and other factors due to the convertible feature, as applicable. 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. The following table presents the hypothetical fair values of our publicly traded securities that would result from potential decreases and increases in the price of each security in the portfolio. Potential fluctuations in the price of each security in the portfolio of plus or minus 10%, 15%, or 25% were selected based on potential near-term changes in those security prices. The hypothetical fair values as of June 27, 2021, were as follows:

	Valuation of Securities Given an X% Decrease in Stock Price			Fair Value as of June 27, 2021	Valuation of Securities Given an X% Increase in Stock Price		
	(25)%	(15)%	(10)%	—%	10%	15%	25%
				(in thousands)			
Mutual funds	$ 72,128	$ 81,745	$ 86,554	$ 96,171	$ 105,788	$ 110,597	$ 120,214

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 expense, net, and offsets the change in fair value of the foreign currency denominated monetary assets and liabilities also recorded in other expense, net, assuming the hedge contract fully covers the hedged items. The notional amount and unrealized gain of our outstanding forward and option contracts that are designated as cash flow hedges, as of June 27, 2021, are shown in the table below. This table also shows 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.

		Notional Amount	Unrealized FX Gain/(Loss) June 27, 2021	Valuation of FX Contracts Given an X% Increase (+)/Decrease(-) in Each = +/- (10%)	= +/- (15%)
				(in thousands)	
Forward contracts					
Sell	Japanese yen	$ 560,338	$ 16,432	$ 54,268	$ 81,403
Buy	Euro	146,748	(383)	14,583	21,874
Buy	Korean won	145,167	(1,518)	14,363	21,544
Buy	Indian rupee	55,364	657	5,741	8,612
Buy	Malaysian ringgit	41,911	(39)	4,202	6,302
			$ 15,149	$ 93,157	$ 139,735
Option Contracts					
Buy put	Japanese yen	$ 35,877	$ 541	$ 3,080	$ 4,457
Sell call	Japanese yen	38,069	(178)	4	—
			$ 363	$ 3,084	$ 4,457

The notional amount and unrealized loss of our outstanding foreign currency forward contracts that are designated as balance sheet hedges, as of June 27, 2021, are shown in the table below. This table also shows 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. These changes in fair values would be offset in other 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.

		Notional Amount	Unrealized FX Gain/(Loss) June 27, 2021	Valuation of FX Contracts Given an X% Increase (+)/Decrease(-) in Each = +/- (10%)	= +/- (15%)
				(in thousands)	
Forward contracts, balance sheet hedge					
Sell	Korean won	$ 220,134	$ 11	$ 22,015	$ 33,022
Buy	Swiss francs	79,859	(10)	7,980	11,970
Buy	Chinese renminbi	57,768	33	5,789	8,684
Buy	Singapore dollar	26,765	1	2,677	4,015
Buy	Euro	21,493	(2)	2,148	3,222
Buy	British pound	15,086	—	1,509	2,262
Buy	Malaysian ringgit	10,553	22	1,056	1,585
Sell	Japanese yen	8,746	—	874	1,312
Buy	Indian rupee	3,082	2	309	464
			$ 57	$ 44,357	$ 66,536

Item 8. *Financial Statements and Supplementary Data*

Index to Consolidated Financial Statements

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

	Year Ended		
	June 27, 2021	June 28, 2020	June 30, 2019
Revenue	$ 14,626,150	$ 10,044,736	$ 9,653,559
Cost of goods sold	7,820,844	5,436,043	5,295,100
Gross margin	6,805,306	4,608,693	4,358,459
Research and development	1,493,408	1,252,412	1,191,320
Selling, general, and administrative	829,875	682,479	702,407
Total operating expenses	2,323,283	1,934,891	1,893,727
Operating income	4,482,023	2,673,802	2,464,732
Other expense, net	(111,219)	(98,824)	(18,161)
Income before income taxes	4,370,804	2,574,978	2,446,571
Income tax expense	(462,346)	(323,225)	(255,141)
Net income	$ 3,908,458	$ 2,251,753	$ 2,191,430
Net income per share:			
Basic	$ 27.22	$ 15.55	$ 14.37
Diluted	$ 26.90	$ 15.10	$ 13.70
Number of shares used in per share calculations:			
Basic	143,609	144,814	152,478
Diluted	145,320	149,090	159,915

See Notes to Consolidated Financial Statements

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

	Year Ended		
	June 27, 2021	June 28, 2020	June 30, 2019
Net income	$ 3,908,458	$ 2,251,753	$ 2,191,430
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustment	14,398	(6,441)	(6,648)
Cash flow hedges:			
Net unrealized gains (losses) during the period	22,139	(30,603)	2,461
Net (gains) losses reclassified into net income	(3,468)	2,137	(2,749)
	18,671	(28,466)	(288)
Available-for-sale investments:			
Net unrealized (losses) gains during the period	(4,098)	1,842	3,535
Net losses (gains) reclassified into net income	786	935	(199)
	(3,312)	2,777	3,336
Defined benefit plans, net change in unrealized component	326	1,949	(2,981)
Other comprehensive income (loss), net of tax	30,083	(30,181)	(6,581)
Comprehensive income	$ 3,938,541	$ 2,221,572	$ 2,184,849

See Notes to Consolidated Financial Statements

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

	June 27, 2021	June 28, 2020
ASSETS:		
Cash and cash equivalents	$ 4,418,263	$ 4,915,172
Investments	1,310,872	1,795,080
Accounts receivable, less allowance of $5,255 as of June 27, 2021 and $5,465 as of June 28, 2020	3,026,430	2,097,099
Inventories	2,689,294	1,900,024
Prepaid expenses and other current assets	207,528	146,160
Total current assets	11,652,387	10,853,535
Property and equipment, net	1,303,479	1,071,499
Restricted cash and investments	252,487	253,911
Goodwill	1,490,134	1,484,436
Intangible assets, net	132,365	168,532
Other assets	1,061,300	727,134
Total assets	$ 15,892,152	$ 14,559,047
LIABILITIES AND STOCKHOLDERS' EQUITY:		
Trade accounts payable	$ 829,710	$ 592,387
Accrued expenses and other current liabilities	1,719,483	1,272,655
Deferred profit	967,325	457,523
Current portion of long-term debt and finance lease obligations	11,349	839,877
Total current liabilities	3,527,867	3,162,442
Long-term debt and finance lease obligations, less current portion	4,990,333	4,970,848
Income taxes payable	948,037	909,709
Other long-term liabilities	398,727	332,559
Total liabilities	9,864,964	9,375,558
Commitments and contingencies		
Temporary equity, convertible notes	—	10,995
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 27, 2021 and June 28, 2020; issued and outstanding 142,501 shares as of June 27, 2021, and 145,331 shares as of June 28, 2020	143	145
Additional paid-in capital	7,052,962	6,695,858
Treasury stock, at cost, 150,766 shares as of June 27, 2021, and 145,432 shares as of June 28, 2020	(15,646,701)	(12,949,889)
Accumulated other comprehensive loss	(64,128)	(94,211)
Retained earnings	14,684,912	11,520,591
Total stockholders' equity	6,027,188	5,172,494
Total liabilities and stockholders' equity	$ 15,892,152	$ 14,559,047

See Notes to Consolidated Financial Statements

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

	Year Ended		
	June 27, 2021	June 28, 2020	June 30, 2019
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net income	$ 3,908,458	$ 2,251,753	$ 2,191,430
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	307,151	268,525	309,281
Deferred income taxes	(151,477)	(17,777)	(4,980)
Equity-based compensation expense	220,164	189,197	187,234
Other, net	(17,392)	6,628	1,524
Changes in operating asset and liability accounts:			
Accounts receivable, net of allowance	(928,928)	(641,827)	732,138
Inventories	(792,591)	(411,608)	281,355
Prepaid expenses and other assets	(59,189)	(14,354)	(17,864)
Trade accounts payable	184,615	208,478	(131,472)
Deferred profit	508,008	76,207	(178,074)
Accrued expenses and other liabilities	409,344	211,229	(194,559)
Net cash provided by operating activities	3,588,163	2,126,451	3,176,013
CASH FLOWS FROM INVESTING ACTIVITIES:			
Capital expenditures and intangible assets	(349,096)	(203,239)	(303,491)
Purchases of available-for-sale securities	(3,389,388)	(2,897,627)	(2,930,049)
Proceeds from maturities of available-for-sale securities	2,381,758	1,647,379	466,539
Proceeds from sales of available-for-sale securities	1,472,152	1,235,248	1,137,302
Other, net	(42,155)	(25,845)	(7,355)
Net cash provided by (used for) investing activities	73,271	(244,084)	(1,637,054)

	Year Ended		
	June 27, 2021	June 28, 2020	June 30, 2019
CASH FLOWS FROM FINANCING ACTIVITIES:			
Net proceeds from issuance of long-term debt	$ —	$ 1,974,651	$ 2,476,720
Principal payments on long-term debt and finance lease obligations and payments for debt issuance costs	(862,060)	(667,537)	(117,653)
Net (repayment) from commercial paper	—	—	(361,754)
Proceeds from borrowings on revolving credit facility	—	1,250,000	—
Repayment of borrowings on revolving credit facility	—	(1,250,000)	—
Treasury stock purchases	(2,697,704)	(1,369,649)	(3,780,611)
Dividends paid	(726,992)	(656,838)	(678,348)
Reissuances of treasury stock related to employee stock purchase plan	97,764	85,439	77,961
Proceeds from issuance of common stock	24,123	8,084	6,813
Other, net	(2,113)	1,920	(13,208)
Net cash used for financing activities	(4,166,982)	(623,930)	(2,390,080)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	7,215	(2,750)	(4,041)
Net (decrease) increase in cash, cash equivalents and restricted cash	(498,333)	1,255,687	(855,162)
Cash, cash equivalents and restricted cash at beginning of year	5,169,083	3,913,396	4,768,558
Cash, cash equivalents and restricted cash at end of year	$ 4,670,750	$ 5,169,083	$ 3,913,396
Schedule of non-cash transactions			
Accrued payables for stock repurchases	$ 20,005	$ 82	$ 29
Accrued payables for capital expenditures	61,392	37,812	23,185
Dividends payable	185,431	167,129	158,868
Transfers of finished goods inventory to property and equipment	80,252	51,694	54,533
Supplemental disclosures:			
Cash payments for interest	$ 203,932	$ 171,889	$ 76,933
Cash payments for income taxes, net	518,567	222,909	300,268

Reconciliation of cash, cash equivalents, and restricted cash	June 27, 2021	June 28, 2020	June 30, 2019
Cash and cash equivalents	$ 4,418,263	$ 4,915,172	$ 3,658,219
Restricted cash and cash equivalents	252,487	253,911	255,177
Total cash, cash equivalents, and restricted cash	$ 4,670,750	$ 5,169,083	$ 3,913,396

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 24, 2018	156,892	$ 157	$ 6,144,425	$ (7,846,476)	$ (57,449)	$ 8,261,194	$ 6,501,851
Issuance of common stock	1,090	1	6,812	—	—	—	6,813
Purchase of treasury stock	(21,059)	(21)	—	(3,780,503)	—	—	(3,780,524)
Reissuance of treasury stock	622	—	53,555	24,406	—	—	77,961
Equity-based compensation expense	—	—	187,234	—	—	—	187,234
Effect of conversion of convertible notes	2,783	3	(11,361)	—	—	—	(11,358)
Exercise of warrants	4,105	4	(12)	—	—	—	(8)
Reclassification from temporary to permanent equity	—	—	28,752	—	—	—	28,752
Adoption of ASU 2014-09	—	—	—	—	—	139,355	139,355
Adoption of ASU 2016-16	—	—	—	—	—	(443)	(443)
Adoption of ASU 2018-02	—	—	—	—	(2,227)	2,227	—
Net income	—	—	—	—	—	2,191,430	2,191,430
Other comprehensive loss	—	—	—	—	(4,354)	—	(4,354)
Cash dividends declared ($4.40 per common share)	—	—	—	—	—	(662,844)	(662,844)
Balance at June 30, 2019	144,433	144	6,409,405	(11,602,573)	(64,030)	9,930,919	4,673,865
Issuance of common stock	1,288	1	8,083	—	—	—	8,084
Purchase of treasury stock	(5,371)	(5)	—	(1,369,697)	—	—	(1,369,702)
Reissuance of treasury stock	513	1	63,057	22,381	—	—	85,439
Equity-based compensation expense	—	—	189,197	—	—	—	189,197
Effect of conversion of convertible notes	4,468	4	(12,328)	—	—	—	(12,324)
Reclassification from temporary to permanent equity	—	—	38,444	—	—	—	38,444
Adoption of ASU 2016-02	—	—	—	—	—	3,018	3,018
Net income	—	—	—	—	—	2,251,753	2,251,753
Other comprehensive loss	—	—	—	—	(30,181)	—	(30,181)
Cash dividends declared ($4.60 per common share)	—	—	—	—	—	(665,099)	(665,099)
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

See Notes to Consolidated Financial Statements

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
June 27, 2021

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 2021, 2020, and 2019 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 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 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 27, 2021, June 28, 2020, or June 30, 2019.

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 27, 2021 and June 28, 2020 each included 52 weeks, and the fiscal year ended June 30, 2019 included 53 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 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 adoption of Accounting Standard Codification Topic 326 (see additional information in Note 3: Recent Accounting Pronouncements), 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 year ended June 27, 2021. No other-than-temporary impairment charges were recognized during the years ended June 28, 2020 or June 30, 2019.

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 27, 2021, June 28, 2020, and June 30, 2019.

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 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 expense, net, where the U.S. dollar is the functional currency.

Note 3: Recent Accounting Pronouncements

Recently Adopted or Effective

In June 2016, the Financial Accounting Standards Board ("FASB") released Accounting Standards Update ("ASU") 2016-13, "Financial Instruments – Credit Losses (Topic 326)." The amendment revises the impairment model to utilize an expected loss methodology in place of the previously used incurred loss methodology, which results in more timely recognition of losses on financial instruments, including but not limited to, available for sale debt securities and accounts receivable. The FASB issued a subsequent

amendment to the initial guidance in April 2019 and November 2019 within ASU 2019-04 and ASU 2019-11, respectively. The adoption of these standards in the first quarter of fiscal year 2021 did not have a material impact on the Company's Consolidated Financial Statements.

In November 2018, the FASB issued ASU 2018-18, "Collaborative Arrangements (Topic 808)." The amendment clarifies that certain transactions between participants in a collaborative arrangement should be accounted for under Topic 606 when the counterparty is a customer for a good or service that is a distinct unit of account. The amendment also precludes entities from presenting consideration from transactions with a collaborator that is not a customer together with revenue recognized from contracts with customers. The adoption of this standard in the first quarter of fiscal year 2021 did not have a material impact on the Company's Consolidated Financial Statements.

In March 2020, the FASB issued 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. ASU 2020-04 became effective upon issuance and may be applied prospectively to contract modifications made on or before December 31, 2022. ASU 2021-01 became effective upon issuance and may be applied on a full retrospective basis as of any date from the beginning of an interim period that includes or is subsequent to March 12, 2020 or prospectively for contract modifications made on or before December 31, 2022. The Company has not yet applied the relief afforded by these standard amendments and is currently assessing contracts that will require modification due to reference rate reform to which these standard amendments may be applied.

Updates Not Yet Effective

In August 2020, the FASB issued ASU No. 2020-06, "Accounting for Convertible Instruments and Contracts in an Entity's Own Equity", which simplifies the accounting for certain financial instruments with characteristics of liabilities and equity, including convertible instruments and contracts in an entity's own equity. Among other changes, ASU 2020-06 removes from U.S. GAAP the liability and equity separation model for convertible instruments with a cash conversion feature, and as a result, after adoption, entities will no longer separately present in equity an embedded conversion feature for such debt. ASU 2020-06 also eliminates the treasury stock method to calculate diluted earnings per share and requires the if-converted method. The provisions of ASU 2020-06 are applicable for fiscal years beginning after December 15, 2021, with early adoption permitted no earlier than fiscal years beginning after December 15, 2020. The Company is required to adopt this standard in the first quarter of fiscal year 2023. The update permits the use of either the modified retrospective or fully retrospective method of transition. The Company does not expect adoption of this standard to have a material impact on its Consolidated Financial Statements.

Note 4: Revenue

Deferred Revenue

Revenue of $452.8 million included in deferred profit at June 28, 2020 was recognized during fiscal year 2021.

The following table summarizes the transaction price for contracts that have not yet been recognized as revenue as of June 27, 2021 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	$ 955,157	$ 163,650 (1)	$ —	$ 1,118,807

(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 27, 2021	June 28, 2020	June 30, 2019
		(in thousands)	
Systems Revenue	$ 9,764,845	$ 6,625,130	$ 6,451,104
Customer support-related revenue and other	4,861,305	3,419,606	3,202,455
	$ 14,626,150	$ 10,044,736	$ 9,653,559

System 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 27, 2021	June 28, 2020	June 30, 2019
Memory	61 %	58 %	70 %
Foundry	32 %	31 %	20 %
Logic/integrated device manufacturing	7 %	11 %	10 %

Note 5: Equity-based Compensation Plans

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 2007 Stock Incentive Plan, as amended and restated, 2011 Stock Incentive Plan, as amended and restated, and the 2015 Stock Incentive Plan (collectively the "Stock Plans"), provide for the grant of non-qualified equity-based awards to eligible employees, consultants and advisors, and non-employee directors of the Company and its subsidiaries. The 2015 Stock Incentive Plan was approved by stockholders authorizing up to 18,000,000 shares for issuance under the plan. Additionally, 1,232,068 shares that remained available for grants under the Company's 2007 Stock Incentive Plan were added to the shares available for issuance under the 2015 Stock Incentive Plan. As of June 27, 2021, there were a total of 8,585,404 shares available for future issuance under the Stock Plans. New shares are issued from the Company's balance of authorized Common Stock from the 2015 Stock Incentive Plan 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 27, 2021	June 28, 2020	June 30, 2019
		(in thousands)	
Equity-based compensation expense	$ 220,164	$ 189,197	$ 187,234
Income tax benefit recognized related to equity-based compensation	$ 49,313	$ 36,135	$ 47,396
Income tax benefit realized from the exercise and vesting of options and RSUs	$ 97,275	$ 67,060	$ 49,242

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 2021, 2020, and 2019, the Company issued both service-based RSUs and market-based performance RSUs (“PRSUs”). Service-based RSUs typically vest 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”) for market-based PRSUs issued in 2021 and 2020 and the Philadelphia Semiconductor Sector Index (“SOX”) for market-based PRSUs issued in 2019. The stock price performance or market price performance is measured using the 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 issued in 2021 and 2020 utilized 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. By contrast, market-based PRSUs issued in 2019 utilized the SOX as a benchmark, which excluded the impact of dividends; accordingly the Company's Common Stock price performance was not adjusted for the reinvestment of dividends. 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 28, 2020	1,722	$ 214.93
Granted	527	558.64
Vested	(886)	200.16
Forfeited or canceled	(57)	270.00
Outstanding, June 27, 2021	1,306	$ 345.70

Of the 1.3 million shares outstanding at June 27, 2021, 1.0 million are service-based RSUs and 0.3 million 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 2021, 2020, and 2019 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 $640.69, $320.69, and $165.78, respectively. The total fair value of service-based RSUs and market-based RSUs that vested during fiscal years 2021, 2020, and 2019 was $177.4 million, $166.9 million, and $152.1 million, respectively.

As of June 27, 2021, the Company had $364.6 million of total unrecognized compensation expense which is expected to be recognized over a weighted-average remaining period of approximately 2.3 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 2021, 2020, and 2019. Stock options typically vest over a period of three years or less. The Company had 219.9 thousand options outstanding at June 27, 2021 with a weighted-average exercise price of $201.44 per share, of which 119.4 thousand were exercisable with a weighted-average exercise price of $148.15 per share. As of June 27, 2021, the Company had $6.3 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 2.0 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 2021, approximately 484 thousand shares of the Company’s Common Stock were sold to employees under the ESPP. At June 27, 2021, approximately 5.9 million shares were available for purchase, and the Company had $31.9 million of total unrecognized compensation cost, which is expected to be recognized over a remaining period of less than one year.

Note 6: Other Expense, Net

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

	Year Ended		
	June 27, 2021	June 28, 2020	June 30, 2019
	(in thousands)		
Interest income	$ 19,687	$ 85,433	$ 98,771
Interest expense	(208,597)	(177,440)	(117,263)
Gains on deferred compensation plan related assets, net	61,838	5,999	10,464
Foreign exchange (losses) gains, net	(6,962)	(3,317)	826
Other, net	22,815	(9,499)	(10,959)
	$ (111,219)	$ (98,824)	$ (18,161)

Interest income in the year ended June 27, 2021, decreased compared to the year ended June 28, 2020, primarily as a result of lower yield. Interest income decreased in the year ended June 28, 2020, compared to the year ended June 30, 2019, as a result of lower yield, partially offset by a higher cash balance.

Interest expense in the year ended June 27, 2021, increased compared to the year ended June 28, 2020, primarily due to the full year impact of the issuance of the $2.0 billion senior notes in fiscal year 2020. The increase in interest expense in the year ended June 28, 2020, compared to the year ended June 30, 2019, was primarily due to the full year impact of the issuance of the $2.5 billion of senior notes in fiscal year 2019 and issuance of the $2.0 billion senior notes in fiscal year 2020.

The gains on deferred compensation plan related assets in the years presented were driven by an improvement in the fair market value of the underlying funds.

The gains in other, net for the year ended June 27, 2021 compared to the years ended June 28, 2020 and June 30, 2019 were primarily driven by private equity investments.

Note 7: Income Taxes

The components of income (loss) before income taxes were as follows:

	Year Ended		
	June 27, 2021	June 28, 2020	June 30, 2019
		(in thousands)	
United States	$ 120,161	$ 44,739	$ (59,876)
Foreign	4,250,643	2,530,239	2,506,447
	$ 4,370,804	$ 2,574,978	$ 2,446,571

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

	Year Ended		
	June 27, 2021	June 28, 2020	June 30, 2019
		(in thousands)	
Federal:			
Current	$ 437,525	$ 216,513	$ 143,845
Deferred	(139,531)	(18,458)	(10,722)
	297,994	198,055	133,123
State:			
Current	13,560	4,724	5,994
Deferred	(8,324)	6,524	4,944
	5,236	11,248	10,938
Foreign:			
Current	162,738	119,766	110,283
Deferred	(3,622)	(5,844)	797
	159,116	113,922	111,080
Total provision for income taxes	$ 462,346	$ 323,225	$ 255,141

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 27, 2021	June 28, 2020
	(in thousands)	
Deferred tax assets:		
Tax carryforwards	$ 281,022	$ 249,874
Allowances and reserves	165,335	119,974
Equity-based compensation	7,322	7,167
Inventory valuation differences	28,877	26,069
Outside basis differences of foreign subsidiaries	193,734	105,159
Operating lease liabilities	37,562	40,157
Other	22,575	26,361
Gross deferred tax assets	736,427	574,761
Valuation allowance	(277,133)	(244,973)
Net deferred tax assets	459,294	329,788
Deferred tax liabilities:		
Intangible assets	(3,113)	(6,442)
Convertible debt	—	(24,530)
Capital assets	(97,602)	(105,508)
Amortization of goodwill	(13,161)	(12,256)
Right-of-use assets	(37,562)	(40,157)
Other	(262)	(7,509)
Gross deferred tax liabilities	(151,700)	(196,402)
Net deferred tax assets	$ 307,594	$ 133,386

The change in gross deferred tax assets, gross deferred tax liabilities, and valuation allowance between fiscal year 2021 and 2020 is primarily due to increases in gross deferred tax assets for outside basis differences of foreign subsidiaries, allowances and reserves, and tax credits, and decreases in gross deferred tax liabilities for convertible debt.

The Company previously made 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 $277.1 million related to California deferred tax assets. At June 27, 2021, 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 27, 2021, the Company had federal net operating loss carryforwards of $25.2 million. If not utilized, these losses will begin to expire in fiscal year 2022, and are subject to limitation on their utilization.

At June 27, 2021, the Company had state net operating loss carryforwards of $94.5 million. If not utilized, these losses will begin to expire in fiscal year 2023 and are subject to limitation on their utilization.

At June 27, 2021, the Company had state tax credit carryforwards of $408.9 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 2021, 2020, and 2019) to actual income tax expense is as follows:

	Year Ended		
	June 27, 2021	June 28, 2020	June 30, 2019
	(in thousands)		
Income tax expense computed at federal statutory rate	$ 917,869	$ 540,745	$ 513,780
State income taxes, net of federal tax benefit	(33,478)	(28,046)	(17,565)
Foreign income taxed at different rates	(365,886)	(146,023)	(260,344)
Settlements and reductions in uncertain tax positions	(13,613)	(12,854)	(31,291)
Tax credits	(86,709)	(88,762)	(71,779)
State valuation allowance, net of federal tax benefit	39,477	30,923	26,742
Equity-based compensation	(45,764)	(23,248)	(7,566)
Other permanent differences and miscellaneous items	50,450	50,490	39,251
U.S. tax reform impacts	—	—	63,913
	$ 462,346	$ 323,225	$ 255,141

In November 2019, the Ninth Circuit rejected the en banc appeal petitioned by Altera in July 2019. In that quarter, the Company evaluated the impact of the decision and viewed the denial as an indication that Altera's position of excluding stock-based compensation expense in an intercompany cost-sharing arrangement was unlikely to be sustained upon further litigation. As a result, the Company reversed $74.5 million of net tax assets associated with stock-based compensation benefits related to previous years in the Condensed Consolidated Financial Statements in the three months ended December 29, 2019 and the Company no longer reflected a net tax benefit within its financial statements related to excluding stock-based compensation from its intercompany cost-sharing arrangement. In February 2020, Altera petitioned the SCOTUS to hear their case. In June 2020, the SCOTUS denied the petition.

Earnings of the Company's foreign subsidiaries included in consolidated retained earnings that are indefinitely reinvested in foreign operations aggregated to approximately $774.5 million at June 27, 2021. If these earnings were remitted to the United States, they would be subject to foreign withholding taxes of approximately $122.1 million at current statutory rates. The potential tax expense associated with these foreign withholding taxes would be substantially offset by foreign tax credits that would be generated in the United States upon remittance.

The Company's gross uncertain tax positions were $566.8 million, $476.7 million, and $420.8 million as of June 27, 2021, June 28, 2020, and June 30, 2019, respectively. During fiscal year 2021, gross uncertain tax positions increased by $90.1 million. The amount of uncertain tax positions that, if recognized, would impact the effective tax rate was $504.4 million, $423.8 million, and $376.0 million, as of June 27, 2021, June 28, 2020, and June 30, 2019, respectively. The aggregate changes in the balance of gross uncertain tax positions were as follows:

	(in thousands)
Balance as of June 24, 2018	$ 305,413
Settlements and effective settlements with tax authorities	(3,705)
Lapse of statute of limitations	(28,176)
Increases in balances related to tax positions taken during prior periods	78,927
Decreases in balances related to tax positions taken during prior periods	(1,577)
Increases in balances related to tax positions taken during current period	69,890
Balance as of June 30, 2019	420,772
Settlements and effective settlements with tax authorities	(1,836)
Lapse of statute of limitations	(8,026)
Increases in balances related to tax positions taken during prior periods	3,206
Decreases in balances related to tax positions taken during prior periods	(3,989)
Increases in balances related to tax positions taken during current period	66,568
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

The Company recognizes interest expense and penalties related to the above uncertain tax positions within income tax expense. The Company had accrued $54.6 million, $40.2 million, and $19.1 million cumulatively for gross interest and penalties as of June 27, 2021, June 28, 2020, and June 30, 2019, 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 27, 2021, tax years 2004-2021 remain subject to examination in the jurisdictions where the Company operates. The Internal Revenue Service ("IRS") is examining the Company's U.S. federal income tax return for the fiscal year ended June 24, 2018. As of June 27, 2021, 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 may range up to $37.7 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 27, 2021	June 28, 2020	June 30, 2019
	(in thousands, except per share data)		
Numerator:			
Net income	$ 3,908,458	$ 2,251,753	$ 2,191,430
Denominator:			
Basic average shares outstanding	143,609	144,814	152,478
Effect of potential dilutive securities:			
Employee stock plans	1,168	1,236	1,323
Convertible notes	543	3,040	5,610
Warrants	—	—	504
Diluted average shares outstanding	145,320	149,090	159,915
Net income per share - basic	$ 27.22	$ 15.55	$ 14.37
Net income per share - diluted	$ 26.90	$ 15.10	$ 13.70

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, were not material for fiscal years ended June 27, 2021, June 28, 2020, and June 30, 2019.

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, 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 in an active market 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, 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 and convertible senior notes.

Investments

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 27, 2021, and June 28, 2020:

	June 27, 2021							
					(Reported Within)			
	Cost	Unrealized Gain	Unrealized (Loss)	Fair Value	Cash and Cash Equivalents	Investments	Restricted Cash & Investments	Other Assets
	(in thousands)							
Cash	$ 875,738	$ —	$ —	$ 875,738	$ 873,278	$ —	$ 2,460	$ —
Time deposit	1,548,874	—	—	1,548,874	1,298,847	—	250,027	—
Level 1:								
Money market funds	2,246,138	—	—	2,246,138	2,246,138	—	—	—
U.S. Treasury and agencies	204,743	96	(47)	204,792	—	204,792	—	—
Mutual funds	80,694	15,510	(33)	96,171	—	—	—	96,171
Level 1 total	2,531,575	15,606	(80)	2,547,101	2,246,138	204,792	—	96,171
Level 2:								
Government-sponsored enterprises	3,498	7	—	3,505	—	3,505	—	—
Foreign government bonds	32,995	21	(4)	33,012	—	33,012	—	—
Corporate notes and bonds	1,043,308	2,247	(457)	1,045,098	—	1,045,098	—	—
Mortgage backed securities - residential	5,623	54	—	5,677	—	5,677	—	—
Mortgage backed securities - commercial	18,830	17	(59)	18,788	—	18,788	—	—
Level 2 total	1,104,254	2,346	(520)	1,106,080	—	1,106,080	—	—
Total	$6,060,441	$ 17,952	$ (600)	$6,077,793	$ 4,418,263	$ 1,310,872	$ 252,487	$ 96,171

	June 28, 2020							
					(Reported Within)			
	Cost	Unrealized Gain	Unrealized (Loss)	Fair Value	Cash and Cash Equivalents	Investments	Restricted Cash & Investments	Other Assets
	(in thousands)							
Cash	$ 977,862	$ —	$ —	$ 977,862	$ 973,978	$ —	$ 3,884	$ —
Time deposit	2,244,655	—	—	2,244,655	1,994,628	—	250,027	—
Level 1:								
Money market funds	1,709,350	—	—	1,709,350	1,709,350	—	—	—
U.S. Treasury and agencies	552,088	373	(9)	552,452	76,992	475,460	—	—
Mutual funds	68,784	4,571	(928)	72,427	—	—	—	72,427
Level 1 total	2,330,222	4,944	(937)	2,334,229	1,786,342	475,460	—	72,427
Level 2:								
Government-sponsored enterprises	31,442	12	—	31,454	25,999	5,455	—	—
Foreign government bonds	10,693	28	(5)	10,716	2,540	8,176	—	—
Corporate notes and bonds	1,405,615	5,344	(302)	1,410,657	131,685	1,278,972	—	—
Mortgage backed securities - residential	3,142	71	—	3,213	—	3,213	—	—
Mortgage backed securities - commercial	23,660	144	—	23,804	—	23,804	—	—
Level 2 total	1,474,552	5,599	(307)	1,479,844	160,224	1,319,620	—	—
Total	$7,027,291	$ 10,543	$ (1,244)	$7,036,590	$ 4,915,172	$ 1,795,080	$ 253,911	$ 72,427

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.

Gross realized gains/(losses) from sales of investments were insignificant in the fiscal years 2021, 2020, and 2019.

The following is an analysis of the Company's cash, cash equivalents, investments, and restricted cash and investments in unrealized loss positions. As of June 27, 2021, there are no unrealized loss positions with a duration equal to or greater than twelve months:

	June 27, 2021	
	Unrealized Losses Less than 12 Months	
	Fair Value	Gross Unrealized Loss
	(in thousands)	
U.S. Treasury and agencies	$ 122,791	$ (47)
Mutual funds	2,642	(33)
Foreign government bonds	2,133	(4)
Corporate notes and bonds	278,133	(457)
Mortgage backed securities - commercial	15,076	(59)
	$ 420,775	$ (600)

The amortized cost and fair value of cash equivalents, investments, and restricted investments with contractual maturities as of June 27, 2021, are as follows:

	Cost	Fair Value
	(in thousands)	
Due in one year or less	$ 4,198,483	$ 4,198,992
Due after one year through five years	866,243	867,562
Due in more than five years	39,283	39,330
	$ 5,104,009	$ 5,105,884

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 27, 2021 and June 28, 2020, 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. During the year ended June 28, 2020, the company recognized a net loss of $31.5 million of accumulated other comprehensive income, net of tax, related to interest rate swap agreements. No such activity occurred during the years ended June 27, 2021 or June 30, 2019.

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. There were no material gains or losses during the fiscal years ended June 27, 2021, June 28, 2020, or June 30, 2019 associated with forecasted transactions that failed to occur. There were no material gains or losses during the fiscal year ended June 30, 2019 associated with ineffectiveness.

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.

As of June 27, 2021, the fair value of outstanding cash flow hedges was not material. Additionally, as of June 27, 2021, 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 27, 2021:

	June 27, 2021
	(In thousands)
Buy Contracts	$ 353,313
Sell Contacts	598,407

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:

		Year Ended June 27, 2021		Year Ended June 28, 2020	
	Location of Gain (Loss) Recognized in or Reclassified into Income	Gain Recognized in AOCI	Gain (Loss) Reclassified from AOCI into Income	Gain (Loss) Recognized in AOCI	Gain (Loss) Reclassified from AOCI into Income
Derivatives in Cash Flow Hedging Relationships		**(in thousands)**			
Foreign exchange contracts	Revenue	$ 17,614	$ 868	$ 4,095	$ 2,418
Foreign exchange contracts	Cost of goods sold	3,756	3,659	(2,104)	(3,101)
Foreign exchange contracts	R&D	898	—	—	—
Foreign exchange contracts	SG&A	4,190	3,623	(1,158)	(1,501)
Interest rate contracts	Other expense, net	—	(3,855)	(40,610)	(700)
		$ 26,458	$ 4,295	$ (39,777)	$ (2,884)

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 fair value of these derivatives is recorded as a component of other expense, net and offsets the change in the carrying value of the foreign currency denominated assets and liabilities related to remeasurement, which are also recorded in other expense, net. As of June 27, 2021 and June 28, 2020, 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 27, 2021:

		June 27, 2021
		(In thousands)
Buy Contracts	$	214,606
Sell Contacts		228,880

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

		Year Ended			
		June 27, 2021		June 28, 2020	
Derivatives Not Designated as Hedging Instruments:	Location of Gain (Loss) Recognized in Income	Gain Recognized in Income		Loss Recognized in Income	
		(in thousands)			
Foreign exchange contracts	Other expense, net	$	7,057	$	(5,971)

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 27, 2021, two customers accounted for approximately 23% and 13%, of accounts receivable, respectively. As of June 28, 2020, two customers accounted for approximately 21%, and 12% 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 27, 2021, June 28, 2020, and June 30, 2019. 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 27, 2021		June 28, 2020	
	(in thousands)			
Raw materials	$	1,519,456	$	1,161,961
Work-in-process		391,686		251,199
Finished goods		778,152		486,864
	$	2,689,294	$	1,900,024

Note 11: Property and Equipment

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

	June 27, 2021	June 28, 2020
	(in thousands)	
Manufacturing and engineering equipment	$ 1,328,399	$ 1,154,668
Buildings and improvements	840,661	660,865
Computer and computer-related equipment	181,781	178,193
Office equipment, furniture and fixtures	95,259	83,386
Land	84,681	58,805
	2,530,781	2,135,917
Less: accumulated depreciation and amortization	(1,271,356)	(1,082,827)
	$ 1,259,425	$ 1,053,090

The Company has excluded $44.1 million, and $18.4 million of finance right-of-use assets recorded within property and equipment, net from the table above for the years ended June 27, 2021 and June 28, 2020, 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 2021 and 2020 was $229.8 million and $198.8 million, respectively. During fiscal year 2019, depreciation expense, including amortization of capital leases, was $182.1 million.

Note 12: Goodwill and Intangible Assets

Goodwill

The balance of goodwill was $1.5 billion as of June 27, 2021 and June 28, 2020, respectively. As of June 27, 2021 and June 28, 2020, $61.1 million 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 2021, 2020, or 2019.

Intangible Assets

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

	June 27, 2021			June 28, 2020		
	Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net
			(in thousands)			
Customer relationships	$ 630,303	$ (581,406)	$ 48,897	$ 630,137	$ (532,550)	$ 97,587
Existing technology	669,359	(659,898)	9,461	668,992	(654,382)	14,610
Patents and other intangible assets	132,774	(58,767)	74,007	98,342	(42,007)	56,335
Total intangible assets	$ 1,432,436	$ (1,300,071)	$ 132,365	$ 1,397,471	$ (1,228,939)	$ 168,532

The Company recognized $70.6 million, $66.2 million, and $127.3 million in intangible asset amortization expense during fiscal years 2021, 2020, and 2019, respectively. No intangible asset impairments were recognized in fiscal years 2021, 2020, or 2019.

The estimated future amortization expense of intangible assets as of June 27, 2021, is reflected in the table below. The table excludes $14.1 million of capitalized costs for intangible assets that have not yet been placed into service.

Fiscal Year	Amount
	(in thousands)
2022	$ 70,190
2023	24,228
2024	13,647
2025	7,431
2026	2,034
Thereafter	711
	$ 118,241

Note 13: Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consist of the following:

	June 27, 2021	June 28, 2020
	(in thousands)	
Accrued compensation	$ 552,925	$ 402,401
Warranty reserves	176,030	117,839
Income and other taxes payable	348,206	215,652
Dividend payable	185,431	167,129
Other	456,891	369,634
	$ 1,719,483	$ 1,272,655

Note 14: Long Term Debt and Other Borrowings

As of June 27, 2021, and June 28, 2020, the Company's outstanding debt consisted of the following:

	June 27, 2021		June 28, 2020	
	Amount (in thousands)	Effective Interest Rate	Amount (in thousands)	Effective Interest Rate
Fixed-rate 2.80% Senior Notes Due June 15, 2021 ("2021 Notes")	$ —	— %	$ 800,000	2.95 %
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 2.625% Convertible Notes Due May 15, 2041 ("2041 Notes")	— (1)	— %	48,460 (2)	4.28 %
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 debt outstanding, at par	5,000,000		5,848,460	
Unamortized discount	(38,243)		(53,086)	
Fair value adjustment - interest rate contracts	6,621 (3)		8,405 (3)	
Unamortized bond issuance costs	(7,443)		(8,301)	
Total debt outstanding, at carrying value	$ 4,960,935		$ 5,795,478	
Reported as:				
Current portion of long-term debt	$ —		$ 836,107	
Long-term debt	4,960,935		4,959,371	
Total debt outstanding, at carrying value	$ 4,960,935		$ 5,795,478	

(1) On March 26, 2021, the Company issued a notice of redemption to the existing bondholders with a redemption date of May 21, 2021. As such, the convertible notes outstanding on May 21, 2021 were redeemed by the Company.

(2) As of June 28, 2020, these notes were convertible at the option of the bondholder. This is a result of the following condition being met: the market value of the Company's Common Stock was greater than 130% of the convertible notes conversion price for 20 or more of the 30 consecutive trading days preceding the quarter-end. As a result, the 2041 Notes were classified in current liabilities and a portion of the equity component associated with the convertible notes, representing the unamortized discount, was classified in temporary equity on the Company's Consolidated Balance Sheets.

(3) 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 27, 2021, were as follows:

Payments Due by Fiscal Year:		(in thousands)
2022	$	—
2023		—
2024		—
2025		500,000
2026		750,000
Thereafter		3,750,000
Total	$	5,000,000

Convertible Senior Notes

In June 2012, with the acquisition of Novellus, the Company assumed $700 million in aggregate principal amount of 2.625% Convertible Senior Notes due May 15, 2041 (the “2041 Notes”). On May 21, 2021, the 2041 Notes then outstanding were redeemed pursuant to Section 6.01 of the underlying indenture at a price equal to outstanding principal plus accrued and unpaid interest.

No 2041 Notes were outstanding as of June 27, 2021. Selected additional information regarding the 2041 Notes outstanding as of June 28, 2020, is as follows:

		2041 Notes
		June 28, 2020
		(in thousands, except years, percentages, conversion rate, and conversion price)
Carrying amount of permanent equity component, net of tax	$	161,467
Carrying amount of temporary equity component, net of tax	$	10,995
Remaining amortization period (years)		20.9

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 June 7, 2016, the Company completed a public offering of $800 million aggregate principal amount of Senior Notes due June 15, 2021, (the “2021 Notes”). The Company settled the 2021 Notes upon maturity, June 15, 2021.

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 27, 2021, is as follows:

	Remaining Amortization period (years)	Fair Value of Notes (Level 2) (in thousands)
2025 Notes	3.7	$ 550,340
2026 Notes	4.7	$ 838,890
2029 Notes	7.7	$ 1,157,490
2030 Notes	9.0	$ 748,193
2049 Notes	27.7	$ 1,004,213
2050 Notes	29.0	$ 746,910
2060 Notes	39.0	$ 514,050

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"), and June 17, 2021 (the "Second Amended and Restated Credit Agreement). Among other things, the Second Amended and Restated Credit Agreement provides for a $250 million increase in the Company's revolving credit facility, from $1.25 billion to $1.50 billion 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.

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) one-month LIBOR plus 1.0%, plus a spread of 0.00% to 0.30%, or (2) LIBOR , 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 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 is 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. The Second Amended and Restated Credit Agreement incorporates provisions for the replacement of LIBOR or other reference rates with alternative reference rates under certain circumstances, including when, or if, such reference rates cease to be available. The Second Amended and Restated Credit Agreement contains affirmative covenants, negative covenants, financial covenants, and events of default. As of June 27, 2021, 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 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 $1.5 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 27, 2021, 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, commercial paper, and the revolving credit facility during the fiscal years ended June 27, 2021, June 28, 2020, and June 30, 2019.

	Year Ended		
	June 27, 2021	June 28, 2020	June 30, 2019
		(in thousands)	
Contractual interest coupon	$ 197,367	$ 169,483	$ 100,712
Amortization of interest discount	3,934	4,280	3,937
Amortization of issuance costs	1,639	1,632	1,426
Effect of interest rate contracts, net	2,070	1,037	4,086
Total interest cost recognized	$ 205,010	$ 176,432	$ 110,161

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 27, 2021 and June 28, 2020:

	Year Ended	
	June 27, 2021	June 28, 2020
	(in thousands)	
Financing lease cost:		
Amortization of right-of-use assets	$ 7,131	$ 3,613
Interest on lease liabilities	697	506
Total finance lease cost	$ 7,828	$ 4,119
Operating lease cost	$ 51,519	$ 46,101
Variable lease cost	219,040	91,851

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 27, 2021 and June 28, 2020, respectively.

Supplemental cash flow information related to leases was as follows as of June 27, 2021 and June 28, 2020:

	Year Ended	
	June 27, 2021	June 28, 2020
	(in thousands)	
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows paid for operating leases	$ 63,895	$ 50,223
Financing cash flows paid for principal portion of finance leases	5,952	3,539
Right-of-use assets obtained in exchange for lease obligations:		
Operating leases	$ 48,993	108,816
Finance leases	29,497	3,019

Supplemental balance sheet information related to leases were as follows as of June 27, 2021 and June 28, 2020:

	June 27, 2021	June 28, 2020
	(in thousands)	
Operating leases		
Other assets	$ 173,784	$ 174,583
Accrued expenses and other current liabilities	$ 45,310	$ 49,480
Other long-term liabilities	118,385	123,889
Total operating lease liabilities	$ 163,695	$ 173,369
Finance Leases		
Property and Equipment, net	$ 44,054	$ 18,409
Current portion of long-term debt and lease liabilities	$ 11,349	$ 3,770
Long-term debt and lease liabilities, less current portion	29,398	11,477
Total finance lease liabilities	$ 40,747	$ 15,247

	June 27, 2021		June 28, 2020	
	Weighted-Average Remaining Lease Term	Weighted-Average Discount Rate	Weighted-Average Remaining Lease Term	Weighted-Average Discount Rate
	(in years)		(in years)	
Operating leases	5.5	2.30 %	9.0	2.57 %
Finance leases	5.3	1.69 %	4.1	2.79 %

As of June 27, 2021, the maturities of lease liabilities are as follows:

	Operating Leases	Finance Leases
	(in thousands)	
2022	$ 48,487	$ 11,870
2023	32,774	6,438
2024	22,756	5,882
2025	17,803	5,152
2026	12,702	5,062
Thereafter	38,628	8,244
Total lease payments	$ 173,150	$ 42,648
Less imputed interest	(9,455)	(1,901)
Total	$ 163,695	$ 40,747

Selected Leases and Related Guarantees

The Company had leases regarding certain improved properties in Fremont and Livermore, California (the “California Facility Leases”) that were classified as operating leases as of June 28, 2020. On September 21, 2020, the Company renewed these leases for an additional seven-year term, and concluded the modified leases are finance leases, and recognized approximately $31.4 million of property and equipment, net, for the associated right of use assets, and $29.8 million of finance lease obligations ($3.1 million classified in current portion of long-term debt and finance lease obligations and the remainder in long-term debt and finance lease obligations, less current portion). 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 Sheet as of June 27, 2021 and June 28, 2020.

During the 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.

The Company leases the majority of its administrative, R&D 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's rental expense for facilities occupied during fiscal year 2019 was $28.1 million.

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 $26.9 million, $23.6 million, and $24.1 million, in fiscal years 2021, 2020, and 2019, 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 27, 2021, and June 28, 2020, the liability of the Company to the plan participants was $297.3 million and $220.0 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 27, 2021, and June 28, 2020, the Company had investments in the aggregate amount of $313.9 million and $235.1 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 $40.1 million and $41.0 million as of June 27, 2021, and June 28, 2020, 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 $527.3 million of liabilities related to uncertain tax positions (see Note 7 - Income Taxes for further discussion), $180.0 million of liability associated with a minimum purchase penalty obligation to a certain supplier, and $200.7 million of capital expenditures associated with facilities under construction 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 27, 2021, 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 27, 2021, the maximum potential amount of future payments that the Company could be required to make under these arrangements and letters of credit was $74.3 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 officers and directors, 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 27, 2021, 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 27, 2021, were as follows:

Payments Due by Fiscal Year:	Purchase Obligations
	(in thousands)
2022	$ 660,201
2023	57,023
2024	57,023
2025	20,362
2026	20,362
Thereafter	3,215
Total	$ 818,186

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 27, 2021, warranty reserves totaling $15.7 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 27, 2021	June 28, 2020
	(in thousands)	
Balance at beginning of period	$ 129,197	$ 127,932
Warranties issued during the period	229,026	151,508
Settlements made during the period	(172,759)	(131,177)
Changes in liability for pre-existing warranties	6,294	(19,066)
Balance at end of period	$ 191,758	$ 129,197

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 November 2020, 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	Average Price Paid Per Share(1)	Amount Available Under Repurchase Program
	(in thousands, except per share data)			
Available balance as of June 28, 2020				$ 1,773,427
Quarter ended September 27, 2020	1,344	$ 461,998	$ 343.73	$ 1,311,429
Board authorization, $5 billion increase, November 2020				$ 6,311,429
Quarter ended December 27, 2020	1,789	$ 724,485	$ 404.98	$ 5,586,944
Quarter ended March 28, 2021	1,474	$ 925,099	$ 519.30	$ 4,661,845
Quarter ended June 27, 2021	922 (2)	$ 439,625	$ 619.76	$ 4,222,220

(1) Average price paid per share excludes the effect of accelerated share repurchases. 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.

In addition to the shares repurchased under the Board-authorized repurchase program shown above, the Company acquired 290 thousand shares at a total cost of $166.4 million during the 12 months ended June 27, 2021, 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 February 11, 2021, the Company entered into an accelerated share repurchase agreement (the "February 2021 ASR") with a financial institution to repurchase a total of $500 million of Common Stock. The Company took an initial delivery of approximately 655 thousand shares, which represented 75% of the prepayment amount divided by the Company's closing stock price on February 11, 2021. The total number of shares received under the February 2021 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 February 2021 ASR occurred during May 2021, resulting in the receipt of approximately 213 thousand additional shares, which yielded a weighted-average share price of approximately $575.74 for the transaction period.

Note 19: Comprehensive Income (Loss)

The components of accumulated other comprehensive loss, net of tax at the end of June 27, 2021, as well as the activity during the fiscal year ended June 27, 2021, 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 28, 2020	$ (45,811)	$ (32,796)	$ 4,923	$ (20,527)	$ (94,211)
Other comprehensive income (loss) before reclassifications	14,398	22,139	(4,098)	326	32,765
(Gains) losses reclassified from accumulated other comprehensive income (loss) to net income (1)	—	(3,468)	786	—	(2,682)
Net current-period other comprehensive income (loss)	14,398	18,671	(3,312)	326	30,083
Balance as of June 27, 2021	$ (31,413)	$ (14,125)	$ 1,611	$ (20,201)	$ (64,128)

(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 27, 2021, June 28, 2020, and June 30, 2019 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 27, 2021 and June 28, 2020; 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 27, 2021	June 28, 2020	June 30, 2019
Revenue:		**(in thousands)**	
China	$ 5,137,886	$ 3,083,916	$ 2,161,440
Korea	3,924,685	2,391,257	2,205,348
Taiwan	2,117,999	1,906,223	1,596,261
Japan	1,363,907	954,743	1,969,869
Southeast Asia	945,478	587,638	615,813
United States	672,716	812,482	748,601
Europe	463,479	308,477	356,227
Total revenue	$ 14,626,150	$ 10,044,736	$ 9,653,559

	June 27, 2021	June 28, 2020	June 30, 2019
Long-lived assets:		**(in thousands)**	
United States	$ 1,137,490	$ 1,052,714	$ 933,054
Southeast Asia	129,881	31,027	5,542
Europe	77,661	80,297	72,928
Korea	62,502	49,943	28,200
Taiwan	47,279	11,555	6,759
Japan	13,149	11,826	5,750
China	9,301	8,720	6,844
	$ 1,477,263	$ 1,246,082	$ 1,059,077

In fiscal year 2021, three customers accounted for approximately 25%, 12%, and 10% of total revenues, respectively. In fiscal year 2020, four customers accounted for approximately 24%, 14%, 10%, and 10% of total revenues, respectively. In fiscal year 2019, four customers accounted for approximately 15%, 14%, 14%, and 14%, of total revenues, respectively. No other customers accounted for more than 10% of total revenues.

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 27, 2021 and June 28, 2020, the related consolidated statements of operations, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended June 27, 2021, 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 as of June 27, 2021 and June 28, 2020, and the results of its operations and its cash flows for each of the three years in the period ended June 27, 2021, 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 27, 2021, 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 17, 2021 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 $2.7 billion as of June 27, 2021, representing 17% 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 17, 2021

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 27, 2021, 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 27, 2021, 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 27, 2021 and June 28, 2020, the related consolidated statements of operations, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended June 27, 2021, and the related notes and our report dated August 17, 2021 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 17, 2021

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 27, 2021, 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 27, 2021, 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.

In response to the COVID-19 pandemic a significant number of our employees are working remotely. The design of our business processes and internal controls enabled remote execution through secure remote access to data. While certain of our business processes required slight modification as a result of the need for remote work, those changes did not result in the need for significant adjustments to our internal control structure.

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 27, 2021, 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 2021 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 2021 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 2021 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 8, 2021, (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 2021 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 — 2021 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 heading “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 heading “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 heading “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.

2. Index to Financial Statement Schedules

Schedules have been omitted since they are not applicable, not required, not material, or the information is included elsewhere herein.

Item 16. Form 10-K Summary

None

LAM RESEARCH CORPORATION

ANNUAL REPORT ON FORM 10-K
FOR THE FISCAL YEAR ENDED JUNE 27, 2021

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 12, 2020 which is incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed on May 18, 2020 (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 File No. 000-12933).
10.9*	Form of Nonstatutory Stock Option Award Agreement (U.S. Participants) — Lam Research Corporation (Novellus Systems, Inc.) 2011 Stock Incentive Plan (As Amended) which is incorporated by reference to Exhibit 10.9 to the Registrant's Quarterly Report on Form 10-Q filed on February 6, 2014 (SEC File No. 000-12933).
10.10	Form of Confidentiality Agreement which is incorporated by reference to Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-Q filed on February 3, 2015 (SEC File No. 000-12933).
10.11*	Form of Restricted Stock Unit Award Agreement (U.S. Participants) - 2015 Stock Incentive Plan which is incorporated by reference to Exhibit 10.244 to the Registrant's Current Report on Form 8-K filed on November 5, 2015 (SEC File No. 000-12933).
10.12*	Form of Option Award Agreement (U.S. Participants) - 2015 Stock Incentive Plan which is incorporated by reference to Exhibit 10.247 to the Registrant's Current Report on Form 8-K filed on November 5, 2015 (SEC File No. 000-12933).
10.13*	Form of Indemnification Agreement which is incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on April 24, 2017 (SEC File No. 000-12933).
10.14	Form of Commercial Paper Dealer Agreement 4(a)(2) Program between Lam Research Corporation, as issuer, and the dealer which is incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on November 14, 2017 (SEC File No. 000-12933).

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 4.23 to the Registrant's Current Report on Form 8-K filed on November 5, 2015 (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	Second Amended and Restated Credit Agreement dated June 17, 2021, among Lam Research Corporation, JPMorgan Chase Bank, N.A., as administrative agent, and the other agents and lenders listed therein, and all exhibits and schedules attached thereto which is incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on June 21, 2021 (SEC File No. 000-12933).
10.29*	Form of Option Award Agreement (U.S. Participants) - 2015 Stock Incentive Plan.
10.30*	Form of Restricted Stock Unit Agreement (U.S. Participants) - 2015 Stock Incentive Plan.
10.31*	Form of Market-Based Performance Restricted Stock Unit Award Agreement (U.S. Participants) - 2015 Stock Incentive Plan.
10.32*	Form of Option Award Agreement (U.S. Participants) - 2015 Stock Incentive Plan.
10.33*	Form of Option Award Agreement (International Participants) - 2015 Stock Incentive Plan.
10.34*	Form of Restricted Stock Unit Agreement (U.S. Participants) - 2015 Stock Incentive Plan.
10.35*	Form of Restricted Stock Unit Agreement (International Participants) - 2015 Stock Incentive Plan.
10.36*	Form of Market-Based Performance Restricted Stock Unit Award Agreement (U.S. Participants) - 2015 Stock Incentive Plan.
10.37*	Form of Market-Based Performance Restricted Stock Unit Award Agreement (International Participants) - 2015 Stock Incentive Plan.
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

Exhibit	Description
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)

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* 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 17, 2021	LAM RESEARCH CORPORATION (Registrant)
	By: /s/ Timothy M. Archer
	Timothy M. Archer President and Chief Executive Officer

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 Timothy M. Archer	President, Chief Executive Officer and Director	August 17, 2021
Principal Financial Officer and Principal Accounting Officer		
/s/ Douglas R. Bettinger Douglas R. Bettinger	Executive Vice President, Chief Financial Officer, and Chief Accounting Officer	August 17, 2021

Other Directors

Signatures	Title	Date	Signatures	Title	Date
/s/ Abhijit Y. Talwalkar Abhijit Y. Talwalkar	Chairman	August 17, 2021	/s/ Catherine P. Lego Catherine P. Lego	Director	August 17, 2021
/s/ Sohail U. Ahmed Sohail U. Ahmed	Director	August 17, 2021	/s/ Bethany J. Mayer Bethany J. Mayer	Director	August 17, 2021
/s/ Eric K. Brandt Eric K. Brandt	Director	August 17, 2021	/s/ Lih Shyng Tsai Lih Shyng (Rick L.) Tsai	Director	August 17, 2021
/s/ Michael R. Cannon Michael R. Cannon	Director	August 17, 2021	/s/ Leslie F. Varon Leslie F. Varon	Director	August 17, 2021