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 January 28, 2023

or

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

For the transition period from to

Commission file number 001-40357

MARVELL TECHNOLOGY, INC.

(Exact name of registrant as specified in its charter)

Delaware	**85-3971597**
(State or other jurisdiction of incorporation or organization)	***(I.R.S. Employer Identification No.)***

1000 N. West Street, Suite 1200

Wilmington, Delaware 19801

(Address of principal executive offices)

(302) 295 - 4840

(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common stock, $0.002 par value per share	MRVL	**The Nasdaq Global Select Market**

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

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 Exchange 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 Exchange Act 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 Exchange Act). Yes ☐ No ☒

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant was $47,253,245,480 based upon the closing price of $55.68 per share on the Nasdaq Global Select Market on July 29, 2022 (the last business day of the registrant's most recently completed second quarter).

As of March 2, 2023, there were 856.9 million shares of the registrant's common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of Part III of this Form 10-K are incorporated by reference from the registrant's definitive proxy statement for its 2023 annual meeting of stockholders, which will be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year covered by this Form 10-K. Except with respect to information specifically incorporated by reference in this Form 10-K, the proxy statement is not deemed to be filed as part of this Form 10-K.

TABLE OF CONTENTS

		Page
	PART I	
Item 1.	Business	3
Item 1A.	Risk Factors	14
Item 1B.	Unresolved Staff Comments	39
Item 2.	Properties	39
Item 3.	Legal Proceedings	39
Item 4.	Mine Safety Disclosures	39
	PART II	
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	40
Item 6.	Reserved	41
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	42
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk	53
Item 8.	Financial Statements and Supplementary Data	54
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	98
Item 9A.	Controls and Procedures	98
Item 9B.	Other Information	99
Item 9C.	Disclosure Regarding Foreign Jurisdictions that Prevent Inspections	99
	PART III	
Item 10.	Directors, Executive Officers and Corporate Governance	101
Item 11.	Executive Compensation	101
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	101
Item 13.	Certain Relationships and Related Transactions, and Director Independence	102
Item 14.	Principal Accountant Fees and Services	102
	PART IV	
Item 15.	Exhibits and Financial Statement Schedules	103
Item 16.	Form 10-K Summary	108
	Signatures	109
	Schedule II	111

MARVELL TECHNOLOGY, INC.
Forward-Looking Statements

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which are subject to the "safe harbor" created by those sections. These statements involve known and unknown risks, uncertainties and other factors, which may cause our actual results to differ materially from those implied by the forward-looking statements. Words such as "anticipates," "expects," "intends," "plans," "projects," "believes," "seeks," "estimates," "forecasts," "targets," "may," "can," "will," "would" and similar expressions identify such forward-looking statements.

Forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those indicated in the forward-looking statements. Factors that could cause actual results to differ materially from those predicted include, but are not limited to:

- risks related to changes in general economic conditions such as economic slowdowns, inflation, stagflation, rising interest rates, and recessions or political conditions, such as the tariffs and trade restrictions with China, Russia and other foreign nations, and specific conditions in the end markets we address, including the continuing volatility in the technology sector and semiconductor industry and the U.S. National Science and Technology Council's designation of semiconductors as a critical and emerging technology;
- risks related to cancellations, rescheduling or deferrals of significant customer orders or shipments, as well as the ability of our customers to manage inventory;
- risks related to the impact of the COVID-19 pandemic or other future pandemics, on the global economy and on our manufacturing partners, customers, suppliers, employees and business;
- risks related to our ability to scale our business;
- risks related to the extension of lead time due to supply chain disruptions, component shortages that impact the cost and production of our products and kitting process, and constrained availability from other electronic suppliers impacting our customers' ability to ship their products, which in turn may adversely impact our sales to those customers;
- risks related to the ability of our customers, particularly in jurisdictions such as China that may be subject to trade restrictions (including the need to obtain export licenses) to develop their own solutions or acquire fully developed solutions from third-parties;
- risks related to our ability to design, develop and introduce new and enhanced products, in particular in the 5G and Cloud markets, in a timely and effective manner, as well as our ability to anticipate and adapt to changes in technology;
- risks related to our ability to successfully integrate and to realize anticipated benefits or synergies, on a timely basis or at all, in connection with our past, current, or any future acquisitions, divestitures, significant investments or strategic transactions;
- risks related to our debt obligations;
- risks related to the highly competitive nature of the end markets we serve, particularly within the semiconductor and infrastructure industries;
- risks related to our dependence on a few customers for a significant portion of our revenue including risks related to severe financial hardship or bankruptcy or other attrition of one or more of our major customers, particularly as our major customers comprise an increasing percentage of our revenue;
- risks related to our ability to execute on changes in strategy and realize the expected benefits from restructuring activities;
- risks related to our ability to maintain a competitive cost structure for our manufacturing, assembly, testing and packaging processes and our reliance on third parties to produce our products;
- risks related to our ability to attract, retain and motivate a highly skilled workforce, especially engineering, managerial, sales and marketing personnel;

- risks related to any current and future litigation, regulatory investigations or contractual disputes with customers that could result in substantial costs and a diversion of management's attention and resources that are needed to successfully maintain and grow our business;
- risks related to gain or loss of a design win or key customer;
- risks related to seasonality or volatility related to sales into the infrastructure, semiconductor and related industries and end markets;
- risks related to failures to qualify our products or our suppliers' manufacturing lines;
- risks related to failures to protect our intellectual property, particularly outside the United States;
- risks related to the potential impact of significant events or natural disasters or the effects of climate change (such as droughts, flooding, wildfires, increased storm severity, sea level rise, and power outages), particularly in certain regions in which we operate or own buildings, such as Santa Clara, California, and where our third party manufacturing partners or suppliers operate, such as Taiwan and elsewhere in the Pacific Rim;
- risks related to our Environmental, Social and Governance (ESG) programs; and
- risks related to failures of our customers to agree to pay for NRE (non-recurring engineering) costs, failure to pay enough to cover the costs we incur in connection with NREs, or non-payment of previously agreed NRE costs due to us.

Additional factors that could cause actual results to differ materially include the risks discussed in Part I, Item 1A, "Risk Factors." These forward-looking statements speak only as of the date hereof. Unless required by law, we undertake no obligation to update publicly any forward-looking statements.

PART I

Item 1. *Business*

Our Company

Marvell Technology, Inc., together with its consolidated subsidiaries ("Marvell," "MTI," the "Company," "we," or "us") is a leading supplier of data infrastructure semiconductor solutions, spanning the data center core to network edge. We are a fabless semiconductor supplier of high-performance standard and semi-custom products with core strengths in developing and scaling complex System-on-a-Chip architectures, integrating analog, mixed-signal and digital signal processing functionality. Leveraging leading intellectual property and deep system-level expertise, as well as highly innovative security firmware, our solutions are empowering the data economy and enabling the data center, enterprise networking, carrier infrastructure, consumer, and automotive/industrial end markets.

We currently are incorporated in Delaware, United States. Our corporate headquarters is 1000 N. West Street, Suite 1200 Wilmington, Delaware 19801, and our telephone number is (302) 295-4840. We also have operations in many countries, including Argentina, China, India, Israel, Japan, Singapore, South Korea, Taiwan and Vietnam. Our fiscal year ends on the Saturday nearest January 31.

Available Information

Our website address is www.marvell.com. The information contained on any website referred to in this Form 10-K does not form any part of this Annual Report on Form 10-K and is not incorporated by reference herein unless expressly noted. We make available free of charge through our website our annual reports on Form 10-K, our quarterly reports on Form 10-Q, our current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as soon as reasonably practicable after we electronically file these materials with, or furnish them to, the U.S. Securities and Exchange Commission ("SEC"). In addition, the SEC's website, www.sec.gov, contains reports, proxy statements, and other information that we file electronically with the SEC.

Our Markets and Products

Our product solutions serve five large end markets: (i) data center, (ii) enterprise networking, (iii) carrier infrastructure, (iv) consumer, and (v) automotive/industrial. These markets and their corresponding customer products and applications are noted in the table below:

End market	**Customer products and applications**
Data center	• Cloud and on-premise Artificial intelligence (AI) systems • Cloud and on-premise ethernet switching • Cloud and on-premise network-attached storage (NAS) • Cloud and on-premise servers • Cloud and on-premise storage area networks • Cloud and on-premise storage systems • Data center interconnect (DCI)
Enterprise networking	• Campus and small medium enterprise routers • Campus and small medium enterprise ethernet switches • Campus and small medium enterprise wireless access points (WAPs) • Network appliances (firewalls, and load balancers) • Workstations
Carrier infrastructure	• Broadband access systems • Ethernet switches • Optical transport systems • Routers • Wireless radio access network (RAN) systems
Consumer	• Broadband gateways and routers • Gaming consoles • Home data storage • Home wireless access points (WAPs) • Personal Computers (PCs) • Printers • Set-top boxes
Automotive/industrial	• Advanced driver-assistance systems (ADAS) • Autonomous vehicles (AV) • In-vehicle networking • Industrial ethernet switches • United States military and government solutions • Video surveillance

The following table summarizes net revenue disaggregated by end market (in millions, except percentages):

	Year Ended					
	January 28, 2023		January 29, 2022		January 30, 2021	
Data center	$ 2,408.8	41 %	$ 1,784.7	40 %	$ 1,040.8	35 %
Enterprise networking	1,369.2	23 %	907.7	20 %	636.0	22 %
Carrier infrastructure	1,084.0	18 %	820.4	18 %	599.4	20 %
Consumer	701.1	12 %	700.0	16 %	574.7	19 %
Automotive/industrial	356.5	6 %	249.6	6 %	118.0	4 %
Total	$ 5,919.6		$ 4,462.4		$ 2,968.9	

We categorize revenue from our five end markets by using a number of data points, including the type of customer purchasing the product, the function of our product being sold, and our knowledge of the end customer product or application into which our product will be incorporated. The categorization of products by end market is inherently subjective and can vary over time as a result of, for example, our knowledge of the ways in which our customers utilize our products.

We serve these five end markets with a broad portfolio of semiconductor solutions based on our compute, networking, security, electro-optics, and storage technologies, which are essential and differentiating for these markets.

Our portfolio of solutions integrate multiple analog, mixed-signal and digital intellectual property components incorporating hardware, firmware and software technologies and our system knowledge to provide our customers highly-integrated solutions for their end products. In addition to selling standard product solutions, where the exact same product is sold to multiple customers, we also offer optimized solutions which are customized to a specific customer's requirements. The demand for optimized solutions has been increasing as our customers seek greater customization and differentiation for their products and services.

Our current product offerings include custom Application Specific Integrated Circuits ("ASICs"), electro-optics, ethernet solutions, fibre channel adapters, processors and storage controllers.

Custom ASICs

We develop custom SoC (System-on-a-Chip) solutions tailored to individual customer specifications that deliver system-level differentiation for next-generation carrier, networking, data center, machine learning, automotive, aerospace and defense applications. These custom offerings leverage our broad portfolio of technologies being used in our standard products.

Electro-optics

We offer a complete portfolio of high-speed optical communication semiconductor solutions for inside cloud data centers, between cloud data centers and in carrier networks. Our electro-optical products include PAM (pulse amplitude modulation) and coherent DSPs (digital signal processors), laser drivers, TIAs (trans-impedance amplifiers), silicon photonics and DCI (data center interconnect) solutions.

Our low-power and low-latency PAM DSPs implement equalization, estimation, clock recovery, carrier recovery, forward error correction, and coded modulation to enable ultra-fast data transmission speeds. In combination with our drivers, TIAs and silicon photonics, our suite of electro-optical products performs a wide range of functions such as amplifying, encoding, multiplexing, demultiplexing, and retiming signals at speeds beyond 800 Gbps. These products are key enablers for inter-connecting servers, routers, switches, storage and other infrastructure equipment that process, store and transport data traffic.

Our coherent TIAs, drivers and DSPs enable optical data transmission over distances of 100s to 1000s of kilometers in telecom carrier networks. Our PAM DSPs along with our accompanying TIAs and drivers deliver low-power and cost-effective solutions for optical connectivity inside cloud data centers. Our data center interconnect solutions enable pluggable transceiver technology to directly interconnect regional cloud data centers, at lower cost, complexity and power compared to traditional optical transport solutions.

Ethernet Solutions

We offer a broad portfolio of Ethernet solutions spanning controllers, network adapters, physical transceivers and switches. Our Ethernet solutions address a wide variety of end-customer data infrastructure products from small, high-reliability automotive sub-systems to large, high-performance modular enterprise and data center solutions.

Our Prestera and Teralynx Ethernet switches integrate market-optimized innovative features, such as advanced tunneling and routing, high throughput forwarding, and packet processing that make networks more effective at delivering content with low-latency and high-reliability. Our Ethernet switch product portfolio ranges from low-power, five-port switches to highly integrated, multi-terabit Ethernet devices that can be interconnected to form massive network solutions.

We complement our Ethernet switches and infrastructure processors with a broad selection of Alaska Ethernet physical-layer transceivers for both optical and copper interconnects with advanced power management, link security, and time synchronization features.

Our Ethernet controllers and network adapters are optimized to accelerate and simplify data center and enterprise networking. Our family of products provide exceptional value features and performance enabling the most agile and data-intensive applications. They deliver Ethernet connectivity for enterprise-class workstations all the way up to enterprise and cloud data centers.

For the automotive market, we offer an automotive-grade portfolio of Brightlane Ethernet physical-layer transceivers, bridges and switches supporting speeds from 100Mbps to 10Gbps with enhanced safety and security features required for today's and tomorrow's in-vehicle networks. Our Brightlane automotive Ethernet products provide the in-vehicle connectivity for key applications such as advanced driver assistance systems (ADAS), central gateways, body domain controllers, vehicle cameras, and in-vehicle infotainment.

Fibre Channel Products

Our QLogic Fibre Channel product family comprises of host bus adapters (HBAs) and controllers for server and storage system connectivity. These products accelerate enterprise and data center applications, deliver a highly resilient infrastructure, enable greater server virtualization density along with an advanced set of data center diagnostic, orchestration and quality of service capabilities to optimize IT productivity. Our latest Fibre Channel products are well-suited for use with all-flash arrays by offering best-in-class latency and performance.

Processors

We offer highly integrated semiconductors that provide single or multiple core processors, along with intelligent Layer 2 through 7 processing of the OSI (Open Systems Interconnection) stack which is the framework that governs network communications within enterprise, datacenter, storage, and carrier markets. All of our products are compatible with standards-based operating systems and general-purpose software to enable ease of programming, and are supported by our ecosystem partners.

Our OCTEON data processor units (DPUs) and multi-core infrastructure processor families provide integrated Layer 4 through 7 data and security processing with additional capabilities at Layers 2 and 3 at line speeds. These software-compatible processors integrate next-generation networking I/Os along with advanced security, storage, and application hardware accelerators, offering programmability for the Layer 2 through Layer 7 processing requirements of intelligent networks. The OCTEON DPUs and processors are targeted for use in a wide variety of carrier, data center, and enterprise equipment, including routers, switches, security UTM appliances, content-aware switches, application-aware gateways, wireless access points, 3G/4G/5G wireless base stations, storage arrays, smart network interface controllers, network functions virtualization (NFV) and software-defined networking (SDN) infrastructure.

Our OCTEON Fusion family of wireless baseband infrastructure processors is a highly scalable product family supporting enterprise small cells, high capacity outdoor picocells and microcells all the way up to multi-sector macrocells for multiple wireless protocols including 5G. The key features include highly optimized processor cores, a highly efficient caching subsystem, high memory bandwidth digital signal processing engines along with a host of hardware accelerators. Additionally, multiple OCTEON Fusion chips can be cascaded for even denser deployments or higher order multiple-input and multiple-output, or MIMO. Our OCTEON Fusion processors have also been designed into 5G base station radio units to help enable Massive MIMO (Multiple Input Multiple Output) antenna and advanced Beamforming implementations.

Our NITROX security processor family provides the functionality required for Layer 3 to Layer 5 secure communication in a single chip. These single chip, custom-designed processors provide security protocol processing, encryption, authentication and compression algorithms to reduce the load on the system processor and increase total system throughput. The LiquidSecurity product family is a high-performance hardware-based transaction security solution for cloud data center and enterprise applications. It address the high-performance security requirements for private key management and administration. This family is available as an adapter with complete software or as a standalone appliance.

Our LiquidIO Server Adapter family is a high-performance, general-purpose programmable adapter platform that enables cloud data centers and enterprises to offload their server processors for higher performance and power efficiencies. The LiquidIO Server Adapter family is supported by a feature rich software development kit that allows customers and partners to develop high-performance SDN (software defined networking) applications with packet processing, switching, security, tunneling, quality of service, and metering.

Storage Controllers

We offer a broad portfolio of storage controllers for hard disk drives ("HDDs") and solid-state-drives ("SSDs") across all high-volume markets. Our Bravera controllers integrate several key Marvell technologies spanning compute, networking, security and storage. These key technologies enable our controllers to be optimized performance-power solutions and to help our customers high-efficient storage products. Our Bravera HDD controllers integrate Marvell's industry-leading read channel technologies to enable higher volumetric densities at low power profiles and are being used by all the current HDD makers. Our technology density and power differentiators are critical for addressing the fast-growing high-capacity, nearline HDD data center and enterprise markets. To further enhance our Bravera HDD controller differentiation and value propositions, we offer customers preamplifier products as part of a chipset with our HDD controllers, seeking to increase our customers' product efficiencies. Our Bravera HDD controllers support all the high-volume host system interfaces, including Serial Advanced Technology Attachment ("SATA") and Serial Attached SCSI ("SAS"), which are critical for the data center and enterprise markets.

Our Bravera SSD controller products leverage our strong HDD controller know-how and system-level expertise. We integrate several of our Bravera HDD controller IPs with our flash technologies to deliver optimal solutions for data center, enterprise and client computing markets. Our Bravera SSD controller products integrate hardware and firmware components to help accelerate our customers' time to market and maximize the capabilities of our solutions. Like our HDD controllers, our SSD controllers support all the high-volume SSD host system interfaces, including SAS, SATA, peripheral component interconnect express ("PCIe"), non-volatile memory express ("NVMe") and NVMe over Fabrics ("NVMe-oF").

Our new controller chipset products enable innovative flash-based storage architectures in data centers and enterprises. These solutions increase overall data center performance, density and scalability while lowering overall power, resulting in lower total cost of ownership for the infrastructure organizations.

Financial Information about Segments and Geographic Areas

We have determined that we operate in one reportable segment: the design, development and sale of integrated circuits. For information regarding our revenue by geographic area, and property and equipment by geographic area, please see "Note 15 – Segment and Geographic Information" in our Notes to the Consolidated Financial Statements set forth in Part II, Item 8 of this Annual Report on Form 10-K. See "Risk Factors" under Item 1A of this Annual Report on Form 10-K for a discussion of the risks associated with our international operations.

Customers, Sales and Marketing

Our target customers are original equipment manufacturers ("OEMs") and original design manufacturers, both of which design and manufacture end market devices. We seek to strategically align our sales force along key customer lines in order to offer fully integrated platforms to our customers. In this way, we believe we can more effectively offer a broader set of content into our key customers' end products, without having multiple product groups separately engage the same customer. We seek to complement and support our direct sales force with manufacturers' representatives for our products in North America and Europe. In addition, we have contracted with distributors who support our sales and marketing activities in the United States, Europe and Asia. We also use third-party logistics providers who maintain warehouses in close proximity to our customers' facilities. We expect that a significant percentage of our sales will continue to come from direct sales to key customers.

We use field application engineers to provide technical support and assistance to existing and potential customers in designing, testing and qualifying systems designs that incorporate our products. Our marketing team works in conjunction with our field sales and application engineering force, and is organized around our product groups.

During fiscal 2023, 2022 and 2021, there was no net revenue attributable to a customer, other than one distributor, whose revenues as a percentage of net revenue was 10% or greater of total net revenues. Net revenue attributable to significant distributors whose revenues as a percentage of net revenue was 10% or greater of total net revenues is presented in the following table:

	Year Ended		
	January 28, 2023	January 29, 2022	January 30, 2021
Distributor:			
Distributor A	20 %	15 %	13 %

Net revenue attributable to Distributor A increased due to the change of four large module makers from direct to distribution accounts to align with our support business model in Asia.

Inventory and Working Capital

We typically place firm orders with our suppliers up to 52 weeks prior to the anticipated delivery date and typically prior to an order for the product. Starting in fiscal 2022 and through the first half of fiscal 2023, in response to a large increase in demand from our customers for our products in a majority of our end markets as they continued to invest in data infrastructure, our operations team continued to increase production with our global supply chain partners to alleviate supply constraints. However, with the start of a broad inventory correction in the semiconductor industry, supply constraints have now mostly resolved. To secure capacity over the long term, we have entered into and expect to continue to enter into capacity reservation arrangements with certain foundries and partners for substrates. Our products typically have long multi-year lifecycles and we often maintain substantial inventories because the semiconductor industry is characterized by short lead time orders and quick delivery schedules.

Research and Development

We believe that our future success depends on our ability to introduce improvements to our existing products and to develop new products that deliver cost-effective solutions for both existing and new markets. Our research and development efforts are directed largely to the development of high-performance analog, mixed-signal, digital signal processing and embedded microprocessor integrated circuits with the smallest die size and lowest power. We devote a significant portion of our resources to expanding our product portfolio based on a broad intellectual property portfolio with designs that are intended to enable high-performance, reliable communications over a variety of physical transmission media. We are also focused on incorporating functions currently provided by stand-alone integrated circuits into our integrated platform solutions to reduce our customers' overall system costs.

We have assembled a core team of engineers who have experience in the areas of complementary metal oxide semiconductor ("CMOS") technology, digital signal processing, electro-optics, embedded microprocessors, mixed-signal circuit design, silicon photonics, and system-level architectures. We have invested and expect to continue to invest a significant amount in research and development. See our discussion of research and development expenses in Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, of this Annual Report on Form 10-K for further information.

Manufacturing

Integrated Circuit Fabrication

The vast majority of our integrated circuits are fabricated using widely available CMOS processes, which is intended to provide greater flexibility to engage independent foundries to manufacture integrated circuits at lower costs. By outsourcing manufacturing, we are able to avoid the cost associated with owning and operating our own manufacturing facilities. This is intended to allow us to focus our efforts on the design and marketing of our products. We seek to work closely with our foundry partners to forecast on a monthly basis our manufacturing capacity requirements. We also seek to closely monitor foundry production to help ensure consistent overall quality, reliability and yield levels. Our integrated circuits are currently fabricated in several advanced manufacturing processes. Because more precise manufacturing processes are expected to lead to enhanced performance, smaller silicon chip size and lower power requirements, we continually seek to evaluate the benefits and feasibility of migrating to smaller geometry process technology in order to reduce cost and improve performance.

Assembly and Test

We typically outsource all product packaging and testing requirements for our products in production to several assembly and test subcontractors primarily located in Taiwan, Canada, Korea, Singapore and China.

Governmental Regulations

Import/Export, National Security and Other Regulations Related to International Operations and Ownership

We are subject to laws and regulations worldwide, which may differ among jurisdictions, affecting our operations in areas including, but not limited to: intellectual property ownership and infringement; tax; import and export requirements; anti-corruption; foreign exchange controls and cash repatriation restrictions; conflict minerals; data privacy requirements; competition; advertising; employment; product regulations; environment, health and safety requirements; and consumer laws. For example, government export regulations apply to the encryption or other features contained in some of our products.

A portion of the business we acquired in our Avera acquisition in fiscal 2021 requires facility security clearances under the National Industrial Security Program. The National Industrial Security Program requires that a corporation maintaining a facility security clearance be effectively insulated from foreign ownership, control or influence ("FOCI"). Because we were organized in Bermuda at the time of the Avera acquisition, we entered into agreements with the U.S. Department of Defense with respect to FOCI mitigation arrangements that relate to our operation of the portion of the Avera business involving facility clearances. These measures and arrangements may materially and adversely affect our operating results due to the increased cost of compliance with these measures. If we fail to comply with our obligations under these agreements, our ability to operate our business may be adversely affected. Now that we are domiciled in the United States, we have requested to be released from some of the above FOCI-related obligations. We can offer no assurance that such a request will be granted in a timely manner or at all.

Primarily as a result of our acquisition of Avera, we are now a party to certain contracts with the U.S. government and its subcontractors. Our contracts with government entities are subject to various procurement regulations and other requirements relating to their formation, administration and performance.

See "Risk Factors" under Item 1A of this Annual Report on Form 10-K for additional information on regulatory matters.

Environmental Management

We are also subject to environmental rules and regulations in multiple jurisdictions, such as the EU Directive on Restriction of Hazardous Substances (RoHS), the EU Regulation, Evaluation and Authorization of Chemicals SVHC Substances Directive, the EU Waste Electrical and Electronic Equipment Directive (WEEE Directive), China's regulation on Management Methods for Controlling Pollution Caused by Electronic Information Products, and California Safe Drinking Water and Toxic Enforcement Act of 1986.

We believe that our products comply with the current Restriction of Hazardous Substances Directive, the European legislation that restricts the use of a number of substances, including lead, and the Regulation, Evaluation and Authorization of Chemicals SVHC Substances Directive. In addition, each of our manufacturing subcontractors certifies to us compliance with ISO 14001:2004, the international standard related to environmental management. We are also working to establish a "conflict-free" supply chain, including ethical sourcing of certain minerals for our products.

Intellectual Property

Our future revenue growth and overall success depend in large part on our ability to protect our intellectual property. We rely on a combination of patents, copyrights, trademarks, trade secrets, contractual provisions, confidentiality agreements and licenses to protect our intellectual property. As of January 28, 2023, we have over 10,000 issued patents and pending patent applications in the United States and other countries, covering various aspects of our technology. The expiration of our patents range from 2023 to 2042, and none of the patents expiring in the near future are expected to be material to our IP portfolio as we are not substantially dependent on any single patent or group of related patents. While we believe the duration of our patents generally covers the expected lives of our products, our patents may not collectively or individually cover every feature on innovation in our product. In addition, our efforts may not be sufficient to protect our intellectual property from misappropriation or infringement. See "Risk Factors" under Item 1A of this Annual Report on Form 10-K for a discussion of the risks associated with our intellectual property.

We have expended and expect to continue to expend considerable resources in establishing a patent position designed to protect our intellectual property. While our ability to compete is enhanced by our ability to protect our intellectual property, we believe that in view of the rapid pace of technological change, the combination of the technical experience and innovative skills of our employees may be as important to our business as the legal protection of our patents and other proprietary information.

From time to time, we may desire or be required to renew or to obtain licenses from third parties in order to further develop and effectively market commercially viable products or in connection with a pending or future claim or action asserted against us. We cannot be sure that any necessary licenses will be available or will be available on commercially reasonable terms.

The integrated circuit industry is characterized by vigorous pursuit and protection of intellectual property rights, which has resulted in significant and often time consuming and expensive litigation. From time to time, we receive, and may continue to receive in the future, notices that claim we have infringed upon, misappropriated or misused the proprietary rights of other parties.

In addition, we have in the past and may in the future be sued by other parties who claim that we have infringed their patents or misappropriated or misused other intellectual property rights, or who may seek to invalidate one or more of our patents, trademarks, or other rights. Although we defend these claims vigorously, it is possible that we will not prevail in pending or future lawsuits. See “Risk Factors” under Item 1A of this Annual Report on Form 10-K and “Note 6 – Commitments and Contingencies” in our Notes to the Consolidated Financial Statements set forth in Part II, Item 8, of this Annual Report on Form 10-K for further discussion of the risks associated with patent litigation matters.

Cyber Security and Information Security Risk Oversight

The Company has a Cyber Security Governance Committee composed of executives and subject matter experts who meet no less than quarterly to review the Company’s information security, programs, policies, and projects. The Company’s Internal Audit Group reviews the cyber security governance and controls annually. In addition, at least quarterly the Audit Committee reviews reports on cyber security from the Chief Information Officer, the Chief Information Security Officer and other members of the Company’s management team.

We regularly perform risk assessments relating to cyber security and technology risks. More specifically, an independent third party performs a quarterly penetration test of Marvell’s IT infrastructure. In addition to quarterly penetration testing, at least once a year, we bring in an independent third party security firm to perform additional tests and audits. Risks identified in this process are analyzed to determine the impact on the Company and the likelihood of occurrence. Such risks are continuously monitored. We conduct information security training as part of our ongoing compliance program, and every employee of the Company is required to participate in such training. We install and regularly update anti-malware and endpoint detection and response (EDR software) on all IT-managed systems and workstations to detect and prevent malicious code from impacting our systems.

The Company has not experienced a material security breach in the last three years, and as a result, we have not incurred any net expenses from such a breach. We have not been penalized or paid any amount under an information security breach settlement over the last three years. Further, the Company periodically assesses its insurance coverage and has determined not to purchase cyber related insurance.

Competition

The markets for our products are intensely competitive, and are characterized by rapid technological change, evolving industry standards, frequent new product introductions and pricing pressures. Competition has intensified as a result of the increasing demand for higher levels of performance, integration and smaller process geometries. We expect competition to further intensify as current competitors strengthen the depth and breadth of their product offerings, either through in-house development or by acquiring existing technology. In addition, some of our customers have chosen to develop certain semiconductor products internally and this trend may continue to proliferate. We believe that our ability to compete successfully in the rapidly evolving markets for our products depends on multiple factors, including, but not limited to:

- the performance, features, quality and price of our products;
- the development execution, timing and success of enhanced and new product introductions by us, our customers and our competitors;
- the emergence, rate of adoption and acceptance of new industry standards;
- market demand trends;

- competitive tactics;
- our ability to obtain adequate foundry capacity with the appropriate technological capability; and
- the number and nature of our competitors in a given market.

Companies that compete directly with our businesses include, but are not limited to, Advanced Micro Devices, Inc.("AMD"), Astera Labs, Inc., Broadcom Inc. ("Broadcom"), Cisco Systems, Inc.("Cisco"), Credo Technology Group Holding Ltd, Intel Corporation, MACOM Technology Solutions Holdings, Inc., MediaTek Inc., Microchip Technology Inc., Montage Technology, Nvidia Corporation, NXP Semiconductors N.V., Phison Electronics Corporation, Qualcomm Incorporated ("Qualcomm"), Rambus, Inc., Realtek Semiconductor Corporation, Semtech Corporation, Silicon Motion Technology Corporation, and Socionext Inc. We expect increased competition in the future from both emerging and established companies, as well as from alliances among competitors, customers or other third parties, any of which could acquire significant market share. See "Risk Factors" under Item 1A of this Annual Report on Form 10-K for a discussion of competitive risks associated with our business.

We expect that the average unit selling prices of our products will continue to be subject to significant pricing pressures. In order to offset expected declines in the selling prices of our products, we will need to continue to introduce innovative new products and attempt to reduce the cost to design and manufacture our products. To accomplish this, we intend to continue to implement design changes that lower the cost of manufacturing, assembly and testing of our products. See "Risk Factors" under Item 1A of this Annual Report on Form 10-K for a discussion of pricing risks.

Human Capital

We believe that attracting, retaining and motivating a workforce with the ability to support our leading position in semiconductor innovation is essential to effectively execute our strategy. Accordingly, we believe our success depends on our ability to attract, retain and motivate the highly skilled talent necessary to scale our business. We believe the people who work here are our greatest resource, and we encourage and empower all individuals employed at Marvell to excel to their greatest potential. We seek to create an environment that fuels collaboration and innovation, inspires our employees to give their best, and enables our business to thrive. We work hard to attract the industry's best talent, provide opportunities to learn and grow, and create an environment where our employees feel motivated, appreciated and engaged, and have a pathway to building a long-term career at Marvell.

Our Board of Directors (the "Board") and its committees share oversight of our human capital management strategy. The Nominating and Governance Committee has oversight of our approach to human capital and inclusion and diversity as part of its broader focus on Environmental, Social, and Governance ("ESG"). Marvell annually conducts talent reviews and succession planning and the Board receives updates regularly from senior management on succession planning, management talent assessment, attrition and employee survey results. Our executive management team also reviews our human capital initiatives and our progress on such initiatives. The Audit Committee provides oversight of business risks and ethics and compliance programs, both of which have relevance for human capital- and workplace-related issues. The Executive Compensation Committee provides oversight of our overall compensation philosophy, policies and programs, and their respective alignment with our human capital strategy.

The Company employed 7,448 people as of January 28, 2023. As of January 28, 2023, our global workforce was comprised of approximately: 99.6% full time employees and 0.4% part time employees. Our employees sit across three geographical regions: 48.6% of employees are based in the Americas, 40.4% are in APAC (which includes India) and 11.0% are in EMEA.

At Marvell, we focus on employee retention by seeking to foster an environment where people can learn, develop, and advance their careers with us over the long term. We regularly monitor employee turnover, as given the nature of our business, our success depends upon highly trained personnel with the technical skills necessary to execute on our business objectives. We believe the combination of competitive compensation and career growth and development opportunities help to increase employee tenure and reduce voluntary turnover. Intern and entry level professional new hires are an important part of our overall talent pipeline and strategy, as students and entry level professionals often have knowledge in the latest research and innovations, and we want Marvell to benefit from that knowledge.

Competitive Compensation and Benefits

We believe we provide comprehensive, market-competitive compensation and benefits, including affordable health and wellness coverage, globally and consider them a key priority for attracting and keeping top talent. Each year, we benchmark our compensation and benefits programs against our industry peers to help ensure we maintain competitiveness in each of our markets. We seek to align our executives' long-term equity compensation with our stockholders' interests by linking realizable pay with performance.

Culture, Engagement and Development

Marvell's Core Behaviors lay the foundation of our culture and are centered around four key aspects:

- Act with integrity and treat everyone with respect,
- Innovate to solve customer needs,
- Execute with thoroughness and rigor, and
- Help others achieve their objectives.

Our efforts to attract, develop, engage and retain employees, as well as our efforts to embed inclusion and diversity ("I&D") across the Company, reinforce these behaviors. Our Core Behaviors also serve as a roadmap to help integrate employees as we grow through hiring and acquisitions.

We seek to take a holistic approach to helping employees feel engaged, connected and supported — from employee and family events, to learning and development, to weekly Company-wide emails from our CEO. One of the ways we measure levels of engagement is through our annual Voice of the Employee Survey. Survey results help us to better understand employee needs and opportunities for improvement, and to develop action plans to address them.

We offer a variety of employee training programs, including management training programs aligned with the level of managers, technical training, mandatory compliance trainings and voluntary professional development opportunities. In addition, we organize a wide range of employee events designed to foster a sense of community at Marvell.

The COVID-19 pandemic has presented challenges for all individuals and businesses. Our leadership has continued to engage and support employees through the pandemic in a range of ways, including sending frequent communication and resources, providing a number of four day "recharge weekends," and surveying employees on the experience of working from home. See the Health and Safety section below for more details.

Inclusion and Diversity

Marvell is committed to creating and fostering an inclusive, diverse and engaging workplace where people feel fulfilled, inspired and motivated to learn and grow both personally and professionally. We value the uniqueness that a diverse global team brings to our company, and we are focused on creating an environment that fully leverages the perspectives and contributions of every individual.

Our Inclusion and Diversity ("I&D") approach is centered around three key aspects:

- Interconnected across the company: Embedding inclusivity in every function and in everything we do
- Full participation and responsibility: Empowering every employee to do their part toward creating a welcoming and inclusive environment
- Globally aligned and locally relevant: Applying our global strategic framework to specific regional and local site needs

Our efforts focus on four I&D business outcomes:

- Activate and empower leaders
- Create an inclusive best place to work
- Cultivate a diverse workforce
- Lead in the marketplace and community

Health and Safety

We believe everyone deserves a safe workplace that supports their health and wellbeing. To help create this environment, we seek to continue to evolve our programs and resources to support employees' mental and physical wellbeing.

The COVID-19 pandemic has placed a continued emphasis on health and safety at Marvell, and we took various steps to promote the health, safety and wellness of our employees during the crisis.

While our workplaces are mainly office facilities with limited safety hazards, we recognize the importance of preventing and addressing any risks that may occur. As a company, we work to prevent injury by focusing on ergonomics, employee training, maintenance, hazard reporting mechanisms and developing emergency action plans. We encourage our employees to report unsafe conditions.

Climate Change

Climate change is an important topic for Marvell. We recognize that climate change may pose potential risks and may create potential opportunities to our organization and are taking steps to further identify and assess the nature and magnitude of these risks and opportunities. As such, Marvell is working to develop plans to mitigate and manage any potential material climate change risks and to benefit from any potential climate change opportunities.

Management is responsible for formulating and executing our climate strategy. Marvell also runs an executive-level ESG Committee to provide senior leadership and strategic guidance on ESG, as well as ESG Working Groups who are responsible for gathering data, setting strategy and goals, and supporting disclosure efforts on material ESG topics. Marvell's Chief Operations Officer (the "COO") is the executive sponsor of the Environment Working Groups and has overall responsibility at the executive level for climate strategy and related issues. The COO is responsible for assessing and leading the management of climate-related risks and opportunities, elevating stakeholder concerns and guiding the implementation of climate-related policies, programs and disclosures. The COO is also a member of the executive-level ESG Committee, and, in that capacity, is responsible for elevating climate topics to Marvell's senior leadership and, ultimately, to the Board's Nominating and Governance and Audit Committees. The Nominating and Governance Committee has oversight of our climate strategy and ESG matters and receives quarterly updates on our ESG performance. Our Board of Directors receives periodic updates on our ESG performance.

Marvell has an enterprise risk management process in place that may be leveraged to help identify potential climate-related risks and to assess the magnitude of such risks. We have already committed to and are in the process of setting a Science Based Target aligned with the latest climate science to remain within the 1.5°C warming limit established under the Paris Agreement. We have reported against the Task Force for Climate-related Financial Disclosures ("TCFD") framework in our Fiscal Year 2022 ESG Report and have conducted scenario analysis on the potential impacts of climate change to our business in alignment with the TCFD framework.

Item 1A. ***Risk Factors***

Investing in our common stock involves a high degree of risk. You should carefully consider the material risks and uncertainties described below and all information contained in this report before you decide to purchase our common stock. Many of these risks and uncertainties are beyond our control, including business cycles and seasonal trends of the computing, infrastructure, semiconductor and related industries and end markets. A manifestation of any of the following risks and uncertainties could, in circumstances we may or may not be able to accurately predict, render us unable to conduct our business as currently planned and materially and adversely affect our reputation, business, prospects, financial condition, cash flows, liquidity and operating results. In addition, the trading price of our common stock could decline due to the occurrence of any of these risks, and you could lose all or part of your investment. It is not possible to predict or identify all such risks and uncertainties; our operations could also be affected by risks or uncertainties that are not presently known to us or that we currently do not consider to present significant risks to our operations. Therefore, you should not consider the following discussion to be a complete statement of all the potential risks or uncertainties that we face.

SUMMARY OF FACTORS THAT MAY AFFECT OUR FUTURE RESULTS

The following summarizes the principal factors that make an investment in the Company speculative or risky. This summary should be read in conjunction with the remainder of this "Risk Factors" section and should not be relied upon as an exhaustive summary of the material risks facing our business. The occurrence of any of these risks could harm our business, financial condition, results of operations and/or growth prospects or cause our actual results to differ materially from those contained in forward-looking statements we have made in this report and those we may make from time to time. You should consider all of the risk factors described in our public filings when evaluating our business.

- risks related to changes in general economic conditions such as economic slowdowns, inflation, stagflation, rising interest rates, and recessions or political conditions, such as the tariffs and trade restrictions with China, Russia and other foreign nations, and specific conditions in the end markets we address, including the continuing volatility in the technology sector and semiconductor industry and the U.S. National Science and Technology Council's designation of semiconductors as a critical and emerging technology;
- risks related to cancellations, rescheduling or deferrals of significant customer orders or shipments, as well as the ability of our customers to manage inventory;
- risks related to the impact of the COVID-19 pandemic or other future pandemics, on the global economy and on our customers, suppliers, employees and business;
- risks related to our ability to scale our business;
- risks related to the extension of lead time due to supply chain disruptions, component shortages that impact the costs and production of our products and kitting process, and constrained availability from other electronic suppliers impacting our customers' ability to ship their products, which in turn may adversely impact our sales to those customers;
- risks related to the ability of our customers, particularly in jurisdictions such as China that may be subject to trade restrictions (including the need to obtain export licenses) to develop their own solutions or acquire fully developed solutions from third-parties;
- risks related to our ability to design, develop and introduce new and enhanced products, in particular in the 5G and Cloud markets, in a timely and effective manner, as well as our ability to anticipate and adapt to changes in technology;
- risks related to our ability to successfully integrate and to realize anticipated benefits or synergies, on a timely basis or at all, in connection with our past, current, or any future acquisitions, divestitures, significant investments or strategic transactions;
- risks related to our debt obligations;
- risks related to the highly competitive nature of the end markets we serve, particularly within the semiconductor and infrastructure industries;
- risks related to our dependence on a few customers for a significant portion of our revenue including risks related to severe financial hardship or bankruptcy or other attrition of one or more of our major customers, particularly as our major customers comprise an increasing percentage of our revenue;
- risks related to our ability to execute on changes in strategy and realize the expected benefits from restructuring activities;

- risks related to our ability to maintain a competitive cost structure for our manufacturing, assembly, testing and packaging processes and our reliance on third parties to produce our products;
- risks related to our ability to attract, retain and motivate a highly skilled workforce, especially engineering, managerial, sales and marketing personnel;
- risks related to any current and future litigation, regulatory investigations, or contractual disputes with customers that could result in substantial costs and a diversion of management's attention and resources that are needed to successfully maintain and grow our business;
- risks related to gain or loss of a design win or key customer;
- risks related to seasonality or volatility related to sales into the infrastructure, semiconductor and related industries and end markets;
- risks related to failures to qualify our products or our suppliers' manufacturing lines;
- risks related to failures to protect our intellectual property, particularly outside the United States;
- risks related to the potential impact of significant events or natural disasters or the effects of climate change (such as drought, flooding, wildfires, increased storm severity, sea level rise, and power outages), particularly in certain regions in which we operate or own buildings, such as Santa Clara, California, and where our third party manufacturing partners or suppliers operate, such as Taiwan and elsewhere in the Pacific Rim;
- risks related to our Environmental, Social and Governance (ESG) programs; and
- risks related to failures of our customers to agree to pay for NRE (non-recurring engineering) costs, failure to pay enough to cover the costs we incur in connection with NREs or non-payment of previously agreed NRE costs due to us.

Our quarterly results of operations have fluctuated in the past and could do so in the future. Because our results of operations are difficult to predict, you should not rely on quarterly comparisons of our results of operations as an indication of our future performance. Due to fluctuations in our quarterly results of operations and other factors, the price at which our common stock will trade is likely to continue to be highly volatile. Accordingly, you may not be able to resell your common stock at or above the price you paid. In future periods, our stock price could decline if, among other factors, our revenue or operating results are below our estimates or the estimates or expectations of securities analysts and investors. Our stock is traded on the Nasdaq Global Select Market under the ticker symbol "MRVL". As a result of stock price volatility, we may be subject to securities class action litigation. Any litigation could result in substantial costs and a diversion of management's attention and resources that are needed to successfully maintain and grow our business.

CHANGES IN PRODUCT DEMAND CAN ADVERSELY AFFECT OUR FINANCIAL RESULTS

We face risks related to recessions, inflation, stagflation and other economic conditions

Customer demand for our products may be impacted by weak economic conditions, inflation, stagflation, recessionary or lower-growth environments, rising interest rates, equity market volatility or other negative economic factors in the U.S. or other nations. For example, under these conditions or expectation of such conditions, our customers may cancel orders, delay purchasing decisions or reduce their use of our services. In addition, these economic conditions could result in higher inventory levels and the possibility of resulting excess capacity charges from our manufacturing partners if we need to slow production to reduce inventory levels. Further, in the event of a recession or threat of a recession our manufacturing partners, suppliers, distributors, and other third-party partners may suffer their own financial and economic challenges and as a result they may demand pricing accommodations, delay payment, or become insolvent, which could harm our ability to meet our customer demands or collect revenue or otherwise could harm our business. Similarly, disruptions in financial and/or credit markets may impact our ability to manage normal commercial relationships with our manufacturing partners, customers, suppliers and creditors and might cause us to not be able to continue to access preferred sources of liquidity when we would like, and our borrowing costs could increase. Thus, if general macroeconomic conditions, or conditions in the semiconductor industry, or conditions in our customer end markets continue to deteriorate or experience a sustained period of weakness or slower growth, our business and financial results could be materially and adversely affected.

In addition, we are also subject to risk from inflation and increasing market prices of certain components, supplies, and commodity raw materials, which are incorporated into our end products or used by our manufacturing partners or suppliers to manufacture our end products. These components, supplies and commodities have from time to time become restricted, or general market factors and conditions have in the past and may in the future affect pricing of such components, supplies and commodities (such as inflation or supply chain constraints). See also, "Our gross margin and results of operations may be adversely affected in the future by a number of factors, including decreases in our average selling prices of products over time, shifts in our product mix, or price increases of certain components or third-party services due to inflation, supply chain constraints, or for other reasons."

Unfavorable or uncertain conditions in the 5G and Cloud markets may cause fluctuations in our rate of revenue growth or financial results.

World-wide markets for our 5G and Cloud products may not develop in the manner or in the time periods we anticipate. If domestic and global economic conditions continue to worsen, overall spending on our 5G and Cloud products may be reduced, which would adversely impact demand for our products in these markets. In addition, unfavorable developments with evolving laws and regulations worldwide related to these products and suppliers may limit global adoption, impede our strategy, and negatively impact our long-term expectations in this area. Even if the 5G and Cloud markets develop in the manner or in the time periods we anticipate, if we do not have timely, competitively priced, market-accepted products available to meet our customers' planned roll-out of 5G wireless communication systems or Cloud systems, we may miss a significant opportunity and our business, financial condition, results of operations and cash flows could be materially and adversely affected. In addition, as a result of the fact that the markets for 5G and Cloud are still developing, demand for these products may be unpredictable and may vary significantly from one period to another. See also, *"Our sales are concentrated in a few large customers. If we lose or experience a significant reduction in sales to any of these key customers, if any of these key customers experience a significant decline in market share, or if any of these customers experience significant financial difficulties, our revenue may decrease substantially and our results of operations and financial condition may be harmed."* See also, *"Adverse changes in the political and economic policies of the U.S. government in connection with trade with China have reduced the demand for our products and damaged our business"* for additional risks related to export restrictions that may impact certain customers in the 5G and Cloud markets.

Our sales are concentrated in a few large customers. If we lose or experience a significant reduction in sales to any of these key customers, if any of these key customers experience a significant decline in market share, or if any of these customers experience significant financial difficulties, our revenue may decrease substantially and our results of operations and financial condition may be harmed.

We receive a significant amount of our revenue from a limited number of customers. For example, during fiscal 2023, we had one distributor, whose revenue as a percentage of our net revenue was 10% or greater of total net revenues. In addition, net revenue from our ten (10) largest customers, including this distributor, represented 63% of our net revenue for the fiscal year ended January 28, 2023. Sales to our largest customers have fluctuated significantly from period to period and year to year and will likely continue to fluctuate in the future, primarily due to the timing and number of design wins with each customer, the continued diversification of our customer base as we expand into new markets, adverse changes in the political and economic policies of the U.S. or other governments (such as changes in export policies), and natural disasters or other issues. The loss of any of our large customers or a significant reduction in sales we make to them would likely harm our financial condition and results of operations. To the extent one or more of our large customers experience financial challenges, bankruptcy or insolvency, this could have a material adverse effect on our sales and our ability to collect on receivables, which could harm our financial condition and results of operations.

If we are unable to increase the number of large customers in key markets, then our operating results in the foreseeable future would be expected to continue to depend on sales to a relatively small number of customers, as well as the ability of these customers to sell products that incorporate our products. In the future, these customers may decide not to purchase our products at all, purchase fewer products than they did in the past, or alter their purchasing patterns in some other way, particularly because:

- a significant portion of our sales are made on a purchase order basis, which allows our customers to cancel, change or delay product purchase commitments with relatively short notice to us;
- customers may purchase similar products from our competitors;
- customers may discontinue sales or lose market share in the markets for which they purchase our products;
- customers, particularly in jurisdictions such as China that may be subject to trade restrictions or tariffs, may develop their own solutions or acquire fully developed solutions from third-parties; or

- customers may be subject to severe business disruptions, including, but not limited to, those driven by recessions, financial instability, actual or threatened public health emergencies, such as the COVID-19 pandemic, other global or regional macroeconomic developments, or natural disasters.

In addition, there has been a trend toward customer consolidation in the semiconductor industry through business combinations, including mergers, asset acquisitions and strategic partnerships (for example, Western Digital acquired SanDisk in 2017, Toshiba Corporation sold control of a portion of its semiconductor business in 2018, and Cisco acquired Acacia Communications in 2021). Mergers or restructuring among our customers, or their end customers, could increase our customer concentration with a particular customer or reduce total demand as the combined entities reevaluate their business and consolidate their suppliers. Such future developments, particularly in those end markets that account for more significant portions of our revenues, could harm our business and our results of operations.

In addition, we may be unable to negotiate as favorable terms with larger customers whether those customers resulted from customer consolidation, merger integrations or other reasons, and any such less favorable terms could harm our business and our results of operations.

We are subject to order and shipment uncertainties. If we are unable to accurately predict customer demand, we may hold excess or obsolete inventory, which would reduce our gross margin. Conversely, we may have insufficient inventory or be unable to obtain the supplies or contract manufacturing capacity to meet that demand which would result in lost revenue opportunities and potential loss of market share as well as damaged customer relationships.

We typically sell products pursuant to purchase orders rather than long-term purchase commitments. Some of our customers have, and others may in the future, cancel or defer purchase orders on short notice without incurring a significant penalty. In addition, customers who have purchase commitments may not honor those commitments. Due to their inability to predict demand or other reasons, during the last few years some of our customers have accumulated excess inventories and, as a consequence, they either have deferred or they may defer future purchases of our products. We cannot accurately predict what or how many products our customers will need in the future. Anticipating demand is difficult because our customers face unpredictable demand for their own products and are increasingly focused more on cash preservation and tighter inventory management.

We place orders with our suppliers based on forecasts of customer demand and, in some instances, may establish buffer inventories to accommodate anticipated demand. Our forecasts are based on multiple assumptions, each of which may introduce error into our estimates. For example, our ability to accurately forecast customer demand may be impaired by the delays inherent in our customer's product development processes, which may include extensive qualification and testing of components included in their products, including ours. In many cases, they design their products to use components from multiple suppliers. This creates the risk that our customers may decide to cancel or change product plans for products incorporating our semiconductor solutions prior to completion, which makes it even more difficult to forecast customer demand. In addition, while many of our customers are subject to purchase orders or other agreements that do not allow for cancellation, there can be no assurance that these customers will honor these contract terms and cancellation of these orders may adversely affect our business operations and demand forecast which is the basis for us to have products made.

Our products are incorporated into complex devices and systems, which creates supply chain cross-dependencies. Due to cross dependencies, supply chain disruptions have in the past and may in the future negatively impact the demand for our products. We have a limited ability to predict the timing of a supply chain correction. As we have a broad product portfolio and diversified products with many different SKUs, significant supply chain disruptions will cause us to have more work-in-process inventories we hold to ensure we have flexibility to support our customers. If we cannot predict future customer demand or supply chain disruptions, then we may hold excess or obsolete inventory. Moreover, significant supply chain disruption may negatively impact the timing of our product shipments and revenue shipment linearity which may impact and extend our cash conversion cycle. In addition, the market share of our customers could be adversely impacted on a long-term basis due to any continued supply chain disruption, which could negatively affect our results of operations. See also, *"We rely on our manufacturing partners for the manufacture, assembly, testing and packaging of our products, and the failure of any of these third-party vendors to deliver products or otherwise perform as requested could damage our relationships with our customers, decrease our sales and limit our ability to grow our business"* for additional information on the impacts of supply chain cross-dependencies on our business.

If we overestimate customer demand, our excess or obsolete inventory may increase significantly, which would reduce our gross margin and adversely affect our financial results. The risk of obsolescence and/or excess inventory is heightened for semiconductor solutions designed for consumer electronics due to the rapidly changing market for these types of products. Conversely, if we underestimate customer demand or if insufficient manufacturing capacity is available, we would miss revenue opportunities and potentially lose market share and damage our customer relationships. In addition, any future significant cancellations or deferrals of product orders or the return of previously sold products could materially and adversely affect our profit margins, increase product obsolescence and restrict our ability to fund our operations.

We operate in intensely competitive markets. Our failure to compete effectively would harm our results of operations.

The semiconductor industry, and specifically the storage, networking and infrastructure markets, is extremely competitive. We currently compete with a number of large domestic and international companies in the business of designing semiconductor solutions and related applications, some of which have greater financial, technical and management resources than us. Our efforts to introduce new products into markets with entrenched competitors will expose us to additional competitive pressures. For example, we are facing, and expect we will continue to face, significant competition in the infrastructure, networking and SSD storage markets. Additionally, customer expectations and requirements have been evolving rapidly. For example, customers now expect us to provide turnkey solutions and commit to future roadmaps that have technical risks.

Some of our competitors may be better situated to meet changing customer needs and secure design wins. Increasing competition in the markets in which we operate may negatively impact our revenue and gross margins. For example, competitors with greater financial resources may be able to offer lower prices than us, or they may offer additional products, services or other incentives that we may not be able to match.

We also may experience discriminatory or anti-competitive practices by our competitors that could impede our growth, cause us to incur additional expense or otherwise negatively affect our business. In addition, some of these competitors may use their market power to dissuade our customers from purchasing from us.

In addition, many of our competitors operate and maintain their own fabrication facilities and have longer operating histories, greater name recognition, larger customer bases, and greater sales, marketing and distribution resources than we do.

Moreover, the semiconductor industry has experienced increased consolidation over the past several years. For example, NVIDIA Corporation acquired Mellanox Technologies in April 2020, Infineon acquired Cypress Semiconductors in April 2020, Renesas Electronics Corporation acquired Dialog Semiconductor in August 2021, AMD acquired Xilinx, Inc. in February 2022 and Pensando Systems in May 2022 and Qualcomm acquired Veonner in 2022. In addition, MaxLinear, Inc. announced plans to acquire Silicon Motion in May 2022 and Broadcom announced plans to acquire VMware in May 2022. Consolidation among our competitors has led, and in the future could lead, to a changing competitive landscape, capabilities and market share, which could put us at a competitive disadvantage and harm our results of operations.

Our gross margin and results of operations may be adversely affected in the future by a number of factors, including decreases in our average selling prices of products over time, shifts in our product mix, or price increases of certain components or third-party services due to inflation, supply chain constraints, or for other reasons.

The products we develop and sell are primarily used for high-volume applications. While prices of our products have increased recently due to inflation and additional costs resulting from securing an increase in supply, the prices of our products have historically decreased. We expect that the average unit selling prices of our products will continue to be subject to significant pricing pressures. In addition, our more recently introduced products tend to have higher associated costs because of initial overall development and production expenses. Therefore, over time, we may not be able to maintain or improve our gross margins. Our financial results could suffer if we are unable to offset any reductions in our average selling prices by other cost reductions through efficiencies, introduction of higher margin products and other means.

To attract new customers or retain existing customers, we may offer certain price concessions to certain customers, which could cause our average selling prices and gross margins to decline. In the past, we have reduced the average selling prices of our products in anticipation of future competitive pricing pressures, new product introductions by us or by our competitors and other factors. We expect to continue to have to reduce prices of existing products in the future. Moreover, because of the wide price differences across the markets we serve, the mix and types of performance capabilities of our products sold may affect the average selling prices of our products and have a substantial impact on our revenue and gross margin. We may enter new markets in which a significant amount of competition exists, and this may require us to sell our products with lower gross margins than we earn in our established businesses. If we are successful in growing revenue in these markets, our overall gross margin may decline. Fluctuations in the mix and types of our products may also affect the extent to which we are able to recover the fixed costs and investments associated with a particular product, and as a result may harm our financial results.

Additionally, because we do not operate our own manufacturing, assembly, testing or packaging facilities, we are not able to reduce our costs as rapidly as companies that operate their own facilities and our costs may even increase, which could also reduce our gross margins. Our gross margin could also be impacted for example by the following factors: increased costs (including increased costs caused by tariffs, inflation, higher interest rates, or supply chain constraints); loss of cost savings if parts ordering does not correctly anticipate product demand or if the financial health of either our manufacturers partners or our suppliers deteriorates; excess inventory, or inventory holding and obsolescence charges. In addition, we are subject to risks from fluctuating market prices of certain components, which are incorporated into our products or used by our suppliers to manufacture our products. Supplies of these components may from time to time become restricted, or general market factors and conditions such as inflation or supply chain constraints have in the past affected and may in the future affect pricing of such commodities. For example, during the first few quarters of fiscal year 2023 supply shortages in the semiconductor industry of multi-layer complex substrates, IC packaging capacity and fab constraints resulted in increased lead times, inability to meet demand, and increased costs. Any increase in the price of components used in our products will adversely affect our gross margins.

Entry into new markets, such as markets with different business models, as a result of our acquisitions may reduce our gross margin and operating margin. For example, for certain products we use an ASIC model to offer end-to-end solutions for intellectual property, design team, fab and packaging to deliver a tested, yielded product to customers. This business model tends to have a lower gross margin. In addition, the costs related to this type of business model typically include significant NRE (non-recurring engineering) costs that customers pay based on the completion of milestones. Our operating margin may decline if our customers do not agree to pay for NREs, if they do not pay enough to cover the costs we incur in connection with NREs, or non-payment of previously agreed NRE costs. In addition, our operating margin may decline if we are unable to sell products in sufficient volumes to cover the development costs that we have incurred. In addition, the ASIC business model requires us to use third-party intellectual property and we may lose business or experience reputational harm if third parties, including customers, lose confidence in our ability to protect their intellectual property rights. With respect to risks related to our use of third-party intellectual property, see also, **"*We have been named as a party to several legal proceedings and may be named in additional ones in the future, including litigation involving our patents and other intellectual property, which could subject us to liability, require us to indemnify our customers, require us to obtain or renew licenses, require us to stop selling our products or force us to redesign our products.*"**

WE ARE SUBJECT TO RISKS ASSOCIATED WITH THE CORONAVIRUS (COVID-19) PANDEMIC

We face risks related to the COVID-19 pandemic which has, and may continue in the future to, significantly disrupt and adversely impact our manufacturing, research and development, operations, sales and financial results.

Our business has been, and may continue to be, adversely impacted by the effects of the COVID-19 pandemic or other future pandemics. In addition to global and domestic macroeconomic effects, during fiscal years 2022 and 2023 the COVID-19 pandemic and related adverse public health measures caused disruption to our global operations and sales. Our third-party manufacturing partners, suppliers, distributors, sub-contractors and customers have been, and may continue to be, disrupted by worker absenteeism, quarantines and restrictions on their employees' ability to work; office and factory closures; disruptions to ports and other shipping infrastructure; border closures; and other travel or health-related restrictions. Depending on the magnitude of such effects on our manufacturing, assembling, testing, and packaging activities or the operations of our manufacturing partners, suppliers, distributors, sub-contractors and customers, our supply chain, manufacturing and product shipments will be delayed, which could adversely affect our business, operations and customer relationships.

Although the pandemic related restrictions above have eased in many places, the ongoing pandemic, including large outbreaks, resurgences of COVID-19 in various regions and appearances of new variants of the virus, has resulted, and may continue to result, in their full or partial reinstitution. In addition, although many countries have vaccinated large segments of their population, during fiscal year 2023 COVID-19 continued to disrupt business activities, trade, and supply chains in many countries. We expect lingering impacts related to COVID-19 to continue for the foreseeable future. For example, we were impacted by COVID outbreaks in Asia during the first half of fiscal 2023 that resulted in closed factories, clogged ports and a shortage of workers as officials imposed lockdowns and mass testing requirements.

In addition to operational and customer impacts, the COVID-19 pandemic has had, and is expected to continue to have, (and future pandemics are expected to have) a significant impact on the economies and financial markets of many countries including an economic downturn, which has affected and may in the future affect demand for our products and impact our operating results in both the near and long term. There can be no assurance that any decreases in sales resulting from the COVID-19 pandemic (or any future pandemic) will be offset by increased sales in subsequent periods.

Our ongoing efforts to manage these and other potential impacts of the COVID-19 pandemic (and any impacts of future pandemics) may be unsuccessful. As the COVID-19 pandemic reaches endemic stages, due to the continued uncertainty regarding its severity and duration (including resurgences or mutations of the virus), related public health measures and macroeconomic impacts, at this time we are unable to predict its full impact on our business, financial condition, operating results and cash flows.

WE ARE SUBJECT TO RISKS ASSOCIATED WITH THE RAPID GROWTH OF THE COMPANY AND WITH OUR STRATEGIC TRANSACTIONS

We may not be able to scale our business quickly enough to meet our customers' needs or in an efficient manner, which could harm our operating results.

Over the last few years, we have rapidly increased in size. As a result, we have had to, and expect in the future to continue to need to, appropriately scale our business, internal systems and organization, and to continue to improve our operational, financial and management controls, reporting systems and procedures, to serve our growing customer base. Even if we are able to upgrade our systems and expand our staff, any such expansion will likely be expensive and complex, requiring management's time and attention. We could also face inefficiencies, reduced productivity or operational failures as a result of our efforts to scale our business. Moreover, there are inherent risks associated with upgrading, improving and expanding our information technology systems. We cannot be sure that the expansion and improvements to our business operations will be fully or effectively implemented on a timely basis, if at all. Any failure of, or delay in, these efforts could negatively impact performance our financial results.

Recent, current and potential future acquisitions, strategic investments, divestitures, mergers or joint ventures may subject us to significant risks, any of which could harm our business.

Our long-term strategy has included in the past, and may continue to include in the future, identifying and acquiring, investing in or merging with suitable companies, or divesting of certain business lines, assets or activities. In particular, over time, we may acquire, make investments in, or merge with providers of product offerings that complement our business or may terminate or dispose of business lines, assets or activities if they are no longer in alignment with our operational strategy and priorities.

Mergers, acquisitions and divestitures include a number of risks and present financial, managerial and operational challenges. Given that our resources are limited, any decision to pursue a transaction has opportunity costs; accordingly, if we pursue a particular transaction, we may need to forgo the prospect of entering into other transactions or making other capital allocation decisions that could help us achieve our strategic objectives.

Any acquired business, technology, service or product could significantly underperform relative to our expectations. Our acquisitions may not further our business strategy as we expected, we may not integrate an acquired company or technology as successfully as we expected, we may impose our business practices that adversely impact the acquired business or we may overpay for, or otherwise not realize the expected return on our investments, each or all of which could adversely affect our business or operating results and potentially cause impairment to assets that we recorded as a part of an acquisition including intangible assets and goodwill. In addition, the use of our stock to finance an acquisition, will result in an increase in the number of outstanding shares and will reduce the ownership percentage of each of our outstanding stockholders.

When we decide to sell assets or a business, we may have difficulty selling on acceptable terms in a timely manner or at all. These circumstances could delay the achievement of our strategic objectives or cause us to incur additional expense, or we may sell a business at a price or on terms that are less favorable than we had anticipated, resulting in a loss on the transaction.

If we do enter into agreements with respect to acquisitions, divestitures, or other transactions, these transactions, or parts of these transactions, may fail to be completed due to factors such as: failure to obtain regulatory or other approvals; disputes or litigation; or difficulties obtaining financing for the transaction. In addition, such transactions are increasingly being subjected to regulatory review and other burdens, which could delay the closing of any transaction and greatly increase the costs related to such transaction.

If we fail to complete a transaction, we may nonetheless have incurred significant expenses in connection with such transaction. Failure to complete a pending transaction may result in negative publicity and a negative perception of us among the investment community.

In addition, we used a significant portion of our cash and incurred substantial indebtedness in connection with the financing of our acquisition of Inphi, which was completed in fiscal 2022. Our use of cash to fund our acquisitions has reduced our liquidity and may (i) limit our flexibility in responding to other business opportunities and (ii) increase our vulnerability to adverse economic and industry conditions. Furthermore, the financing agreements in connection with our outstanding indebtedness contain negative covenants, limitations on indebtedness, liens, sale and leaseback transactions and mergers and other fundamental changes. Our ability to comply with these negative covenants can be affected by events beyond our control. Our indebtedness and these negative covenants will also have the effect, among other things, of limiting our ability to obtain additional financing, if needed, limiting our flexibility in the conduct of our business and making us more vulnerable to economic downturns and adverse competitive and industry conditions. In addition, a breach of the negative covenants could result in an event of default with respect to the indebtedness, which, if not cured or waived, could result in the indebtedness becoming immediately due and payable and could have a material adverse effect on our business, financial condition or operating results. See also, *"We are subject to risks related to our debt obligations."*

For all these reasons, our pursuit of an acquisition, investment, divestiture, merger or joint venture could cause our actual results to differ materially from those anticipated.

WE ARE VULNERABLE TO PRODUCT DEVELOPMENT AND MANUFACTURING-RELATED RISKS

We rely on our manufacturing partners for the manufacture, assembly, testing and packaging of our products, and the failure of any of these third-party vendors to deliver products or otherwise perform as requested or to be able to fulfill our orders could damage our relationships with our customers, decrease our sales and limit our ability to grow our business.

We do not have our own manufacturing, assembly or packaging facilities and have very limited in-house testing facilities. Therefore, we currently rely on several third-party manufacturing partners to produce our products. We also currently rely on several third-party assembly, testing and packaging subcontractors to assemble, package and test our products. This exposes us to a variety of risks, including the following:

Regional Concentration

Most of our products are manufactured by third-party foundries located in Taiwan, and other sources are located in China, Germany, South Korea, Singapore and the United States. In addition, substantially all of our third-party assembly, testing and packaging facilities are located in China, Malaysia, Singapore, Taiwan and Canada. Because of the geographic concentration of these third-party foundries, as well as our assembly, testing and packaging subcontractors, we are exposed to the risk that their operations may be disrupted by regional events including, for example, droughts, earthquakes (particularly in Taiwan and elsewhere in the Pacific Rim close to fault lines), tsunamis or typhoons, severe storms, power outages, or by actual or threatened public health emergencies such as the COVID-19 pandemic and future pandemics, or by political, social or economic instability, or by geopolitical tensions and conflicts. For example, we were impacted by COVID outbreaks in Asia in the first half of fiscal 2023 that resulted in closed factories, clogged ports and a shortage of workers as officials imposed lockdowns and mass testing requirements. In the case of such an event, our revenue, cost of goods sold and results of operations may be negatively impacted. In addition, there are limited numbers of alternative foundries capable of producing advanced technologies and identifying and implementing alternative manufacturing facilities would be time consuming. Although there is a movement in the U.S. to build more foundries locally and the U.S. government is providing funds or other incentives for certain companies to do so, we do not expect that such foundries will be available to us to produce advanced technologies any time soon, if ever. If we need to utilize alternate manufacturing facilities, either in Taiwan or elsewhere we could experience significant expenses and delays in product shipments, which could harm our results of operations.

No Guarantee of Capacity or Supply

The ability of each of our manufacturing partners to provide us with materials and services is limited by its available capacity and existing obligations. When demand is strong, availability of our partners' capacity may be constrained or not available, and with certain exceptions, our vendors are not obligated to perform services or supply products to us for any specific period, in any specific quantities, or at any specific price, except as may be provided in a particular purchase order. We place our orders on the basis of our customers' purchase orders or our forecast of customer demand, and most of our manufacturing partners can allocate capacity to the production of other companies' products and reduce deliveries to us on short notice. It is possible that their customers that are larger and better financed than we are or that have long-term agreements with our main foundries may induce them to reallocate capacity to those customers. Most of our manufacturing partners may reallocate capacity to their customers offering them a better margin or rate of return than provided by us. This reallocation could impair our ability to secure the supply of components that we need. Moreover, if any of our third-party manufacturing partners or other suppliers are unable to secure the necessary raw materials from their suppliers, lose benefits under material agreements, experience power outages or labor shortages, or lack sufficient capacity to manufacture our products, encounter financial difficulties or suffer any other disruption or reduction in efficiency, we may encounter supply delays or disruptions, which could harm our business or results of operations.

There are a very limited number of foundries and consolidation of the foundries that provide services to us or to the semiconductor industry due to bankruptcy or through business combinations, including mergers, asset acquisitions and strategic partnerships may adversely impact us. A foundry, supplier or other manufacturing partner could become unavailable to us if it is acquired by a competitor or a large company that may change the scope of the offerings. For example, Intel Corporation announced in February 2022 of its intent to acquire Tower Semiconductor. Or a foundry may not be suitable for us if it does not invest in, or have the ability to manufacture, advanced technologies. In particular, as we and others in our industry transition to smaller geometries, our manufacturing partners may be supply constrained or may charge premiums for these advanced technologies, which may harm our business or results of operations. See also, *"We may experience increased actual and opportunity costs as a result of our transition to smaller geometry process technologies."* In addition, a foundry or supplier may become unavailable to us as a result of economic or political instability. Any disruption to our manufacturing partners could result in a material decline in our revenue, net income and cash flow.

We have in the past including in the first few quarters of fiscal year 2023, and may in the future, experience a number of industry-wide supply constraints affecting the type of high complexity products we provide for data infrastructure. These supply constraints have impacted, and are expected in the future to impact, the kitting process for our products. These supply challenges have in the past, and may in the future, limit our ability to fully satisfy the increase in demand for some of our products.

While we attempt to create multiple sources for our products, most of our products are not manufactured at more than one foundry at any given time, and our products typically are designed to be manufactured in a specific process at only one of these foundries. Accordingly, if one of our foundries is unable to provide us with components as needed, it would be difficult for us to transition the manufacture of our products to other foundries, and we could experience significant delays in securing sufficient supplies of those components. Any disruption to our or foundry partners could result in a material decline in our revenue, net income and cash flow. In addition, our assembly testing and packaging partners may be single sourced and it may be difficult for us to transition to other manufacturing partners for these services.

In order to secure sufficient capacity when demand is high and to mitigate the risks described in the foregoing paragraph, we have entered into, and in the future may enter into, various arrangements with certain manufacturing partners or other suppliers that could be costly and harm our results of operations, such as nonrefundable deposits with, or loans to, such parties in exchange for capacity commitments, or contracts that commit us to purchase specified quantities of components over extended periods. We may not be able to make such arrangements in a timely fashion or at all, and any arrangements may be costly, reduce our financial flexibility, and not be on terms favorable to us. Moreover, if we are able to secure capacity, we may be obligated to use all of that capacity or incur penalties. These penalties may be expensive and could harm our financial results.

During the first few quarters of fiscal year 2023, supply shortages in the semiconductor industry of multi-layer complex substrates, IC packaging capacity, and specific wafer process node constraints resulted in increased lead times, inability to meet demand, and increased costs. Of these shortages, ABF substrates and specific wafer process nodes were the most constrained and most of these suppliers are located in Japan and Taiwan. Because of the geographic concentration of these suppliers, we are exposed to the risk that their operations may be disrupted by regional events including droughts, earthquakes (particularly in Taiwan and elsewhere in the Pacific Rim close to fault lines), tsunamis or typhoons, severe storms, power outages, or by actual or threatened public health emergencies such as the COVID-19 pandemic, or by political, social or economic instability. In addition, while the Russian invasion of Ukraine has not had a direct material impact on us due to our limited sales to Russia and Ukraine, we are unable to predict the indirect impact this conflict will have on us due to impacts on the supply chain, global and domestic economies, interest rates and stock markets.

Uncertain Yields and Quality

The fabrication of our products is a complex and technically demanding process. Our technology is transitioning from planar to FINFET transistors. This transition may result in longer qualification cycles and lower yields. Our manufacturing partners have from time to time experienced manufacturing defects and lower manufacturing yields, which are difficult to detect at an early stage of the manufacturing process and may be time consuming and expensive to correct. Changes in manufacturing processes or the inadvertent use of defective or contaminated materials by our foundries could result in lower than anticipated manufacturing yields or unacceptable performance. In addition, we may face lower manufacturing yields and reduced quality in the process of ramping up and diversifying our manufacturing partners. Poor yields from our partners, or defects, integration issues or other performance problems with our products could cause us significant customer relations and business reputation problems, harm our financial performance and result in financial or other damages to our customers. Our customers could also seek damages in connection with product liability claims, which would likely be time consuming and costly to defend. In addition, defects could result in significant costs. See also, *"Costs related to defective products could have a material adverse effect on us."*

Because we rely on outside manufacturing partners, we have a reduced ability to directly control product delivery schedules and quality assurance, which has in the past and may in the future result in product shortages or quality assurance problems that delay shipments or increase costs.

Commodity Prices

We are also subject to risk from increasing or fluctuating market prices of certain commodity raw materials, including gold and copper, which are incorporated into our end products or used by our suppliers to manufacture our end products. Supplies for such commodities have from time to time become restricted, or general market factors and conditions have in the past affected and may in the future affect pricing of such commodities (such as inflation or supply chain constraints).

We may experience increased actual and opportunity costs as a result of our transition to smaller geometry process technologies.

In order to remain competitive, we have transitioned, and expect to continue to transition, our semiconductor products to increasingly smaller line width geometries. We periodically evaluate the benefits, on a product-by-product basis, of migrating to smaller geometry process technologies. We also evaluate the costs of migrating to smaller geometry process technologies including both actual costs such as increased mask costs and wafer costs and increased costs related to EDA tools and the opportunity costs related to the technologies we choose to forego. These transitions are imperative for us to be competitive with the rest of the industry and to target some of our product development in high growth areas to these advanced nodes, which has resulted in significant initial design and development costs.

We have been, and may continue to be, dependent on our relationships with our manufacturing partners to transition to smaller geometry processes successfully. We cannot ensure that the partners we use will be able to effectively manage any future transitions. In addition, there are a very limited number of foundries capable of producing advanced technologies, and identifying and implementing alternative manufacturing facilities would be time consuming. If we or any of our partners experience significant delays in a future transition or fail to efficiently implement a transition, we could experience reduced manufacturing yields, delays in product deliveries and increased expenses, all of which could harm our relationships with our customers and our results of operations.

As smaller geometry processes become more prevalent, we expect to continue to integrate greater levels of functionality, as well as customer and third-party intellectual property, into our products. However, we may not be able to achieve higher levels of design integration or deliver new integrated products on a timely basis, if at all. Moreover, even if we are able to achieve higher levels of design integration, such integration may have a short-term adverse impact on our results of operations, as we may reduce our revenue by integrating the functionality of multiple chips into a single chip.

We rely on our customers to design our products into their systems, and the nature of the design process requires us to incur expenses prior to customer commitments to use our products or recognizing revenues associated with those expenses which may adversely affect our financial results.

One of our primary focuses is on winning competitive bid selection processes, known as "design wins," to develop products for use in our customers' products. We devote significant time and resources in working with our customers' system designers to understand their future needs and to provide products that we believe will meet those needs and these bid selection processes can be lengthy. If a customer's system designer initially chooses a competitor's product, it becomes significantly more difficult for us to sell our products for use in that system because changing suppliers can involve significant cost, time, effort and risk for our customers. Thus, our failure to win a competitive bid can result in our foregoing revenues from a given customer's product line for the life of that product. In addition, design opportunities may be infrequent or delayed. Our ability to compete in the future will depend, in large part, on our ability to design products to ensure compliance with our customers' and potential customers' specifications. We expect to invest significant time and resources and to incur significant expenses to design our products to ensure compliance with relevant specifications.

We often incur significant expenditures in the development of a new product without any assurance that our customers' system designers will select our product for use in their applications. We often are required to anticipate which product designs will generate demand in advance of our customers expressly indicating a need for that particular design. Even if our customers' system designers select our products, a substantial period of time will elapse before we generate revenues related to the significant expenses we have incurred.

The reasons for this delay generally include the following elements of our product sales and development cycle timeline and related influences:

- our customers usually require a comprehensive technical evaluation of our products before they incorporate them into their designs;
- it can take from six months to three years from the time our products are selected to commence commercial shipments; and
- our customers may experience changed market conditions or product development issues.

The resources devoted to product development and sales and marketing may not generate material revenue for us, and from time to time, we may need to write off excess and obsolete inventory if we have produced product in anticipation of expected demand. We may spend resources on the development of products that our customers may not adopt. If we incur significant expenses and investments in inventory in the future that we are not able to recover, and we are not able to compensate for those expenses, our operating results could be adversely affected. In addition, if we sell our products at reduced prices in anticipation of cost reductions but still hold higher cost products in inventory, our operating results would be harmed.

Additionally, even if system designers use our products in their systems, we cannot assure you that these systems will be commercially successful or that we will receive significant revenue from the sales of our products for those systems. As a result, we may be unable to accurately forecast the volume and timing of our orders and revenues associated with any new product introductions.

We have in the past, and may continue to, make custom or semi-custom products on an exclusive basis for some of our customers for a negotiated period of time. The percentage of our sales related to custom or semi-custom products has been increasing over the last few years. Any revenue from sales of our custom or semi-custom products is directly related to sales of the third-party customer's products and reflective of their success in the market. We have no control over the marketing efforts of these third-party customers and can't make any assurances that sales of their products will be successful in current or future years. In addition, if these customers are bought by our competitors or other third parties, they may terminate agreements related to these custom or semi-custom products or otherwise limit our access to technology necessary for the production of these products. As a result, there may be no other customers for these products due to their custom or semi-custom nature. Consequently, we may not fully realize our expectations for custom or semi-custom product revenue and our operating results may be adversely affected.

Additionally, failure of our customers to agree to pay for NRE (non-recurring engineering) costs or failure to pay enough to cover the costs we incur in connection with NREs, or non-payment of previously agreed NRE costs due to us, can harm our financial results. See also, *"Research and Development"* under Results of Operations.

If we are unable to develop and introduce new and enhanced products that achieve market acceptance in a timely and cost-effective manner, our results of operations and competitive position will be harmed.

Our future success will depend on our ability to develop and introduce new products and enhancements to our existing products that address customer requirements, in a timely and cost-effective manner and are competitive as to a variety of factors. For example, we must successfully identify customer requirements and design, develop and produce products on time that compete effectively as to price, functionality and performance. We sell products in markets that are characterized by rapid technological change, evolving industry standards, frequent new product introductions, and increasing demand for higher levels of integration and smaller process geometries.

In addition, the development of new semiconductor solutions is highly complex and, due to a variety of factors, including supply chain cross-dependencies, dependencies on EDA and similar tools, dependencies on the use of third party, business partner or customer intellectual property, collaboration and synchronization requirements with business partners and customers, requirements to establish new manufacturing, testing, assembly and packing processes, and other factors, we may experience delays in completing the design, development, production and introduction of our new products. Any delays could result in increased development costs, hurt our customer relationships including our ability to win new designs, resulting in lost potential future revenue, or impact our ability to allocate resources to other projects. See also, *"We rely on our manufacturing partners for the manufacture, assembly, testing and packaging of our products, and the failure of any of these third-party vendors to deliver products or otherwise perform as requested could damage our relationships with our customers, decrease our sales and limit our ability to grow our business"* for additional information on the impacts of supply chain cross-dependencies on our business.

Our ability to adapt to changes and to anticipate future standards, and the rate of adoption and acceptance of those standards, will be a significant factor in maintaining or improving our competitive position and prospects for growth. We may also have to incur substantial unanticipated costs to comply with these new standards. Our success will also depend on the ability of our customers to develop new products and enhance existing products for the markets they serve and to introduce and promote those products successfully and in a timely manner. Even if we and our customers introduce new and enhanced products to the market, those products may not achieve market acceptance.

Some of our customers require our products and our third-party manufacturing partners to undergo a lengthy and expensive qualification process which does not assure product sales. If we are unsuccessful or delayed in qualifying these products with a customer, our business and operating results would suffer.

Prior to purchasing our products, some of our customers require that both our products and our third-party manufacturing partners undergo extensive qualification processes, which involve testing of our products in the customers' systems, as well as testing for reliability. This qualification process can take several months and qualification of a product by a customer does not assure any sales of the product to that customer. Even after successful qualification and sales of a product to a customer, a subsequent revision in our third party manufacturing partners' process or our selection of a new supplier may require a new qualification process with our customers, which may result in delays and in our holding excess or obsolete inventory. After our products are qualified, it can take several months or more before the customer commences volume production of components or systems that incorporate our products. Despite these uncertainties, we devote substantial resources, including design, engineering, sales, marketing and management efforts, to qualify our products with customers in anticipation of sales. If we are unsuccessful or delayed in qualifying these products with a customer, sales of the products to the customer may be precluded or delayed, which may impede our growth and cause our business to suffer.

Costs related to defective products could have a material adverse effect on us.

We make highly complex semiconductor solutions and, accordingly, there is a risk of defects in our products. Such defects can give rise to the significant costs noted below. Moreover, since the cost of replacing defective products is often much higher than the value of the products themselves, we are subject to damage claims from customers in excess of the amounts they pay us for our products, including consequential damages. We also face exposure to potential liability resulting from the fact that our customers typically integrate the semiconductor solutions we sell into numerous consumer products, including automobiles. We are exposed to product liability claims if our semiconductor solutions or the consumer products integrated with our semiconductor solutions (such as automobiles), malfunction and lead to personal injury or death. In addition, our customers may issue recalls on their products if they prove to be defective or make compensatory payments in accordance with industry or business practice or in order to maintain good customer relationships. If such recalls or payments are the result of a defect in one of our products, our customers may seek to recover all or a portion of their losses from us. Recalls of our customers' products in certain end-markets, such as with our automotive and base station customers, may cause us to incur significant costs.

In addition, despite our testing procedures, we cannot ensure that errors will not be found in new products or releases after commencement of commercial shipments in the future. Such errors could result in:

- loss of or delay in market acceptance of our products;
- material recall and replacement costs;
- delay in revenue recognition or loss of revenue;
- writing down the inventory of defective products;
- the diversion of the attention of our engineering personnel from product development efforts;
- our having to defend against litigation related to defective products or related property damage or personal injury; and
- damage to our reputation in the industry that could adversely affect our relationships with our customers.

In addition, the process of identifying a recalled product in devices that have been widely distributed may be lengthy and require significant resources. We may have difficulty identifying the end customers of the defective products in the field, which may cause us to incur significant replacement costs, contract damage claims from our customers and further reputational harm. Any of these problems could materially and adversely affect our results of operations.

Despite our best efforts, security vulnerabilities may exist with respect to our products. Mitigation techniques designed to address such security vulnerabilities, including software and firmware updates or other preventative measures, may not operate as intended or effectively resolve such vulnerabilities. Software and firmware updates and/or other mitigation efforts may result in performance issues, system instability, data loss or corruption, unpredictable system behavior, or the theft of data by third parties, any of which could significantly harm our business and reputation. See also, *"We may be unable to protect our intellectual property, which would negatively affect our ability to compete."*

We rely on third-party distributors and manufacturers' representatives and the failure of these distributors and manufacturers' representatives to perform as expected could reduce our future sales

From time to time, we enter into relationships with distributors and manufacturers' representatives to sell our products, and we are unable to predict the extent to which these partners will be successful in marketing and selling our products. Moreover, many of our distributors and manufacturers' representatives also market and sell competing products, and may terminate their relationships with us at any time. Our future performance will also depend, in part, on our ability to attract additional distributors or manufacturers' representatives that will be able to market and support our products effectively, especially in markets in which we have not previously distributed our products. If we cannot retain or attract distributors or manufacturers' representatives, or if any of our distributors or manufacturer's representatives are unsuccessful in marketing and selling our products or terminate their relationships with us, our sales and results of operations will be harmed.

WE OPERATE GLOBALLY AND ARE SUBJECT TO SIGNIFICANT RISKS IN MANY JURISDICTIONS

Adverse changes in the political and economic policies of the U.S. government in connection with trade with China and Chinese customers have reduced the demand for our products and damaged our business.

Regulatory activity, such as tariffs, export controls, economic sanctions and vigorous enforcement of U.S. export controls and economic sanctions laws have in the past and may continue to materially limit our ability to make sales to our significant customers in China, which has in the past and may continue to harm our results of operations, reputation and financial condition. For example, addition of companies to the Entity List, which places export restrictions on certain foreign persons or entities by the U.S. Department of Commerce's Bureau of Industry and Security, has dampened demand for our products, adding to the already challenging macroeconomic environment. Due to the U.S. government restricting sales to certain customers in China, sales to some of our customers require licenses in order for us to export our products; however, in the past some of these licenses have been denied and there can be no assurances that requests for future licenses will be approved by the U.S. government. Moreover, concerns that U.S. companies may not be reliable suppliers as a result of these and other actions has caused, and may in the future cause, some of our customers in China to amass large inventories of our products well in advance of need or caused some of our customers to replace our products in favor of products from other suppliers. As a result, the Chinese government adopted a law with respect to unreliable suppliers. Being designated as an unreliable supplier would have an adverse impact on our business and operations. In addition, there may be indirect impacts to our business that we cannot easily quantify such as the fact that some of our other customers' products may also be impacted by export restrictions. In addition, any customers in China that are subject to trade restrictions or tariffs, may develop their own products or solutions instead of purchasing from us or they may acquire products or solutions from our competitors or other third-party sources that are not subject to the U.S. tariffs and trade restrictions. If export restrictions related to Chinese customers are sustained for a long period of time, or increased, or if other export restrictions are imposed, it will have an adverse impact on our revenues and results of operations.

In addition, companies in the semiconductor industry, including us, have been impacted by rules and regulations related to business activities in China, or other locations, due to concerns that semiconductors are necessary for U.S. national security, manufacturing and critical infrastructure, and compliance with these rules and regulations may adversely affect our revenues and results of operations. For example, in February 2022, the U.S. National Science and Technology Council published an updated list of critical and emerging technologies, which includes semiconductors, as part of an ongoing effort to identify advanced technologies that are potentially significant to U.S. national security, which could result in more stringent export controls or a greater number of our products requiring a license for export to China. In addition, in October 2022, the U.S. Department of Commerce Bureau of Industry and Security released new controls on the export of advanced computing and semiconductor manufacturing items to China as well as transactions related to supercomputer end-uses in China with the aim of addressing U.S. national security and foreign policy concerns. The regulations published in October 2022 include new restrictions on U.S. persons with respect to activities that are not subject to the Export Administration Regulations ("EAR"), which differs from the agency's historical approach of controlling items that are subject to the EAR, and could further restrict our engagement in the China market.

Most of our products are manufactured by third-party foundries located in Taiwan. As we have a significant amount of sales into China, we may be adversely impacted by export restrictions, labeling requirements or other trade related issues or disputes, or political conflicts or tensions between China and Taiwan as these restrictions and requirements could impact or delay the delivery of our products to our customers in China.

We typically sell products to customers in China pursuant to purchase orders rather than long term purchase commitments. Some customers in China may be able to cancel or defer purchase orders on short notice without incurring a penalty and, therefore, they may be more likely to do so while the tariffs and trade restrictions are in effect. See also, the Risk Factor entitled "*We are subject to order and shipment uncertainties. If we are unable to accurately predict customer demand, we may hold excess or obsolete inventory, which would reduce our gross margin. Conversely, we may have insufficient inventory or be unable to obtain the supplies or contract manufacturing capacity to meet that demand or be unable to obtain the supplies or contract manufacturing capacity to meet that demand, which would result in lost revenue opportunities and potential loss of market share as well as damaged customer relationships*."

Changes to U.S. or foreign tax, trade policy, tariff and import/export regulations may have a material adverse effect on our business, financial condition and results of operations.

Changes in U.S. or foreign international tax, social, political, regulatory and economic conditions or in laws and policies governing foreign trade, manufacturing, development and investment in the territories or countries where we currently sell our products or conduct our business have in the past and could in the future adversely affect our business. For example, while the Russian invasion of Ukraine (including related export and other business sanctions on Russia) has not had a material impact on us due to our limited sales to Russia and Ukraine, we are unable to predict the indirect impact this conflict will have on us through impacts to the supply chain, the global and domestic economies, interest rates or stock markets. The U.S. government has in the past, and may in the future, instituted or proposed changes in trade policies that included the negotiation or termination of trade agreements, the imposition of higher tariffs on imports into the U.S., economic sanctions on individuals, corporations or countries, and other government regulations affecting trade between the U.S. and other countries where we conduct our business. Any new tariffs and other changes in U.S. trade policy could trigger retaliatory actions by affected countries, and certain foreign governments have instituted or are considering imposing trade sanctions on certain U.S. goods.

In addition, the U.S. government has in the past, and may in the future, adopted policies that discourage corporations from outsourcing manufacturing and production activities to foreign jurisdictions, including through tariffs or penalties on goods manufactured outside the U.S., which required us to change the way we conduct business. Political changes and trends such as populism, protectionism, economic nationalism and sentiment toward multinational companies and resulting changes to trade, tax or other laws and policies may be disruptive to our businesses. These changes in U.S. and foreign laws and policies have the potential to adversely impact the U.S. economy or certain sectors thereof, our industry and the global demand for our products, and as a result, could have a material adverse effect on our business, financial condition and results of operations. See also, "*Adverse changes in the political and economic policies of the U.S. government in connection with trade with China have reduced the demand for our products and damaged our business"* and *"Changes in existing taxation benefits, rules or practices may adversely affect our financial results*."

We face additional risks due to the extent of our global operations since a majority of our products, and those of many of our customers, are manufactured and sold outside of the United States. The occurrence of any or a combination of the additional risks described below would significantly and negatively impact our business and results of operations.

A substantial portion of our business is conducted outside of the United States and, as a result, we are subject to foreign business, political and economic risks. Most of our products are manufactured by our manufacturing partners outside of the United States. Most of our current qualified integrated circuit foundries are located in the same region within Taiwan. In addition, our primary assembly, testing and packaging subcontractors are located in the Pacific Rim region. For example, a substantial amount of our revenue is derived from products manufactured in Taiwan and as a result, disruptions to business in Taiwan, whether political, military, natural disasters or other events will adversely impact our business. In addition, many of our customers are located outside of the United States, primarily in Asia, which further exposes us to foreign risks. Sales shipped to customers with operations in Asia represented approximately 75% and 78% of our net revenue in fiscal 2023 and fiscal 2022, respectively.

We also have substantial operations outside of the United States. We anticipate that our manufacturing, assembly, testing, packaging and sales outside of the United States will continue to account for a substantial portion of our operations and revenue in future periods.

Accordingly, we are subject to risks associated with international operations, including:

- actual or threatened public health emergencies such as the COVID-19 pandemic on our operations, employees, customers and suppliers;
- political, social and economic instability, military hostilities including invasions, wars, terrorism, political unrest, boycotts, curtailment of trade and other business restrictions;
- volatile global economic conditions, including downturns or recessions in which some competitors may become more aggressive in their pricing practices, which would adversely impact our gross margin;
- compliance with domestic and foreign export and import regulations, including pending changes thereto, and difficulties in obtaining and complying with domestic and foreign export, import and other governmental approvals, permits and licenses;
- local laws and practices that favor local companies, including business practices that are prohibited by the U.S. Foreign Corrupt Practices Act and other anti-corruption laws and regulations;

- difficulties in staffing, managing or closing foreign operations;
- natural disasters or other events, including droughts or other water shortages, earthquakes, fires, tsunamis and floods, or power outages;
- trade restrictions, higher tariffs, worsening trade relationship between the United States and China, or changes in cross border taxation, particularly in light of the tariffs imposed by the U.S. government;
- transportation and port related delays;
- difficulties in obtaining, managing or terminating foreign distributors;
- less effective protection of intellectual property than is afforded to us in the United States or other developed countries;
- inadequate local infrastructure; and
- exposure to local banking, currency control and other financial-related risks.

As a result of having global operations, the sudden disruption of the supply chain and/or disruption of the manufacture of our customer's products caused by events outside of our control has in the past and may in the future impact our results of operations by impairing our ability to timely and efficiently deliver our products. See also, "*We rely on our manufacturing partners for the manufacture, assembly, testing and packaging of our products, and the failure of any of these third-party vendors to deliver products or otherwise perform as requested or to be able to fulfill our orders could damage our relationships with our customers, decrease our sales and limit our ability to grow our business.*"

Moreover, the international nature of our business subjects us to risk associated with the fluctuation of the U.S. dollar versus foreign currencies. Decreases in the value of the U.S. dollar versus currencies in jurisdictions where we have large fixed costs, or where our third-party manufacturing partners have significant costs, will increase the cost of such operations which could harm our results of operations. In addition, an appreciation of the U.S. dollar relative to the local currency could reduce sales of our products.

CHANGES IN OUR EFFECTIVE TAX RATE MAY REDUCE OUR NET INCOME

Changes in existing taxation benefits, tax rules or tax practices may adversely affect our financial results.

As a result of the closing of our transaction with Inphi, we are now domiciled in the United States and not Bermuda. Therefore, the income from all foreign subsidiaries is now subject to the U.S. provisions applicable to Global Intangible Low Taxed Income ("GILTI"), which generally requires GILTI income to be included in the taxable income of U.S. entities. The U.S. currently has a federal corporate tax rate of 21%. President Biden signed into law the Inflation Reduction Act of 2022 (the "IRA") on August 16, 2022 and the CHIPS and Science Act of 2022 on August 9, 2022.These laws implement new tax provisions and provide for various incentives and tax credits. The IRA applies to tax years beginning after December 31, 2022 and introduces a 15% corporate alternative minimum tax for corporations whose average annual adjusted financial statement income for any consecutive three-tax-year period preceding the tax year exceeds $1 billion and a 1% excise tax on certain stock repurchases made by publicly traded U.S. corporations after December 31, 2022. While we are not currently expecting a material impact on our business by the new taxes under the IRA if we become subject to these taxes in the future it could materially affect our financial results, including our earnings and cash flow.

The Organization for Economic Cooperation and Development (the "OECD") has been working on a Base Erosion and Profit Shifting Project, and since 2015 has been issuing guidelines and proposals with respect to various aspects of the existing framework under which our tax obligations are determined in the countries in which we do business. In 2021, the OECD announced that more than 140 member jurisdictions (including the United States, Singapore, and Bermuda) have politically committed to potential changes to the international corporate tax system, including enacting a minimum tax rate of at least 15%. During December 2022, the European Union reached agreement on the introduction of a minimum tax directive requiring member states to enact local legislation. Such proposed changes have not generally been enacted into law in most of the primary jurisdictions in which we operate. We will continue to monitor countries' laws with respect to the OECD model rules with respect to a global minimum tax. We calculate our income taxes based on currently enacted laws. Because of increasing focus by government taxing authorities on multinational companies, the tax laws of certain countries in which we do business could change on a prospective or retroactive basis, and any such changes could increase our liabilities for taxes, interest and penalties, and could materially adversely impact our financial results, including our earnings and cash flow.

In addition, in prior years, we entered into incentive agreements in certain foreign jurisdictions that provide for reduced tax rates in such jurisdictions if certain criteria are met. During the three months ended April 30, 2022, the Singapore Economic Development Board agreed to extend our Development and Expansion Incentive by five years until June 30, 2029. In addition, under the Israeli Encouragement law of "approved or benefited enterprise," our subsidiary in Israel, Marvell Israel (M.I.S.L) Ltd., is entitled to reduced tax rates and exemption of certain income from taxation through fiscal 2027. Receipt of past and future benefits under tax agreements and incentives may depend on several factors, including but not limited to, our ability to fulfill commitments regarding employment of personnel, investment, or performance of specified activities in the applicable jurisdictions as well as changes in foreign laws. Changes in our business plans, including divestitures, could result in termination of an agreement or loss of tax benefits thereunder. If any of our tax agreements in any of these foreign jurisdictions were terminated, our results of operations and our financial position could be harmed.

In addition, in prior periods, we transferred certain intellectual property to a related entity in Singapore. The impact to us was based on our determination of the fair value of this property, which required management to make significant estimates and to apply complex tax regulations in multiple jurisdictions. In future periods, local tax authorities may challenge our valuations of these assets, which could reduce our expected tax benefits from these transactions.

Our profitability and effective tax rate could be impacted by unexpected changes to our statutory income tax rates or income tax liabilities. Such changes could result from various items, including changes in tax laws or regulations, changes to court or administrative interpretations of tax laws, changes to our geographic mix of earnings, changes in the valuation of our deferred tax assets and liabilities, changes in valuation allowances on our deferred tax assets, discrete items, changes in our supply chain, and changes due to audit assessments. In particular, the tax benefits associated with our transfer of intellectual property to Singapore are sensitive to our future profitability and taxable income in Singapore, audit assessments, and changes in applicable tax law. Our current corporate effective tax rate fluctuates significantly from period to period, and is based on the application of currently applicable income tax laws, regulations and treaties, as well as current judicial and administrative interpretations of these income tax laws, regulations and treaties, in various jurisdictions.

WE ARE SUBJECT TO RISKS RELATED TO OUR ASSETS

We are exposed to potential impairment charges on certain assets.

We had approximately $11.6 billion of goodwill and $5.1 billion of acquired intangible assets on our consolidated balance sheet as of January 28, 2023. Under generally accepted accounting principles in the United States, we are required to review our intangible assets including goodwill for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable. We perform an assessment of goodwill for impairment annually on the last business day of our fiscal fourth quarter and whenever events or changes in circumstances indicate the carrying amount of goodwill may not be recoverable. When testing goodwill for impairment, we first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value or we may determine to proceed directly to the quantitative impairment test.

Factors we consider important in the qualitative assessment which could trigger a goodwill impairment review include: significant underperformance relative to historical or projected future operating results; significant changes in the manner of our use of the acquired assets or the strategy for our overall business; significant negative industry or economic trends; a significant decline in our stock price for a sustained period; and a significant change in our market capitalization relative to our net book value.

We assess the impairment of intangible assets whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. Circumstances which could trigger a review include, but are not limited to the following: significant decreases in the market price of the asset; significant adverse changes in the business climate or legal factors; accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of the asset; current period cash flow or operating losses combined with a history of losses or a forecast of continuing losses associated with the use of the asset; and current expectation that the asset will more likely than not be sold or disposed of significantly before the end of its estimated useful life. For example, if the operations of any businesses that we have acquired declines significantly, we could incur significant intangible asset impairment charges.

For example, during the second quarter of fiscal 2021, we made changes to the scope of our server processor product line in response to changes in the associated market. We transitioned our product offering from standard server processors to the broad server market to focus only on customized server processors for a few targeted customers. This change in strategy required us to assess whether the carrying value of the associated assets would be recoverable. As a result of the assessment, we determined the carrying amount of certain impacted assets are not recoverable, which resulted in recognition of $119.0 million of restructuring related charges associated with the server processor product line during the second quarter of fiscal 2021. See “Note 10 – Restructuring” in the Notes to the Consolidated Financial Statements for further information.

We have determined that our business operates as a single operating segment and has a single reporting unit for the purpose of goodwill impairment testing. The fair value of the reporting unit is determined by taking our market capitalization as determined through quoted market prices and as adjusted for a control premium and other relevant factors. If our fair value declines to below our carrying value, we could incur significant goodwill impairment charges, which could negatively impact our financial results. If in the future a change in our organizational structure results in more than one reporting unit, we will be required to allocate our goodwill and perform an assessment of goodwill for impairment in each reporting unit. As a result, we could have an impairment of goodwill in one or more of such future reporting units.

In addition, from time to time, we have made investments in private companies. If the companies that we invest in are unable to execute their plans and succeed in their respective markets, we may not benefit from such investments, and we could potentially lose the amounts we invest. We evaluate our investment portfolio on a regular basis to determine if impairments have occurred. Impairment charges could have a material impact on our results of operations in any period.

We are subject to the risks of owning real property.

Our buildings in Santa Clara, California and Shanghai, China subject us to the risks of owning real property, which include, but are not limited to:

- the possibility of environmental contamination and the costs associated with remediating any environmental problems;
- adverse changes in the value of these properties due to economic conditions, the movement by many companies to a full time work from home or a hybrid work environment, interest rate changes, changes in the neighborhood in which the property is located, or other factors;
- the possible need for structural improvements in order to comply with zoning, seismic and other legal or regulatory requirements;
- the potential disruption of our business and operations arising from or connected with a relocation due to moving or to renovating the facility;
- increased cash commitments for improvements to the buildings or the property, or both;
- increased operating expenses for the buildings or the property, or both;
- possible disputes with third parties related to the buildings or the property, or both;
- failure to achieve expected cost savings due to extended non-occupancy of a vacated property intended to be leased; and
- the risk of financial loss in excess of amounts covered by insurance, or uninsured risks, such as the loss caused by damage to the buildings as a result of earthquakes, floods and/or other natural disasters.

WE ARE SUBJECT TO IP RISKS AND RISKS ASSOCIATED WITH LITIGATION AND REGULATORY PROCEEDINGS

We may be unable to protect our intellectual property, which would negatively affect our ability to compete.

We believe one of our key competitive advantages results from the collection of proprietary technologies we have developed and acquired since our inception, and the protection of our intellectual property rights is, and will continue to be, important to the success of our business. If we fail to protect these intellectual property rights, competitors could sell products based on technology that we have developed, which could harm our competitive position and decrease our revenue.

We rely on a combination of patents, copyrights, trademarks, trade secrets, contractual provisions, confidentiality agreements, licenses and other methods, to protect our proprietary technologies. We also enter into confidentiality or license agreements with our employees, consultants, manufacturing or other business partners, and control access to and distribution of our documentation and other proprietary information. Notwithstanding these agreements, we have experienced disputes with employees regarding ownership of intellectual property in the past. To the extent that any third party has a claim to ownership of any relevant technologies used in our products, we may not be able to recognize the full revenue stream from such relevant technologies. See also, "*We have been named as a party to several legal proceedings and may be named in additional ones in the future, including litigation involving our patents and other intellectual property, which could subject us to liability, require us to indemnify our customers, require us to obtain or renew licenses, require us to stop selling our products or force us to redesign our products.*"

We have been issued a significant number of U.S. and foreign patents and have a significant number of pending U.S. and foreign patent applications. However, a patent may not be issued as a result of any applications or, if issued, claims allowed may not be sufficiently broad to protect our technology. In addition, it is possible that existing or future patents may be challenged, invalidated or circumvented. We may also be required to license some of our patents to others including competitors as a result of our participation in and contribution to development of industry standards. Despite our efforts, unauthorized parties may attempt to copy or otherwise obtain and use our products or proprietary technology. Monitoring unauthorized use of our technology is difficult, and the steps that we have taken may not prevent unauthorized use of our technology, particularly in jurisdictions where the laws may not protect our proprietary rights as fully as in the United States or other developed countries. If our patents do not adequately protect our technology, our competitors may be able to offer products similar to ours, which would adversely impact our business and results of operations. In addition, we have implemented security systems with the intent of maintaining the physical security of our facilities and protecting our confidential information including our intellectual property. Despite our efforts, we may be subject to breach of these security systems and controls which may result in unauthorized access to our facilities and labs and/or unauthorized use or theft of the confidential information and intellectual property we are trying to protect. See also, "*Cyber security risks could adversely affect our business and disrupt our operations.*" If we fail to protect these intellectual property rights, competitors could sell products based on technology that we have developed, which could harm our competitive position and decrease our revenue.

Certain of our software, as well as that of our customers, may be derived from so-called "open source" software that is generally made available to the public by its authors and/or other third parties. Open source software is made available under licenses that impose certain obligations on us in the event we were to distribute derivative works of the open source software. These obligations may require us to make source code for the derivative works available to the public and/or license such derivative works under a particular type of license, rather than the forms of license we customarily use to protect our intellectual property. While we believe we have complied with our obligations under the various applicable licenses for open source software, in the event that the copyright holder of any open source software were to successfully establish in court that we had not complied with the terms of a license for a particular work, we could be required to release the source code of that work to the public and/or stop distribution of that work if the license is terminated which could adversely impact our business and results of operations.

In addition, we license technology from Arm Limited that is included in a majority of our products and would be adversely impacted if the pricing for, or availability of, the relevant technology is changed in an adverse manner.

We must comply with a variety of existing and future laws and regulations, as well as Environmental, Social and Governance (ESG) initiatives, that could impose substantial costs on us and may adversely affect our business.

We are subject to laws and regulations worldwide, which may differ among jurisdictions, affecting our operations in areas including, but not limited to: intellectual property ownership and infringement; tax; import and export requirements; anti-corruption; foreign exchange controls and cash repatriation restrictions; conflict minerals; data privacy requirements; competition; advertising; employment; product regulations; environment, health and safety requirements; securities registration laws; and consumer laws. For example, government export regulations apply to the encryption or other features contained in some of our products. If we fail to continue to receive licenses or otherwise comply with these regulations, we may be unable to manufacture the affected products at foreign foundries or ship these products to certain customers, or we may incur penalties or fines. In addition, we are subject to various industry requirements restricting the presence of certain substances in electronic products. Although our management systems are designed to maintain compliance, we cannot assure you that we have been or will be at all times in compliance with such laws and regulations. Our compliance programs rely in part on compliance by our manufacturing partners, suppliers, vendors and distributors. To the extent such third parties don't comply with these obligations our business, operations and reputation may be adversely impacted. If we violate or fail to comply with any of the above requirements, a range of consequences could result, including fines, import/export restrictions, sales limitations, criminal and civil liabilities or other sanctions. The costs of complying with these laws (including the costs of any investigations, auditing and monitoring) could adversely affect our current or future business.

Our product or manufacturing standards could also be impacted by new or revised environmental rules and regulations or other social initiatives. For example, a significant portion of our revenues come from international sales. Environmental legislation, such as the EU Directive on Restriction of Hazardous Substances (RoHS), the EU Waste Electrical and Electronic Equipment Directive (WEEE Directive) and China's regulation on Management Methods for Controlling Pollution Caused by Electronic Information Products, may increase our cost of doing business internationally and impact our revenues from the EU, China and other countries with similar environmental legislation as we endeavor to comply with and implement these requirements.

Increasingly regulators (including the U.S. Securities and Exchange Commission), customers, investors, employees and other stakeholders are focusing on Environmental, Social and Governance (ESG) matters. While we have certain ESG initiatives at the Company there can be no assurance that regulators, customers, investors, and employees will determine that these programs are sufficiently robust. In addition, there can be no assurance that we will be able to accomplish our announced goals related to our ESG program, as statements regarding our ESG goals reflect our current plans and aspirations and are not guarantees that we will be able to achieve them within the timelines we announce or at all. Actual or perceived shortcomings with respect to our ESG initiatives, including our diversity initiatives, and reporting can impact our ability to hire and retain employees, increase our customer base, reelect our board of directors, or attract and retain certain types of investors. In addition, these parties are increasing focused on specific disclosures and frameworks related to ESG matters. Collecting, measuring, and reporting ESG information and metrics can be costly, difficult and time consuming, is subject to evolving reporting standards, and can present numerous operational, reputational, financial, legal and other risks, any of which could have a material impact on us, including on our reputation and stock price. Inadequate processes to collect and review this information prior to disclosure could subject us to potential liability related to such information.

A portion of the business we acquired in fiscal 2021 requires facility security clearances under the National Industrial Security Program. The National Industrial Security Program requires that a corporation maintaining a facility security clearance be effectively insulated from foreign ownership, control or influence ("FOCI"). Because we were organized in Bermuda at the time of this acquisition, we entered into agreements with the U.S. Department of Defense with respect to FOCI mitigation arrangements that relate to our operation of the portion of the business involving facility clearances. These measures and arrangements may materially and adversely affect our operating results due to the increased cost of compliance with these measures. If we fail to comply with our obligations under these agreements, our ability to operate our business may be adversely affected. Now that we are domiciled in the United States, we have requested to be released from some of the above FOCI-related obligations. We can offer no assurance that such a request will be granted in a timely manner or at all.

We are a party to certain contracts with the U.S. government or its subcontractors. Our contracts with the U.S. government or its subcontractors are subject to various procurement regulations and other requirements relating to their formation, administration and performance. We may be subject to audits and investigations relating to our government contracts, and any violations could result in various civil and criminal penalties and administrative sanctions, including termination of contracts, refunding or suspending of payments, forfeiture of profits, payment of fines, and suspension or debarment from future government business. In addition, such contracts may provide for termination by the government at any time, without cause. Any of these risks related to contracting with the U.S. government or its subcontractors could adversely impact our future sales and operating results.

We have been named as a party to several legal proceedings and may be named in additional ones in the future, including litigation involving our patents and other intellectual property, which could subject us to liability, require us to indemnify our customers, require us to obtain or renew licenses, require us to stop selling our products or force us to redesign our products.

We are currently, and have been in the past, named as a party to several lawsuits, government inquiries or investigations and other legal proceedings (referred to as "litigation"), and we may be named in additional litigation in the future. Please see "Note 6 – Commitments and Contingencies" of our Notes to the Consolidated Financial Statements set forth in Part I, Item 1 of this Annual Report on Form 10-K for a more detailed description of any material litigation matters in which we may be currently engaged.

In particular, litigation involving patents and other intellectual property is widespread in the high-technology industry and is particularly prevalent in the semiconductor industry, where a number of companies and other entities aggressively bring numerous infringement claims to assert their patent portfolios. The amount of damages alleged in intellectual property infringement claims can often be very significant. See also, "*We may be unable to protect our intellectual property, which would negatively affect our ability to compete.*"

From time to time, we receive and our customers receive, and we and our customers may continue to receive in the future, standards-based or other types of infringement claims, as well as claims against us and our proprietary technologies. These claims could result in litigation and/or claims for indemnification, which, in turn, could subject us to significant liability for damages, attorneys' fees and costs. Any potential intellectual property litigation also could force us to do one or more of the following:

- stop selling, offering for sale, making, having made or exporting products or using technology that contains the allegedly infringing intellectual property;
- limit or restrict the type of work that employees involved in such litigation may perform for us;
- pay substantial damages and/or license fees and/or royalties to the party claiming infringement or other license violations that could adversely impact our liquidity or operating results;
- attempt to obtain or renew licenses to the relevant intellectual property, which licenses may not be available on reasonable terms or at all; and
- attempt to redesign those products that contain the allegedly infringing intellectual property.

Under certain circumstances, we have contractual and other legal obligations to indemnify and to incur legal expenses for current and former directors and officers. See also, "*Our indemnification obligations and limitations of our director and officer liability insurance may have a material adverse effect on our financial condition, results of operations and cash flows.*" Additionally, from time to time, we have agreed to indemnify select customers for claims alleging infringement of third-party intellectual property rights, including, but not limited to, patents, registered trademarks and/or copyrights. If we are required to make a significant payment under any of our indemnification obligations, our results of operations may be harmed.

The ultimate outcome of litigation could have a material adverse effect on our business and the trading price for our securities. Litigation may be time consuming, expensive, and disruptive to normal business operations, and the outcome of litigation is difficult to predict. Litigation, regardless of the outcome, may result in significant expenditures, diversion of our management's time and attention from the operation of our business and damage to our reputation or relationship with third parties, which could materially and adversely affect our business, financial condition, results of operations, cash flows and stock price.

WE ARE SUBJECT TO RISKS RELATED TO OUR DEBT OBLIGATIONS

Our indebtedness could adversely affect our financial condition and our ability to raise additional capital to fund our operations and limit our ability to react to changes in the economy or our industry.

We paid the cash portion of the consideration for the Inphi acquisition and other fees and expenses required to be paid in connection with the transaction from cash on hand and borrowings. On the closing date of the Inphi acquisition, the entire principal amount was funded and incurred in respect of the $1.75 billion senior unsecured term loan facility, comprised of a $875.0 million 3-year term loan tranche (the "3-Year Tranche Loan") and a $875.0 million 5-year term loan tranche (the "5-Year Tranche Loan," and collectively with the 3-Year Tranche Loan, the "2024 and 2026 Term Loans"). The 2024 and 2026 Term Loans are evidenced by a credit agreement, dated December 7, 2020 (the "2024 and 2026 Term Loan Agreement"). As of January 28, 2023, the Company had a balance of $1.5 billion on the term loan facility. In addition to the 2024 and 2026 Term Loan Agreement, on December 7, 2020, we entered into a revolving credit agreement ("2020 Revolving Credit Facility" and together with the 2024 and 2026 Term Loan Agreement, the "Credit Agreements"), which provides for a $750.0 million revolving credit facility. As of January 28, 2023, the revolving credit facility is undrawn.

On April 12, 2021, we completed a private offering of (i) $500.0 million aggregate principal amount of 2026 Senior Notes, (ii) $750.0 million aggregate principal amount of 2028 Senior Notes and (iii) $750.0 million aggregate principal amount of 2031 Senior Notes (collectively, the "Senior Notes"). In addition, on May 4, 2021, we completed a private exchange offer where we exchanged most of the notes issued by Marvell Technology Group Ltd. (collectively, the "MTG Senior Notes") for $433.9 million aggregate principal amount of 2023 Senior Notes and $479.5 million aggregate principal amount of 2028 Senior Notes issued by us (the "MTI Senior Notes") (together with the Senior Notes, the "Notes"). As of January 28, 2023, we had $2.0 billion aggregate principal amount of Senior Notes outstanding and $913.2 million in aggregate principal amount of the MTI Senior Notes outstanding and $86.7 million aggregate principal amount of the MTG Senior Notes outstanding. On October 8, 2021 and December 16, 2021, we completed registered exchange offers for each series of Notes. The terms of the new notes issued in the exchange offers are substantially identical to the Notes, except that the new notes are registered under the Securities Act of 1933 and the transfer restrictions and registration rights applicable to the Notes do not apply to the new notes.

Our indebtedness could have important consequences to us including:

- increasing our vulnerability to adverse general economic and industry conditions;
- requiring us to dedicate a substantial portion of our cash flow from operations to payments on our indebtedness, thereby reducing the availability of our cash flow to fund working capital, capital expenditures, research and development efforts, execution of our business strategy, acquisitions and other general corporate purposes;
- limiting our flexibility in planning for, or reacting to, changes in the economy and the semiconductor industry;
- placing us at a competitive disadvantage compared to our competitors with less indebtedness;
- exposing us to interest rate risk to the extent of our variable rate indebtedness, particularly in the current environment of rising interest rates; and
- making it more difficult to borrow additional funds in the future to fund growth, acquisitions, working capital, capital expenditures and other purposes.

Although the Credit Agreements contain restrictions on our ability to incur additional indebtedness and the indentures governing the Notes (together, the "Notes Indentures") contain restrictions on creating liens and entering into certain sale-leaseback transactions, these restrictions are subject to a number of qualifications and exceptions, and the additional indebtedness, liens or sale-leaseback transactions incurred in compliance with these restrictions could be substantial.

The Credit Agreements, the Notes Indentures and the indenture governing the MTI Senior Notes contain customary events of default upon the occurrence of which, after any applicable grace period, the lenders would have the ability to immediately declare the loans due and payable in whole or in part. In such event, we may not have sufficient available cash to repay such debt at the time it becomes due, or be able to refinance such debt on acceptable terms or at all. Any of the foregoing could materially and adversely affect our financial condition and results of operations.

Adverse changes to our debt ratings could negatively affect our ability to raise additional capital.

We receive debt ratings from the major credit rating agencies in the United States. Factors that may impact our credit ratings include debt levels, planned asset purchases or sales and near-term and long-term production growth opportunities. Liquidity, asset quality, cost structure, reserve mix and commodity pricing levels could also be considered by the rating agencies. The applicable margins with respect to the loans incurred under the Credit Agreements will vary based on the applicable public ratings assigned to the indebtedness by Moody's Investors Service, Inc., Standard & Poor's Financial Services LLC, Fitch's and any successor to each such rating agency business. A ratings downgrade could adversely impact our ability to access debt markets in the future and increase the cost of current or future debt and may adversely affect our share price.

The Credit Agreements and the Notes Indentures impose restrictions on our business.

The Credit Agreements and the Notes Indentures each contains a number of covenants imposing restrictions on our business. These restrictions may affect our ability to operate our business and may limit our ability to take advantage of potential business opportunities as they arise. The restrictions, among other things, restrict our ability and our subsidiaries' ability to create or incur certain liens, incur or guarantee additional indebtedness, merge or consolidate with other companies, pay dividends, transfer or sell assets and make restricted payments. These restrictions are subject to a number of limitations and exceptions set forth in the Credit Agreements and the Notes Indentures. Our ability to meet the leverage ratio set forth in the Credit Agreements may be affected by events beyond our control.

The foregoing restrictions could limit our ability to plan for, or react to, changes in market conditions or our capital needs. We do not know whether we will be granted waivers under, or amendments to, our Credit Agreements or to the Notes Indentures if for any reason we are unable to meet these requirements, or whether we will be able to refinance our indebtedness on terms acceptable to us, or at all.

We may be unable to generate the cash flow to service our debt obligations.

We may not be able to generate sufficient cash flow to enable us to service our indebtedness, including the Notes, or to make anticipated capital expenditures. Our ability to pay our expenses and satisfy our debt obligations, refinance our debt obligations and fund planned capital expenditures will depend on our future performance, which will be affected by general economic, financial, competitive, legislative, regulatory and other factors beyond our control. If we are unable to generate sufficient cash flow from operations or to borrow sufficient funds in the future to service our debt, we may be required to sell assets, reduce capital expenditures, refinance all or a portion of our existing debt (including the Notes) or obtain additional financing. We cannot assure you that we will be able to refinance our debt, sell assets or borrow more money on terms acceptable to us, if at all. If we cannot make scheduled payments on our debt, we will be in default and holders of our debt could declare all outstanding principal and interest to be due and payable, and we could be forced into bankruptcy or liquidation. In addition, a material default on our indebtedness could suspend our eligibility to register securities using certain registration statement forms under SEC guidelines that permit incorporation by reference of substantial information regarding us, potentially hindering our ability to raise capital through the issuance of our securities and increasing our costs of registration.

We may, under certain circumstances, be required to repurchase the Notes at the option of the holder.

We will be required to repurchase the Notes at the option of each holder upon the occurrence of a change of control repurchase event as defined in the Notes Indentures. However, we may not have sufficient funds to repurchase the Notes in cash at the time of any change of control repurchase event. Our failure to repurchase the Notes upon a change of control repurchase event would be an event of default under the Notes Indentures and could cause a cross-default or acceleration under the Credit Agreements and certain future agreements governing our other indebtedness. The repayment obligations under the Notes may have the effect of discouraging, delaying or preventing a takeover of our company. If we were required to repurchase the Notes prior to their scheduled maturity, it could have a significant negative impact on our cash and liquidity and could impact our ability to invest financial resources in other strategic initiatives.

WE ARE SUBJECT TO CYBER SECURITY RISKS

Cyber security risks could adversely affect our business and disrupt our operations.

We depend heavily on our technology infrastructure and maintain and rely upon certain critical information systems for the effective operation of our business. We routinely collect and store sensitive data in our information systems, including intellectual property and other proprietary information about our business and that of our customers, suppliers and manufacturing and other business partners. These information technology systems are subject to damage or interruption from a number of potential sources, including, but not limited to, natural disasters, destructive or inadequate code, malware, power failures, cyber-attacks, internal malfeasance or other events. Cyber-attacks may include phishing or other forms of social engineering attacks, exploits of code or system configurations, malicious code, such as viruses and worms, ransomware attacks, denial-of-service attacks and other actions granting unauthorized access to our technology infrastructure or information systems or those of our customers, suppliers and manufacturing and other business partners. In addition, we have in the past and may in the future be the target of email phishing attacks that attempt to acquire personal information or Company assets.

We have implemented processes for systems under our control intended to mitigate risks; however, we cannot guarantee that those risk mitigation measures will be effective. We have not experienced a material information security breach in the last three years, and as a result, we have not incurred any net expenses from such a breach. We have not been penalized or paid any amount under an information security breach settlement over the last three years. Further, we annually assess our insurance policy and have determined not to purchase cyber related insurance. Cyber-attacks have become increasingly more prevalent and much harder to detect, defend against or prevent. The risk of state-sponsored or geopolitical-related cyber security incidents has also increased during fiscal 2023 due to geopolitical tensions or incidents, such as the Russian invasion of Ukraine. While we have historically been successful in defending against the cyber-attacks and breaches mentioned above, given the frequency of cyber-attacks and resulting breaches reported by other businesses and governments, it is likely we will experience one or more material breaches of some extent in the future. We have incurred and may in the future incur significant costs in order to implement, maintain and/or update security systems we feel are necessary to protect our information systems, or we may miscalculate the level of investment necessary to protect our systems adequately. Since the techniques used to obtain unauthorized access or to sabotage systems change frequently and are often not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventive measures.

Our business also requires it to share confidential information with manufacturing partners, suppliers and other third parties. Although we take steps to secure confidential information that is provided to third parties, such measures may not always be effective. Immaterial data breaches, losses or other unauthorized access to or releases of confidential information have in the past occurred with third parties and material data breaches, losses or other unauthorized access to or releases of confidential information may in the future occur in connection with third parties and could materially adversely affect our reputation, financial condition and operating results and could result in liability or penalties under data privacy laws.

To the extent that any system failure, accident or security breach results in material disruptions or interruptions to our operations, or those of our customers, suppliers and manufacturing and other business partners, or the theft, loss or disclosure of, or damage to our data or confidential information, including our intellectual property, our reputation, business, results of operations and/or financial condition could be materially adversely affected.

GENERAL RISK FACTORS

We depend on highly skilled personnel to support our business operations. If we are unable to retain and motivate our current personnel or attract additional qualified personnel, our ability to develop and successfully market our products could be harmed.

We believe our future success will depend in large part upon our ability to attract and retain highly skilled engineering, managerial, sales and marketing personnel. We typically do not enter into employment agreements with any of our key personnel and the loss of such personnel could harm our business, as their knowledge of our business and industry would be extremely difficult to replace. The competition for qualified personnel with significant experience in the management, design, development, manufacturing, marketing and sales of semiconductor solutions has been intense over the last few years, both in the Silicon Valley where our U.S. operations are based and in global markets in which we operate. Our inability to attract and retain qualified personnel, including executive officers, hardware and software engineers and sales and marketing personnel, could delay the development and introduction of, impact our ability to fulfill commitments to customers for, and harm our ability to sell, our products. In addition, if we are unable to fulfill our customer commitments in a timely manner we may also lose future business relationships or otherwise experience negative consequences. Despite a wave of recent layoffs in the technology sector, competitors for talent increasingly seek to hire our employees and executive officers (for example, our former Chief Financial Officer was recently hired by another semiconductor company), and the increased availability of work-from-home arrangements has both intensified and expanded competition. As a result, during the last few years, we have increased our efforts to recruit and retain talent. These efforts have increased our expenses, resulted in a higher volume of equity issuances, and may not be successful in attracting, retaining, and motivating the workforce necessary to deliver on our strategy. We believe equity compensation is a valuable component of our compensation program which helps us to attract, retain, and motivate employees and as a result we issue stock-based awards, such as RSUs, to a significant portion of our employees. A significant change in our stock price, such as the recent stock price decline in fiscal year 2023, or lower stock price performance relative to competitors, may reduce the retention value of our stock-based awards. Our employee hiring and retention also depends on our ability to build and maintain a diverse and inclusive workplace culture and be viewed as an employer of choice. To the extent our compensation programs and workplace culture are not viewed as competitive, our ability to attract, retain, and motivate employees may be weakened, which could harm our results of operations.

Changes to U.S. immigration and export policies that restrict our ability to attract and retain technical personnel may negatively affect our research and development efforts. In addition, changes in employment-related laws applicable to our workforce practices may also result in increased expenses and less flexibility in how we meet our changing workforce needs.

In addition, as a result of our past and any future acquisitions and related integration activities, our current and prospective employees may experience uncertainty about their futures that may impair our ability to retain, recruit or motivate key management, engineering, technical and other personnel.

We have adopted a hybrid work policy for our employees, where employees have the option to split their time between home and the office. However, certain types of activities such as new product innovation, critical business decision making, brainstorming sessions, providing sensitive employee feedback, and onboarding new employees may be less effective in a hybrid work environment. Our hybrid work environment may also negatively impact social interactions between employees that build camaraderie and may, therefore, negatively impact our office culture. Many companies, including companies that we compete with for talent, have announced plans to adopt full time remote work arrangements or hybrid work arrangements more flexible than ours, which may impact our ability to attract and retain qualified personnel if potential or current employees prefer these policies. In addition, as a result of our recent move to a hybrid work environment, we expect to face challenges in retention of personnel who prefer to only work from home.

There can be no assurance that we will continue to declare cash dividends or effect stock repurchases in any particular amount or at all, and statutory requirements may require us to defer payment of declared dividends or suspend stock repurchases.

In May 2012, we declared our first quarterly cash dividend and in October 2018, we announced that our Board of Directors had authorized a $700.0 million addition to our previously existing $1.0 billion stock repurchase program. An aggregate of $1.3 billion of shares of stock have been repurchased under that program as of January 28, 2023, including 0.9 million shares of our common stock repurchased for $50.0 million pursuant to a 10b5-1 trading plan. Future payment of a regular quarterly cash dividend on our common stock and future stock repurchases are subject to, among other things: the best interests of the Company and our stockholders; our results of operations, cash balances and future cash requirements; financial condition; developments in ongoing litigation; statutory requirements under Delaware law; securities laws and regulations, market conditions; and other factors that our Board of Directors may deem relevant. Our dividend payments or stock repurchases may change from time to time, and we cannot provide assurance that we will continue to declare dividends or repurchase stock in any particular amounts or at all. A reduction in, a delay of, or elimination of our dividend payments or stock repurchases could have a negative effect on our stock price. As of January 28, 2023, there was $449.5 million remaining available for future stock repurchases under the authorization.

Our indemnification obligations and limitations of our director and officer liability insurance may have a material adverse effect on our financial condition, results of operations and cash flows.

Under Delaware law, our certificate of incorporation, our bylaws and certain indemnification agreements to which we are a party, we have an obligation to indemnify, or we have otherwise agreed to indemnify, certain of our current and former directors and officers with respect to past, current and future investigations and litigation. Further, in the event such directors and officers are ultimately determined not to be entitled to indemnification, we may not be able to recover any amounts we previously advanced to them.

We cannot provide any assurances that any future indemnification claims, including the cost of fees, penalties or other expenses, will not exceed the limits of our insurance policies, that such claims are covered by the terms of our insurance policies or that our insurance carrier will be able to cover our claims. Additionally, to the extent there is coverage of these claims, the insurers also may seek to deny or limit coverage in some or all of these matters. Furthermore, the insurers could become insolvent and unable to fulfill their obligation to defend, pay or reimburse us for insured claims. Due to these coverage limitations, we may incur significant unreimbursed costs to satisfy our indemnification obligations, which may have a material adverse effect on our financial condition, results of operations or cash flows.

As we carry only limited insurance coverage, any incurred liability resulting from uncovered claims could adversely affect our financial condition and results of operations.

Our insurance policies may not be adequate to fully offset losses from covered incidents, and we do not have coverage for certain losses. For example, there is very limited coverage available with respect to the services provided by our third-party manufacturing partners and assembly, testing and packaging subcontractors. In the event of a natural disaster (such as drought, earthquake or tsunami), political or military turmoil, widespread public health emergencies including pandemics, power outages, cyber-attack or incident, or other significant disruptions to their operations, insurance may not adequately protect us from this exposure. We believe our existing insurance coverage is consistent with common practice, economic considerations and availability considerations. If our insurance coverage is insufficient to protect us against unforeseen losses, any uncovered losses could adversely affect our financial condition and results of operations.

If any of our non-U.S. based subsidiaries were classified as a passive foreign investment company, there would be adverse tax consequences.

If any of our non-U.S. based subsidiaries were classified as a “passive foreign investment company” or “PFIC” under section 1297 of the Internal Revenue Code, of 1986, as amended, for any taxable year during which a U.S. holder holds common stock, such U.S. holder generally would be taxed at ordinary income tax rates on any gain realized on the sale or exchange of the stock and on any “excess distributions” (including constructive distributions) received on the shares. Such U.S. holder could also be subject to a special interest charge with respect to any such gain or excess distribution.

A non-U.S. entity would be classified as a PFIC for U.S. federal income tax purposes in any taxable year in which either (i) at least 75% of its gross income is passive income or (ii) on average, the percentage of its assets that produce passive income or are held for the production of passive income is at least 50% (determined on an average gross value basis). Whether an entity will, in fact, be classified as a PFIC for any taxable year depends on its assets and income over the course of the relevant taxable year and, as a result, cannot be predicted with certainty. There can be no assurance that any of our foreign based subsidiaries will not be classified as a PFIC in the future or the Internal Revenue Service will not challenge our determination concerning PFIC status for any prior period.

Item 1B. ***Unresolved Staff Comments***

None.

Item 2. ***Properties***

The following table presents the approximate square footage of our significant owned and leased facilities as of January 28, 2023:

		(Square Feet)	
Locations	**Primary Use**	**Owned Facilities**	**Leased Facilities (1)**
United States	Research and design, sales and marketing, administration and operations	983,000	692,000
India	Research and design	—	263,000
Israel	Research and design	—	220,000
Taiwan	Research and design	—	98,000
Singapore	Operations, and research and design	—	60,000
Canada	Research and design	—	56,000
China	Research and design, and sales and marketing	116,000	46,000
	Total	**1,099,000**	**1,435,000**

(1) Lease terms expire in various years from 2023 through 2032; provided, however, that we have the option to extend certain leases past the current lease term. We have ceased-use lease facilities and subleased facilities of approximately 283,000 square feet in the United States that are excluded from the table above.

We also lease smaller facilities in various international locations, which are occupied by administrative, sales, design and field application personnel. Based on the potential for future hiring, we believe that our current facilities in most locations will be adequate to meet our requirements at least through the next fiscal year.

Item 3. ***Legal Proceedings***

The information set forth under “Note 6 – Commitments and Contingencies” in our Notes to the Consolidated Financial Statements set forth in Part II, Item 8 of this Annual Report on Form 10-K is incorporated herein by reference. For a discussion of certain risks associated with legal proceedings, please see Part I, Item 1A, “Risk Factors” above.

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***

Market Information

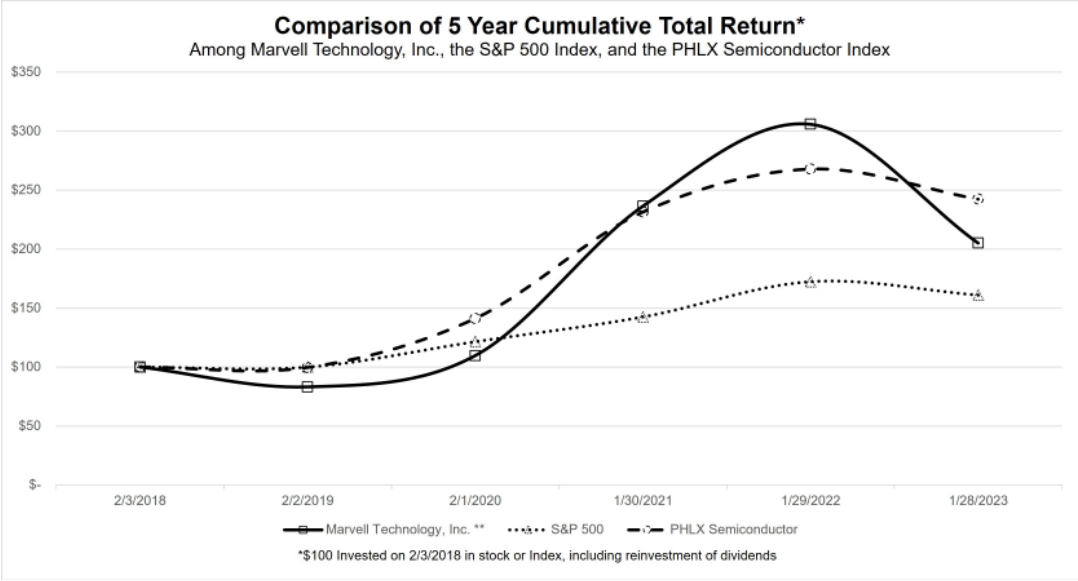
Our shares of common stock are traded on the Nasdaq Global Select Market under the symbol "MRVL." Shares of Marvell Technology Group Ltd. (our prior parent company) began trading under the MRVL symbol on June 27, 2000, upon completion of an initial public offering. As of April 20, 2021, shares of Marvell Technology, Inc began trading under the symbol MRVL.

As of March 2, 2023, the approximate number of record holders of our common stock was 590 (not including beneficial owners of stock held in street name).

Stock Price Performance Graph

This performance graph shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or incorporated by reference into any filings under the Securities Act or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

The graph below compares the cumulative total stockholder return of our common stock with the cumulative total return of the S&P 500 Index and the Philadelphia Semiconductor Index since February 3, 2018 through January 28, 2023. The graph compares a $100 investment on February 3, 2018 in our common stock with a $100 investment on February 3, 2018 in each index and assumes that any dividends were reinvested. Stockholder returns over the indicated periods should not be considered indicative of future stock prices or stockholder returns.



	2/3/2018	2/2/2019	2/1/2020	1/30/2021	1/29/2022	1/28/2023
Marvell Technology, Inc.**	**100.00**	**83.15**	**109.69**	**236.42**	**305.88**	**205.15**
S&P 500	**100.00**	**99.94**	**121.49**	**142.45**	**172.36**	**160.94**
PHLX Semiconductor	**100.00**	**99.56**	**141.14**	**231.43**	**267.92**	**242.36**

*****Information prior to April 20, 2021 is for Marvell Technology Group, Ltd.***

Dividends

Our Board of Directors declared quarterly cash dividends of $0.06 per share payable to holders of our common stock in each quarter of fiscal 2023, 2022 and 2021. As a result, we paid total cash dividends of $204.4 million in fiscal 2023, $191.0 million in fiscal 2022, and $160.6 million in fiscal 2021.

Future payment of a regular quarterly cash dividend on the Company's common stock will be subject to, among other things, the best interests of the Company and its stockholders, the Company's results of operations, cash balances and future cash requirements, financial condition, developments in ongoing litigation, statutory requirements under Delaware law and other factors that our Board of Directors may deem relevant. The Company's dividend payments may change from time to time, and we cannot provide assurance that we will continue to declare dividends at all or in any particular amounts.

Recent Sales of Unregistered Securities

Sales of unregistered equity securities made during fiscal 2022 were disclosed on our Quarterly Reports on Form 10-Q for the quarters ended May 1, 2021; July 31, 2021; and October 30, 2021.

In fiscal 2023, on December 2, 2022, the Company acquired all the equity interests of a private company for cash and stock. Pursuant to this transaction, 439,499 shares of Marvell common stock were issued, which shares are subject to forfeiture in some circumstances. The shares of Marvell common stock were issued in a private placement pursuant to Rule 4(a)(2) of the Securities Act.

Issuer Purchases of Equity Securities

We resumed our stock repurchase program in the first quarter of fiscal 2023, which had been temporarily suspended in fiscal 2021 to preserve cash during the COVID-19 pandemic.

We did not purchase any shares of our common stock for the three months ended January 28, 2023. We have $449.5 million of repurchase authority remaining under our current share repurchase program.

Our stock repurchase program is subject to market conditions, legal restrictions and regulations, and other factors, and does not obligate the Company to repurchase any dollar amount or number of shares of its common stock and the repurchase program may be extended, modified, suspended or discontinued at any time.

Item 6. ***Reserved***

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

The following discussion of our financial condition and results of operations should be read in conjunction with the financial statements and related notes included in this Annual Report on Form 10-K. This discussion contains forward-looking statements based upon current expectations that involve risks and uncertainties, including those discussed under Part I, Item 1A, "Risk Factors." These risks and uncertainties may cause actual results to differ materially from those discussed in the forward-looking statements.

Overview

We are a leading supplier of data infrastructure semiconductor solutions, spanning the data center core to network edge. We are a fabless semiconductor supplier of high-performance standard and semi-custom products with core strengths in developing and scaling complex System-on-a-Chip architectures, integrating analog, mixed-signal and digital signal processing functionality. Leveraging leading intellectual property and deep system-level expertise, as well as highly innovative security firmware, our solutions are empowering the data economy and enabling the data center, enterprise networking, carrier infrastructure, consumer, and automotive/industrial end markets.

Net revenue in fiscal 2023 was $5.9 billion and was 33% higher than net revenue of $4.5 billion in fiscal 2022. This was due to an increase in sales from a majority of our end markets. Sales increased from the data center end market by 35%, from the enterprise networking end market by 51%, from the carrier infrastructure end market by 32%, and from the automotive/industrial end market by 43% compared to fiscal 2022. The sales from our consumer end market were relatively flat for fiscal 2023 compared to fiscal 2022.

Starting in fiscal 2022 and through the first half of fiscal 2023, in response to a large increase in demand from our customers for our products in a majority of our end markets as they continued to invest in data infrastructure, our operations team continued to increase production with our global supply chain partners to alleviate supply constraints. However, with the start of a broad inventory correction in the semiconductor industry, supply constraints have now mostly resolved. During the second half of fiscal 2023, in response to a softening demand environment, customers started requesting to push out shipments and reschedule orders to manage their inventory. In the fourth quarter, we saw the largest impact from our storage customers. In addition, demand for our products has come down significantly from our OEM customers in China, as they deal with a changing macroeconomic situation.

To secure capacity over the long term, we have entered into and expect to continue to enter into capacity reservation arrangements with certain foundries and partners for substrates. See "Note 6 – Commitments and Contingencies" in the Notes to the Consolidated Financial Statements for additional information.

We continue to monitor the impact of COVID-19 on our business. As part of our response to the effects of COVID-19, we adopted a hybrid work policy where most of our employees have the option to split their time between working from home and the office. We continue to expect lingering impacts with respect to COVID-19 on our business, for a further discussion of the uncertainties and business risks associated with the COVID-19 pandemic, see Part I, Item 1A, "Risk Factors," including but not limited to the risk detailed under the caption "*We face risks related to the COVID-19 pandemic which currently has, and may continue in the future to, significantly disrupt and adversely impact our manufacturing, research and development, operations, sales and financial results.*"

We expect that the U.S. government's export restrictions on certain Chinese customers to continue to impact our revenue. Moreover, concerns that U.S. companies may not be reliable suppliers as a result of these and other actions has caused, and may in the future cause, some of our customers in China to amass large inventories of our products well in advance of need or cause some of our customers to replace our products in favor of products from other suppliers. Customers in China may also choose to develop indigenous solutions, as replacements for products that are subject to U.S. export controls. In addition, there may be indirect impacts to our business that we cannot easily quantify such as the fact that some of our other customers' products which use our solutions may also be impacted by export restrictions. See also Part I, Item IA, "Risk Factors," including, but not limited to, the risk detailed under the caption "*Adverse changes in the political and economic policies of the U.S. government in connection with trade with China and Chinese customers have reduced the demand for our products and damaged our business.*"

Our fiscal year is the 52- or 53-week period ending on the Saturday closest to January 31. Accordingly, every fifth or sixth fiscal year will have a 53-week period. The additional week in a 53-week year is added to the fourth quarter, making such quarter consist of 14 weeks. Fiscal 2023, fiscal 2022 and fiscal 2021 each had a 52-week period.

Capital Return Program. We remain committed to delivering stockholder value through our stock repurchase and dividend programs. Under the program authorized by our Board of Directors, we may repurchase shares of our common stock in the open-market or through privately negotiated transactions. The extent to which we repurchase our stock and the timing of such repurchases will depend upon market conditions, legal rules and regulations, and other corporate considerations, as determined by our management team. We resumed our stock repurchase program in the first quarter of fiscal 2023, which had been temporarily suspended in fiscal 2021 to preserve cash during the COVID-19 pandemic. During our fiscal year ended January 28, 2023, we repurchased 2.3 million shares of our common stock for $115.0 million, including 0.9 million shares of our common stock repurchased for $50.0 million pursuant to a 10b5-1 trading plan during the second quarter of fiscal 2023. As of January 28, 2023, $449.5 million remained available under our stock repurchase program for future stock repurchases. See "Note 11 – Stockholders' Equity" in the Notes to the Consolidated Financial Statements for further information.

As of January 28, 2023, a total of 310.4 million shares have been repurchased since inception of our current and previous stock repurchase programs for an aggregate total of $4.4 billion in cash. We returned $319.4 million to stockholders in fiscal 2023 through $115.0 million in repurchases of shares of common stock and $204.4 million in cash dividends.

Cash and Short-Term Investments. Our cash and cash equivalents were $911.0 million at January 28, 2023, which were $297.5 million higher than our balance at our fiscal year ended January 29, 2022 of $613.5 million.

Sales and Customer Composition. We regularly monitor the creditworthiness of our customers and distributors and believe these distributors' sales to diverse end customers and geographies further serve to mitigate our exposure to credit risk.

Most of our sales are made to customers with operations located outside of the United States, primarily in Asia, and majority of our products are manufactured outside the United States. Sales shipped to customers with operations in Asia represented approximately 75% of our net revenue in fiscal 2023, 78% of our net revenue in fiscal 2022 and 80% of our net revenue in fiscal 2021. Because many manufacturers and manufacturing subcontractors of our customers are located in Asia, we expect that most of our net revenue will continue to be represented by sales to our customers in that region. For risks related to our global operations, see Part I, Item 1A, "Risk Factors," including but not limited to the risk detailed under the caption "*We face additional risks due to the extent of our global operations since a majority of our products, and those of many of our customers, are manufactured and sold outside of the United States. The occurrence of any or a combination of the additional risks described below would significantly and negatively impact our business and results of operations.*"

The development process for our products is long, which may cause us to experience a delay between the time we incur expenses and the time revenue is generated from these expenditures. We anticipate that the rate of new orders may vary significantly from quarter to quarter. For risks related to our sales cycle, see Part I, Item 1A, "Risk Factors," including but not limited to the risk detailed under the caption, "*We are subject to order and shipment uncertainties. If we are unable to accurately predict customer demand, we may hold excess or obsolete inventory, which would reduce our gross margin. Conversely, we may have insufficient inventory, or be unable to obtain the supplies or contract manufacturing capacity to meet that demand, which would result in lost revenue opportunities and potential loss of market share as well as damaged customer relationships.*"

Critical Accounting Policies and Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates, judgments and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates, including those related to revenue recognition, income taxes, goodwill and other intangible assets, and business combinations. We base our estimates of the carrying value of certain assets and liabilities on historical experience and on various other assumptions that are believed to be reasonable under the circumstances when these carrying values are not readily available from other sources. Actual results could differ from these estimates, and such differences could affect the results of operations reported in future periods. In the macroeconomic environment affected by COVID-19, our estimates could require increased judgment and carry a higher degree of variability and volatility. We continue to monitor and assess our estimates in light of developments, and as events continue to evolve and additional information becomes available, our estimates may change materially in future periods. We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements. For further information on our significant accounting policies, see "Note 2 – Significant Accounting Policies" in the Notes to Consolidated Financial Statements.

Revenue Recognition. We recognize revenue upon transfer of control of promised products or services to customers in an amount that reflects the consideration we expect to receive in exchange for those products or services. Under the revenue recognition standard, we apply the following five step approach: (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 a performance obligation is satisfied.

We enter into contracts that may include various combinations of products and services that are capable of being distinct and accounted for as separate performance obligations. To date, the majority of the revenue has been generated by sales of products as revenue from services has been insignificant. Performance obligations associated with product sales transactions are generally satisfied when control passes to customers upon shipment. Accordingly, product revenue is recognized at a point in time when control of the asset is transferred to the customer. We recognize revenue when we satisfy a performance obligation by transferring control of a product to a customer in an amount that reflects the consideration to which we expect to be entitled in exchange for those goods or services. For product revenue, the performance obligation is deemed to be the delivery of the product and therefore, the revenue is generally recognized upon shipment to customers, net of accruals for estimated sales returns and rebates. These estimates are based on historical returns, analysis of credit memo data and other known factors. Actual returns could differ from these estimates. We account for rebates by recording reductions to revenue for rebates in the same period that the related revenue is recorded. The amount of these reductions is based upon the terms agreed to with the customer. Some of our sales are made to distributors under agreements allowing for price protection, price discounts and limited rights of stock rotation on products unsold by the distributors. Control passes to the distributor upon shipment, and terms and payment by our distributors is not contingent on resale of the product. Product revenue on sales made to distributors is recognized upon shipment, net of estimated variable consideration. Variable consideration primarily consists of price discounts, price protection, rebates, and stock rotation programs and is estimated based on a portfolio approach using the expected value method derived from historical data, current economic conditions, and contractual terms. Actual variable consideration could differ from these estimates.

A portion of our net revenue is derived from sales through third-party logistics providers who maintain warehouses in close proximity to our customer’s facilities. Revenue from sales through these third-party logistics providers is not recognized until the product is pulled from stock by the customer.

Our products are generally subject to warranty, which provides for the estimated future costs of replacement upon shipment of the product. Our products carry a standard one-year warranty, with certain exceptions in which the warranty period can extend to more than one year based on contractual agreements. The warranty accrual is estimated primarily based on historical claims compared to historical revenues and assumes that we will have to replace products subject to a claim. From time to time, we become aware of specific warranty situations, and we record specific accruals to cover these exposures. Warranty expenses were not material for the periods presented.

Inventories. We value our inventory at the lower of cost or net realizable value, cost being determined under the first-in, first-out method. We regularly review inventory quantities on hand and record a reduction to the total carrying value of our inventory for any difference between cost and estimated net realizable value of inventory that is determined to be excess, obsolete or unsellable inventory based primarily on our estimated forecast of product demand and production requirements. The estimate of future demand is compared to our inventory levels, including open purchase commitments, to determine the amount, if any, of obsolete or excess inventory. Demand for our products can fluctuate significantly from period to period. A significant decrease in demand could result in an increase in the amount of excess inventory on hand. In addition, our industry is characterized by rapid technological change, frequent new product development and rapid product obsolescence that could result in an increase in the amount of obsolete inventory quantities on hand. Additionally, our estimates of future product demand and judgement to determine excess inventory may prove to be inaccurate, in which case we may have understated or overstated the reduction to the total carrying value of our inventory for excess and obsolete inventory. In the future, if our inventory is determined to be overvalued, we would be required to recognize such costs in our cost of goods sold at the time of such determination. Likewise, if our inventory is determined to be undervalued, we may have over-reported our cost of goods sold in previous periods and would be required to recognize additional gross margin at the time the related inventory is sold. Therefore, although we make every effort to ensure the accuracy of our forecasts of future product demand, any significant unanticipated changes in demand or technological developments could have a significant impact on the value of our inventory and our results of operations.

Accounting for Income Taxes. We estimate our income taxes in each of the jurisdictions in which we operate. This process involves estimating our actual tax exposure together with assessing temporary differences resulting from the differing treatment of certain items for tax return and financial statement purposes. These differences result in deferred tax assets and liabilities, which are included in our consolidated balance sheets.

We recognize income taxes using an asset and liability approach. This approach requires the recognition of taxes payable or refundable for the current year, and deferred tax liabilities and assets for the future tax consequences of events that have been recognized in our consolidated financial statements or tax returns. The measurement of current and deferred taxes is based on provisions of the enacted tax law and the effects of future changes in tax laws or rates are not anticipated.

Evaluating the need for a valuation allowance for deferred tax assets requires judgment and analysis of all the positive and negative evidence available, including recent earnings history and cumulative losses in recent years, reversals of deferred tax liabilities, projected future taxable income, and tax planning strategies to determine whether all or some portion of the deferred tax assets will not be realized. Forming a conclusion that a valuation allowance is not needed is difficult when there is negative evidence such as cumulative losses in recent years, and as a result, in jurisdictions with cumulative losses, we have provided for a full valuation allowance on deferred tax assets. Using available evidence and judgment, we establish a valuation allowance for deferred tax assets, when it is determined that it is more likely than not that they will not be realized. Valuation allowances have been provided primarily against the U.S. and state research and development credits and certain acquired net operating losses and deferred tax assets of foreign subsidiaries. A change in the assessment of the realizability of deferred tax assets may materially impact our tax provision in the period in which a change of assessment occurs. Taxes due on Global Intangible Low-Taxed Income (GILTI) exclusions in U.S. are recognized as a current period expense when incurred.

As a multinational corporation, we conduct our business in many countries and are subject to taxation in many jurisdictions. The taxation of our business is subject to the application of various and sometimes conflicting tax laws and regulations as well as multinational tax conventions. Our effective tax rate is highly dependent upon the geographic distribution of our worldwide earnings or losses, tax laws and regulations in various jurisdictions, tax incentives, the availability of tax credits and loss carryforwards, and the effectiveness of our tax planning strategies, which includes our estimates of the fair value of our intellectual property. The application of tax laws and regulations is subject to legal and factual interpretation, judgment and uncertainty. Tax laws themselves are subject to change as a result of changes in fiscal policy, changes in legislation, and the evolution of regulations and court rulings and tax audits. There can be no assurance that we will accurately predict the outcome of audits, and the amounts ultimately paid on resolution of audits could be materially different than the amounts previously included in our income tax expense and therefore, could have a material impact on our tax provision, results of operations, and cash flows. Consequently, taxing authorities may impose tax assessments or judgments against us that could materially impact our tax liability and/or our effective income tax rate.

We are subject to income tax audits by the respective tax authorities in the jurisdictions in which we operate. We recognize the effect of income tax positions only if these positions are more likely than not to be sustained. Recognized income tax positions are measured at the largest amount that is more than 50% likely to be realized. Changes in recognition or measurement with respect to our uncertain tax positions are reflected in the period in which a change in judgment occurs. We record interest and penalties related to unrecognized tax benefits in income tax expense. The calculation of our tax liabilities involves the inherent uncertainty associated with complex tax laws. We believe we have adequately provided for in our financial statements additional taxes that we estimate to be required as a result of such examinations. While we believe that we have adequately provided for all tax positions, amounts asserted by tax authorities could be greater or less than our accrued position. Any unpaid tax liabilities, including the interest and penalties, are released pursuant to a final settlement with tax authorities, completion of audit or expiration of various statutes of limitation. The material jurisdictions in which we are subject to potential examination by tax authorities throughout the world include China, India, Israel, Singapore, Germany, and the United States.

The recognition and measurement of current taxes payable or refundable, and deferred tax assets and liabilities require that we make certain estimates and judgments. Changes to these estimates or judgments may have a material effect on our income tax provision in a future period.

Long-lived Assets and Intangible Assets. We assess the impairment of long-lived assets and intangible assets whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. Circumstances which could trigger a review include, but are not limited to the following:

- significant decreases in the market price of the asset;
- significant adverse changes in the business climate or legal factors;
- accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of the asset;
- current period cash flow or operating losses combined with a history of losses or a forecast of continuing losses associated with the use of the asset; and

- current expectation that the asset will more likely than not be sold or disposed of significantly before the end of its estimated useful life.

Whenever events or changes in circumstances suggest that the carrying amount of long-lived assets and intangible assets may not be recoverable, we estimate the future cash flows expected to be generated by the asset from its use or eventual disposition. If the sum of the expected future cash flows is less than the carrying amount of those assets, we recognize an impairment loss based on the excess of the carrying amount over the fair value of the assets. Significant management judgment is required in the forecasts of future operating results that are used in the discounted cash flow method of valuation. These significant judgments may include future expected revenue, expenses, capital expenditures and other costs, discount rates and whether or not alternative uses are available for impacted long-lived assets.

Goodwill. We record goodwill when the consideration paid for a business acquisition exceeds the fair value of net tangible and intangible assets acquired. We review goodwill for impairment annually on the last business day of our fiscal fourth quarter, and more frequently, if an event occurs or circumstances change that indicate the fair value of the reporting unit may be below its carrying amount. We have identified that our business operates as a single operating segment and as a single reporting unit for the purpose of goodwill impairment testing.

When testing goodwill for impairment, we first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value or we may determine to proceed directly to the quantitative impairment test.

Factors we consider important in the qualitative assessment which could trigger a goodwill impairment review include;

- significant underperformance relative to historical or projected future operating results;
- significant changes in the manner of our use of the acquired assets or the strategy for our overall business;
- significant negative industry or economic trends;
- a significant decline in our stock price for a sustained period; and
- a significant change in our market capitalization relative to our net book value.

If we assess qualitative factors and conclude that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, or if we determine not to use qualitative assessment, then a quantitative impairment test is performed. The quantitative impairment test requires comparing the fair value of the reporting unit to its carrying value, including goodwill. An impairment exists if the fair value of the reporting unit is lower than its carrying value. We would record an impairment loss in the fiscal quarter in which an impairment determination is made. Determining the fair value of a reporting unit involves the use of significant estimates and assumptions.

As of the last day of the fourth quarter of fiscal 2023, we performed our annual impairment assessment for testing goodwill. A step one assessment was performed. Based on our assessment, we determined there was no goodwill impairment.

Business Combinations. We allocate the fair value of the purchase consideration of a business acquisition to the tangible assets, liabilities, and intangible assets acquired, including in-process research and development (“IPR&D”), based on their estimated fair values. The excess of the fair value of purchase consideration over the fair values of these identifiable assets and liabilities is recorded as goodwill. IPR&D is initially capitalized at fair value as an intangible asset with an indefinite life and assessed for impairment thereafter. When an IPR&D project is completed, the IPR&D is reclassified as an amortizable purchased intangible asset and amortized over the asset’s estimated useful life. Our valuation of acquired assets and assumed liabilities requires significant estimates, especially with respect to intangible assets. The valuation of intangible assets, in particular, requires that we use valuation techniques such as the income approach. The income approach includes the use of a discounted cash flow model, which includes discounted cash flow scenarios and requires the following significant estimates: future expected revenue, expenses, capital expenditures and other costs, and discount rates. We estimate the fair value based upon assumptions we believe 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 regarding the assets acquired and liabilities assumed. Acquisition-related expenses and related restructuring costs are recognized separately from the business combination and are expensed as incurred.

Results of Operations

Years Ended January 28, 2023 and January 29, 2022

The following table sets forth information derived from our consolidated statements of operations expressed as a percentage of net revenue:

	Year Ended	
	January 28, 2023	January 29, 2022
Net revenue	100.0 %	100.0 %
Cost of goods sold	49.5	53.7
Gross profit	50.5	46.3
Operating expenses:		
Research and development	30.1	31.9
Selling, general and administrative	14.3	21.4
Legal settlement	1.7	—
Restructuring related charges	0.4	0.7
Total operating expenses	46.5	54.0
Operating income (loss)	4.0	(7.7)
Interest income	0.1	—
Interest expense	(2.9)	(3.1)
Other income, net	0.2	—
Income (loss) before income taxes	1.4	(10.8)
Provision (benefit) for income taxes	4.2	(1.4)
Net loss	(2.8)%	(9.4)%

Net Revenue

	Year Ended		
	January 28, 2023	January 29, 2022	% Change in 2023
	(in millions, except percentage)		
Net revenue	$ 5,919.6	$ 4,462.4	32.7 %

Our net revenue for fiscal 2023 increased by $1.5 billion compared to net revenue for fiscal 2022. This was due to an increase in sales from a majority of our end markets. Sales increased from the data center end market by 35%, from the enterprise networking end market by 51%, from the carrier infrastructure end market by 32%, and from the automotive/industrial end market by 43% compared to fiscal 2022. The sales from the consumer end market were relatively flat for fiscal 2023 compared to fiscal 2022.

The overall increase in revenue of 33% for fiscal 2023 was primarily driven by relatively higher sales of products with higher average selling prices associated with higher content and more features. In addition, the overall increase in net revenue was also driven by an increase in demand for our products and the year-over-year impact of acquisitions made in fiscal 2022, with both factors contributing to higher sales of products and higher unit shipments.

Cost of Goods Sold and Gross Profit

	Year Ended		
	January 28, 2023	January 29, 2022	% Change in 2023
	(in millions, except percentages)		
Cost of goods sold	$ 2,932.1	$ 2,398.2	22.3 %
% of net revenue	49.5 %	53.7 %	
Gross profit	$ 2,987.5	$ 2,064.2	44.7 %
% of net revenue	50.5 %	46.3 %	

Cost of goods sold as a percentage of net revenue decreased for fiscal 2023 compared to fiscal 2022 primarily due to lower amortization of inventory fair value adjustment and acquired intangible assets as a percentage of net revenue. As a result, gross profit for fiscal 2023 increased 4.2 percentage points compared to fiscal 2022.

Research and Development

	Year Ended		
	January 28, 2023	January 29, 2022	% Change in 2023
	(in millions, except percentages)		
Research and development	$ 1,784.3	$ 1,424.2	25.3 %
% of net revenue	30.1 %	31.9 %	

Research and development expense increased by $360.1 million in fiscal 2023 compared to fiscal 2022. The increase was primarily due to $255.1 million of higher employee personnel-related costs, including $99.2 million of higher stock-based compensation expense, as a result of headcount increases, including the addition of new employees from our recent acquisitions, $42.0 million of higher engineering design costs, and $24.9 million higher depreciation and amortization costs.

Selling, General and Administrative

	Year Ended		
	January 28, 2023	January 29, 2022	% Change in 2023
	(in millions, except percentages)		
Selling, general and administrative	$ 843.6	$ 955.3	(11.7)%
% of net revenue	14.3 %	21.4 %	

Selling, general and administrative expense decreased by $111.7 million in fiscal 2023 compared to fiscal 2022. The decrease was primarily due to a $97.9 million decrease in transaction and integration costs associated with our acquisitions of Inphi and Innovium, Inc. (“Innovium”) that were incurred in the prior year. In addition, our employee personnel-related costs were lower by $13.7 million due to lower stock based compensation expense mainly related to accelerated vesting of Inphi equity awards incurred in the prior year as part of the Inphi acquisition.

Stock-Based Compensation Expense

	Year Ended	
	January 28, 2023	January 29, 2022
	(in millions)	
Cost of goods sold	$ 43.3	$ 31.1
Research and development	372.4	273.2
Selling, general and administrative	136.7	173.2
Total stock-based compensation	$ 552.4	$ 477.5

Stock-based compensation expense increased by $74.9 million in fiscal 2023 compared to fiscal 2022. Stock-based compensation under research and development and cost of goods sold increased by $99.2 million and $12.2 million, respectively, partially offset by decrease under selling, general and administrative expense by $36.5 million. The increase was mainly due to additional equity awards assumed as part of the Inphi and Innovium acquisitions as described in "Note 7 – Business Combinations" and "Note 12 – Employee Benefit Plans" in the Notes to the Consolidated Financial Statements. The decrease in stock-based compensation expense under selling, general and administrative expense was mainly related to accelerated vesting of Inphi/Innovium equity awards incurred in the prior year as part of the Inphi and Innovium acquisitions.

Legal Settlement

	Year Ended		
	January 28, 2023	January 29, 2022	% Change in 2023
	(in millions, except percentages)		
Legal settlement	$ 100.0	$ —	*
% of net revenue	1.7 %	— %	

*Not meaningful

We recorded a charge of $100.0 million in fiscal year 2023 related to the settlement of a contractual dispute. Refer to "Note 6 – Commitments and Contingencies" in the Notes to the Consolidated Financial Statements for a discussion of this settlement.

Restructuring Related Charges

	Year Ended		
	January 28, 2023	January 29, 2022	January 30, 2021
	(in millions)		
Restructuring related charges	$ 21.6	$ 32.4	$ 170.8

Fiscal 2023 vs Fiscal 2022: We recorded total restructuring related charges of $21.6 million in fiscal 2023 as we integrated the acquired businesses and continued to evaluate our existing operations to increase operational efficiency, decrease costs and improve profitability.

Fiscal 2022 vs Fiscal 2021: During the second quarter of fiscal 2021, we made changes to the scope of our server processor product line in response to changes in the associated market. We transitioned our product offering from standard server processors to the broad server market to focus only on customized server processors for a few targeted customers. This change in strategy required us to assess whether the carrying value of the associated assets would be recoverable. As a result of the assessment, we determined the carrying amount of certain impacted assets were not recoverable, which resulted in recognition of $119.0 million of restructuring related charges associated with the server processor product line during the second quarter of fiscal 2021. The charges included $50.3 million in impairment of acquired intangibles, $36.0 million in impairment of purchased IP licenses and $32.7 million in equipment and inventory impairment and other related restructuring charges. The remaining restructuring charges of $61.4 million include approximately $36.9 million in severance and related costs and $24.5 million in other costs. The severance costs primarily relate to the employee separation costs in connection with the acquisitions. The other costs primarily relate to the remaining payments under lease obligations upon vacating certain worldwide office locations, and ongoing operating expenses of vacated facilities. See "Note 10 – Restructuring" in the Notes to the Consolidated Financial Statements for further information.

Interest Income

	Year Ended		
	January 28, 2023	January 29, 2022	% Change in 2023
	(in millions, except percentages)		
Interest income	$ 5.3	$ 0.8	562.5 %
% of net revenue	0.1 %	— %	

Interest income increased by $4.5 million in fiscal 2023 compared to fiscal 2022 due to higher interest rates on our invested cash and higher cash balance.

Interest Expense

	Year Ended		
	January 28, 2023	January 29, 2022	% Change in 2023
	(in millions, except percentages)		
Interest expense	$ (170.6)	$ (139.3)	22.5 %
% of net revenue	(2.9)%	(3.1)%	

Interest expense increased by $31.3 million in fiscal 2023 compared to fiscal 2022. The increase was primarily due to higher interest expense and amortization of debt issuance costs associated with the 2024 and 2026 Term Loans and the Senior Notes, partially offset by prior period costs associated with the bridge loan termination.

Other Income, net

	Year Ended		
	January 28, 2023	January 29, 2022	% Change in 2023
	(in millions, except percentages)		
Other income, net	$ 12.4	$ 2.7	359.3%
% of net revenue	0.2 %	— %	

Other income, net increased by $9.7 million in fiscal 2023 compared to fiscal 2022. The increase was primarily due to gains from equity investments and exchange rate fluctuations.

Provision (Benefit) for Income Taxes

	Year Ended		
	January 28, 2023	January 29, 2022	% Change in 2023
	(in millions, except percentage)		
Provision (benefit) for income taxes	$ 248.6	$ (62.5)	(497.8)%

The income tax expense for fiscal 2023 differs from the U.S. federal statutory rate of 21% primarily due to the remeasurement of Singapore deferred taxes upon extension of the Company's tax incentive in Singapore, tax benefits attributable to reduction in tax reserves as a result of settled income tax audits in combination with the lapsing of statute of limitations, offset by foreign income inclusions in the U.S., and a tax expense related to the recapture of Israel corporate income taxes. The income tax expense for fiscal 2023 is also impacted by a substantial portion of the Company's earnings, or in some cases, losses being taxed or benefited at rates lower than the U.S. statutory rate, stock compensation tax benefits, and disallowed deductions related to non-deductible compensation.

The income tax benefit for fiscal 2022 differed from the U.S. federal statutory rate of 21% primarily due to tax benefits of stock-based compensation, offset by foreign income inclusions in the U.S. and non-deductible compensation. We continue to evaluate potential changes to our legal entity structure in response to guidelines and requirements in various international tax jurisdictions where we conduct business, as well as changes to our business, and acquisitions and divestitures.

Our provision for incomes taxes may be affected by changes in the geographic mix of earnings with different applicable tax rates, acquisitions, changes in the realizability of deferred tax assets, accruals related to contingent tax liabilities and period-to-period changes in such accruals, the results of income tax audits, the expiration of statutes of limitations, the implementation of tax planning strategies, tax rulings, court decisions, settlements with tax authorities and changes in tax laws and regulations. It is also possible that significant negative evidence may become available that causes us to conclude that a valuation allowance is needed on certain of our deferred tax assets, which would adversely affect our income tax provision in the period of such change in judgment. Additionally, please see the information in "Item 1A: Risk Factors" under the caption "*Changes in existing taxation benefits, tax rules or tax practices may adversely affect our financial results*."

Our Annual Report on Form 10-K for the fiscal year ended January 29, 2022 includes a discussion and analysis of our financial condition and results of operations for the year ended January 30, 2021 and year-to-year comparisons between the fiscal years ended January 29, 2022 and January 30, 2021 in Item 7 of Part II, "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Liquidity and Capital Resources

Our principal source of liquidity as of January 28, 2023 consisted of approximately $911.0 million of cash and cash equivalents, of which approximately $642.0 million was held by subsidiaries outside of the United States. We manage our worldwide cash requirements by, among other things, reviewing available funds held by our foreign subsidiaries and the cost effectiveness by which those funds can be accessed in the United States. See “Note 13 – Income Taxes” in the Notes to the Consolidated Financial Statements for further information.

In December 2020, to fund the Inphi acquisition, we executed the 2024 and 2026 Term Loan Agreement to obtain the 2024 and 2026 Term Loans. For the year ended January 28, 2023, we repaid $65.6 million of the principal outstanding on the 2026 Term Loan. As of January 28, 2023, we had $735.0 million borrowings outstanding under the 2024 Term Loan and $787.5 million borrowings outstanding under the 2026 Term Loan.

In December 2020, we also executed a debt agreement to obtain a $750.0 million revolving credit facility (the “2020 Revolving Credit Facility”). During the year ended January 28, 2023 we drew down $200.0 million on the 2020 Revolving Credit Facility which has been fully repaid at January 28, 2023.

As of January 28, 2023, we had $2.0 billion aggregate principal amount of Senior Notes outstanding and $1.0 billion in aggregate principal amount of the MTG/MTI Senior Notes outstanding. The notes are registered under the Securities Act.

For a description of our contractual obligations including debt, leases, and purchase commitments, see “Note 4 – Debt,” “Note 5 – Leases,” and “Note 6 – Commitments and Contingencies” in the Notes to the Consolidated Financial Statements. In addition, see “Note 13 – Income Taxes” regarding tax related contingencies and uncertain tax positions in the Notes to the Consolidated Financial Statements. We generally expect to satisfy these commitments with cash on hand and cash provided by operating activities.

We believe that our existing cash, cash equivalents, together with cash generated from operations, and funds from our 2020 Revolving Credit Facility will be sufficient to cover our working capital needs, capital expenditures, investment requirements, any declared dividends, repurchases of our common stock and commitments (including those discussed in “Note 6 – Commitments and Contingencies” in the Notes to the Consolidated Financial Statements) for at least the next twelve months. Our capital requirements will depend on many factors, including our rate of sales growth, market acceptance of our products, costs of securing access to adequate manufacturing capacity, the timing and extent of research and development projects and increases in operating expenses, all of which are subject to uncertainty.

To the extent that our existing cash and cash equivalents together with cash generated by operations, and funds available under our 2020 Revolving Credit Facility are insufficient to fund our future activities, we may need to raise additional funds through public or private debt or equity financing. We may also acquire additional businesses, purchase assets or enter into other strategic arrangements in the future, which could also require us to seek debt or equity financing. Additional equity financing or convertible debt financing may be dilutive to our current stockholders. If we elect to raise additional funds, we may not be able to obtain such funds on a timely basis or on acceptable terms, if at all. In addition, the equity or debt securities that we issue may have rights, preferences or privileges senior to our common stock.

Future payment of a regular quarterly cash dividend on our common stock and our planned repurchases of common stock will be subject to, among other things, the best interests of the Company and our stockholders, our results of operations, cash balances and future cash requirements, financial condition, developments in ongoing litigation, statutory requirements under Delaware law, U.S. securities laws and regulations, market conditions and other factors that our Board of Directors may deem relevant. Our dividend payments and repurchases of common stock may change from time to time, and we cannot provide assurance that we will continue to declare dividends or repurchase stock at all or in any particular amounts.

Cash Flows from Operating Activities

Net cash provided by operating activities was $1.3 billion for fiscal 2023 compared to net cash provided by operating activities of $819.3 million for fiscal 2022. We had a net loss of $163.5 million adjusted for the following non-cash items: amortization of acquired intangible assets of $1.1 billion, stock-based compensation expense of $552.4 million, depreciation and amortization of $304.9 million, deferred income tax expense of $50.4 million, amortization of inventory fair value adjustment associated with Innovium acquisition of $38.7 million, amortization of deferred debt issuance costs and debt discounts of $10.3 million, restructuring related impairment charges of $5.6 million and $52.4 million net loss from other non-cash items. Cash outflow from working capital of $649.8 million for fiscal 2023 was primarily driven by an increase in accounts receivable, an increase in inventories, an increase in prepaid expenses and other assets, and a decrease in accounts payable partially offset by cash inflows due to an increase in accrued liabilities and other non-current liabilities and an increase in accrued employee compensation. The increase in accounts receivable was primarily due to increase sales, as well as changes to the timing of shipments due to evolving supply chain dynamics. We increased inventory in order to better support unfulfilled backlog, new product ramps and the impact from inventory correction late in the year. The increase in prepaid expenses and other assets was primarily due to prepayments on supply capacity reservation agreements and an increase in ship and debit reserve. The decrease in accounts payable was primarily due to the timing of payments. The increase in accrued liabilities and other non-current liabilities was primarily due to accruals relating to settlement of contractual disputes and an increase in ship and debit claim reserve due to price increases and stock replenishment. The increase in accrued employee compensation was due to increases in our bonus accrual and in employee contributions to the employee stock purchase plan, net of payments.

Net cash provided by operating activities was $819.3 million for fiscal 2022. We had a net loss of $421.0 million adjusted for the following non-cash items: amortization of acquired intangible assets of $979.4 million, stock-based compensation expense of $460.7 million, depreciation and amortization of $265.9 million, amortization of inventory fair value adjustment associated with Inphi and Innovium acquisitions of $194.3 million, deferred income tax benefit of $93.9 million, amortization of deferred debt issuance costs and debt discounts of $21.6 million, restructuring related impairment charges of $6.2 million and $69.0 million net loss from other non-cash items. Cash outflow from working capital of $662.9 million was primarily driven by an increase in accounts receivable, an increase in inventories and an increase in prepaid expenses and other assets. Such increases were partially offset by cash inflows due to an increase in accounts payable, an increase in accrued liabilities and other non-current liabilities and an increase in accrued employee compensation. The increase in accounts receivable was driven primarily by the increase in revenue and stable collections. The increase in inventories is due to strong organic revenue growth and business acquisitions during the year as well as higher materials and manufacturing prices. The increase in prepaid expenses and other assets was due to payments for capacity reservation agreements and an increase in ship and debit reserve. The increase in accrued liabilities and other non-current liabilities was mainly due to an increase in ship and debit claim reserve due to price increase and stock replenishment. The increase in accounts payable was mainly due to timing of payments. The increase in accrued employee compensation was due to the increase in our bonus accrual.

Cash Flows from Investing Activities

Net cash used in investing activities of $328.4 million in fiscal 2023 was primarily driven by the purchases of property and equipment of $206.2 million, net cash consideration for business acquisitions of $112.3 million, and purchases of technology licenses of $11.1 million.

Net cash used in investing activities of $3.7 billion in fiscal 2022 was primarily driven by the net cash consideration for business acquisitions of $3.6 billion, purchases of property and equipment of $169.2 million and purchases of technology licenses of $17.7 million.

Cash Flows from Financing Activities

Net cash used in financing activities of $662.9 million in fiscal 2023 was primarily attributable to $265.6 million repayment of debt principal, $227.6 million for withholding tax paid on behalf of employees for net share settlement, $204.4 million payment for our quarterly dividends, $142.5 million payments for technology license obligations and $115.0 million repurchases of common stock. These outflows were partially offset by proceeds from issuance of debt of $200.0 million, and $91.3 million proceeds from the issuance of our common stock under our equity inventive plans.

Net cash provided by financing activities of $2.8 billion in fiscal year 2022 was primarily attributable to proceeds from issuance of debt of $3.9 billion, $160.3 million proceeds from capped calls and $84.5 million proceeds from the issuance of our common stock under our equity inventive plans. These inflows were partially offset by $526.8 million repayment of debt principal, $305.8 million for withholding tax paid on behalf of employees for net share settlement, $191.0 million payment for our quarterly dividends, $181.2 million payment for repurchases and settlement of convertible notes, $134.5 million payments for technology license obligations and $11.8 million payments for debt financing and equity issuance costs associated with the Inphi acquisition.

Recent Accounting Pronouncements

Please see "Note 2 – Significant Accounting Policies - Recent Accounting Pronouncements" in our Notes to the Consolidated Financial Statements set forth in Part II, Item 8 of this Annual Report on Form 10-K.

Related Party Transactions

None.

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

Interest Rate Risk. With our outstanding debt, we are exposed to various forms of market risk, including the potential losses arising from adverse changes in interest rates on our outstanding 2024 and 2026 Term Loans. See "Note 4 – Debt" in our Notes to the Consolidated Financial Statements for further information. A hypothetical increase or decrease in the interest rate by 1 percentage point may result in an increase or decrease in annual interest expense by approximately $15.1 million.

We currently carry debt that relies on one-month LIBOR as the benchmark rate. The one-month LIBOR is expected to cease publication after June 30, 2023. To the extent the one-month LIBOR ceases to exist, the 2024 and 2026 Term Loans and 2020 Revolving Credit Facility contemplate an alternative benchmark rate without the need for any amendment thereto.

We maintain an investment policy that requires minimum credit ratings, diversification of credit risk and limits the long-term interest rate risk by requiring effective maturities of generally less than five years. We typically invest our excess cash primarily in highly liquid debt instruments of the U.S. government and its agencies, money market mutual funds, corporate debt securities and municipal debt securities that are classified as available-for-sale and time deposits. These investments are recorded on our consolidated balance sheets at fair market value with their related unrealized gain or loss reflected as a component of accumulated other comprehensive income (loss) in the consolidated statement of stockholders' equity. Investments in both fixed rate and floating rate interest earning securities carry a degree of interest rate risk. Fixed rate securities may have their fair market value adversely impacted due to a rise in interest rates, while floating rate securities may produce less income than predicted if interest rates fall. There were no such investments on hand at January 28, 2023, aside from cash and cash equivalents.

Foreign Currency Exchange Risk. All of our sales and the majority of our expenses are denominated in U.S. dollars. Since we operate in many countries, a percentage of our international operational expenses are denominated in foreign currencies and exchange volatility could positively or negatively impact those operating costs. Increases in the value of the U.S. dollar relative to other currencies could make our products more expensive, which could negatively impact our ability to compete. Conversely, decreases in the value of the U.S. dollar relative to other currencies could result in our suppliers raising their prices to continue doing business with us. Additionally, we may hold certain assets and liabilities, including potential tax liabilities, in local currency on our consolidated balance sheet. These tax liabilities would be settled in local currency. Therefore, foreign exchange gains and losses from remeasuring the tax liabilities are recorded to interest and other income, net. We do not believe that foreign exchange volatility has a material impact on our current business or results of operations. However, fluctuations in currency exchange rates could have a greater effect on our business or results of operations in the future to the extent our expenses increasingly become denominated in foreign currencies.

We may enter into foreign currency forward and option contracts with financial institutions to protect against foreign exchange risks associated with certain existing assets and liabilities, certain firmly committed transactions, forecasted future cash flows and net investments in foreign subsidiaries. However, we may choose not to hedge certain foreign exchange exposures for a variety of reasons, including, but not limited to, accounting considerations and the prohibitive economic cost of hedging particular exposures.

To provide an assessment of the foreign currency exchange risk associated with our foreign currency exposures within operating expense, we performed a sensitivity analysis to determine the impact that an adverse change in exchange rates would have on our financial statements. If the U.S. dollar weakened by 10%, our operating expense could increase by approximately 2%.

Item 8. ***Financial Statements and Supplementary Data***

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	Page
Report of Independent Registered Public Accounting Firm (PCAOB ID No.34)	55
Consolidated Balance Sheets as of January 28, 2023 and January 29, 2022	57
Consolidated Statements of Operations and Comprehensive Loss for the years ended January 28, 2023, January 29, 2022 and January 30, 2021	58
Consolidated Statements of Stockholders' Equity for the years ended January 28, 2023, January 29, 2022 and January 30, 2021	59
Consolidated Statements of Cash Flows for the years ended January 28, 2023, January 29, 2022 and January 30, 2021	60
Notes to Consolidated Financial Statements	61

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Marvell Technology, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Marvell Technology, Inc. and subsidiaries (the "Company") as of January 28, 2023, and January 29, 2022, the related consolidated statements of operations, comprehensive loss, stockholders' equity, and cash flows, for each of the three years in the period ended January 28, 2023, and the related notes and the schedules listed in the Index at Item 15 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of January 28, 2023, and January 29, 2022, and the results of its operations and its cash flows for each of the three years in the period ended January 28, 2023, in conformity with accounting principles generally accepted in the United States of America.

We have also 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 January 28, 2023, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 9, 2023, expressed an unqualified opinion on the Company's internal control over financial reporting.

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 critical audit matters does not alter in any way our opinion on the 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 accounts or disclosures to which it relates.

Inventories – Management Judgements Regarding Excess and Obsolete Inventory Reserves — Refer to Note 2 to the financial statements

Critical Audit Matter Description

Management writes down excess inventories based upon a regular analysis of inventory on hand compared to forecasted demand. Management's estimates of forecasted demand are based upon analysis and assumptions including, but not limited to, expected product lifecycles and development plans, expected customer orders, projected market conditions, and historical usage by product. As of January 28, 2023, the Company's consolidated inventories balance was $1,068 million.

We identified inventory valuation as a critical audit matter because of the significant assumptions management makes with regards to estimating the excess write-down and the potential amplification of those judgments in periods of market uncertainty. Specifically, due to the ongoing market uncertainty, including the business impact of the macroeconomic environment, performing audit procedures to evaluate the reasonableness of management's estimates of forecasted demand required a high degree of auditor judgment and increased audit effort.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to management's estimates of forecasted demand used in the valuation of inventory included the following, among others:

- We tested the effectiveness of internal controls over management's provisions for excess inventories, including internal controls designed to review and approve forecasted demand and the underlying assumptions regarding expected product lifecycles, product development plans, expected customer orders, projected market conditions, and historical usage by product.
- We evaluated management's ability to accurately estimate forecasted demand by comparing estimates made in prior periods to the historical actual results for those same periods.
- We made inquiries of business unit managers throughout the period as well as executives, sales, and operations personnel about the expected product lifecycles and product development plans and historical usage by product and compared expectations to actual developments over the period.
- We selected a sample of inventory products and tested the forecasted demand by comparing internal and external information (e.g., historical usage, contracts, communications with customers, macroeconomic conditions, etc.) with the Company's forecast.
- We considered, when relevant, the existence of contradictory evidence based on reading of internal financial and operational information used by management and the board of directors, Company press releases, and analysts' reports, as well as our observations and inquires as to changes within the business and evidence obtained through other areas of the audit.

/s/ DELOITTE & TOUCHE LLP

San Jose, California
March 9, 2023

We have served as the Company's auditor since 2016.

MARVELL TECHNOLOGY, INC.
CONSOLIDATED BALANCE SHEETS
(In millions, except par value per share)

	January 28, 2023	January 29, 2022
ASSETS		
Current assets:		
Cash and cash equivalents	$ 911.0	$ 613.5
Accounts receivable, net	1,192.2	1,048.6
Inventories	1,068.3	720.3
Prepaid expenses and other current assets	109.6	111.0
Total current assets	3,281.1	2,493.4
Property and equipment, net	577.4	462.8
Goodwill	11,586.9	11,511.1
Acquired intangible assets, net	5,102.0	6,153.4
Deferred tax assets	465.9	493.5
Other non-current assets	1,508.8	994.4
Total assets	$ 22,522.1	$ 22,108.6
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 465.8	$ 461.5
Accrued liabilities	1,092.0	622.6
Accrued employee compensation	244.5	241.3
Short-term debt	584.4	63.2
Total current liabilities	2,386.7	1,388.6
Long-term debt	3,907.7	4,484.8
Other non-current liabilities	590.5	533.1
Total liabilities	6,884.9	6,406.5
Commitments and contingencies (Note 6)		
Stockholders' equity:		
Preferred stock, $0.002 par value; 8.0 shares authorized; no shares issued and outstanding	—	—
Common stock, $0.002 par value; 1,250 shares authorized; 856.1 and 846.7 shares issued and outstanding in fiscal 2023 and 2022, respectively	1.7	1.7
Additional paid-in capital	14,512.0	14,209.0
Retained earnings	1,123.5	1,491.4
Total stockholders' equity	15,637.2	15,702.1
Total liabilities and stockholders' equity	$ 22,522.1	$ 22,108.6

See accompanying Notes to Consolidated Financial Statements.

MARVELL TECHNOLOGY, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(In millions, except per share amounts)

	Year Ended		
	January 28, 2023	January 29, 2022	January 30, 2021
Net revenue	$ 5,919.6	$ 4,462.4	$ 2,968.9
Cost of goods sold	2,932.1	2,398.2	1,480.6
Gross profit	2,987.5	2,064.2	1,488.3
Operating expenses:			
Research and development	1,784.3	1,424.2	1,072.7
Selling, general and administrative	843.6	955.3	467.2
Legal settlement	100.0	—	36.0
Restructuring related charges	21.6	32.4	170.8
Total operating expenses	2,749.5	2,411.9	1,746.7
Operating income (loss)	238.0	(347.7)	(258.4)
Interest income	5.3	0.8	2.6
Interest expense	(170.6)	(139.3)	(69.3)
Other income, net	12.4	2.7	2.9
Interest and other income (loss), net	(152.9)	(135.8)	(63.8)
Income (loss) before income taxes	85.1	(483.5)	(322.2)
Provision (benefit) for income taxes	248.6	(62.5)	(44.9)
Net loss	$ (163.5)	$ (421.0)	$ (277.3)
Comprehensive loss, net of tax	$ (163.5)	$ (421.0)	$ (277.3)
Net loss per share - basic	$ (0.19)	$ (0.53)	$ (0.41)
Net loss per share - diluted	$ (0.19)	$ (0.53)	$ (0.41)
Weighted-average shares:			
Basic	851.4	796.9	668.8
Diluted	851.4	796.9	668.8

See accompanying Notes to Consolidated Financial Statements.

MARVELL TECHNOLOGY, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In millions, except per share amounts)

	Common Stock				
	Shares	Amount	Additional Paid-in Capital	Retained Earnings	Total
Balance at February 1, 2020	663.5	$ 1.4	$ 6,135.9	$ 2,541.3	$ 8,678.6
Issuance of common stock in connection with equity incentive plans	13.2	—	86.7	—	86.7
Tax withholdings related to net share settlement of restricted stock units	—	—	(108.1)	—	(108.1)
Stock-based compensation	—	—	241.7	—	241.7
Repurchase of common stock	(1.3)	—	(25.2)	—	(25.2)
Cash dividends declared and paid (cumulatively $0.24 per share)	—	—	—	(160.6)	(160.6)
Net loss	—	—	—	(277.3)	(277.3)
Balance at January 30, 2021	675.4	1.4	6,331.0	2,103.4	8,435.8
Issuance of common stock in connection with equity incentive plans	11.6	—	84.5	—	84.5
Tax withholdings related to net share settlement of restricted stock units	—	—	(299.9)	—	(299.9)
Stock-based compensation	—	—	473.5	—	473.5
Issuance of common stock in connection with acquisitions	146.2	0.3	6,889.8	—	6,890.1
Equity related issuance cost	—	—	(8.2)	—	(8.2)
Replacement equity awards attributable to pre-acquisition service	—	—	115.6	—	115.6
Conversion feature of convertible notes	—	—	244.2	—	244.2
Impact of repurchase of convertible notes	7.1	—	234.3	—	234.3
Conversion of convertible notes to common stock	6.4	—	144.2	—	144.2
Cash dividends declared and paid (cumulatively $0.24 per share)	—	—	—	(191.0)	(191.0)
Net loss	—	—	—	(421.0)	(421.0)
Balance at January 29, 2022	846.7	1.7	14,209.0	1,491.4	15,702.1
Issuance of common stock in connection with equity incentive plans	11.7	—	91.3	—	91.3
Tax withholdings related to net share settlement of restricted stock units	—	—	(227.6)	—	(227.6)
Stock-based compensation	—	—	554.3	—	554.3
Repurchase of common stock	(2.3)	—	(115.0)	—	(115.0)
Cash dividends declared and paid (cumulatively $0.24 per share)	—	—	—	(204.4)	(204.4)
Net loss	—	—	—	(163.5)	(163.5)
Balance at January 28, 2023	856.1	$ 1.7	$ 14,512.0	$ 1,123.5	$ 15,637.2

See accompanying Notes to Consolidated Financial Statements.

MARVELL TECHNOLOGY, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In millions)

	Year Ended		
	January 28, 2023	January 29, 2022	January 30, 2021
Cash flows from operating activities:			
Net loss	$ (163.5)	$ (421.0)	$ (277.3)
Adjustments to reconcile net loss to net cash provided by operating activities:			
Depreciation and amortization	304.9	265.9	197.9
Stock-based compensation	552.4	460.7	241.5
Amortization of acquired intangible assets	1,087.4	979.4	443.6
Amortization of inventory fair value adjustment associated with acquisitions	38.7	194.3	17.3
Amortization of deferred debt issuance costs and debt discounts	10.3	21.6	10.0
Restructuring related impairment charges	5.6	6.2	130.9
Deferred income taxes	50.4	(93.9)	(39.5)
Other expense, net	52.4	69.0	25.0
Changes in assets and liabilities, net of acquisitions:			
Accounts receivable	(142.7)	(409.0)	(44.3)
Prepaid expenses and other assets	(480.4)	(161.8)	(41.6)
Inventories	(385.9)	(291.9)	29.9
Accounts payable	(87.8)	93.2	39.7
Accrued employee compensation	2.5	29.6	39.6
Accrued liabilities and other non-current liabilities	444.5	77.0	44.6
Net cash provided by operating activities	1,288.8	819.3	817.3
Cash flows from investing activities:			
Purchases of technology licenses	(11.1)	(17.7)	(12.7)
Purchases of property and equipment	(206.2)	(169.2)	(106.8)
Acquisitions, net of cash acquired	(112.3)	(3,555.0)	—
Other, net	1.2	(3.2)	(0.1)
Net cash used in investing activities	(328.4)	(3,745.1)	(119.6)
Cash flows from financing activities:			
Repurchases of common stock	(115.0)	—	(25.2)
Proceeds from employee stock plans	91.3	84.5	86.6
Tax withholding paid on behalf of employees for net share settlement	(227.6)	(305.8)	(108.1)
Dividend payments to stockholders	(204.4)	(191.0)	(160.6)
Payments on technology license obligations	(142.5)	(134.5)	(100.0)
Proceeds from issuance of debt	200.0	3,896.1	—
Principal payments of debt	(265.6)	(526.8)	(250.0)
Payment for repurchases and settlement of convertible notes	—	(181.2)	—
Proceeds from capped calls	—	160.3	—
Payment of equity and debt financing costs	—	(11.8)	(38.0)
Other, net	0.9	1.0	(1.5)
Net cash provided by (used in) in financing activities	(662.9)	2,790.8	(596.8)
Net increase (decrease) in cash and cash equivalents	297.5	(135.0)	100.9
Cash and cash equivalents at beginning of the year	613.5	748.5	647.6
Cash and cash equivalents at end of the year	$ 911.0	$ 613.5	$ 748.5

See accompanying Notes to Consolidated Financial Statements.

Note 1 — Basis of Presentation

The Company

Marvell Technology, Inc., and its subsidiaries (the "Company"), is a leading supplier of data infrastructure semiconductor solutions, spanning the data center core to network edge. The Company is a fabless semiconductor supplier of high-performance standard and semi-custom products with core strengths in developing and scaling complex System-on-a-Chip architectures, integrating analog, mixed-signal, and digital signal processing functionality. The Company also leverages leading intellectual property and deep system-level expertise, as well as highly innovative security firmware. The Company's solutions are empowering the data economy and enabling the data center, enterprise networking, carrier infrastructure, consumer, and automotive/industrial end markets. The Company is incorporated in Delaware, United States.

Basis of Presentation

The Company's fiscal year is the 52- or 53-week period ending on the Saturday closest to January 31. Accordingly, every fifth or sixth fiscal year will have a 53-week period. The additional week in a 53-week year is added to the fourth quarter, making such quarter consist of 14 weeks. Fiscal 2023, fiscal 2022 and fiscal 2021 each had a 52-week period. Certain prior period amounts have been reclassified to conform to current year presentation. All dollar amounts in the financial statements and tables in these notes, except per share amounts, are stated in millions of U.S. dollars unless otherwise noted.

Note 2 — Significant Accounting Policies

Use of Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates, judgments and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent liabilities. On an ongoing basis, the Company evaluates its estimates, including those related to performance-based compensation, revenue recognition, provisions for sales returns and allowances, inventory excess and obsolescence, investment fair values, goodwill and other intangible assets, restructuring, income taxes, litigation and other contingencies. Actual results could differ from these estimates, and such differences could affect the results of operations reported in future periods. In the macroeconomic environment affected by COVID-19, these estimates could require increased judgment and carry a higher degree of variability and volatility. As events continue to evolve and additional information becomes available, these estimates may change materially in future periods.

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All inter-company accounts and transactions have been eliminated. The functional currency of the Company and its subsidiaries is the U.S. dollar.

Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less from the date of purchase to be cash equivalents. Cash and cash equivalents consist of cash on deposit with banks and time deposits.

Investments in Equity Securities

The Company has equity investments in privately-held companies. If the Company has the ability to exercise significant influence over the investee, but not control, the Company accounts for the investment under the equity method. If the Company does not have the ability to exercise significant influence over the operations of the investee, the Company accounts for the investment under the measurement alternative method. Investments in privately-held companies are included in other non-current assets and subject to impairment review on an ongoing basis. Investments are considered impaired when the fair value is below the investment's cost basis. This assessment is based on a qualitative and quantitative analysis, including, but not limited to, the investee's revenue and earnings trends, available cash and liquidity, and the status of the investee's products and the related market for such products.

Concentration of Credit Risk and Significant Customers

Financial instruments that potentially subject the Company to a significant concentration of credit risk consist principally of cash equivalents and accounts receivable. Cash and cash equivalents are maintained with high-quality financial institutions, the composition and maturities of which are regularly monitored by management. The Company believes that the concentration of credit risk in its trade receivables is substantially mitigated by the Company's credit evaluation process, relatively short collection terms and the high level of credit worthiness of its customers. For customers including distributors, the Company performs ongoing credit evaluations of their financial conditions and limits the amount of credit extended when deemed necessary based upon payment history and their current credit worthiness, but generally requires no collateral. The Company regularly reviews the allowance for bad debt and doubtful accounts by considering factors such as historical experience, credit quality, reasonable and supportable forecasts, age of the accounts receivable balances and current economic conditions that may affect a customer's ability to pay.

The Company's accounts receivable was concentrated with five customers at January 28, 2023, who comprise a total of 55% of gross accounts receivable, compared with six customers at January 29, 2022, who represented 52% of gross accounts receivable, respectively. This presentation is at the customer consolidated level.

During fiscal 2023, 2022 and 2021, there was no net revenue attributable to a customer, other than one distributor, whose revenues as a percentage of net revenue was 10% or greater of total net revenues. Net revenue attributable to significant distributors whose revenues as a percentage of net revenue was 10% or greater of total net revenues is presented in the following table:

	Year Ended		
	January 28, 2023	January 29, 2022	January 30, 2021
Distributor:			
Distributor A	20 %	15 %	13 %

The Company continuously monitors the creditworthiness of its distributors and believes these distributors' sales to diverse end customers and to diverse geographies further serve to mitigate the Company's exposure to credit risk.

Inventories

Inventory is stated at the lower of cost or net realizable value, cost being determined under the first-in, first-out method. The total carrying value of the Company's inventory is reduced for any difference between cost and estimated net realizable value of inventory that is determined to be excess, obsolete or unsellable inventory based upon assumptions about future demand and market conditions. If actual future demand for the Company's products is less than currently forecasted, the Company may be required to write inventory down below the current carrying value. Once the carrying value of inventory is reduced, it is maintained until the product to which it relates is sold or otherwise disposed. Inventoriable shipping and handling costs are classified as a component of cost of goods sold in the consolidated statements of operations.

Property and Equipment, Net

Property and equipment, net, are stated at cost less accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives of the assets, which ranges from 2 to 7 years for machinery and equipment, and 3 to 4 years for computer software, and furniture and fixtures. Buildings are depreciated over an estimated useful life of 30 years and building improvements are depreciated over estimated useful lives of 15 years. Leasehold improvements are depreciated over the shorter of the remaining lease term or the estimated useful life of the asset.

Goodwill

Goodwill is recorded when the consideration paid for a business acquisition exceeds the fair value of net tangible and intangible assets acquired. Goodwill is measured and tested for impairment annually on the last business day of the fiscal fourth quarter and whenever events or changes in circumstances indicate the carrying amount of goodwill may not be recoverable. The Company first assesses qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount or the Company may determine to proceed directly to the quantitative impairment test.

If the Company assesses qualitative factors and concludes that it is more likely than not that the fair value of a reporting unit is less than its carrying amount or if the Company determines not to use the qualitative assessment, then a quantitative impairment test is performed. The quantitative impairment test requires comparing the fair value of the reporting unit to its carrying value, including goodwill. The Company has identified that its business operates as a single operating segment and as a single reporting unit for the purpose of goodwill impairment testing. An impairment exists if the fair value of the reporting unit is lower than its carrying value. If the fair value of the reporting unit is lower than its carrying value, the Company would record an impairment loss in the fiscal quarter in which the determination is made.

Long-Lived Assets and Intangible Assets

The Company assesses the impairment of long-lived assets and intangible assets whenever events or changes in circumstances indicate that the carrying amount of long-lived assets may not be recoverable. The Company estimates the future cash flows, undiscounted and without interest charges, expected to be generated by the assets from its use or eventual disposition. If the sum of the expected undiscounted future cash flows is less than the carrying amount of those assets, the Company recognizes an impairment loss based on the excess of the carrying amount over the fair value of the assets. Please see “Note 8 – Goodwill and Acquired Intangible Assets, Net” for further details regarding impairment of acquisition-related identified intangible assets.

Acquisition-related identified intangible assets are amortized on a straight-line basis over their estimated economic lives, except for certain customer contracts and related relationships, which are amortized using an accelerated method of amortization over the expected customer lives. In-process research and development (“IPR&D”) is not amortized until the completion of the related development.

Leases

The Company determines if an arrangement is a lease at inception. Operating lease right-of-use (“ROU”) assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. Operating lease ROU assets also include any initial direct costs and prepayments less lease incentives. Lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise such options. As the Company’s leases do not provide an implicit rate, the Company uses its collateralized incremental borrowing rate based on the information available at the lease commencement date, including lease term, in determining the present value of lease payments. Lease expense for these leases is recognized on a straight line basis over the lease term.

Foreign Currency Transactions

The functional currency of all of the Company’s non-United States (“U.S.”) operations is the U.S. dollar. Monetary accounts maintained in currencies other than the U.S. dollar are re-measured using the foreign exchange rate at the balance sheet date. Operational accounts and nonmonetary balance sheet accounts are measured and recorded at the exchange rate in effect at the date of the transaction. The effects of foreign currency re-measurement are reported in current operations.

Revenue Recognition

Product revenue is recognized at a point in time when control of the asset is transferred to the customer. Substantially all of the Company’s revenue is derived from product sales. The Company recognizes revenue when it satisfies a performance obligation by transferring control of a product to a customer in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. For product revenue, the performance obligation is deemed to be the delivery of the product and therefore, the revenue is generally recognized upon shipment to customers, net of accruals for estimated sales returns and rebates. These estimates are based on historical returns analysis and other known factors. The Company accounts for rebates by recording reductions to revenue for rebates in the same period that the related revenue is recorded. The amount of these reductions is based upon the terms agreed to with the customer. Product revenue on sales made to distributors is recognized upon shipment, net of estimated variable consideration. Variable consideration primarily consists of price discounts, price protection, rebates, and stock rotation programs and is estimated based on a portfolio approach using the expected value method derived from historical data, current economic conditions, and contractual terms.

A portion of the Company’s net revenue is derived from sales through third-party logistics providers who maintain warehouses in close proximity to our customer’s facilities. Revenue from sales through these third-party logistics providers is not recognized until the product is pulled from stock by the customer.

The Company's products are generally subject to warranty, which provides for the estimated future costs of replacement upon shipment of the product. The Company's products carry a standard one-year warranty, with certain exceptions in which the warranty period can extend to more than one year based on contractual agreements. The warranty accrual is estimated primarily based on historical claims compared to historical revenues and assumes that the Company will have to replace products subject to a claim. From time to time, the Company becomes aware of specific warranty situations, and it records specific accruals to cover these exposures. Warranty expenses were not material for the periods presented.

Business Combinations

The Company allocates the fair value of the purchase consideration of its acquisitions to the tangible assets, liabilities, and intangible assets acquired, including IPR&D, based on their estimated fair values. The excess of the fair value of purchase consideration over the fair values of these identifiable assets and liabilities is recorded as goodwill. IPR&D is initially capitalized at fair value as an intangible asset with an indefinite life and assessed for impairment thereafter. When an IPR&D project is completed, the IPR&D is reclassified as an amortizable purchased intangible asset and amortized over the asset's estimated useful life. Acquisition-related expenses and related restructuring costs are recognized separately from the business combination and are expensed as incurred.

Advertising Expense

Advertising costs are expensed as incurred. The Company recorded $0.7 million, $0.8 million and $0.6 million of advertising costs for fiscal 2023, 2022 and 2021, respectively, included in selling, general and administrative expenses in the consolidated statements of operations.

Stock-Based Compensation

Stock-based compensation is measured at the grant date, based on the fair value of the award, and is recognized as expense over the requisite service vesting period. The Company amortizes stock-based compensation expense for time-based awards under the straight-line attribution method over the vesting period. Stock-based compensation expense for performance-based awards is recognized when it becomes probable that the performance conditions will be met. The Company amortizes stock-based compensation expense for performance-based awards using the accelerated method.

The fair value of each restricted stock unit is estimated based on the market price of the Company's common stock on the date of grant less the expected dividend yield.

The Company estimates the fair value of stock purchase awards on the date of grant using the Black Scholes option-pricing model. The fair value of performance-based awards based on total shareholder return ("TSR") and value creation ("VCA") awards are estimated on the date of grant using a Monte Carlo simulation model.

Forfeitures are recorded when they occur. Previously recognized expense is reversed for the portion of awards forfeited prior to vesting as and when forfeitures occur.

Comprehensive Loss

Comprehensive loss, net of tax is comprised of net loss. For fiscal 2023, 2022 and 2021, there were no reconciling differences between net loss and comprehensive loss.

Accounting for Income Taxes

The Company estimates its income taxes in the jurisdictions in which it operates. This process involves estimating the Company's actual tax exposure together with assessing temporary differences resulting from the differing treatment of certain items for tax return and financial statement purposes. These differences result in deferred tax assets and liabilities, which are included in the Company's consolidated balance sheets.

The Company recognizes income taxes using an asset and liability approach. This approach requires the recognition of taxes payable or refundable for the current year, and deferred tax liabilities and assets for the future tax consequences of events that have been recognized in the Company's consolidated financial statements or tax returns. The measurement of current and deferred taxes is based on provisions of the enacted tax law and the effects of future changes in tax laws or rates are not anticipated.

Evaluating the need for a valuation allowance on deferred tax assets requires judgment and analysis of all available positive and negative evidence, including recent earnings history and cumulative losses in recent years, reversals of deferred tax liabilities, projected future taxable income, and tax planning strategies to determine whether all or some portion of the deferred tax assets will not be realized. We establish a valuation allowance for deferred tax assets, when it is determined that it is more likely than not that they will not be realized. Valuation allowances have been provided primarily against U.S. and state research and development credits and certain acquired net operating losses and deferred tax assets of foreign subsidiaries. A change in the assessment of the realizability of deferred tax assets may materially impact the Company's tax provision in the period in which a change occurs. Taxes due on Global Intangible Low-Taxed Income (GILTI) inclusions in U.S. are recognized as a current period expense when incurred.

As a multinational corporation, the Company conducts its business in many countries and is subject to taxation in many jurisdictions. The taxation of the business is subject to the application of various and sometimes conflicting tax laws and regulations as well as multinational tax conventions. The Company's effective tax rate is highly dependent upon the geographic distribution of the Company's worldwide earnings or losses, the tax laws and regulations in various localities, the availability of tax incentives, tax credits and loss carryforwards, and the effectiveness of the Company's tax planning strategies, including the Company's estimates of the fair value of its intellectual property. The application of tax laws and regulations is subject to legal and factual interpretation, judgment and uncertainty. Tax laws themselves are subject to change as a result of changes in fiscal policy, changes in legislation, and the evolution of regulations and court rulings. Consequently, taxing authorities may impose tax assessments or judgments against us that could materially affect the Company's tax liability and/or effective income tax rate.

The Company is subject to income tax audits by tax authorities in the jurisdictions in which it operates. The Company recognizes the effect of income tax positions only if these positions are more likely than not to be sustained. Recognized income tax positions are measured at the largest amount that is more than 50% likely to be realized. Changes in judgment regarding the recognition or measurement of uncertain tax positions are reflected in the period in which the change occurs. The Company records interest and penalties related to unrecognized tax benefits in income tax expense. The calculation of the Company's tax liabilities involves the inherent uncertainty associated with complex tax laws. The Company believes it has adequately provided for in its financial statements additional taxes that it estimates may be required to be paid as a result of such examinations. While the Company believes that it has adequately provided for all tax positions, amounts asserted by tax authorities could be greater or less than its accrued position. Unpaid tax liabilities, including the interest and penalties, are released pursuant to a final settlement with tax authorities, completion of audit or expiration of various statutes of limitations. The material jurisdictions in which the Company may be subject to potential examination by tax authorities throughout the world include China, India, Israel, Singapore, Germany, and the United States.

The recognition and measurement of current taxes payable or refundable, and deferred tax assets and liabilities require that the Company make certain estimates and judgments. Changes to these estimates or judgments may have a material effect on the Company's tax provision in a future period.

Recent Accounting Pronouncements

Accounting Pronouncements Recently Adopted

In October 2021, the FASB issued an accounting standards update that requires contract assets and contract liabilities acquired in a business combination to be recognized and measured by the acquirer on the acquisition date in accordance with ASC 606, Revenue from Contracts with Customers. The guidance should be applied prospectively to acquisitions occurring on or after the effective date. The new standard was early adopted by the Company on January 30, 2022 and did not have a material effect on the Company's consolidated financial statements.

Note 3 — Revenue

Disaggregation of Revenue

The majority of the Company's revenue is generated from sales of the Company's products.

The following table summarizes net revenue disaggregated by end market (in millions, except percentages):

	Year Ended January 28, 2023	% of Total	Year Ended January 29, 2022	% of Total	Year Ended January 30, 2021	% of Total
Net revenue by end market:						
Data center	$ 2,408.8	41 %	$ 1,784.7	40 %	$ 1,040.8	35 %
Enterprise networking	1,369.2	23 %	907.7	20 %	636.0	22 %
Carrier infrastructure	1,084.0	18 %	820.4	18 %	599.4	20 %
Consumer	701.1	12 %	700.0	16 %	574.7	19 %
Automotive/industrial	356.5	6 %	249.6	6 %	118.0	4 %
	$ 5,919.6	100 %	$ 4,462.4	100 %	$ 2,968.9	100 %

The following table summarizes net revenue disaggregated by primary geographical market based on destination of shipment (in millions, except percentages):

	Year Ended January 28, 2023	% of Total	Year Ended January 29, 2022	% of Total	Year Ended January 30, 2021	% of Total
Net revenue based on destination of shipment:						
China	$ 2,486.3	42 %	$ 1,970.5	44 %	$ 1,268.8	43 %
United States	690.1	12 %	484.0	11 %	321.4	11 %
Malaysia	393.2	7 %	276.0	6 %	254.1	9 %
Thailand	391.9	7 %	355.3	8 %	251.4	8 %
Singapore	331.7	6 %	220.8	5 %	107.6	4 %
Taiwan	289.0	5 %	161.0	4 %	79.8	3 %
Japan	260.0	4 %	222.8	5 %	142.6	5 %
Finland	189.6	3 %	80.2	2 %	6.9	— %
Philippines	171.5	3 %	213.4	5 %	166.7	6 %
Others	716.3	11 %	478.4	10 %	369.6	11 %
	$ 5,919.6		$ 4,462.4		$ 2,968.9	

These destinations of shipment are not necessarily indicative of the geographic location of the Company's end customers or the country in which the Company's end customers sell devices containing the Company's products. For example, a substantial majority of the shipments made to China relate to sales to non-China based customers that have factories or contract manufacturing operations located within China.

The following table summarizes net revenue disaggregated by customer type (in millions, except percentages):

	Year Ended January 28, 2023	% of Total	Year Ended January 29, 2022	% of Total	Year Ended January 30, 2021	% of Total
Net revenue by customer type:						
Direct customers	$ 3,949.6	67 %	$ 3,314.5	74 %	$ 2,213.6	75 %
Distributors	1,970.0	33 %	1,147.9	26 %	755.3	25 %
	$ 5,919.6		$ 4,462.4		$ 2,968.9	

Contract Liabilities

Contract liabilities consist of the Company's obligation to transfer goods or services to a customer for which the Company has received consideration or the amount is due from the customer. Contract liability balances are comprised of deferred revenue. The amount of revenue recognized during the year ended January 28, 2023, that was included in deferred revenue balance at January 29, 2022 was not material.

As of the end of a reporting period, some of the performance obligations associated with contracts will have been unsatisfied or only partially satisfied. In accordance with the practical expedients available in the guidance, the Company does not disclose the value of unsatisfied performance obligations for contracts with an original expected duration of one year or less.

Sales Commissions

The Company has elected to apply the practical expedient to expense commissions when incurred as the amortization period is typically one year or less. These costs are recorded in selling, general and administrative expenses in the consolidated statements of operations.

Note 4 — Debt

Summary of Borrowings and Outstanding Debt

The following table summarizes the Company's outstanding debt at January 28, 2023 and January 29, 2022 (in millions):

	January 28, 2023	January 29, 2022
Face Value Outstanding:		
2024 Term Loan - 3 Year Tranche	$ 735.0	$ 735.0
2026 Term Loan - 5 Year Tranche	787.5	853.1
Term Loan Total	1,522.5	1,588.1
4.200% MTG/MTI 2023 Senior Notes	500.0	500.0
4.875% MTG/MTI 2028 Senior Notes	499.9	499.9
1.650% 2026 Senior Notes	500.0	500.0
2.450% 2028 Senior Notes	750.0	750.0
2.950% 2031 Senior Notes	750.0	750.0
Senior Notes Total	2,999.9	2,999.9
Total borrowings	$ 4,522.4	$ 4,588.0
Less: Unamortized debt discount and issuance cost	(30.3)	(40.0)
Net carrying amount of debt	$ 4,492.1	$ 4,548.0
Less: Current portion (1)	584.4	63.2
Non-current portion	$ 3,907.7	$ 4,484.8

(1) As of January 28, 2023, the current portion of outstanding debt that is due within twelve months includes the MTG/MTI 2023 Senior Notes and the portion of the 2026 Term Loan - 5 Year Tranche. The Company intends to repay the amount with operating cash flow. The weighted average interest rate on short-term debt outstanding at January 28, 2023 and January 29, 2022 was 4.448% and 1.485%, respectively.

In December 2020, the Company executed a debt agreement to obtain a 3-year $875.0 million term loan and a 5-year $875.0 million term loan. The Company also executed a debt agreement to obtain a 5-year $750.0 million revolving credit facility in December 2020, replacing its previous $500 million revolving credit facility. On April 12, 2021, the Company completed a debt offering and issued (i) $500.0 million of Senior Notes with a 5-year term due in 2026, (ii) $750.0 million of Senior Notes with a 7-year term due in 2028, and (iii) $750.0 million of Senior Notes with a 10-year term due in 2031.

On May 4, 2021, in conjunction with the U.S. domiciliation, the Company exchanged certain existing senior notes due in 2023 and 2028 that were previously issued by the Bermuda-domiciled Marvell Technology Group Ltd. (the "MTG Senior Notes") with like notes that are now issued by the Delaware-domiciled Marvell Technology, Inc. (the "MTI Senior Notes"). Below is further discussion of the terms of the various debt agreements.

2024 and 2026 Term Loans

On December 7, 2020, the Company entered into a term loan credit agreement with a lending syndicate led by JP Morgan Chase Bank, N.A (the “2024 and 2026 Term Loan Agreement”) in order to finance the merger with Inphi. The 2024 and 2026 Term Loan Agreement provides for borrowings of $1.75 billion consisting of: (i) $875 million loan with a three-year term from the funding date (the “3-Year Tranche Loan”) and (ii) $875 million loan with a five-year term from the funding date (the “5-Year Tranche Loan” and, together with the 3-Year Tranche Loan, the "2024 and 2026 Term Loans").

The 3-Year Tranche Loan has a stated floating interest rate which equates to reserve-adjusted LIBOR + 125 bps. The effective interest rate for the 3-Year Tranche Loan was 4.027% as of January 28, 2023. The 5-Year Tranche Loan has a stated floating interest rate which equates to reserve-adjusted LIBOR + 137.5 bps. The effective interest rate for the 5-Year Tranche Loan was 4.665% as of January 28, 2023. The 3-Year Tranche Loan does not require any scheduled principal payments prior to final maturity but does permit the Company to make early principal payments without premium or penalty. The 5-year Tranche Loan requires scheduled principal payments at the end of each fiscal quarter equal to (i) 1.25% of the aggregate principal amount on the term funding date for the first four full fiscal quarters following the term loan funding date, (ii) 2.50% of the aggregate principal amount on the term funding date for the fifth through twelfth full fiscal quarters following the term loan funding date, and (iii) 3.75% of the aggregate principal amount on the term funding date for each fiscal quarter following the twelfth full fiscal quarter following the term loan funding date. During the year ended January 28, 2023, the Company repaid $65.6 million of the principal outstanding of the 5-Year Tranche Loan.

The 2024 and 2026 Term Loan Agreement requires that the Company and its subsidiaries comply with covenants relating to customary matters, including with respect to creating or permitting certain liens, entering into sale and leaseback transactions, and consolidating, merging, liquidating or dissolving. It also prohibits subsidiaries of the Company from incurring additional indebtedness, subject to certain exceptions, and requires that the Company maintain a leverage ratio financial covenant as of the end of any fiscal quarter. As of January 28, 2023, the Company had $1.5 billion 2024 and 2026 Term Loan borrowings outstanding, and was in compliance with its debt covenants.

2020 Revolving Credit Facility

On December 7, 2020, the Company entered into a revolving line of credit agreement (“2020 Revolving Credit Facility”) with a lending syndicate led by JP Morgan Chase Bank, N.A for borrowings of up to $750 million. Borrowings from the 2020 Revolving Credit Facility are intended for general corporate use, which may include among other things, the financing of acquisitions, the refinancing of other indebtedness and the payment of transaction expenses related to the foregoing. The 2020 Revolving Credit Facility has a five-year term and a stated floating interest rate which equates to reserve-adjusted LIBOR plus an applicable margin. The Company may prepay any borrowings at any time without premium or penalty. An unused commitment fee is payable quarterly based on unused balances at a rate that is based on the ratings of the Company’s senior unsecured long-term indebtedness. This annual rate was 0.175% at January 28, 2023.

During the quarter ended July 30, 2022, the Company drew down $200.0 million on the 2020 Revolving Credit Facility, of which $130.0 million was repaid in the same quarter. During the quarter ended October 29, 2022, the Company repaid the remaining outstanding amount of $70.0 million. As of January 28, 2023, the 2020 Revolving Credit Facility was undrawn and will be available for draw down through December 7, 2025.

The 2020 Revolving Credit Facility requires that the Company and its subsidiaries comply with covenants relating to customary matters. The covenants are consistent with the 2024 and 2026 Term Loans covenants discussed above.

The Company currently carries debt that relies on one-month LIBOR as the benchmark rate. The one-month LIBOR is expected to cease publication after June 30, 2023. To the extent the one-month LIBOR ceases to exist, the 2024 and 2026 Term Loans and 2020 Revolving Credit Facility agreements contemplate an alternative benchmark rate without the need for any amendment thereto.

2026, 2028, and 2031 Senior Unsecured Notes

On April 12, 2021, the Company completed an offering of (i) $500.0 million aggregate principal amount of the Company's 1.650% Senior Notes due 2026 (the "2026 Senior Notes"), (ii) $750.0 million aggregate principal amount of the Company's 2.450% Senior Notes due 2028 (the "2028 Senior Notes") and (iii) $750.0 million aggregate principal amount of the Company's 2.950% Senior Notes due 2031 (the "2031 Senior Notes," and, together with the 2026 Senior Notes and the 2028 Senior Notes, the "Senior Notes"). On October 8, 2021, the Senior Notes issued on April 12, 2021 were exchanged for new notes. The terms of the new notes issued in the exchange are substantially identical to the notes issued in April 2021, except that the new notes are registered under the Securities Act of 1933 and the transfer restrictions and registration rights applicable to the Senior Notes issued in April 2021 do not apply to the new notes.

The 2026 Senior Notes mature on April 15, 2026, the 2028 Senior Notes mature on April 15, 2028, and the 2031 Senior Notes mature on April 15, 2031. The stated and effective interest rates for the 2026 Senior Notes are 1.650% and 1.839%, respectively. The stated and effective interest rates for the 2028 Senior Notes are 2.450% and 2.554%, respectively. The stated and effective interest rates for the 2031 Senior Notes are 2.950% and 3.043%, respectively. The Company may redeem the Senior Notes, in whole or in part, at any time prior to their respective maturity at the redemption prices set forth in the indenture governing the Senior Notes. In addition, upon the occurrence of a change of control repurchase event (which involves the occurrence of both a change of control and a ratings event involving the Senior Notes being rated below investment grade), 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 notes, plus accrued and unpaid interest to, but excluding, the repurchase date. The indenture governing the Senior Notes also contains certain limited covenants restricting the Company's ability to incur certain liens, enter into certain sale and leaseback transactions and merge or consolidate with any other entity or convey, transfer or lease all or substantially all of the Company's properties or assets to another person, which, in each case, are subject to certain qualifications and exceptions. As of January 28, 2023, the Company had $2.0 billion Senior Notes borrowings outstanding.

2023 and 2028 Senior Unsecured Notes

On June 22, 2018, the Company's Bermuda-based parent company Marvell Technology Group, Ltd. ("MTG") completed a public offering of (i) $500.0 million aggregate principal amount of 4.200% Senior Notes due 2023 (the "MTG 2023 Notes") and (ii) $500.0 million aggregate principal amount of 4.875% Senior Notes due 2028 (the "MTG 2028 Notes" and, together with the 2023 Notes, the "MTG Senior Notes").

In April 2021, in conjunction with the Company's U.S. domiciliation, the Company commenced Exchange Offers on April 19, 2021 for the outstanding $1.0 billion in aggregate principal amount of MTG Senior Notes outstanding in exchange for corresponding senior notes to be issued by the Company's U.S. domiciled parent MTI. MTI made an offer to (i) exchange any and all of the outstanding MTG 2023 Notes for up to an aggregate principal amount of $500.0 million of new 4.200% Senior Notes due 2023 issued by MTI (the "MTI 2023 Notes") and to (ii) exchange any and all of the outstanding MTG 2028 Notes for up to an aggregate principal amount of $500.0 million of new 4.875% Senior Notes due 2028 issued by MTI (the "MTI 2028 Notes" and, together with the MTI 2023 Notes, the "MTI Senior Notes"). Each new series of MTI Senior Notes have the same interest rate, maturity date, redemption terms and interest payment dates and are subject to substantially similar covenants as the corresponding series of the MTG Senior Notes for which they were offered in exchange.

The settlement of the Exchange Offers occurred on May 4, 2021 with $433.9 million aggregate principal amount of the MTG 2023 Notes and $479.5 million aggregate principal amount of the MTG 2028 Notes. The exchange was accounted for as a debt modification in accordance with applicable accounting guidance. On December 16, 2021, the MTI Senior Notes issued on May 4, 2021 were exchanged for new notes. The terms of the new notes issued in the exchange are substantially identical to the notes issued in May 2021, except that the new notes are registered under the Securities Act of 1933 and the transfer restrictions and registration rights applicable to the MTI Senior Notes issued in May 2021 do not apply to the new notes.

The MTI 2023 Notes mature on June 22, 2023 and the MTI 2028 Notes mature on June 22, 2028. The stated and effective interest rates for the MTI 2023 Notes are 4.200% and 4.502%, respectively. The stated and effective interest rates for the MTI 2028 Notes are 4.875% and 4.988%, respectively. The Company may redeem the MTI Senior Notes, in whole or in part, at any time prior to their maturity at the redemption prices set forth in MTI Senior Notes. In addition, upon the occurrence of a change of control repurchase event (which involves the occurrence of both a change of control and a ratings event involving the MTI Senior Notes being rated below investment grade), the Company will be required to make an offer to repurchase the MTI Senior Notes at a price equal to 101% of the principal amount of the notes, plus accrued and unpaid interest to, but excluding, the repurchase date. The indenture governing the MTI Senior Notes also contains certain limited covenants restricting the Company's ability to incur certain liens, enter into certain sale and leaseback transactions and merge or consolidate with any other entity or convey, transfer or lease all or substantially all of the Company's properties or assets to another person, which, in each case, are subject to certain qualifications and exceptions.

The MTG 2023 Notes mature on June 22, 2023 and the MTG 2028 Notes mature on June 22, 2028. The stated and effective interest rates for the MTG 2023 Notes are 4.200% and 4.360%, respectively. The stated and effective interest rates for the MTG 2028 Notes are 4.875% and 4.940%, respectively. The Company may redeem the MTG Senior Notes, in whole or in part, at any time prior to their maturity at the redemption prices set forth in MTG Senior Notes.

As of January 28, 2023, the Company had $1.0 billion MTG/MTI Senior Notes borrowings outstanding.

Interest Expense and Future Contractual Maturities

During fiscal 2023 and fiscal 2022, the Company recognized $159.6 million and $119.0 million of interest expense, respectively, in its consolidated statements of operations related to interest, amortization of debt issuance costs and accretion of discount associated with the outstanding term loans and senior notes.

As of January 28, 2023, the aggregate future contractual maturities of the Company's outstanding debt, at face value, were as follows (in millions):

Fiscal Year	Amount
2024	$ 587.5
2025	844.4
2026	131.2
2027	959.4
2028	—
Thereafter	1,999.9
Total	$ 4,522.4

Note 5 — Leases

The Company's leases primarily include facility leases and hosting/data center leases, which are all classified as operating leases. For hosting/data center leases, the Company elected the practical expedient to account for the lease and non-lease component as a single lease component.

Lease expense and supplemental cash flow information are as follows (in millions):

	Year Ended		
	January 28, 2023	January 29, 2022	January 30, 2021
Operating Lease Expense	$ 49.6	$ 61.7	$ 47.8
Cash paid for amounts included in the measurement of operating lease liabilities	$ 41.9	$ 45.1	$ 36.8
Right-of-use assets obtained in exchange for lease obligation	$ 107.7	$ 95.4	$ 26.6

The effect of operating lease right-of-use asset amortization of $32.5 million, $28.9 million and $21.6 million is included in changes in Other expense, net in the cash provided by operating activities section on the consolidated statements of cash flows for the fiscal year ended January 28, 2023, January 29, 2022, and January 30, 2021, respectively.

The aggregate future lease payments for operating leases as of January 28, 2023 are as follows (in millions):

Fiscal Year	Operating Leases	Sublease Income
2024	$ 51.4	$ 5.4
2025	43.8	5.5
2026	38.8	5.7
2027	35.9	5.9
2028	29.2	4.1
Thereafter	79.5	6.3
Total lease payments	278.6	32.9
Less: imputed interest	33.2	
Present value of lease liabilities	$ 245.4	

Average lease terms and discount rates were as follows:

	Year Ended	
	January 28, 2023	January 29, 2022
Weighted-average remaining lease term (years)	7.01	5.95
Weighted-average discount rate	3.66 %	2.47 %

Note 6 — Commitments and Contingencies

Warranty Obligations

The Company's products carry a standard one-year warranty with certain exceptions in which the warranty period can extend to more than one year based on contractual agreements. The Company's warranty expense has not been material in the periods presented.

Commitments

The Company's commitments primarily consist of wafer purchase obligations with foundry partners, supply capacity reservation payment commitments with foundries and test & assembly partners, and technology license fee obligations.

Total future unconditional purchase commitments as of January 28, 2023, are as follows (in millions):

Fiscal Year	Purchase Commitments to Foundries and Test & Assembly Partners	Technology License Fees
2024	$ 742.7	$ 163.0
2025	622.1	120.6
2026	613.9	43.1
2027	449.4	36.4
2028	185.5	36.5
Thereafter	533.5	157.0
Total unconditional purchase commitments	$ 3,147.1	$ 556.6

Technology license fees include the liabilities under agreements for technology licenses between the Company and various vendors.

Under the Company's manufacturing relationships with its foundry partners, cancellation of outstanding purchase orders is allowed but requires payment of all costs and expenses incurred through the date of cancellation, and in some cases, may result in incremental fees, loss of amounts paid in advance, or loss of priority to reserved capacity for a period of time.

The Company entered into manufacturing supply capacity reservation agreements with foundries and test & assembly suppliers during the current and prior fiscal year. Under these arrangements, the Company agreed to pay capacity fees or refundable deposits to the suppliers in exchange for reserved manufacturing production capacity over the term of the agreements, which ranges from 4 to 10 years. In addition, the Company committed to certain purchase levels that were in line with the capacity reserved. The Company currently estimates that it has agreed to purchase level commitments of at least $2.8 billion of wafers, substrates, and other manufacturing products for the fiscal years 2024 through 2033 under the capacity reservation agreements. In addition, total fees and refundable deposits payable under these arrangements are $99.0 million in fiscal years 2024 through 2026. Such purchase commitments are summarized in the preceding table.

In September 2021, the Company entered into an IP licensing agreement with a vendor which provides complete access to the vendor's IP portfolio for 10 years. The arrangement provides access to IP over the term of the contract, including existing IP, as well as IP in development, and to be developed in the future. The contract provides support and maintenance over the term of the contract as well. Aggregate fees of $354 million are payable quarterly over the contract term.

Contingencies and Legal Proceedings

The Company currently is, and may from time to time become, subject to claims, lawsuits, governmental inquiries, inspections or investigations and other legal proceedings (collectively, "Legal Matters") arising in the course of its business. Such Legal Matters, even if not meritorious, could result in the expenditure of significant financial and managerial resources.

During the third quarter of fiscal 2023, the Company entered into a settlement agreement with a customer in relation to a contractual dispute pursuant to which the Company agreed to pay the customer $100.0 million in cash over several quarters.

The Company is currently unable to predict the final outcome of its other pending Legal Matters and therefore cannot determine the likelihood of loss or estimate a range of possible loss, except with respect to amounts where it has determined a loss is both probable and estimable and has made an accrual. The Company evaluates, at least on a quarterly basis, developments in its Legal Matters that could affect the amount of any accrual, as well as any developments that would result in a loss contingency to become both probable and reasonably estimable. The ultimate outcome of any Legal Matter involves judgments, estimates and inherent uncertainties. An unfavorable outcome in a Legal Matter could require the Company to pay damages or could prevent the Company from selling some of its products in certain jurisdictions. While the Company cannot predict with certainty the results of the Legal Matters in which it is currently involved, the Company does not expect that the ultimate costs to resolve these Legal Matters will individually or in the aggregate have a material adverse effect on its financial condition, however, there can be no assurance that the current or any future Legal Matters will be resolved in a manner that is not adverse to the Company's business, financial statements, results of operations or cash flows.

In the fourth quarter of fiscal 2021, the Company became involved in discussions with another party to resolve disputes that ultimately concluded with settlement by the Company in the amount of $36.0 million which was accrued at the time such offer of settlement was determined by management. Such amount is presented separately on the accompanying consolidated statement of operations for the fiscal year ended January 30, 2021.

Indemnities, Commitments and Guarantees

During its normal course of business, the Company has made certain indemnities, commitments and guarantees under which it may be required to make payments in relation to certain transactions. These indemnities may include indemnities for general commercial obligations, indemnities to various lessors in connection with facility leases for certain claims arising from such facility or lease, and indemnities to directors and officers of the Company to the maximum extent permitted under the laws of Delaware. In addition, the Company has contractual commitments to various customers, which could require the Company to incur costs to repair an epidemic defect with respect to its products outside of the normal warranty period if such defect were to occur. The duration of these indemnities, commitments and guarantees varies, and in certain cases, is indefinite. Some of these indemnities, commitments and guarantees do not provide for any limitation of the maximum potential future payments that the Company could be obligated to make. In general, the Company does not record any liability for these indemnities, commitments and guarantees in the accompanying consolidated balance sheets as the amounts cannot be reasonably estimated and are not considered probable. The Company does, however, accrue for losses for any known contingent liability, including those that may arise from indemnification provisions, when future payment is probable and estimable.

Intellectual Property Indemnification

In addition to the above indemnities, the Company has agreed to indemnify certain customers for claims made against the Company's products where such claims allege infringement of third-party intellectual property rights, including, but not limited to, patents, registered trademarks, and/or copyrights. Under the aforementioned indemnification clauses, the Company may be obligated to defend the customer and pay for the damages awarded against the customer as well as the attorneys' fees and costs under an infringement claim. The Company's indemnification obligations generally do not expire after termination or expiration of the agreement containing the indemnification obligation. Generally, but not always, there are limits on and exceptions to the Company's potential liability for indemnification. Historically the Company has not made significant payments under these indemnification obligations and the Company cannot estimate the amount of potential future payments, if any, that it might be required to make as a result of these agreements. The maximum potential amount of any future payments that the Company could be required to make under these indemnification obligations could be significant.

Note 7 — Business Combinations

Innovium

On October 5, 2021, the Company completed the acquisition of Innovium, Inc. ("Innovium"), a leading provider of networking solutions for cloud and edge data centers, in an all-stock transaction for total purchase consideration of $1.0 billion attributable to stock consideration of $994.2 million and the fair value of a previously held equity interest of $10.0 million. The Innovium acquisition was primarily intended to allow the Company to immediately participate in the fastest growing segment of the switch market with a cloud-optimized solution. In accordance with the terms of the Agreement and Plan of Merger dated August 2, 2021 (the "Innovium merger agreement"), the Company's common stock was issued in exchange for all outstanding equity of Innovium, including shares of Innovium's preferred and common stock, employee equity awards and warrants.

The factors contributing to the recognition of goodwill were based upon the Company's conclusion that there are strategic and synergistic benefits that are expected to be realized from the acquisition. Goodwill recorded for the Innovium acquisition is not expected to be deductible for tax purposes.

The following table summarized the total merger consideration (in millions):

Common stock issued or to be issued	$	971.0
Stock consideration for replacement equity awards attributable to pre-combination service		33.2
Total merger consideration	$	1,004.2

In accordance with U.S. GAAP requirements for business combinations, the Company allocated the fair value of the purchase consideration to the tangible assets, liabilities and intangible assets acquired, including in-process research and development ("IPR&D"), generally based on their estimated fair values. The excess purchase price over those fair values is recorded as goodwill. IPR&D is initially capitalized at fair value as an intangible asset with an indefinite life and assessed for impairment thereafter. When an IPR&D project is completed, the IPR&D is reclassified as an amortizable purchased intangible asset and amortized over the asset's estimated useful life. The Company's valuation assumptions of acquired assets and assumed liabilities require significant estimates, especially with respect to intangible assets. Acquisition-related costs are expensed in the periods in which such costs are incurred. See "Note 8 – Goodwill and Acquired Intangible Assets, Net" for additional information.

The purchase price allocation is as follows (in millions):

Cash and cash equivalents	$	60.4
Inventories		70.0
Goodwill		462.4
Acquired intangible assets, net		433.0
Other, net		(21.6)
Total merger consideration	$	1,004.2

The Company incurred total acquisition related costs of $11.9 million which were recorded in selling, general and administrative expense in the consolidated statements of operations.

Inphi

On April 20, 2021, the Company completed the acquisition of Inphi (the "Inphi acquisition"). Inphi is a global leader in high-speed data movement enabled by optical interconnects. The Inphi acquisition was primarily intended to create an opportunity for the combined company to be uniquely positioned to serve the data-driven world, addressing high growth, attractive end markets such as cloud data center and 5G. In accordance with the terms of the Agreement and Plan of Merger dated as of October 29, 2020, by and among the Company and Inphi (the "Inphi merger agreement"), the Company acquired all outstanding shares of common stock of Inphi for $66 per share in cash and 2.323 shares of the Company's common stock exchanged for each share of Inphi common stock. The merger consideration paid in cash was funded with a combination of cash on hand and funds from the Company's debt financing. See "Note 4 – Debt" for additional information.

The factors contributing to the recognition of goodwill were based upon the Company's conclusion that there are strategic and synergistic benefits that are expected to be realized from the acquisition. Goodwill recorded for the Inphi acquisition is not expected to be deductible for tax purposes.

The following table summarized the total merger consideration (in millions):

Cash consideration	$	3,673.2
Common stock issued		5,917.8
Stock consideration for replacement equity awards attributable to pre-combination service		82.3
Equity component of convertible debt		244.2
Total merger consideration	$	9,917.5

In accordance with U.S. GAAP requirements for business combinations, the Company allocated the fair value of the purchase consideration to the tangible assets, liabilities and intangible assets acquired, including IPR&D, generally based on their estimated fair values. The excess purchase price over those fair values is recorded as goodwill. IPR&D is initially capitalized at fair value as an intangible asset with an indefinite life and assessed for impairment thereafter. When an IPR&D project is completed, the IPR&D is reclassified as an amortizable purchased intangible asset and amortized over the asset's estimated useful life. The Company's valuation assumptions of acquired assets and assumed liabilities require significant estimates, especially with respect to intangible assets. Acquisition-related costs are expensed in the periods in which such costs are incurred. See "Note 8 – Goodwill and Acquired Intangible Assets, Net" for additional information.

The purchase price allocation is as follows (in millions):

	Previously Reported January 29, 2022 (Provisional)	Measurement Period Adjustment	January 28, 2023
Cash and cash equivalents	$ 72.3	$ —	$ 72.3
Accounts receivable, net	99.7	—	99.7
Inventories	270.4	—	270.4
Prepaid expenses and other current assets	213.3	—	213.3
Property and equipment, net	98.5	—	98.5
Acquired intangible assets, net	4,420.0	—	4,420.0
Other non-current assets	98.8	(2.2)	96.6
Goodwill	5,686.2	2.2	5,688.4
Accounts payable and accrued liabilities	(189.8)	—	(189.8)
Convertible debt - short-term	(313.7)	—	(313.7)
Convertible debt - long-term	(240.3)	—	(240.3)
Other non-current liabilities	(297.9)	—	(297.9)
Total merger consideration	$ 9,917.5	$ —	$ 9,917.5

The provisional amounts presented in the table above pertained to the preliminary purchase price allocation reported in the Company's Form 10-K for the year ended January 29, 2022. The measurement period adjustments were associated with a change in deferred tax assets as a result of changes in estimates related to finalizing Inphi's short period 2021 U.S. tax return. The Company does not believe that the measurement period adjustment had a material impact on its consolidated statements of operations, balance sheets, or cash flows in any periods previously reported.

In fiscal year 2022, the Company incurred $50.8 million in acquisition related costs which were recorded in selling, general and administrative expense in the consolidated statements of operations. The Company also incurred $39.8 million of aggregate debt financing costs. As of January 28, 2023, $3.0 million is included in short-term debt, and $22.9 million is included in long-term debt on the accompanying consolidated balance sheets. See "Note 4 – Debt" for additional information. Additionally, the Company incurred $8.2 million of equity issuance costs, which were recorded in additional paid-in capital in the consolidated balance sheets.

Unaudited Supplemental Pro Forma Information

The unaudited supplemental pro forma financial information presented below is for illustrative purposes only and is not necessarily indicative of the financial position or results of operations that would have been realized if the acquisitions had been completed on the date indicated, does not reflect synergies that might have been achieved, nor is it indicative of future operating results or financial position. The pro forma adjustments are based upon currently available information and certain assumptions the Company believe are reasonable under the circumstances.

The following unaudited supplemental pro forma information presents the combined results of operations for each of the periods presented, as if Innovium and Inphi had been acquired as of beginning of fiscal year 2021. The unaudited supplemental pro forma information includes adjustments to amortization and depreciation for acquired intangible assets and property and equipment, adjustments to stock-based compensation expense, the purchase accounting effect on inventories acquired, interest expense, and transaction costs. For fiscal year 2021, non-recurring pro forma adjustments directly attributable to the Innovium and Inphi acquisitions in the pro forma information presented below included (i) stock-based compensation expense of $46.7 million, (ii) the purchase accounting effect of inventories acquired of $233.0 million, (iii) interest expense of $11.4 million, and (iv) transaction costs of $65.7 million. The unaudited supplemental pro forma information presented below is for informational purposes only and is not necessarily indicative of our consolidated results of operations of the combined business had the Inphi and Innovium acquisitions actually occurred at the beginning of fiscal year 2021 or of the results of our future operations of the combined business.

The unaudited supplemental pro forma financial information for the periods presented is as follows (in millions):

	Year Ended	
	January 29, 2022	January 30, 2021
Pro forma net revenue	$ 4,638.5	$ 3,686.0
Pro forma net loss	$ (211.9)	$ (1,351.4)

Note 8 — Goodwill and Acquired Intangible Assets, Net

Goodwill

Goodwill represents the excess of the purchase price over the fair value of the net tangible and identifiable intangible assets acquired in a business combination.

In connection with the Innovium and Inphi acquisitions on October 5, 2021 and April 20, 2021, respectively, the Company recorded goodwill of $6.1 billion. In January 2022, the Company completed the acquisition of a consulting services entity for purchase consideration of $41.8 million, primarily for the purpose of expanding engineering resources to address customer design opportunities, of which $25.5 million was allocated to goodwill.

During fiscal 2023, the Company completed acquisitions of several companies for total purchase consideration of $103.2 million, of which $73.6 million was allocated to goodwill. The purpose of the acquisitions was to expand engineering resources staff to address customer design opportunities, access additional intellectual property and support expansion of the Company's networking solutions. The carrying value of total goodwill as of January 28, 2023 and January 29, 2022 was $11.6 billion and $11.5 billion, respectively. See "Note 7 – Business Combinations" for discussion of acquisitions and changes to the carrying value of goodwill.

The Company has identified that its business operates as a single operating segment and as a single reporting unit for the purpose of goodwill impairment testing. The Company's annual test for goodwill impairment as of the last day of the fourth quarter of fiscal 2023 did not result in any impairment charge.

There was no activity from acquisitions or divestitures recorded to goodwill in fiscal 2023 and 2022 other than those described above.

Acquired Intangible Assets, Net

In connection with the Innovium acquisition on October 5, 2021, the Company acquired $433.0 million of intangible assets as follows (in millions, except for weighted-average useful life as of acquisition date):

	Preliminary Estimated Asset Fair Value	Weighted-Average Useful Life (Years)
Developed technology	$ 274.0	8.00
Customer contracts and related relationships	66.0	8.00
IPR&D	93.0	n/a
	$ 433.0	

In connection with the Inphi acquisition on April 20, 2021, the Company acquired $4.4 billion of intangible assets as follows (in millions, except for weighted-average useful life as of acquisition date):

	Preliminary Estimated Asset Fair Value	Weighted-Average Useful Life (Years)
Developed technology	$ 2,010.0	6.00
Customer contracts and related relationships	1,470.0	6.00
Order backlog	70.0	0.80
Trade name	50.0	5.00
IPR&D	820.0	n/a
	$ 4,420.0	

As of January 28, 2023 and January 29, 2022, net carrying amounts excluding fully amortized intangible assets are as follows (in millions, except for weighted-average remaining amortization period):

	January 28, 2023			
	Gross Carrying Amounts	Accumulated Amortization	Net Carrying Amounts	Weighted-Average Remaining Amortization Period (Years)
Developed technologies	$ 5,078.0	$ (2,014.5)	$ 3,063.5	4.67
Customer contracts and related relationships	2,179.0	(853.2)	1,325.8	4.24
Trade names	66.0	(32.3)	33.7	3.11
Total acquired amortizable intangible assets	7,323.0	(2,900.0)	4,423.0	4.53
IPR&D	679.0	—	679.0	n/a
Total acquired intangible assets	$ 8,002.0	$ (2,900.0)	$ 5,102.0	

	January 29, 2022			
	Gross Carrying Amounts	Accumulated Amortization	Net Carrying Amounts	Weighted-Average Remaining Amortization Period (Years)
Developed technologies	$ 4,744.1	$ (1,333.7)	$ 3,410.4	5.17
Customer contracts and related relationships	2,184.0	(519.6)	1,664.4	5.21
Trade names	73.0	(26.2)	46.8	3.95
Order backlog	70.0	(67.2)	2.8	0.03
Total acquired amortizable intangible assets	7,071.1	(1,946.7)	5,124.4	5.17
IPR&D	1,029.0	—	1,029.0	n/a
Total acquired intangible assets	$ 8,100.1	$ (1,946.7)	$ 6,153.4	

The intangible assets are amortized on a straight-line basis over the estimated useful lives, except for certain Cavium customer contracts and related relationships, which are amortized using an accelerated method of amortization over the expected customer lives, which more closely align with the pattern of realization of economic benefits expected to be obtained. The IPR&D will be accounted for as an indefinite-lived intangible asset and will not be amortized until the underlying projects reach technological feasibility and commercial production at which point the IPR&D will be amortized over the estimated useful life. Useful lives for these IPR&D projects are expected to range between 5 to 10 years. In the event the IPR&D is abandoned, the related assets will be written off.

Amortization for acquired intangible assets was $1.1 billion, $979.4 million and $443.6 million during the years ended January 28, 2023, January 29, 2022 and January 30, 2021 respectively.

The following table presents the estimated future amortization expense of acquired amortizable intangible assets as of January 28, 2023 (in millions):

Fiscal Year	Amount
2024	$ 1,084.6
2025	1,031.7
2026	983.5
2027	831.9
2028	275.2
Thereafter	216.1
	$ 4,423.0

Note 9 — Fair Value Measurements

Fair value is an exit price representing the amount that would be received in the sale of an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability. As a basis for considering such assumptions, the accounting guidance establishes a three-tier value hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value:

Level 1 — Observable inputs that reflect quoted prices for identical assets or liabilities in active markets.

Level 2 — Other inputs that are directly or indirectly observable in the marketplace.

Level 3 — Unobservable inputs that are supported by little or no market activity.

The fair value hierarchy also requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

The Company's Level 1 assets include marketable equity investments that are classified as other non-current assets and which are valued primarily using quoted market prices. The Company's Level 2 assets include time deposits, as the market inputs used to value these instruments consist of market yield. In addition, the severance pay fund is classified within Level 2 of the fair value hierarchy as the valuation inputs are based on quoted prices and market observable data of similar instruments.

The tables below set forth, by level, the Company's assets and liabilities that are measured at fair value on a recurring basis. The tables do not include assets and liabilities that are measured at historical cost or any basis other than fair value (in millions):

	Fair Value Measurements at January 28, 2023			
	Level 1	Level 2	Level 3	Total
Items measured at fair value on a recurring basis:				
Assets				
Cash equivalents:				
Time deposits	$ —	$ 150.7	$ —	$ 150.7
Other non-current assets:				
Marketable equity investments	3.2	—	—	3.2
Severance pay fund	—	0.7	—	0.7
Total assets	$ 3.2	$ 151.4	$ —	$ 154.6

The carrying value of investments in non-marketable equity securities recorded to fair value on a non-recurring basis is adjusted for observable transactions for identical or similar investments of the same issuer or for impairment. These securities relate to equity investments in privately-held companies. These items measured at fair value on a non-recurring basis are classified as Level 3 in the fair value hierarchy because the value is estimated based on valuation methods using the observable transaction price at the transaction date and other unobservable inputs such as volatility, rights and obligations of the securities held. As of January 28, 2023 and January 29, 2022, non-marketable equity investments had a carrying value of $36.1 million and $30.7 million, respectively, and are included in other non-current assets in the Company's consolidated balance sheets.

	Fair Value Measurements at January 29, 2022			
	Level 1	Level 2	Level 3	Total
Items measured at fair value on a recurring basis:				
Assets				
Cash equivalents:				
Time deposits	$ —	$ 177.6	$ —	$ 177.6
Other non-current assets:				
Marketable equity investments	1.2	—	—	1.2
Severance pay fund	—	0.7	—	0.7
Total assets	$ 1.2	$ 178.3	$ —	$ 179.5

There were no transfers of assets between levels in either fiscal 2023 or 2022.

Fair Value of Debt

The Company classified the 2024 and 2026 Term Loans, the 2023 Notes, the 2026 Notes, 2028 Notes, and 2031 Notes as Level 2 in the fair value measurement hierarchy. The carrying value of the 2024 and 2026 Term Loans approximate their fair value as the 2024 and 2026 Term Loans are carried at a market observable interest rate that resets periodically. The estimated aggregate fair value of the unsecured senior notes was $2.7 billion at January 28, 2023 and $3.0 billion as at January 29, 2022, and were classified as Level 2 as there are quoted prices from less active markets for the notes. See "Note 4 – Debt" for additional information.

Note 10 — Restructuring

The following table provides a summary of restructuring related charges as presented in the consolidated statements of operations (in millions):

	Year Ended		
	January 28, 2023	January 29, 2022	January 30, 2021
Cost of goods sold	$ —	$ (0.8)	$ 9.6
Restructuring related charges	21.6	32.4	170.8
	$ 21.6	$ 31.6	$ 180.4

The following table presents details related to the restructuring related charges as presented in the consolidated statements of operations (in millions):

	Year Ended		
	January 28, 2023	January 29, 2022	January 30, 2021
Employee severance	$ 15.5	$ 24.1	$ 38.5
Impairment and write-off of assets			
Acquired intangible assets	—	—	50.3
Purchased IP licenses	—	—	36.0
Equipment and inventory	—	—	28.6
Other	6.1	7.5	27.0
	$ 21.6	$ 31.6	$ 180.4

Fiscal 2023. The Company recorded $21.6 million of restructuring related charges during its evaluation of its existing operations to increase operational efficiency, decrease costs and increase profitability. A restructuring plan was initiated during the first quarter of fiscal 2023 (the "Fiscal 2023 Plan") in order to realign the organization and enable further investment in key priority areas. Restructuring charges are mainly comprised of severance and other one-time termination benefits, facility closures where sites may be redundant within the same region or no longer suitably sized for the local employee base, and other costs. The charges include $15.5 million related to the Fiscal 2023 Plan primarily from severance costs. The Company expects to complete these restructuring actions by the end of fiscal 2024.

Fiscal 2022. The Company recorded $31.6 million of restructuring related charges during its evaluation of its existing operations to increase operational efficiency, decrease costs and increase profitability. A restructuring plan was initiated during the first quarter of fiscal 2022 (the "Fiscal 2022 Plan") in order to realign the organization and enable further investment in key priority areas as part of the integration of the acquisitions as described in "Note 7 – Business Combinations." Restructuring charges are mainly comprised of severance and other one-time termination benefits, facility closures where sites may be redundant within the same region or no longer suitably sized for the local employee base, and other costs. The charges include $24.1 million related to the Fiscal 2022 Plan primarily from severance costs.

Fiscal 2021. The Company recorded $180.4 million of restructuring and other related charges during its evaluation of its existing operations to increase operational efficiency, decrease costs and increase profitability. The charges include $119.0 million associated with the server processor product line described below and $61.4 million recorded in connection with prior acquisitions.

During the second quarter of fiscal 2021, the Company made changes to the scope of its server processor product line in response to changes in the associated market. The Company transitioned its product offering from standard server processors to the broad server market to focus only on customized server processors for a few targeted customers. This change in strategy required the Company to assess whether the carrying value of the associated assets would be recoverable. As a result of the assessment, the Company determined the carrying amount of certain impacted assets were not recoverable, which resulted in recognition of $119.0 million of restructuring related charges associated with the server processor product line during the second quarter of fiscal 2021. The charges included $50.3 million in impairment of acquired intangibles, $36.0 million in impairment of purchased IP licenses and $32.7 million in equipment and inventory impairment and other related restructuring charges.

The remaining restructuring charges of $61.4 million include approximately $36.9 million in severance and related costs and $24.5 million in other costs. The severance costs primarily relate to the employee separation costs in connection with the acquisitions. The other costs primarily relate to the remaining payments under lease obligations upon vacating certain worldwide office locations, and ongoing operating expenses of vacated facilities.

The following table sets forth a reconciliation of the beginning and ending restructuring liability balances by each major type of costs associated with the restructuring charges (in millions):

	July 2018 Restructuring		November 2019 Restructuring		July 2020 Restructuring		Fiscal 2022 Restructuring		Fiscal 2023 Restructuring		
	Employee Severance	Other	Employee Severance	Other	Employee Severance	Other	Employee Severance	Other	Employee Severance	Other	Total
Balance at January 30, 2021	$ 2.3	$ 2.2	$ 0.2	$ —	$ 3.1	$ 3.0	$ —	$ —	$ —	$ —	$ 10.8
Charges	(0.5)	8.5	—	—	(0.3)	(1.0)	24.1	0.8	—	—	31.6
Net Cash payments	(1.4)	(3.4)	—	—	(2.5)	(0.5)	(22.0)	(0.8)	—	—	(30.6)
Non-cash items	—	(6.2)	—	—	—	—	—	—	—	—	(6.2)
Balance at January 29, 2022	0.4	1.1	0.2	—	0.3	1.5	2.1	—	—	—	5.6
Charges	—	5.5	—	—	—	0.3	—	—	15.4	0.4	21.6
Net Cash payments	(0.4)	—	(0.2)	—	(0.3)	(1.4)	(2.1)	—	(11.8)	(0.4)	(16.6)
Non-cash items	—	(5.6)	—	—	—	—	—	—	—	—	(5.6)
Balance at January 28, 2023	—	1.0	—	—	—	0.4	—	—	3.6	—	5.0
Less: non-current portion	—	0.8	—	—	—	—	—	—	—	—	0.8
Current portion	$ —	$ 0.2	$ —	$ —	$ —	$ 0.4	$ —	$ —	$ 3.6	$ —	$ 4.2

The current and non-current portions of the restructuring liability at January 28, 2023 of $4.2 million and $0.8 million are included as a component of accrued liabilities and other non-current liabilities respectively in the accompanying consolidated balance sheets.

Note 11 — Stockholders' Equity

Preferred and Common Stock

Under the terms of the Company's Certificate of Incorporation, the Board of Directors may determine the rights, preferences, and terms of the Company's authorized but unissued shares of preferred stock.

As of January 28, 2023, the Company is authorized to issue 8.0 million shares of $0.002 par value preferred stock and 1.25 billion shares of $0.002 par value common stock. As of January 28, 2023 and January 29, 2022, no shares of preferred stock were outstanding.

Restricted Stock

In connection with an acquisition in fiscal 2023, the Company granted 0.4 million shares of unregistered restricted stock, which is subject to certain vesting conditions.

Restricted Stock Unit Withholdings

For the years ended January 28, 2023 and January 29, 2022, the Company withheld approximately 4.2 million and 4.8 million shares, or $227.6 million and $299.9 million, of common stock, respectively, in settlement of employee tax withholding obligations due upon the vesting of restricted stock.

Cash Dividends on Shares of Common Stock

During fiscal 2023, the Company declared and paid cash dividends of $0.24 per common stock, or $204.4 million, on the Company's outstanding common stock. During fiscal 2022, the Company declared and paid cash dividends of $0.24 per common stock, or $191.0 million, on the Company's outstanding common stock.

Any future dividends will be subject to the approval of the Company's Board of Directors.

Stock Repurchase Program

On November 17, 2016, the Company announced that its Board of Directors authorized a $1.0 billion stock repurchase plan with no fixed expiration. The stock repurchase program replaced in its entirety the prior $3.25 billion stock repurchase program. On October 16, 2018, the Company announced that its Board of Directors authorized a $700 million addition to the balance of its existing stock repurchase plan. The Company intends to effect stock repurchases in accordance with the conditions of Rule 10b-18 under the Exchange Act, but may also make repurchases in the open market outside of Rule 10b-18 or in privately negotiated transactions. The stock repurchase program is subject to market conditions, legal rules and regulations, and other factors, and does not obligate the Company to repurchase any dollar amount or number of shares of its common stock and the repurchase program may be extended, modified, suspended or discontinued at any time.

The Company resumed its stock repurchase program in the first quarter of fiscal 2023, which had been temporarily suspended in fiscal 2021 to preserve cash during the COVID-19 pandemic. The Company repurchased 2.3 million shares of its common stock for $115.0 million, including 0.9 million shares of its common stock repurchased for $50.0 million pursuant to a 10b5-1 trading plan during fiscal 2023. There were no stock repurchases during fiscal 2022. The repurchased shares of stock were retired immediately after the repurchases were completed. The Company records all repurchases, as well as investment purchases and sales, based on their trade date. As of January 28, 2023, a total of 310.4 million shares of stock have been repurchased to date under the Company's stock repurchase program for a total $4.4 billion in cash and there was $449.5 million remaining available for future stock repurchases.

A summary of the stock repurchase activity under the stock repurchase program, reported based on the trade date, is summarized as follows (in millions, except per-share amounts):

	Shares Repurchased	Weighted-Average Price per Share	Amount Repurchased
Cumulative balance at February 1, 2020	306.8	$ 13.83	$ 4,244.8
Repurchase of common stock under the stock repurchase program	1.3	$ 20.14	$ 25.2
Cumulative balance at January 30, 2021	308.1	$ 13.86	$ 4,270.0
Repurchase of common stock under the stock repurchase program	—	$ —	$ —
Cumulative balance at January 29, 2022	308.1	$ 13.86	$ 4,270.0
Repurchase of common stock under the stock repurchase program	2.3	$ 49.93	$ 115.0
Cumulative balance at January 28, 2023	310.4	$ 14.12	$ 4,385.0

Note 12 — Employee Benefit Plans

Employee Stock Compensation Plans

1995 Stock Option Plan

In April 1995, the Company adopted the 1995 Stock Option Plan (the "Option Plan"). The Option Plan, as amended from time to time, had 383.4 million common stock reserved for issuance thereunder as of January 28, 2023. Options granted under the Option Plan generally have a term of 10 years and generally must be issued at prices equal to the fair market value of the stock on the date of grant and such options may be subject to vesting. The Company can also grant other types of stock awards, which may be subject to vesting. Generally, the Company grants restricted stock unit ("RSU") awards. RSU awards are denominated in shares of stock, but may be settled in cash or shares upon vesting, as determined by the Company at the time of grant. Awards under the Option Plan generally vest over 3 to 4 years.

As of January 28, 2023, approximately 63.3 million shares remained available for future grants under the Option Plan.

Equity awards granted under the Option Plan include time-based RSUs as well as RSUs that vest based on the achievement of performance-based criteria i.e. Company financial goals ("Financial Performance RSU"), or based on achievement of market-based goals i.e. relative total shareholder return ("TSR RSUs"), or stock price goals ("Value Creation Awards" or "VCA RSUs"), or both market-based goals i.e. relative total shareholder return, and performance-based criteria i.e. non-GAAP EPS growth ("Enhanced TSR RSUs").

Prior to fiscal year 2020, the Company granted Financial Performance RSUs to each of its executive officers when they joined the Company, and as an annual refresh grant to all executive officers and other Vice Presidents in April of each fiscal year. The Financial Performance RSUs had a three-year service requirement. The number of shares to be earned could be 0% to 200% of target and was based on the achievement of certain financial operating metrics to be measured as of the end of the second fiscal year of the three-year vesting term. Shares granted under these Financial Performance RSUs are reported in the table presented below as "Performance-Based" based on 100% expected achievement.

In addition, the Company grants TSR RSUs to its executive officers that newly join the Company, and as an annual refresh grant to all executive officers and other Vice Presidents, usually in April of each fiscal year. Prior to fiscal year 2020, TSR RSUs were measured based on stock performance as compared to that of companies on the Philadelphia Semiconductor Sector over a performance period defined in the award. The number of shares to be earned can be 0% to 150% of target and is based on the achievement of performance objectives relating to relative total shareholder return of the Company's common stock. Beginning in fiscal 2020, the S&P 500 Index serves as the benchmark index. The TSR RSUs have a three year service vesting requirement. The number of shares to be earned can be 0% to 200% of target and is based on the achievement of performance objectives relating to relative total shareholder return of the Company's common stock. These TSR RSUs are reported in the table presented below as "Market-Based" awards based on 100% expected achievement.

In fiscal 2020, the Company issued Value Creation Awards that are based on achievement of the Company's stock price target over a specified performance period, also referred to as VCA RSUs. The VCA RSU will be earned if the Company's average closing trading stock price over 100-calendar days equals or exceeds a certain target price. 100% of the award will vest on the 1-year anniversary of the achievement. The grant will be forfeited if the market-based condition is not achieved. These VCA RSUs are reported in the table presented below as "Market-Based" awards based on 100% expected achievement. During fiscal year 2021, the performance metrics were achieved. The awards vested on the 1-year anniversary of the achievement in November 2021.

Beginning in fiscal 2023, the Company granted Enhanced TSR RSUs to its executive officers and certain other employees. The number of shares to be earned can be 0% to 250% of target and is based on the achievement of performance objectives relating to relative total shareholder return of the Company's common stock as compared to that of companies on the S&P 500 Index and also based on the Company's non-GAAP EPS growth relative to a group of peer companies. The Enhanced TSR RSUs have a three year service vesting requirement in addition to the performance based requirements. These Enhanced TSR RSUs are reported in the table presented below as "Market-Based & Performance-Based" awards based on 100% expected achievement.

In December 2017, the Company's Executive Compensation Committee approved a deferred stock program, whereby executives of the Company have the option, beginning in 2018, to defer the settlement of time-based and performance-based restricted stock units granted under the Option Plan to a future date. In June 2021, the Company extended the stock deferral program to members of the Board of Directors. A deferral election is irrevocable after the annual submission deadline. The shares of common stock underlying the deferred grants will be distributed at the earliest of the employee's specified future settlement date, not to be earlier than 2023, or upon separation from service, a change in control, or death or disability.

Cavium Acquisition

Following the Cavium acquisition and in accordance with the Cavium merger agreement, certain outstanding options to purchase shares of Cavium common stock and certain restricted stock units with respect to Cavium common stock, each granted under Cavium 2016 Equity Incentive Plan ("Cavium 2016 EIP"), Cavium 2007 Equity Incentive Plan ("Cavium 2007 EIP") and QLogic 2005 Performance Incentive Plan, as assumed by Cavium effective August 16, 2016 ("QLogic 2005 Plan"), (and collectively, with the Cavium 2016 EIP and the Cavium 2007 EIP, the "Cavium Plans"), were assumed by the Company and converted into options to purchase common stock of the Company and restricted stock units with respect to common stock of the Company, respectively. Marvell Technology Group Ltd. filed a registration statement on July 6, 2018 to register 15,824,555 common stock of the Company, issuable under the Cavium Plans, comprised of 2,535,940 common stock issuable pursuant to outstanding but unexercised options under the Cavium Plans and 13,288,615 common stock issuable pursuant to outstanding unvested restricted stock units under the Cavium Plans. On April 20, 2021, Marvell Technology, Inc. filed a new registration statement to cover any shares remaining under the plan.

Cavium 2016 EIP

The Cavium 2016 EIP was adopted by Cavium on June 15, 2016 and was intended as the successor to and continuation of Cavium 2007 EIP. The Cavium 2016 EIP provided for the grant of incentive stock options, non-statutory stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance stock awards, performance cash awards and other stock awards, which may be granted to employees, directors and consultants. Awards under the Cavium 2016 EIP generally vest over four years and expire seven to ten years from the date of grant. Following the effective date, no additional awards were granted under the Cavium 2007 EIP.

Cavium 2007 EIP

Cavium adopted the Cavium 2007 EIP in May 2007 upon completion of its initial public offering. The Cavium 2007 EIP provided for the grant of incentive stock options, non-statutory stock options, restricted stock awards, restricted stock unit awards, stock appreciation rights, performance stock awards, and other forms of equity compensation and performance cash awards, all of which may be granted to employees (including officers), directors, and consultants or affiliates. Awards granted under the Cavium 2007 EIP vest at the rate specified by the plan administrator, for stock options, typically with 1/8th of the shares vesting six months after the date of grant and 1/48th of the shares vesting monthly thereafter over the next three and one half years and for restricted stock unit awards typically with quarterly vesting over four years. Awards expire seven to ten years from the date of grant.

QLogic 2005 Plan

The QLogic 2005 Plan was assumed and registered by Cavium upon its completion of acquisition of QLogic Corporation on August 16, 2016. The QLogic 2005 Plan provided for the issuance of restricted stock unit awards, incentive and non-qualified stock options, and other stock-based incentive awards. Restricted stock unit awards granted pursuant to the QLogic 2005 Plan to employees subject to a service condition generally vest over four years from the date of grant. Stock options granted pursuant to the QLogic 2005 Plan to employees have ten-year terms and generally vest over four years from the date of grant.

Aquantia Plans Assumed

In accordance with the Aquantia merger agreement, certain outstanding options to purchase shares of Aquantia common stock and certain restricted stock units with respect to Aquantia common stock, each granted under Aquantia 2017 Equity Incentive Plan ("Aquantia 2017 EIP"), Aquantia 2015 Equity Incentive Plan ("Aquantia 2015 EIP") and Aquantia 2004 Equity Incentive Plan ("Aquantia 2004 EIP"), the "Aquantia Plans" were assumed by the Company and converted into options to purchase common stock of the Company and restricted stock units with respect to common stock of the Company, respectively. Marvell Technology Group Ltd. filed a registration statement on September 19, 2019 to register 2,128,823 common stock of the Company, issuable under the Aquantia plans, comprised of 805,965 common stock issuable pursuant to outstanding but unexercised options under the Aquantia Plans and 1,322,858 common stock issuable pursuant to outstanding unvested restricted stock units under the Aquantia Plans. On April 20, 2021, Marvell Technology, Inc. filed a new registration statement to cover any shares remaining under the plan.

Inphi Acquisition-related Equity Awards and the Inphi 2010 EIP

Following the Inphi acquisition and in accordance with the Inphi merger agreement, certain outstanding options to purchase shares of Inphi common stock and certain restricted stock units with respect to Inphi common stock, each granted under the Inphi Amended and Restated 2010 Stock Incentive Plan ("Inphi 2010 EIP"), were assumed by the Company and converted into options to purchase common stock of the Company and restricted stock units with respect to common stock of the Company, respectively. The Company filed a registration statement on April 20, 2021 to register 10,301,589 common stock of the Company, issuable under the Inphi 2010 EIP, comprised of 127,249 common stock issuable pursuant to outstanding but unexercised options under the Inphi 2010 EIP, 10,040,693 common stock issuable pursuant to outstanding unvested restricted stock units under the Inphi 2010 EIP, and 133,647 common stock issuable pursuant to outstanding unvested performance stock units under the Inphi 2010 EIP.

The Inphi 2010 EIP was adopted by Inphi on June 7, 2010. The 2010 Plan provided for the grants of restricted stock, stock appreciation rights and stock unit awards to employees, non-employee directors, advisors and consultants. Awards under the Inphi 2010 EIP generally vest over 3 to 4 years.

The awards under the Inphi 2010 EIP assumed by the Company in the Inphi acquisition were measured at the acquisition date based on the estimated fair value of $589.7 million. A portion of that fair value, $161.7 million, which represented the pre-acquisition service provided by employees to Inphi, was included in the total consideration transferred as part of the acquisition. As of the acquisition date, the remaining portion of the fair value of those awards was $428.0 million, representing post-acquisition stock-based compensation expense that will be recognized as these employees provide service over the remaining vesting periods.

Innovium Acquisition-related Equity Awards and the Innovium 2015 EIP

Following the Innovium acquisition and in accordance with the Innovium merger agreement, certain outstanding options to purchase shares of Innovium common stock and certain restricted stock units with respect to Innovium common stock, each granted under the Innovium Amended and Restated 2015 Stock Incentive Plan ("Innovium 2015 EIP"), were assumed by the Company and converted into options to purchase common stock of the Company and restricted stock units with respect to common stock of the Company, respectively. The Company filed a registration statement on October 5, 2021 to register 1,232,805 common stock of the Company, issuable under the Innovium 2015 EIP, comprised of 421,648 common stock issuable pursuant to outstanding but unexercised options under the Innovium 2015 EIP and 811,157 common stock issuable pursuant to outstanding unvested restricted stock units under the Innovium 2015 EIP.

The Innovium 2015 EIP was adopted by Innovium on January 2015 and amended and restated in September 2020. The Innovium 2015 EIP provided for the grants of restricted stock, stock appreciation rights and stock unit awards to employees, non-employee directors, advisors and consultants. Awards under the Innovium 2015 EIP generally vest over 3 to 4 years.

The awards under the Innovium 2015 EIP assumed by the Company in the Innovium acquisition were measured at the acquisition date based on the estimated fair value of $80.9 million. A portion of that fair value, $39.8 million, which represented the pre-acquisition service provided by employees to Innovium, was included in the total consideration transferred as part of the acquisition. As of the acquisition date, the remaining portion of the fair value of those awards was $41.1 million, representing post-acquisition stock-based compensation expense that will be recognized as these employees provide service over the remaining vesting periods.

Outside Director Equity Compensation Policy

In September 2016, the Company's Board of Directors approved the termination of the 2007 Directors' Stock Incentive Plan, that was initially adopted in October 2007, and it approved a new Outside Director Equity Compensation Policy that governs the grant of equity awards to non-employee directors under the Option Plan. At the annual meeting of stockholders held in June 2015, the stockholders approved an amendment to the Option Plan to enable a full range of awards to be granted to non-employee directors. Under the current Outside Director Compensation Policy, each outside director, upon appointment to fill a vacancy on the board or in connection with election at an annual meeting of stockholders, will be granted an RSU award under the Option Plan for a number of shares with an aggregate fair market value equal to $235,000 on the grant date. In no event shall an outside director be awarded an annual RSU award for more than 20,000 shares. The RSU award vests 100% on the earlier of the date of the next annual meeting of stockholders or the one-year anniversary of the date of grant.

Employee Stock Purchase Plan

Under the 2000 Employee Stock Purchase Plan, as amended and restated on April 2, 2021 (the "ESPP"), participants purchase the Company's stock using payroll deductions, which may not exceed 15% of their total cash compensation. Pursuant to the terms of the current ESPP, the "look-back" period for the stock purchase price is 24 months. Offering and purchase periods begin on December 8 and June 8 of each year. Participants enrolled in a 24-month offering period will continue in that offering period until the earlier of the end of the offering period or the reset of the offering period. A reset occurs if the fair market value of the Company's common stock on any purchase date is less than it was on the first day of the offering period. Participants in a 24-month offering period will be granted the right to purchase common stock at a price per share that is 85% of the lesser of the fair market value of the shares at (i) the participant's entry date into the two-year offering period or (ii) the end of each six-month purchase period within the offering period.

Under the ESPP, a total of 2.3 million shares were issued in fiscal 2023 at a weighted-average price of $37.52 per share, a total of 2.4 million shares were issued in fiscal 2022 at a weighted-average price of $31.96 per share, and a total of 5.0 million shares were issued in fiscal 2021 at a weighted-average price of $14.36 per share. As of January 28, 2023, there was $104.1 million of unamortized compensation cost related to the ESPP.

As of January 28, 2023, approximately 43.9 million shares remained available for future issuance under the ESPP.

Summary of Stock-Based Compensation Expense

The following table summarizes stock-based compensation expense (in millions):

	Year Ended		
	January 28, 2023	January 29, 2022	January 30, 2021
Cost of goods sold	$ 43.3	$ 31.1	$ 16.3
Research and development	372.4	273.2	150.9
Selling, general and administrative	136.7	173.2	74.4
Total stock-based compensation	$ 552.4	$ 477.5	$ 241.6

The income tax benefit recognized from stock-based compensation expense was $89.9 million and $71.8 million for the year ended January 28, 2023 and January 29, 2022, respectively. There were no income tax benefits recognized from stock-based compensation expense in the year ended January 30, 2021. Stock-based compensation capitalized in inventory was $20.3 million at January 28, 2023, $18.4 million at January 29, 2022 and $3.8 million at January 30, 2021.

The income tax benefit related to equity awards vested or exercised was $21.7 million and $63.0 million during the year ended January 28, 2023 and January 29, 2022, respectively. There were no income tax benefits related to equity awards vested or exercised in the year ended January 30, 2021.

Restricted Stock and Stock Unit Awards

A summary of restricted stock and stock unit activity, which includes time-based, performance-based, market-based, or market-based & performance-based restricted stock units, is as follows (in millions, except per-share amounts):

	Time-Based		Performance-Based		Market-Based		Market-Based & Performance-Based		Total	
	Number of Shares	Weighted-Average Grant Date Fair Value	Number of Shares	Weighted-Average Grant Date Fair Value	Number of Shares	Weighted-Average Grant Date Fair Value	Number of Shares	Weighted-Average Grant Date Fair Value	Number of Shares	Weighted-Average Grant Date Fair Value
Balance at February 1, 2020	15.3	$ 21.34	0.5	$ 17.71	3.9	$ 15.83	—	$ —	19.7	$ 20.15
Granted	7.4	$ 26.18	0.2 [1]	$ 14.13	1.0 [2]	$ 33.35	—	$ —	8.6	$ 26.80
Vested	(9.3)	$ 21.28	(0.4)	$ 14.11	(0.3)	$ 14.60	—	$ —	(10.0)	$ 20.79
Canceled/Forfeited	(2.1)	$ 22.89	—	$ 21.32	(0.3)	$ 18.86	—	$ —	(2.4)	$ 22.39
Balance at January 30, 2021	11.3	$ 24.27	0.3	$ 21.06	4.3	$ 19.77	—	$ —	15.9	$ 23.00
Assumed upon acquisition [3]	10.9	$ 46.40	0.1	$ 45.67	—	$ —	—	$ —	11.0	$ 46.39
Granted	6.7	$ 55.47	0.2 [1]	$ 65.36	0.7 [2]	$ 51.85	—	$ —	7.6	$ 55.31
Vested	(9.7)	$ 32.34	(0.1)	$ 45.67	(2.9)	$ 12.50	—	$ —	(12.7)	$ 27.95
Canceled/Forfeited	(2.0)	$ 36.61	(0.3)	$ 21.06	(0.1)	$ 35.19	—	$ —	(2.4)	$ 34.84
Balance at January 29, 2022	17.2	$ 44.42	0.2	$ 65.36	2.0	$ 41.18	—	$ —	19.4	$ 44.23
Granted	11.5	$ 55.73	—	$ —	0.7 [2]	$ 42.11	1.5	$ 47.03	13.8	$ 54.06
Vested	(11.6)	$ 44.98	—	$ —	(1.1)	$ 34.62	—	$ —	(12.7)	$ 44.07
Canceled/Forfeited	(1.6)	$ 50.96	—	$ —	(0.1)	$ 43.38	(0.1)	$ 46.66	(1.9)	$ 50.10
Balance at January 28, 2023	15.5	$ 51.71	0.2	$ 65.36	1.5	$ 46.20	1.4	$ 47.07	18.6	$ 51.02

[1] Amount represents the number of restricted stock unit goal shares.

[2] Amount represents the target number of restricted stock units at grant date and restricted stock unit goal shares.

[3] See “Note 7 – Business Combinations” for additional information.

The aggregate intrinsic value of restricted stock units expected to vest as of January 28, 2023 was $824.0 million. The number of restricted stock units that are expected to vest is 18.6 million shares. The Company’s closing stock price of $44.25 as reported on the Nasdaq Global Select Market as of January 28, 2023 was used to calculate the aggregate intrinsic value for the restricted stock units.

As of January 28, 2023, unamortized compensation expense related to restricted stock units was $699.2 million. The unamortized compensation expense for restricted stock units will be amortized on a straight-line basis and is expected to be recognized over a weighted-average period of 1.95 years.

Stock Option Awards

Option Plan and Stock Award Activity

Stock option activity under the Company's Option Plan and other stock incentive plans mentioned above (excluding the ESPP) is included in the following table (in millions, except for per share amounts):

	Number of Shares	Weighted-Average Exercise Price
Balance at February 1, 2020	4.2	$ 12.44
Granted	—	$ —
Exercised	(1.3)	$ 11.63
Canceled/Forfeited	—	$ 12.88
Balance at January 30, 2021	2.9	$ 12.81
Assumed upon acquisition*	0.5	$ 6.97
Granted	—	$ —
Exercised	(0.9)	$ 10.43
Canceled/Forfeited	(0.1)	$ 9.80
Balance at January 29, 2022	2.4	$ 12.51
Granted	—	$ —
Exercised	(0.5)	$ 11.59
Canceled/Forfeited	—	$ —
Balance at Balance at January 28, 2023	1.9	$ 12.80
Balance at Vested or expected to vest at January 28, 2023	1.9	

* See "Note 7 – Business Combinations" for more information.

For stock options vested and expected to vest at January 28, 2023, the aggregate intrinsic value was $60.2 million. For stock options exercisable at January 28, 2023, the aggregate intrinsic value was $60.2 million. The aggregate intrinsic value of stock options exercised during fiscal 2023, 2022 and 2020 was $21.5 million, $43.3 million and $25.1 million respectively. The Company's closing stock price of $44.25 as reported on the Nasdaq Global Select Market as of January 28, 2023 was used to calculate the aggregate intrinsic value for all in-the-money options.

Outstanding options and exercisable options information by range of exercise prices as of January 28, 2023 was as follows:

Range of Exercise Prices		Outstanding Options			Exercisable Options	
		Number of Shares (in millions)	Weighted-Average Remaining Contractual Term (in years)	Weighted-Average Exercise Price	Number of Shares (in millions)	Weighted-Average Exercise Price
$ 2.39	$ 9.80	0.2	3.71	$ 7.62	0.2	$ 7.62
$ 10.76	$ 10.76	0.6	0.25	$ 10.76	0.6	$ 10.76
$ 10.89	$ 13.96	0.2	1.88	$ 12.57	0.2	$ 12.57
$ 14.35	$ 14.35	0.4	2.40	$ 14.35	0.4	$ 14.35
$ 14.45	$ 22.27	0.5	2.19	$ 16.15	0.5	$ 16.15
Total		1.9	1.76	$ 12.79	1.9	$ 12.79

As of January 28, 2023, the unamortized compensation expense for stock options was less than $0.1 million. The unamortized compensation expense for options will be amortized on a straight-line basis and is expected to be recognized over a weighted-average period of 0.10 years.

Valuation of Employee Stock-Based Awards

The expected volatility for awards granted during fiscal 2023, 2022 and 2021 was based on historical stock price volatility.

The expected dividend yield is calculated by dividing the current annualized dividend by the closing stock price on the date of grant of the option.

There were no options granted in fiscal 2023, 2022 and 2021 except for the ones the Company assumed from the Inphi and Innovium acquisitions as described above.

The following weighted-average assumptions were used for each respective period to calculate the fair value of common stock to be issued under the ESPP on the date of grant using the Black-Scholes option pricing model:

	Year Ended		
	January 28, 2023	January 29, 2022	January 30, 2021
Employee Stock Purchase Plan:			
Estimated fair value	$ 17.42	$ 24.14	$ 15.12
Expected volatility	58 %	46 %	48 %
Expected term (in years)	1.3	1.3	1.2
Risk-free interest rate	4.1 %	0.2 %	0.1 %
Expected dividend yield	0.6 %	0.4 %	0.6 %

The following weighted-average assumptions were used for each respective period to calculate the fair value of common stock to be issued under TSR RSUs and Enhanced TSR RSUs performance awards on the date of grant using the Monte Carlo pricing model:

	Year Ended		
	January 28, 2023	January 29, 2022	January 30, 2021
TSR RSUs and Enhanced TSR RSUs:			
Expected term (in years)	3.0	3.0	3.0
Expected volatility	51 %	44 %	40 %
Average correlation coefficient of peer companies	0.7	0.6	0.7
Risk-free interest rate	3.3 %	0.3 %	0.2 %
Expected dividend yield	0.5 %	0.5 %	0.9 %

The correlation coefficients are calculated based upon the price data used to calculate the historical volatilities and is used to model the way in which each entity tends to move in relation to its peers.

Employee 401(k) Plans

The Company sponsors a 401(k) savings and investment plan that allows eligible U.S. employees to participate by making pre-tax, Roth and after-tax contributions to the 401(k) plan ranging from 1% to 75% of eligible earnings subject to a required annual limit. The Company currently matches 100% of 5% of eligible salary to a $5,000 maximum contribution effective from January 1, 2022. The Company made matching contributions to employees of $15.9 million in fiscal 2023, $14.5 million in fiscal 2022 and $11.1 million in fiscal 2021. As of January 28, 2023, the 401(k) plan offers a variety of investment alternatives, representing different asset classes. Employees may not invest in the Company's common stock through the 401(k) plan.

The Company also has voluntary defined contribution plans in various non-U.S. locations. In connection with these plans, the Company made contributions on behalf of employees totaling $11.3 million, $11.0 million and $11.3 million during fiscal 2023, 2022 and 2021, respectively.

Note 13 — Income Taxes

The U.S. and non-U.S. components of income (loss) from continuing operations before income taxes consist of the following (in millions):

	Year Ended		
	January 28, 2023	January 29, 2022	January 30, 2021
U.S. operations	$ (452.7)	$ (621.2)	$ (18.2)
Non-U.S. operations	537.8	137.7	(304.0)
	$ 85.1	$ (483.5)	$ (322.2)

The provision (benefit) for income taxes consists of the following (in millions):

	Year Ended		
	January 28, 2023	January 29, 2022	January 30, 2021
Current income tax provision (benefit):			
Federal	$ 57.8	$ —	$ 3.2
State	3.3	0.7	3.4
Foreign	137.1	30.7	(12.0)
Total current income tax provision (benefit)	198.2	31.4	(5.4)
Deferred income tax provision (benefit):			
Federal	(118.8)	(83.4)	(14.4)
State	(17.5)	(9.2)	0.9
Foreign	186.7	(1.3)	(26.0)
Total deferred income tax provision (benefit)	50.4	(93.9)	(39.5)
Total provision (benefit) for income taxes	$ 248.6	$ (62.5)	$ (44.9)

During fiscal 2022 a new Delaware corporation became the parent of the Company. Prior to that, the Company consisted of a Bermuda parent holding company with various foreign and U.S. subsidiaries. The applicable statutory rate in the U.S. is 21% for the Company for fiscal 2023 and was 21% for the Company for fiscal 2022. The applicable statutory rate in Bermuda was zero for the Company for fiscal 2021. For purposes of the reconciliation between the provision (benefit) for income taxes at the statutory rate and the effective tax rate, a U.S. statutory tax rate of 21% for fiscal years 2023, 2022 and 2021 is applied as follows:

	Year Ended		
	January 28, 2023	January 29, 2022	January 30, 2021
Provision at U.S. statutory rate	$ 17.9	$ (101.5)	$ (67.7)
State taxes, net of federal benefit	(13.8)	(8.1)	0.3
Difference in U.S. and non-U.S. tax rates	(16.0)	1.7	38.1
Foreign income inclusion in U.S.	194.4	54.1	0.9
Non-deductible compensation	15.1	47.9	4.1
Stock-based compensation	(2.0)	(70.9)	—
Singapore incentive rate extension	213.6	—	—
Federal research and development credits	(96.1)	(60.7)	(49.3)
Uncertain tax positions	(16.5)	(1.5)	(20.0)
Change in federal valuation allowance	(73.8)	62.7	49.3
Transaction costs	0.4	5.7	—
Federal tax attribute expiration	5.8	—	—
Israel income tax recapture	18.3	—	—
Other	1.3	8.1	(0.6)
Income tax provision (benefit)	$ 248.6	$ (62.5)	$ (44.9)

The income tax expense for fiscal 2023 differs from the U.S. federal statutory rate of 21% primarily due to the remeasurement of Singapore deferred taxes upon extension of the Company's tax incentive in Singapore, which is discussed in more detail below, tax benefits attributable to a net reduction of unrecognized tax benefits as a result of settled income tax audits in combination with the lapsing of statute of limitations, offset by foreign income inclusions in the U.S., and a tax expense related to the recapture of Israel corporate income taxes. The income tax expense for fiscal 2023 is also impacted by a substantial portion of the Company's earnings, or in some cases, losses being taxed or benefited at rates lower than the U.S. statutory rate, stock-based compensation tax benefits, and disallowed deductions related to non-deductible compensation.

The 2017 Tax Cuts and Jobs Act ("TCJA) changed the manner in which multinational companies are taxed on foreign operations. The 2017 TCJA also included a provision requiring the capitalization of R&D expenditures, which became effective as of the Company's fiscal 2023. The effect of these provisions, in tandem, results in a significant increase in foreign income inclusion in the U.S., which is predominantly offset by increased R&D credit utilization in the U.S., resulting in a release of valuation allowances associated with the R&D credits.

The income tax benefit for fiscal 2022 differs from the U.S. federal statutory rate of 21% primarily due to tax benefits of stock-based compensation, offset by foreign income inclusions in the U.S. and non-deductible compensation. The tax benefits from stock-based compensation and increased foreign income inclusions in fiscal 2022 were primarily the result of the parent company being a US-based company during fiscal 2022, as opposed to a Bermuda-based company in prior years. The income tax benefit for fiscal 2021 differed from the U.S. federal statutory rate of 21% primarily due to pretax losses of subsidiaries with income tax rates that differ from the U.S. statutory tax rate, combined with a net reduction of unrecognized tax benefits inclusive of interest and penalties, offset by tax expense attributable to non-deductible compensation.

Deferred tax assets consist of the following (in millions):

	January 28, 2023	January 29, 2022
Deferred tax assets:		
Net operating losses	$ 124.9	$ 281.4
Federal and California income tax credits	917.4	935.7
Intangible assets	684.7	639.4
Reserves and accruals	40.6	52.4
Stock-based compensation	24.6	35.1
Lease liabilities	49.7	37.7
Capitalized R&D	253.8	—
Gross deferred tax assets	2,095.7	1,981.7
Valuation allowance	(961.7)	(1,003.4)
Total deferred tax assets	1,134.0	978.3
Deferred tax liabilities:		
Intangible assets	(648.5)	(455.9)
Fixed assets	(13.6)	(8.1)
Unremitted earnings of non-U.S. subsidiaries	(24.7)	(21.5)
Right of use assets	(45.5)	(33.8)
Total deferred tax liabilities	(732.3)	(519.3)
Net deferred tax assets (liabilities)	$ 401.7	$ 459.0

The deferred tax assets and liabilities based on tax jurisdictions are presented on our consolidated balance sheet as follows:

	January 28, 2023	January 29, 2022
Non-current deferred tax assets	$ 465.9	$ 493.5
Non-current deferred tax liabilities	(64.2)	(34.5)
Net deferred tax assets (liabilities)	$ 401.7	$ 459.0

The ultimate realization of deferred tax assets depends upon the generation of future taxable income during the periods in which those assets become deductible or creditable. The Company evaluates the recoverability of its deferred tax assets, weighing all positive and negative evidence, and provides or maintains a valuation allowance for these assets if it is more likely than not that some, or all, of the deferred tax assets will not be realized. If negative evidence exists, sufficient positive evidence is necessary to support a conclusion that a valuation allowance is not needed. The Company considers all available evidence such as its earnings history including the existence of cumulative income or losses, reversals of taxable temporary differences, projected future taxable income, and tax planning strategies. In jurisdictions where the Company has cumulative losses, the Company has provided for a full valuation allowance on deferred tax assets. In the U.S., and in certain foreign jurisdictions, the Company has deferred tax assets for which partial valuation allowances have been established. After weighing all available evidence, particularly the earnings history and forecasts of future taxable income in each respective jurisdiction, as well as its history of tax credits expiring unused, the Company determined that negative evidence outweighed positive evidence with respect to the ability to realize federal, state, and foreign research and development and other tax credits, as well as certain other foreign deferred tax assets. The valuation allowance decreased by $41.7 million from fiscal 2022, primarily as a result of R&D credit utilization in the U.S. The Company maintains a valuation allowance on its U.S. R&D credits based on the factors listed above as well as forecasted R&D credit utilization and expected R&D credit generation in future years. In future periods, it is possible that significant positive or negative evidence could arise that results in a change in the Company's judgment with respect to the need for a valuation allowance, which could result in a tax benefit, or adversely affect the Company's income tax provision, in the period of such change in judgment.

As of January 28, 2023, the Company had net operating loss carryforwards available to offset future taxable income of approximately $846.8 million, $840.5 million, $212.5 million and $56.3 million for U.S. federal, state of California, other U.S. states, and foreign purposes, respectively. If not utilized, the federal loss carryforwards begin to expire in fiscal year 2032, and the California carryforwards begin to expire in fiscal year 2027. The majority of the Company's foreign losses carry forward indefinitely. The Company also had federal research and other tax credit carryforwards of approximately $470.6 million which begin to expire in fiscal 2024. As of January 28, 2023, the Company also had California research tax credit carryforwards of approximately $652.5 million, which can be carried forward indefinitely. In addition, the Company has research and other tax credit carryforwards of approximately $33.2 million in other U.S. states which begin to expire in fiscal 2024. The Company also has research and other tax credit carryforwards of approximately $12.6 million in foreign jurisdictions which begin to expire in fiscal 2024. The Company's net operating loss and tax credit carryforwards may be subject to audit and adjusted for changes or modification in tax laws, other authoritative interpretations, or other facts and circumstances.

Utilization of the Company's U.S. federal and state net operating loss and credit carryforwards may be subject to annual limitations due to ownership change provisions of the Internal Revenue Code of 1986, as amended, and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization. Future changes in the Company's stock ownership, some of which are generally outside of the Company's control, could result in an ownership change under Section 382 and Section 383 and result in a limitation on U.S. tax attributes. The Company has determined that no significant limitation would be placed on the utilization of its net operating loss and tax credit carry-forwards due to prior ownership changes.

The following table reflects changes in the unrecognized tax benefits (in millions):

	Year Ended		
	January 28, 2023	January 29, 2022	January 30, 2021
Unrecognized tax benefits as of the beginning of the period	$ 334.0	$ 242.2	$ 166.9
Increases related to acquired tax positions	—	94.6	—
Increases related to prior year tax positions	2.0	1.5	77.9
Decreases related to prior year tax positions	(16.4)	—	(1.1)
Increases related to current year tax positions	6.8	7.7	5.6
Settlements	—	(5.9)	(0.5)
Lapse in the statute of limitations	(8.6)	(5.6)	(8.2)
Foreign exchange (gain) loss	(0.3)	(0.5)	1.6
Gross amounts of unrecognized tax benefits as of the end of the period	$ 317.5	$ 334.0	$ 242.2

Included in the balances as of January 28, 2023 is $216.7 million of unrecognized tax benefits that would affect the effective income tax rate if recognized. During the year ended January 28, 2023, the Company decreased its unrecognized tax benefits by $16.5 million primarily as a result of settled income tax audits. Of the gross unrecognized tax benefits in the table above, $297.2 million, $296.7 million, and $221.7 million are offset against deferred tax assets in the consolidated balance sheets as of January 28, 2023, January 29, 2022 and January 30, 2021, respectively.

The amounts in the table above do not include related interest and penalties. The amount of interest and penalties accrued was approximately $3.2 million, $3.9 million, and $4.0 million as of January 28, 2023, January 29, 2022, and January 30, 2021, respectively. The Company's policy is to recognize interest and penalties as a component of income tax expense. The consolidated statements of operations for fiscal 2023, 2022, and 2021 included accruals of $1.6 million, $0.6 million, and $1.0 million, respectively, of interest and penalties related to unrecognized tax benefits.

The Company's major tax jurisdictions are the United States, the states of California and Massachusetts, Singapore, China, India, Germany, and Israel. The Company is subject to income tax audits by the respective tax authorities in all of the jurisdictions in which it operates. The examination of tax liabilities in each of these jurisdictions requires the interpretation and application of complex and sometimes uncertain tax laws and regulations. As of January 28, 2023, the Company is subject to examination in material jurisdictions including China, India, Israel, Singapore, Germany, and the United States for fiscal years 2003 through 2023.

During the next 12 months, it is reasonably possible that the amount of unrecognized tax benefits could increase or decrease significantly due to changes in tax law in various jurisdictions, new tax audits and changes in the U.S. dollar as compared to foreign currencies within the next 12 months. Excluding these factors, uncertain tax positions may decrease by $1.9 million from the lapse of the statutes of limitations in various jurisdictions during the next 12 months.

The Singapore Economic Development Board ("EDB") initially granted a 10-year Pioneer Status in July 1999 to the Company's Singapore subsidiary. After the conclusion of the initial Pioneer status, the EDB granted an incentive known as the Development and Expansion Incentive ("DEI") and extended the Pioneer status over multiple years. During the first quarter of fiscal 2023, the EDB agreed to extend the Company's DEI by five years, through June 30, 2029. As a result of the DEI extension, the Company's Singapore deferred taxes were remeasured based on their expected future reversals at a lower incentive tax rate, resulting in a $213.6 million reduction to our net deferred tax assets in Singapore and a corresponding increase in our deferred income tax expense in that period. To retain the current DEI tax benefits through June 2029 in Singapore, the Company must meet certain operating conditions, headcount and investment requirements, as well as maintain certain activities in Singapore. In fiscal 2023, no Singapore tax incentive net tax benefits were recorded. In fiscal 2022, tax savings associated with this tax incentive were approximately $11.8 million, which if paid would impact the Company's earnings per share by $0.01 per share. There was no such benefit in fiscal 2021.

Marvell Israel (M.I.S.L) Ltd., is entitled to certain tax benefits under the Israeli Encouragement of Investments Law ("Encouragement Law") Special Technology Enterprise Regime, which includes reduced corporate income tax rates, subject to various operating requirements and other conditions. In fiscal 2023, tax savings associated with this program were approximately $11.2 million, which if paid, would impact the Company's earnings per share by $0.01 per share in fiscal 2023. There was no tax benefit in fiscal 2022, and 2021.

The Company's principal source of liquidity as of January 28, 2023 consisted of approximately $911.0 million of cash and cash equivalents, of which approximately $642.0 million was held by subsidiaries outside of the United States. The Company has not recognized a deferred tax liability on $433.9 million of assets held by subsidiaries as such amounts are deemed to be indefinitely reinvested. The Company manages its worldwide cash requirements by, among other things, reviewing available funds held by its foreign subsidiaries and the cost effectiveness by which those funds can be accessed in the United States.

Note 14 — Net Loss Per Share

The Company reports both basic net loss per share, which is based on the weighted-average number of common stock outstanding during the period, and diluted net loss per share, which is based on the weighted-average number of common stock outstanding and potentially dilutive shares outstanding during the period.

The computations of basic and diluted net loss per share are presented in the following table (in millions, except per share amounts):

	Year Ended		
	January 28, 2023	January 29, 2022	January 30, 2021
Numerator:			
Net loss	$ (163.5)	$ (421.0)	$ (277.3)
Denominator:			
Weighted-average shares — basic	851.4	796.9	668.8
Effect of dilutive securities:			
Stock-based awards	—	—	—
Weighted-average shares — diluted	851.4	796.9	668.8
Net loss per share:			
Basic	$ (0.19)	$ (0.53)	$ (0.41)
Diluted	$ (0.19)	$ (0.53)	$ (0.41)

Potential dilutive securities include dilutive common stock from stock-based awards attributable to the assumed exercise of stock options, restricted stock units and employee stock purchase plan shares using the treasury stock method. Potential dilutive securities include dilutive common stock from stock-based awards attributable to the shares that could be issued upon conversion of the Company's convertible debt using the if-converted method. Under the treasury stock method and if-converted method, potential common stock outstanding are not included in the computation of diluted net income per share, if their effect is anti-dilutive.

Anti-dilutive potential shares are presented in the following table (in millions):

	Year Ended		
	January 28, 2023	January 29, 2022	January 30, 2021
Weighted-average shares outstanding:			
Stock-based awards	21.0	16.1	11.3
Convertible debt	—	0.5	—

Anti-dilutive potential shares from stock-based awards are excluded from the calculation of diluted earnings per share for all periods reported above because either their exercise price exceeded the average market price during the period or the stock-based awards were determined to be anti-dilutive based on applying the treasury stock method. Anti-dilutive potential shares from convertible debt are excluded from the calculation of diluted earnings per share for all periods reported above because the shares that would be issued upon conversion of the Company's convertible debt were determined to be anti-dilutive based on applying the if-converted method. Anti-dilutive potential shares from stock-based awards are excluded from the calculation of diluted earnings per share for the years ended January 28, 2023, January 29, 2022, and January 30, 2021 due to the net losses reported in those periods.

Note 15 — Segment and Geographic Information

The Company operates in one reportable segment — the design, development and sale of integrated circuits. The chief executive officer was identified as the chief operating decision maker ("CODM") and is ultimately responsible for and actively involved in the allocation of resources and the assessment of the Company's performance. The fact that the Company operates in only one reportable segment is based on the following:

- The Company uses a highly-integrated approach in developing its products in that discrete technologies developed by the Company are frequently integrated across many of its products. Substantially all of the Company's integrated circuits are manufactured under similar manufacturing processes.
- The Company's organizational structure is based along functional lines. Each of the functional department heads reports directly to the CODM. Shared resources in the Company also report directly to the CODM or to a direct report of the CODM.
- The assessments of performance across the Company, including assessment of the Company's incentive compensation plan, are based largely on operational performance and consolidated financial performance.
- The decisions on allocation of resources and other operational decisions are made by the CODM based on his direct involvement with the Company's operations and product development.

The following table presents long-lived asset information based on the physical location of the assets by geographic region (in millions):

	January 28, 2023	January 29, 2022
Property and equipment, net:		
United States	$ 418.6	$ 319.0
Singapore	94.5	83.4
Israel	18.2	23.7
India	15.6	16.1
China	10.9	11.6
Others	19.6	9.0
	$ 577.4	$ 462.8

Note 16 — Supplemental Financial Information (in millions)

Consolidated Balance Sheets

	January 28, 2023	January 29, 2022
Cash and cash equivalents:		
Cash	$ 760.3	$ 435.9
Cash equivalents:		
Time deposits	150.7	177.6
Cash and cash equivalents	$ 911.0	$ 613.5

Short-term, highly liquid investments of $150.7 million and $177.6 million as of January 28, 2023 and January 29, 2022, respectively, included in cash and cash equivalents on the accompanying consolidated balance sheets are not considered as investments because of the short-term maturity of such investments.

	January 28, 2023	January 29, 2022
Accounts receivable, net:		
Accounts receivable	$ 1,194.3	$ 1,051.6
Less: Doubtful accounts	(2.1)	(3.0)
Accounts receivable, net	$ 1,192.2	$ 1,048.6

	January 28, 2023	January 29, 2022
Inventories:		
Work-in-process	$ 756.3	$ 578.9
Finished goods	312.0	141.4
Inventories	$ 1,068.3	$ 720.3

The inventory balance at January 29, 2022 includes $38.7 million related to the remaining inventory fair value adjustment from the Innovium acquisition.

	January 28, 2023	January 29, 2022
Property and equipment, net:		
Machinery and equipment	$ 1,083.9	$ 895.4
Land, buildings, and leasehold improvements	306.2	293.6
Computer software	114.5	109.1
Furniture and fixtures	30.9	30.1
	1,535.5	1,328.2
Less: Accumulated depreciation	(958.1)	(865.4)
Property and equipment, net	$ 577.4	$ 462.8

The Company recorded depreciation expense of $126.8 million, $113.5 million and $95.9 million for fiscal 2023, 2022 and 2021, respectively.

	January 28, 2023	January 29, 2022
Other non-current assets:		
Prepaid ship and debit	$ 481.3	$ 215.9
Technology and other licenses (1)	439.5	490.2
Prepayments on supply capacity reservation agreements	282.3	54.6
Operating right-of-use assets	211.3	142.0
Non-marketable equity investments	36.1	30.7
Other	58.3	61.0
Other non-current assets	$ 1,508.8	$ 994.4

(1) Amortization of technology and other licenses was $189.5 million, $149.5 million and $99.3 million in fiscal 2023, 2022 and 2021, respectively.

	January 28, 2023	January 29, 2022
Accrued liabilities:		
Variable consideration estimates (1)	$ 572.8	$ 258.6
Accrued income tax payable	118.4	23.3
Technology license obligations	119.1	84.2
Accrued legal reserve	102.0	8.5
Deferred revenue	45.2	39.0
Lease liabilities - current portion	43.8	38.2
Accrued interest payable	22.1	20.1
Deferred non-recurring engineering credits	20.0	71.2
Accrued royalty	16.0	17.4
Other	32.6	62.1
Accrued liabilities	$ 1,092.0	$ 622.6

(1) Variable consideration estimates consist of estimated customer returns, price discounts, price protection, rebates, and stock rotation programs.

	January 28, 2023	January 29, 2022
Other non-current liabilities:		
Technology license obligations	$ 267.0	$ 304.3
Lease liabilities - non current	201.6	140.3
Deferred tax liabilities	64.2	34.5
Non-current income taxes payable	28.5	35.0
Other	29.2	19.0
Other non-current liabilities	$ 590.5	$ 533.1

Accumulated Other Comprehensive Loss:

The changes in accumulated other comprehensive loss, net of tax, by components for the comparative period are presented in the following table (in millions):

	Unrealized Gain (Loss) on Cash Flow Hedges
Balance at Balance at February 1, 2020	$ —
Other comprehensive income (loss) before reclassifications	1.2
Amounts reclassified from accumulated other comprehensive income (loss)	(1.2)
Net current-period other comprehensive income (loss), net of tax	—
Balance at January 30, 2021	—
Other comprehensive income (loss) before reclassifications	—
Amounts reclassified from accumulated other comprehensive income (loss)	—
Net current-period other comprehensive income (loss), net of tax	—
Balance at January 29, 2022	—
Other comprehensive income (loss) before reclassifications	(0.9)
Amounts reclassified from accumulated other comprehensive income (loss)	0.9
Net current-period other comprehensive income (loss), net of tax	—
Balance at January 28, 2023	$ —

Consolidated Statements of Cash Flows

	Year Ended		
	January 28, 2023	January 29, 2022	January 30, 2021
Supplemental Cash Flow Information:			
Cash paid for interest	$ 147.9	$ 91.2	$ 54.6
Cash paid for income taxes, net	$ 95.9	$ 7.9	$ 14.2
Non-Cash Investing and Financing Activities:			
Non-cash consideration paid and consideration unpaid for the acquisitions	$ 9.2	$ 7,231.8	$ —
Purchase of software and intellectual property under license obligations	$ 108.9	$ 325.5	$ 68.8
Unpaid purchase of property and equipment at end of year	$ 63.2	$ 20.7	$ 10.1
Unpaid equity and debt financing costs	$ —	$ —	$ 1.7

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

None.

Item 9A. ***Controls and Procedures***

Management's Evaluation of Disclosure Controls and Procedures

Management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act) as of January 28, 2023. Disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC and that such information is accumulated and communicated to management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosures. Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective as of January 28, 2023.

Management has concluded that the consolidated financial statements included in this Form 10-K present fairly, in all material respects, our financial position, results of operations and cash flows for the periods presented in conformity with accounting principles generally accepted in the United States.

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act. Internal control over financial reporting consists of 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) are designed and operated to provide reasonable assurance regarding the reliability of our financial reporting and our process for the preparation of financial statements for external purposes 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.

Our internal control over financial reporting is designed by, and under the supervision of the principal executive officer and principal financial officer and effected by the Company's Board of Directors, management, and others. Because of its inherent limitations, internal control over financial reporting may not prevent or detect all misstatements. Also, projections of any evaluation of effectiveness of 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.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of January 28, 2023 using the criteria for effective internal control over financial reporting as described in "Internal Control-Integrated Framework," issued by the Committee of Sponsoring Organization of the Treadway Commission (2013 framework) (the COSO Criteria). Based on this assessment, management concluded that our internal control over financial reporting was effective as of January 28, 2023.

The effectiveness of our internal control over financial reporting as of January 28, 2023 has been audited by Deloitte & Touche LLP, our independent registered public accounting firm, as stated in its report that is included herein.

Inherent Limitations on Effectiveness of Controls

Our management, including our principal executive officer and our principal financial officer, does not expect that our disclosure controls or our internal control over financial reporting will prevent or detect all error and all fraud. 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. The design of a control system must reflect the fact that there are resource constraints and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been detected. The design of any system of controls is based in part on certain assumptions about the likelihood of future events and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of the effectiveness of controls to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

Changes to Internal Control over Financial Reporting

No change in the Company's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) occurred during the three months ended January 28, 2023 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting. We adopted a hybrid work policy where most of our employees have the option to split their time between working from home and the office. In addition, we continue to monitor and assess the potential impact of the COVID-19 situation on our internal controls to minimize the impact on their design and operating effectiveness. We believe that our internal controls over financial reporting are being executed effectively and continue to be effective.

Item 9B. ***Other Information***

None

Item 9C. ***Disclosure Regarding Foreign Jurisdictions that Prevent Inspections***

Not applicable.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Marvell Technology, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Marvell Technology, Inc. and subsidiaries (the "Company") as of January 28, 2023, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of January 28, 2023, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended January 28, 2023, of the Company and our report dated March 9, 2023, expressed an unqualified opinion on those financial statements.

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/ DELOITTE & TOUCHE LLP

San Jose, California
March 9, 2023

PART III

Unless we file an amendment to this Form 10-K within 120 days after January 28, 2023 to include the Part III information, we intend to incorporate such information by reference to our definitive proxy statement in connection with our 2023 annual meeting of stockholders to be held in June 2023 (the "2023 Proxy Statement").

Item 10. *Directors, Executive Officers and Corporate Governance*

The information required by Items 401 and 407(c)(3) of Regulation S-K with respect to our directors, director nominees, executive officers and corporate governance is incorporated by reference herein to the information set forth under the captions "Election of Directors," "Corporate Governance and Matters Related to Our Board" and "Executive Officers of the Company" in our 2023 Proxy Statement.

Delinquent Section 16(a) Reports

The information required by Item 405 of Regulation S-K is incorporated by reference herein, as applicable, to the information set forth under the caption "Delinquent Section 16(a) Reports" in our 2023 Proxy Statement.

Code of Ethics

We have adopted a Code of Ethics and Business Conduct for Employees, Officers and Directors (the "Code of Ethics") that applies to all of our directors, officers (including our Chief Executive Officer (our principal executive officer), Chief Financial Officer (our principal financial officer), Corporate Controller (our chief accounting officer) and any person performing similar functions) and employees. This Code of Ethics was most recently amended in March 2022. We intend to disclose certain future amendments to certain provisions of our Code of Ethics and waivers of our Code of Ethics granted to executive officers and directors on our website or in a report on Form 8-K within four business days following the date of such amendment or waiver. Our Code of Ethics is available on our website www.marvell.com. None of the material on our website is part of our Annual Report on Form 10-K or is incorporated by reference herein.

Committees of the Board of Directors

The information required by Items 407(d)(4) and (d)(5) of Regulation S-K concerning our Audit Committee and Audit Committee financial expert is incorporated by reference herein to the information set forth under the caption "Corporate Governance and Matters Related to Our Board" in our 2023 Proxy Statement.

Item 11. *Executive Compensation*

The information required by Items 402, 407(e)(4) and 407(e)(5) of Regulation S-K is incorporated by reference herein to the information set forth under the captions "Compensation of Directors," "Director Compensation Table-Fiscal 2023," "Executive Compensation" and "Compensation Committee Interlocks and Insider Participation" in our 2023 Proxy Statement.

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

The information required by Item 403 of Regulation S-K is incorporated by reference herein to the information set forth under the caption "Security Ownership of Certain Beneficial Owners and Management" in our 2023 Proxy Statement.

Securities Authorized for Issuance under Equity Compensation Plans

Equity Compensation Plan Information

The following table provides certain information with respect to all of our equity compensation plans in effect January 28, 2023:

Plan Category	(a) Number of Securities to Be Issued Upon Exercise of Outstanding Options, Warrants and Rights (1)	(b) Weighted-Average Exercise Price of Outstanding Options, Warrants, and Rights (2)	(c) Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Securities Reflected in Column (a)
Equity compensation plans approved by security holders (3)	16,776,002	$ 19.28	107,174,498
Equity compensation plans not approved by security holders (4)	3,761,649	$ 12.40	—

(1) Includes only options and restricted stock units (outstanding under our equity compensation plans, as no stock warrants or other rights were outstanding as of January 28, 2023).

(2) The weighted-average exercise price calculation does not take into account any restricted stock units as those units vest, without any cash consideration or other payment required for such shares.

(3) Includes our Amended and Restated 1995 Stock Option Plan, our Amended 2000 Employee Stock Purchase Plan (the "2000 ESPP").

(4) Plans not approved by security holders consists of the Cavium 2007, 2016 and Qlogic equity incentive plans which we assumed in our merger with Cavium Inc, Aquantia 2004, 2015 and 2017 equity incentive plans which we assumed in our merger with Aquantia, Inphi 2010 equity incentive plans which we assumed in our merger with Inphi and Innovium 2015 equity incentive plans which we assumed in our merger with Innovium.

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

The information required by Item 404 of Regulation S-K is incorporated by reference herein to the information set forth under the caption "Certain Relationships and Related Party Transactions" in our 2023 Proxy Statement.

The information required by Item 407(a) of Regulation S-K is incorporated by reference herein to the information set forth under the caption "Board of Directors and Committees of the Board" in our 2023 Proxy Statement.

Item 14. ***Principal Accountant Fees and Services***

The information required by Item 9(e) of Schedule 14A is incorporated by reference to the information set forth under the caption "Information Concerning Independent Registered Public Accounting Firm" in our 2023 Proxy Statement.

PART IV

Item 15. ***Exhibits and Financial Statement Schedules***

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

1. *Financial Statements:*

See the "Index to Consolidated Financial Statements" on page 54 of this Annual Report on Form 10-K.

2. *Financial Statement Schedules:*

See "Schedule II — Valuation and Qualifying Accounts" on page 111 of this Annual Report on Form 10-K:

All other schedules not listed above have been omitted because they are not applicable or required, or the information required to be set forth therein is included in the Consolidated Financial Statements or Notes thereto.

3. *Exhibits.*

Exhibit No.	Description	Form	File Number	Incorporated by Reference from Exhibit Number	Filed with SEC
2.1**	Agreement and Plan of Merger and Reorganization, dated as of October 29, 2020, by and among Marvell Technology Group Ltd., Inphi Corporation, Maui HoldCo, Inc., Maui Acquisition Company Ltd and Indigo Acquisition Corp.	8-K	000-30877	2.1	10/30/2020
2.2	Agreement and Plan of Merger by and among the Company, Kauai Acquisition Corp., and Cavium, Inc. dated as of November 19, 2017	8-K	000-30877	2.1	11/20/2017
2.3	Asset Purchase Agreement between Marvell and NXP dated May 29, 2019	10-Q	000-30877	2.1	9/4/2019
3.1	Amended and Restated Certificate of Incorporation of Marvell Technology, Inc.	8-K	001-40357	3.1	4/20/2021
3.2	Amended and Restated Bylaws of Marvell Technology, Inc.	8-K	001-40357	3.2	4/20/2021
4.1	First Supplemental Indenture, dated as of April 20, 2021, by and among Marvell Technology, Inc., Inphi Corporation and Wells Fargo Bank, National Association, as trustee	8-K	001-40357	4.1	4/21/2021
4.2	First Supplemental Indenture, dated as of April 20, 2021, by and among Marvell Technology, Inc., Inphi Corporation and U.S. Bank National Association, as trustee	8-K	001-40357	4.2	4/21/2021
4.3	Base Indenture, dated as of April 12, 2021, between Marvell Technology, Inc. and U.S. Bank National Association, as trustee	8-K	000-30877	4.1	4/12/2021
4.4	First Supplemental Indenture, dated as of April 12, 2021, by and among Marvell Technology, Inc., Marvell Technology Group Ltd. and U.S. Bank National Association, as trustee	8-K	000-30877	4.2	4/12/2021

4.5	Form of $500,000,000 1.650% Senior Notes due 2026 (included as Exhibit A to Exhibit 4.2)	8-K	000-30877	4.3	4/12/2021
4.6	Form of $750,000,000 2.450% Senior Notes due 2028 (included as Exhibit B to Exhibit 4.2)	8-K	000-30877	4.4	4/12/2021
4.7	Form of $750,000,000 2.950% Senior Notes due 2031 (included as Exhibit C to Exhibit 4.2)	8-K	000-30877	4.5	4/12/2021
4.8	Second Supplemental Indenture, dated as of May 4, 2021, between Marvell Technology, Inc. and U.S. Bank National Association, as trustee	8-K	001-40357	4.2	5/4/2021
4.9	Form of $433,817,000 4.200% Senior Notes due 2023 (included as Exhibit A to Exhibit 4.2)	8-K	001-40357	4.3	5/4/2021
4.10	Form of $479,394,000 4.875% Senior Notes due 2028 (included as Exhibit B to Exhibit 4.2)	8-K	001-40357	4.4	5/4/2021
4.11	Second Supplemental Indenture, dated as of April 15, 2021, by and between Marvell Technology Group Ltd. and U.S. Bank National Association	8-K	000-30877	4.1	4/19/2021
4.12	The description of the Registrant's Common Stock, par value $0.002 per share, contained in the Registrant's Registration Statement on Form S-4 initially filed with the Commission on December 22, 2020, as amended;				Filed Herewith
10.1	Form of Indemnification Agreement	8-K	001-40357	10.1	4/20/2021
10.2**	Credit Agreement, dated as of December 7, 2020, among Marvell Technology Group Ltd., Maui HoldCo, Inc., the Guarantors party thereto, the Lenders party thereto and JPMorgan Chase Bank, N.A., as the Administrative Agent	8-K	000-30877	10.1	12/8/2020
10.3**	Revolving Credit Agreement, dated as of December 7, 2020, among Marvell Technology Group Ltd., Maui HoldCo, Inc., the Guarantors party thereto, the Lenders party thereto and Bank of America, N.A., as the Administrative Agent	8-K	000-30877	10.2	12/8/2020
10.4**	Amendment No. 1 to Credit Agreement, dated as of December 7, 2020, among Marvell Technology Group Ltd., the Lenders party thereto, Bank of America, N.A., as the Revolving Facility Agent, and Goldman Sachs Bank USA, as the General Administrative Agent and the Term Facility Agent	8-K	000-30877	10.3	12/8/2020
10.5	Form of Exchange Agreement	8-K	001-40357	10.1	4/21/2021

10.6	Registration Rights Agreement, dated as of April 12, 2021, by and among Marvell Technology, Inc., Marvell Technology Group Ltd. and J.P. Morgan Securities, LLC, BofA Securities, Inc. and Wells Fargo Securities, LLC, as representatives of the initial purchasers of the Notes	8-K	000-30877	10.1	4/12/2021
10.7#	Marvell Technology Group Ltd. Amended and Restated 1995 Stock Option Plan (now named the Marvell Technology, Inc. Amended and Restated 1995 Stock Option Plan) (as amended and restated as of April 2, 2021)	S-8	333-255384	4.1	4/20/2021
10.7.1#	Form of Stock Option Agreement and Notice of Grant of Stock Options and Option Agreement for use with 1995 Stock Option Plan (for options granted after September 20, 2013)	8-K	000-30877	10.2	9/26/2013
10.7.2#	Form of Performance Award Agreement and Notice of Grant of Performance Award and Award Agreement for use with the Amended and Restated 1995 Stock Option Plan	10-Q	000-30877	10.2	6/5/2014
10.7.3#	Form of Deferral Feature Stock Unit Agreement with Stock Unit Election Form for use with the Amended and Restated 1995 Stock Option Plan	10-K	000-30877	10.3.11	3/29/2018
10.7.4#	Form of Relative TSR RSU Grant Notice	10-Q	000-30877	10.3	6/6/2019
10.7.5#	Form of Value Creation Performance Based Restricted Stock Unit Grant Notice	10-Q	000-30877	10.1	6/6/2019
10.7.6#	Amended and restated form of stock unit agreement under the 1995 Stock Option Plan as amended June 2021	10-Q	001-40357	10.21	8/27/2021
10.7.7#	Form of Relative TSR RSU Grant Notice as amended March 2022	10-Q	001-40357	10.7.7	5/27/2022
10.7.8#	Form of Relative TSR and EPS RSU Grant Notice	10-Q	001-40357	10.7.8	5/27/2022
10.7.9#	Form of Relative TSR and EPS RSU Grant Notice December 2022				Filed Herewith
10.8.1#	Marvell Technology Inc. 2000 Employee Stock Purchase Plan (as approved by shareholders as of June 23, 2022)				Filed Herewith
10.8.2#	Amended and restated form of subscription agreement under the 2000 ESPP as amended June 2021	10-Q	001-40357	10.22	8/27/2021

10.9#	Offer Letter between the Marvell and Matthew J. Murphy and form of Severance Agreement attached thereto as Appendix B	8-K	000-30877	10.1	6/20/2016
10.9.1#	Severance Agreement with Matt Murphy as amended 2022				Filed Herewith
10.10#	Cavium, Inc. 2016 Equity Incentive Plan (including forms of grant notice and agreements)	10-Q	000-30877	10.1	12/4/2019
10.11#	Cavium, Inc. 2007 Equity Incentive Plan (including forms of grant notice and agreements)	10-Q	000-30877	10.2	12/4/2019
10.12#	QLogic Corporation 2005 Performance Incentive Plan (including forms of grant notice and agreements)	10-Q	000-30877	10.3	12/4/2019
10.13#	Aquantia Corp. 2017 Equity Incentive Plan (including forms of grant notice and agreements)	10-Q	000-30877	10.6	12/4/2019
10.14#	Aquantia Corp. 2015 Equity Incentive Plan (including forms of grant notice and agreements)	10-Q	000-30877	10.5	12/4/2019
10.15#	Aquantia Corp. 2004 Equity Incentive Plan (including forms of grant notice and agreements)	10-Q	000-30877	10.4	12/4/2019
10.16#	Inphi Corporation Amended and Restated 2010 Stock Incentive Plan, as amended and restated on April 14, 2020	S-8	333-255384	4.10	4/20/2021
10.17#	Offer letter with Loi Nguyen	10-Q	001-40357	10.17	6/9/2021
10.18#	Offer letter with Nariman Yousefi	10-Q	001-40357	10.18	6/9/2021
10.19#	Offer letter with Chris Koopmans	10-Q	000-30877	10.4	9/8/2016
10.20#	Fiscal 2023 Named Executive Officer Compensation	10-Q	001-40357	10.20	5/27/2022
10.21#	Marvell Technology Inc. Change in Control Severance Plan and Summary Plan Description 2022				Filed Herewith
10.22	Warrant to Purchase Common Shares of Marvell dated June 5, 2019	8-K	000-30877	99.1	6/5/2019
10.23#	Offer Letter between Marvell and Mitchell Gaynor	10-Q	000-30877	10.3	9/8/2016
10.24#	Severance Agreement between the Company and Mitchell Gaynor	10-K	000-30877	10.23	3/28/2017

10.25#	Offer Letter between the Company and Jean Hu	8-K	000-30877	10.1	8/23/2016
10.26#	Offer Letter between Marvell and Raghib Hussain	10-Q	000-30877	10.3	9/12/2018
10.27#	Offer Letter for Dean Jarnac and promotion summary of terms	10-Q	000-30877	10.9	12/4/2019
10.28#	Innovium, Inc. Amended 2015 Stock Option and Grant Plan (including forms of grant notice and agreements)	S-8	333-260060	4.1	10/5/2021
10.29#	Promotion to Chief Finance Officer Letter Willem Meintjes				Filed Herewith
21.1	Subsidiaries of Registrant				Filed Herewith
23.1	Consent of Independent Registered Public Accounting Firm - Deloitte & Touche LLP				Filed Herewith
24.1	Power of Attorney (contained in the signature page to this Annual Report)				Filed Herewith
31.1	Rule 13a-14(a)/15d-14(a) Certification of the Principal Executive Officer				Filed Herewith
31.2	Rule 13a-14(a)/15d-14(a) Certification of the Principal Financial Officer				Filed Herewith
32.1*	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 for Principal Executive Officer				Filed Herewith
32.2*	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 for Principal Financial Officer				Filed Herewith
101.INS	Inline XBRL Instance 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				
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document				
101.PRE	Inline XBRL Taxonomy Presentation Linkbase Document				
104	Cover Page Interactive Data File - The cover page from this Annual Report on Form 10-K is formatted in iXBRL				

Management contracts or compensation plans or arrangements in which directors or executive officers are eligible to participate.

* In accordance with Item 601(b)(32)(ii) of Regulation S-K and SEC Release No. 33-8238 and 34-47986, Final Rule: Management's Reports on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports, the certifications furnished in Exhibits 32.1 and 32.2 hereto are deemed to accompany this Annual Report Form 10-K and will not be deemed "filed" for purposes of Section 18 of the Exchange Act. Such certifications will not be deemed to be incorporated by reference into any filings under the Securities Act or the Exchange Act, except to the extent that the registrant specifically incorporates it by reference.

** Pursuant to Item 601(a)(5) of Regulation S-K, certain schedules and similar attachments have been omitted. The registrant hereby agrees to furnish a copy of any omitted schedule or similar attachment to the SEC upon request

Item 16. ***Form 10-K Summary***

None.

SIGNATURES

Pursuant to the requirements of section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

MARVELL TECHNOLOGY, INC.

Dated: March 9, 2023

By: /S/ WILLEM MEINTJES

Willem Meintjes
Chief Financial Officer
(Principal Financial Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Matthew J. Murphy and Willem Meintjes, and each of them individually, as his or her attorney-in-fact, each with full power of substitution, for him or her in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with exhibits thereto and all other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorney-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof. Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant in the capacities and on the dates indicated.

Name and Signature	Title	Date
/S/ MATTHEW J. MURPHY **Matthew J. Murphy**	President, Chief Executive Officer (Principal Executive Officer) and Director	March 9, 2023
/S/ WILLEM MEINTJES **Willem Meintjes**	Chief Financial Officer (Principal Financial Officer)	March 9, 2023
/S/ PANTEHA DIXON **Panteha Dixon**	Chief Accounting Officer (Principal Accounting Officer)	March 9, 2023
/S/ SARA ANDREWS **Sara Andrews**	Director	March 9, 2023
/S/ TUDOR BROWN **Tudor Brown**	Director	March 9, 2023
/S/ BRAD BUSS **Brad Buss**	Director	March 9, 2023
/S/ EDWARD FRANK **Dr. Edward Frank**	Director	March 9, 2023
/S/ RICHARD S. HILL **Richard S. Hill**	Chairman of the Board	March 9, 2023
/S/ REBECCA HOUSE **Rebecca House**	Director	March 9, 2023

Name and Signature	Title	Date
/S/ MARACHEL KNIGHT **Marachel Knight**	Director	March 9, 2023
/S/ MICHAEL STRACHAN **Michael Strachan**	Director	March 9, 2023
/S/ ROBERT E. SWITZ **Robert E. Switz**	Director	March 9, 2023
/S/ FORD TAMER **Ford Tamer**	Director	March 9, 2023

SCHEDULE II

VALUATION AND QUALIFYING ACCOUNTS

(in millions)

	Balance at Beginning of Year	Additions	Deductions	Balance at End of Year
Fiscal year ended January 28, 2023				
Allowance for doubtful accounts	$ 3.0	$ 1.2	$ (2.1)	$ 2.1
Deferred tax asset valuation allowance	$ 1,003.4	$ —	$ (41.7)	$ 961.7
Fiscal year ended January 29, 2022				
Allowance for doubtful accounts	$ 2.1	$ 1.5	$ (0.6)	$ 3.0
Deferred tax asset valuation allowance	$ 749.5	$ 253.9	$ —	$ 1,003.4
Fiscal year ended January 30, 2021				
Allowance for doubtful accounts	$ 2.2	$ 1.4	$ (1.5)	$ 2.1
Deferred tax asset valuation allowance	$ 676.8	$ 72.7	$ —	$ 749.5

Exhibit 4.12

DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

Marvell Technology, Inc. ("Marvell," "we," or the "Company") has one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), our common stock, par value $0.002 per share. Our common stock is listed on the Nasdaq Global Select Market under the symbol "MRVL."

The following description of Marvell capital stock does not purport to be complete and is subject to, and qualified in its entirety by, the Company's amended and restated certificate of incorporation ("certificate of incorporation") and the Company's amended and restated bylaws ("bylaws"), each of which are incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this exhibit is a part.

DESCRIPTION OF MARVELL CAPITAL STOCK

Authorized Capital Stock

The total number of shares of capital stock the Company is authorized to issue is 1,258,000,000 shares. This authorized capital stock consists of 1,250,000,000 shares of common stock and 8,000,000 shares of preferred stock, each having a par value of $0.002 per share.

Common Stock

Each share of our common stock entitles its holder to one vote on all matters to be voted upon by our stockholders. Holders of our common stock have the exclusive right to vote for the election of directors and for all other purposes (subject to the express terms of any preferred stock issued by the Company). A majority of the votes cast is required for stockholders to elect directors (except that directors are elected by a plurality of the votes cast in a contested director election) and a majority of the voting power of stock present or represented is required to take action on all other matters to which our stockholders generally are entitled to vote, except as otherwise required by law, rule or regulation applicable to the Company or our securities.

Subject to any preferences that may apply to any preferred stock that may at the time be outstanding, holders of our common stock will be entitled to receive dividends as may be declared from time to time by our board of directors out of funds legally available for that purpose. If we liquidate, dissolve or wind up, the holders of common stock are entitled to share ratably in all assets remaining after payment or providing for liabilities and any liquidation preference of any preferred stock that may at the time be outstanding. Our common stock has no preemptive rights, conversion rights, or redemption or sinking fund provisions. The rights, preferences and privileges of holders of our common stock are subject to and may be adversely affected by the rights of holders of any series of preferred stock that the Company may designate and issue.

Preferred Stock

Our board of directors has the authority, without further action by the holders of our common stock, to issue up to 8,000,000 shares of preferred stock in one or more series, and to establish from time to time the number of shares to be included in each such series, and to fix the designations, powers, preferences and relative, participating, optional or other rights, if any, and the qualifications, limitations or restrictions, if any, of the shares of each such series of preferred stock. Accordingly, without action by the holders of our common stock, our board of directors may designate and authorize the issuance of additional classes or series of preferred stock having voting rights, dividend rights, conversion rights, redemption provisions (including sinking fund provisions) and rights in liquidation,

dissolution or winding up that are superior to those of our common stock. As such, the issuance of preferred stock could have the effect of restricting dividends on our common stock, diluting the voting power of our common stock, impairing the liquidation rights of our common stock, or delaying or preventing a change in control.

Anti-Takeover Provisions

Some provisions of Delaware law, our certificate of incorporation and our bylaws may have the effect of delaying, deferring or discouraging another party from acquiring control of us or making it more difficult to remove management.

Delaware Law

We are subject to Section 203 of the Delaware General Corporation Law ("DGCL"), which regulates, subject to some exceptions, acquisitions of publicly-held Delaware corporations. In general, Section 203 prohibits us from engaging in a "business combination" with an "interested stockholder" for a period of three years following the date the person becomes an interested stockholder, unless:

- our board of directors approved the business combination or the transaction in which the person became an interested stockholder prior to the date the person attained this status;
- upon consummation of the transaction that resulted in the person becoming an interested stockholder, the person owned at least 85 percent of our voting stock outstanding at the time the transaction commenced, excluding shares owned by persons who are directors and also officers and issued under employee stock plans under which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or subsequent to the date the person became an interested stockholder, our board of directors approved the business combination and the stockholders other than the interested stockholder authorized the transaction at an annual or special meeting of stockholders by the affirmative vote of at least 66 2/3 percent of the outstanding stock not owned by the interested stockholder.

Section 203 defines a "business combination" to include:

- any merger or consolidation involving us and the interested stockholder;
- any sale, transfer, pledge or other disposition involving the interested stockholder of 10 percent or more of our assets;
- in general, any transaction that results in the issuance or transfer by us of any of our stock to the interested stockholder;
- any transaction involving us that has the effect of increasing the proportionate share of our stock owned by the interested stockholders; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges, or other financial benefits provided by or through us.

In general, Section 203 defines an "interested stockholder" as any person who, together with the person's affiliates and associates, owns, or within three years prior to the time of determination of interested stockholder status did own, 15 percent or more of a corporation's voting stock.

Certificate of Incorporation and Bylaw Provisions

Removal of Directors; Board Vacancies; Board Size

Our certificate of incorporation provides for the removal of any of our directors without cause by a stockholder vote of at least a majority of the voting power of the then outstanding voting stock. In addition, our certificate of

incorporation provides that any vacancy occurring on the board may be filled by a majority of directors then in office, even if less than a quorum. Finally, our bylaws provide that the authorized number of directors may be changed only by a resolution of our board of directors. This system of removing directors, filling vacancies and fixing the size of the board makes it more difficult for stockholders to replace a majority of the directors.

Advance Notice of Proposals and Nominations

Our bylaws provide that stockholders must give timely written notice to bring business before an annual meeting of stockholders or to nominate candidates for election as directors at an annual meeting of stockholders. Generally, to be timely, a stockholder's notice will be required to be delivered to the principal executive offices of the Company not later than the 90th day nor earlier than the 120th day prior to the one-year anniversary of the preceding year's annual meeting; provided, however, that in the event that the date of the annual meeting is more than 30 days before or more than 30 days after such anniversary date, or if no annual meeting was held in the preceding year, notice by the stockholder to be timely must be so delivered not earlier than the close of business on the 120th day prior to such annual meeting and not later than the close of business on the later of the 90th day prior to such annual meeting or the 10th day following the date on which public announcement of the special meeting was mailed or public disclosure of the date of the special meeting was made.

Limits on Special Meetings

Our certificate of incorporation provides that a special meeting of the stockholders: (1) may be called at any time by our board of directors and (2) shall be called by the chair of the board or the secretary of the Company upon the written request or requests of one or more persons that (a) own (as defined in the our bylaws) shares representing at least 10% of the voting power of the stock outstanding and entitled to vote on the matter or matters to be brought before the proposed special meeting at the time a request is delivered; and (b) comply with such procedures for calling a special meeting of stockholders as may be set forth in our bylaws.

Amendment of Our Bylaws

Our board of directors is authorized to adopt, amend and repeal our bylaws. Our stockholders also have the power to adopt, amend and repeal our bylaws by a stockholder vote of at least a majority of the voting power of the then outstanding voting stock.

Preferred Stock

The Company's ability to issue an indeterminate number of shares of the authorized shares of preferred stock with such rights, privileges and preferences as our board of directors may fix may have the effect of delaying or preventing a takeover or other change of control of the Company. Please see "Description of Marvell Capital Stock—Preferred Stock" above for additional information.

Shareholder Rights Plan

Our bylaws provide that our board of directors is expressly authorized to adopt a shareholder rights plan as a defensive measure at any time it determines to be in the best interest of the Company and its stockholders, including in response to any pending or threatened unsolicited offer in respect of a business combination. Our bylaws further provide that any shareholder rights plan adopted must either (1) have a term of less than 12 months or (2) be submitted to the stockholders for approval by not more than 12 months following adoption of the plan. In addition, any such shareholder rights plan must not contain provisions that limit the discretion of new directors to amend or redeem the rights under the plan.

Exclusive Forum

Our certificate of incorporation provides that unless the Company, in writing, selects or consents to the selection of an alternative forum: (a) the sole and exclusive forum for any complaint asserting any internal corporate claims (including claims in the right of the Company that are based upon a violation of a duty by a current or former director, officer, employee or stockholder in such capacity, or as to which the DGCL confers jurisdiction upon the Court of Chancery of the State of Delaware), to the fullest extent permitted by law, and subject to applicable jurisdictional requirements, shall be the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have, or declines to accept, jurisdiction, another state court or a federal court located within the State of Delaware); and (b) the sole and exclusive forum for any complaint asserting a cause of action arising under the Securities Act of 1933, as amended, to the fullest extent permitted by law, shall be the federal district courts of the United States. The exclusive forum provision does not apply to actions arising under the Exchange Act.

Exhibit 10.7.9

Marvell Technology, Inc.
1000 N. West, Suite 1200, Wilminton, Delaware 19801
Phone: 408.222.2500 | Fax 408.333.9827
www.marvell.com

Notice of Grant

Name:	%%FIRST_NAME%-% %%MIDDLE_NAME%-% %%LAST_NAME%-% %%ADDRESS_LINE_1%-% %%ADDRESS_LINE_2%-% %%CITY%-%, %%STATE%-% %%ZIPCODE%-%
ID:	%%EMPLOYEE_IDENTIFIER%-%
Grant Date:	%%OPTION_DATE,'Month DD, YYYY'%-%
Grant Number:	%%OPTION_NUMBER%-%
Plan:	%%EQUITY_PLAN%-%

You have been granted a Performance Restricted Stock Unit (RSU) award for the number of shares in the range set forth on **Exhibit A**, subject to the performance metrics set forth on **Exhibit B**.

This Notice of Grant is subject to all of the terms and conditions set forth herein, as well as the Stock Unit Agreement, the Appendix (which includes the special provisions for your country of residence if any), and the Amended and Restated 1995 Stock Option Plan (the "Plan"), all of which are incorporated herein by reference. This Notice of Grant, the Stock Unit Agreement, the Appendix and the Plan are referred to herein as the "Grant Documents." Capitalized terms used in this Notice of Grant but not defined shall have the same meaning as provided in the Plan.

By signing this document, you hereby acknowledge receipt of a copy of the Grant Documents, and agree that:

(a) these Performance-based RSUs are granted under and governed by the terms and conditions of the Grant Documents;

(b) you have carefully read, fully understand and agree to all of the terms and conditions described in the Grant Documents;

(c) you understand and agree that the Grant Documents constitute the entire understanding between you and the Company regarding this Performance-based RSU, and that any prior agreements, commitments or negotiations concerning this grant are replaced and superseded; and

(d) you have been given an opportunity to consult legal counsel with respect to all matters relating to this Performance-based RSU prior to signing this Notice of Grant and that you have either consulted such counsel or voluntarily declined to consult such counsel.

The Stock Unit Agreement, the Appendix and the Plan are available on the Company's website at https://stockselfservice.marvell.com/ or by request from the Company's Stock Administration Department. You hereby agree that these documents are deemed to be delivered to you.

Regards,
Marvell Stock Administration

Exhibit A

Grant Number:	%%OPTION_NUMBER%-%
Grant date:	%%OPTION_DATE,'Month DD, YYYY'%-%
Grant date Fair Market Value per share:	%%MARKET_VALUE%-%
Grant Price:	$0.00
Number of shares in range:	**0% to 250% of Target** **(200% is the Maximum for the TSR component and the product of the TSR * the Multiplier can't exceed 250%)**
Number of shares at Target (payable at 100% of TSR component only):	%%TOTAL_SHARES_GRANTED, '999,999,999'%-%
Grant Type:	Total Stockholder Return (TSR)
Vesting schedule:	If earned, cliff vest at end of 3 years from the date of grant
Vesting date:	%%VEST_DATE_PERIOD1,'Month DD, YYYY'%-%
Performance metrics:	**See Exhibit B**
Performance measurement start date:	December 15, 2022
Performance measurement end date:	December 05, 2025

Exhibit B

TSR Objectives– Based on achievement relating to the relative total stockholder return of the Company's Common Shares as compared to the total stockholder return of the S&P 500 Index over the performance period, provided that you continue to serve as a service provider through the third anniversary of the Vesting commencement date. The ECC will certify the amount of achievement (or non-achievement) of the TSR Objectives prior to the Vesting date.

Calculation Methodology – Stock price growth adjusted for reinvested dividends during the performance period. The start and end prices of the Company's common stock and of the S&P 500 Index shall be based on the average closing prices during the preceding 120-trading days before the Performance measurement start date and before the Performance measurement end date

Performance-Payout Schedule:

Performance Level	Versus the S&P 500 Index	Payout
Maximum	**+33% over**	**200% of Target**
Target	**Equal to S&P 500**	**100% of Target**
Minimum	**-33% under**	**0% of Target**

Actual performance will be calculated using a straight-line interpolation between the above performance levels (rounding up to the nearest percent). The number of shares awarded will be rounded up to nearest whole share.

Notwithstanding the foregoing, in the event the Company's actual TSR is negative over the Performance Period, payout of the TSR component will be no more than 100% of Target. The foregoing cap does not affect the Multiplier noted below.

Non-GAAP EPS CAGR Multiplier (the "Multiplier") –

For purposes of this agreement, "Non-GAAP EPS" will be calculated in accordance with how such term is calculated in the Company's quarterly earnings press releases, and with respect to each company in the Peer Group, "Non-GAAP EPS" will be calculated in accordance with how such term is calculated by such peer company in its quarterly earnings press releases. If a peer company stops providing Non-GAAP EPS in a quarterly earnings report then it will be excluded from the Peer Group. The applicable performance period (the "Multiplier Performance Period") for the Multiplier will be the following 2-year period

	Company	Peer Companies
Base Period (FY22 Q4 through FY23 Q3)	Start Date: October 31, 2021, End Date October 29, 2022	Twelve-month period with the closest calendar or fiscal Quarter ending prior to December 15, 2022

Performance Period	Company	Peer Companies
Year One (FY23 Q4 through FY 24 Q3)	October 30, 2022 to October 28, 2023	Twelve month period with the closest calendar or fiscal Quarter ending prior to December 15, 2023
Year Two (FY24 Q4 through FY 25 Q3)	October 29, 2023 to November 2, 2024	Twelve month period with the closest calendar or fiscal Quarter ending prior to December 15, 2024

The peer companies shall be the Company's compensation peer group approved on September 22, 2022 (which is the same peer group approved on February 16, 2022) (the "Peer Group"). For the avoidance of doubt, the Company will solely rely on publicly released Non-GAAP EPS calculations for each peer company without making any adjustments or alternation to such number.

As the Company's earnings releases generally are issued about one (1) month later than many peer companies, the Company (for purposes of the calculation each quarter) shall rely on the earnings press release issued by each company in the Peer Group that is released immediately prior to the Company's earnings press release. For example, if a peer company releases earnings April 30 for calendar year Q1 and July 30 for calendar year Q2, the Company shall compare its fiscal year Q1 earnings release issued on or about May 26 to the April 30 earnings release issued by the peer company.

For the Multiplier Performance Period, the Non-GAAP EPS compound annual growth rate ("Non-GAAP EPS CAGR") for the Company will be determined and measured against the Non-GAAP EPS CAGR for the companies in the Peer Group, as measured in the table below.

Percentile Rank in Peer Group	Multiplier
Equal to or less than 50th Percentile	**100%**
At 75th Percentile or Higher	**150%**

Actual performance will be calculated using a straight-line interpolation between the 50th percentile and the 75th percentile (rounding up to the nearest percent). The number of shares awarded will be rounded up to nearest whole share. In no circumstance will the Multiplier result in reducing the shares earned under the relative total stockholder return. Notwithstanding the foregoing, maximum payout of the product of (x) the relative total stockholder payout, *multiplied by* (y) the Multiplier will not exceed 250%.

For illustrative purposes, if the Company's Non-GAAP EPS CAGR is at the 75th percentile of the Peer Group and the TSR achievement is earned at target, then net payout would be 100% (at the TSR target) * 150% (for the Multiplier) or 150% payout.

If a company in the Peer Group is acquired or otherwise undergoes a Change in Control which is completed (e.g., transaction closing date) during the Multiplier Performance Period, then such company will be excluded from the Peer Group and will not be used to calculate the Multiplier. If a company in the Peer Group is acquired or otherwise undergoes a Change in Control which is completed after the expiration of the Multiplier Performance Period but prior to the vesting date (which is 3-years from the date of grant), then such company will continue to be included in the Peer Group and will be used to calculate the Multiplier (provided sufficient financial information is publicly available to calculate such company's CAGR).

The Multiplier shall be applied after the TSR Objectives are determined following the end of the 3-year performance period.

Change in Control –

Upon a Change in Control (as defined in the Plan) that occurs during the performance period, the performance period will be truncated to end upon the closing of the Change in Control (the "Change in Control Performance Period"), and the Company total stockholder return will be measured against the S&P 500 Index for the Change in Control Performance Period and the applicable payout will be measured in accordance with the Performance-Payout Schedule above (such Common Shares earned

pursuant to the table above, “Earned Shares”). For the avoidance of doubt, the Company’s stock price for the Change in Control date will be the price payable to Company’s stockholders at the closing of the Change in Control, rather than over the preceding 120-trading days, and it will be compared against the S&P Index during the Change in Control Performance Period which starts on the Performance measurement start date and ends using the 120-day average closing price of the S&P 500 Index ending on the closing of the Change in Control.

If a Change in Control of the Company is completed (e.g., transaction closes) during the Multiplier Performance Period, then the Multiplier will not apply. If a Change in Control of the Company is completed after the Multiplier Performance Period but prior to the Vesting date (which is 3-years from the date of grant), then the Multiplier will apply. To the extent that the Multiplier has already been determined prior to a Change in Control, Earned Shares shall also be increased to include the impact of the Multiplier.

Once the payout is determined, a pro-rata portion of the Earned Shares will vest upon the Change in Control based on the portion of days served in the 3-year performance period through the Change in Control, provided that you continue to serve as a service provider through the closing of the Change in Control. The balance of the remaining portion of the Earned Shares that did not vest at the Change in Control will vest on the last day of the performance period, provided that you continue to serve as a service provider on the vesting date.

Notwithstanding the standard post-Change in Control time-vesting above, if within the 24 month period following the Change in Control, your service is terminated without Cause (as defined in the Company’s Change in Control Severance Plan), then 100% of the remaining unvested Earned Shares will accelerate and become fully vested, subject to your execution of a customary release of claims.

Notwithstanding the above, a separate agreement entered into with the grantee with superior benefits than those above shall control and will apply in lieu of the above Change in Control terms.

Exhibit 10.8.1

MARVELL TECHNOLOGY, INC.

2000 EMPLOYEE STOCK PURCHASE PLAN

AS AMENDED BY THE BOARD OF DIRECTORS ON MARCH 1, 2022

AND APPROVED BY STOCKHOLDERS ON JUNE 23, 2022

1. Purpose. This Plan is intended to allow Employees of the Company and its Designated Subsidiaries to purchase Common Stock through accumulated Payroll deductions. This Plan includes two components: a Code Section 423 Plan Component and a Non-423 Plan Component. The Company's intention is to have the Code Section 423 Plan Component qualify as an "employee stock purchase plan" under Section 423 of the Code (although the Company makes no undertaking or representation to maintain such qualification). The provisions of the Code Section 423 Plan Component, accordingly, will be construed so as to extend and limit Plan participation in a uniform and nondiscriminatory basis consistent with the requirements of Section 423 of the Code. In addition, this Plan authorizes the grant of Purchase Rights under the Non-423 Plan Component that do not qualify under Section 423 of the Code, pursuant to rules, procedures or sub-plans adopted by the Administrator that are designed to achieve tax, securities laws or other objectives for Participants and/or the Company. Except as otherwise indicated, the Non-423 Plan Component will operate and be administered in the same manner as the Code Section 423 Plan Component.

2. Defined Terms. The meanings of defined terms (generally, capitalized terms) in this Plan are provided in Section 23 ("Glossary").

3. Eligibility.

(a) Participation. Any person who is an Employee on an Offering Date shall be eligible to participate in this Plan during the corresponding Offering Period, subject to the limitations in Sections 3(b) and 3(c).

(b) No Participation by Five-Percent Stockholders. Notwithstanding Section 3(a), an Employee shall not participate in this Plan during an Offering Period if immediately after the grant of a Purchase Right on the Offering Date, the Employee (or any other person whose stock would be attributed to the Employee under Section 424(d) of the Code) would own stock possessing five percent or more of the total combined voting power or value of all classes of stock of the Company or of any Subsidiary. For this purpose, an Employee is treated as owning stock that he or she could purchase by exercise of Purchase Rights or other options.

(c) $25,000 Annual Limitation. Notwithstanding Section 3(a), no Employee will be granted a Purchase Right under the Plan to the extent that his or her rights to purchase stock under all employee stock purchase plans (as defined in Section 423 of the Code) of the Company or any Parent of the Company accrue at a rate, which exceeds $25,000 worth of stock (determined at the Fair Market Value of the stock at the time such Purchase Right is granted) for each calendar year in which such Purchase Right is outstanding at any time, determined in accordance with Section 423 of the Code and the regulations thereunder.

4. Offering Periods. Except as otherwise determined by the Administrator:

(a) the first Offering Period after the Restatement Effective Date shall begin on December 8, 2011;

(b) a new Offering Period shall begin on the first trading day on or immediately following each June 8th and December 8th while this Plan is in effect;

(c) the duration of each Offering Period shall be approximately 24 months (measured starting from the applicable Offering Date and ending on the trading day immediately prior to the June 8th or December 8th, as applicable, occurring approximately 24-months thereafter);

(d) the Administrator will have the power to change the duration of Offering Periods (including the commencement dates thereof) with respect to future offerings without shareholder approval if such change is announced prior to the scheduled beginning of the first Offering Period to be affected thereafter;

(e) notwithstanding Section 4(d), in no event shall an Offering Period in the Code Section 423 Component have a duration in excess of 27 months; and

(f) an Offering Period shall terminate on the first date that no Participant is enrolled in it.

5. Participation.

(a) An Employee may become a Participant in this Plan by: (i) completing a subscription agreement, in such form as the Administrator may approve from time to time, and delivering it to the Administrator or (ii) following an electronic enrollment procedure determined by the Administrator, in either event, by 5 p.m. Pacific time on the applicable Offering Date, unless another time for filing the subscription agreement is set by the Administrator for all Employees with respect to a given Offering Period. For purposes herein, a subscription agreement and its analogous electronic enrollment form will both be referred to as the "subscription agreement." The subscription agreement shall authorize Payroll deductions pursuant to this Plan and shall have such other terms as the Administrator may specify from time to time.

(b) At the end of an Offering Period, each Participant in the Offering Period who remains an Employee shall be automatically enrolled in the next succeeding Offering Period (a "Re-enrollment") unless, in a manner and at a time specified by the Administrator, but in no event later than 5 p.m. Pacific time on the Offering Date of such succeeding Offering Period, the Participant notifies the Administrator in writing that the Participant does not wish to be re-enrolled. Re-enrollment shall be at the withholding percentage specified in the Participant's most recent subscription agreement. No Participant shall be automatically re-enrolled whose participation has terminated by operation of Section 10.

(c) If the Fair Market Value of a share of Common Stock on any Offering Date is less than it was on the first day of a then-concurrent Offering Period, each Participant in the concurrent Offering Period shall automatically be withdrawn from such concurrent Offering Period and shall become a Participant in the commencing Offering Period. Participation shall be at the withholding percentage specified in the Participant's most recent (as of 5 p.m. Pacific time on the relevant Offering Date) subscription agreement. No Participant shall be automatically re-enrolled whose participation in this Plan has terminated by operation of Section 10.

6. Payroll Deductions.

(a) Payroll deductions under this Plan shall be in whole percentages, from a minimum of 1% up to a maximum (not to exceed 15%) established by the Administrator from time to time, as specified by the Participant in his or her subscription agreement in effect on the first day of an Offering Period. Payroll deductions for a Participant shall begin with the first payroll payment date of the Offering Period and shall end with the last payroll payment date of the Offering Period, unless sooner terminated by the Participant as provided in Section 10.

(b) A Participant's Payroll deductions shall be credited to his or her account under this Plan. A Participant may not make any additional payments into his or her account.

(c) A Participant may reduce his or her Payroll deductions by any whole percentage (but not below 1%) at any time during an Offering Period, which will become effective as soon as administratively practicable. A Participant may change his or her Payroll deductions during an Offering Period on or before a date prescribed by the Administrator, effective as of the first business day after the next Purchase Date, by delivering a new subscription agreement authorizing the change in payroll deduction in the form (electronic or other procedure) provided by the Administrator for such purpose. Notwithstanding the foregoing, the Administrator may, in its sole discretion, limit the nature and/or number of Payroll deduction rate changes that may be made by Participants during any Offering Period, and may establish such other conditions or limitations as it deems appropriate for Plan administration.

(d) Notwithstanding the foregoing, to the extent necessary to comply with Section 423(b)(8) of the Code and Section 3(c), a Participant's Payroll deductions may be decreased to 0% at any time during the Offering Period. Subject to Section 423(b)(8) of the Code and Section 3(c) hereof, Payroll deductions will recommence at the rate originally elected by the Participant effective as of the beginning of the first Offering Period scheduled to end in the following calendar year, unless terminated by the Participant as provided in Section 10.

(e) Notwithstanding any provisions to the contrary in the Plan, the Administrator may allow Participants to participate in the Plan via cash contributions instead of Payroll deductions if (i) Payroll deductions are not permitted under applicable local law, and (ii) the Participant is participating in the Non-423 Plan Component or the Administrator determines that cash contributions are permissible under Section 423 of the Code.

7. Purchase Rights.

(a) Grant of Purchase Rights. On the Offering Date of each Offering Period, each Participant will be granted a Purchase Right to purchase on each Purchase Date during such Offering Period (at the applicable purchase price) up to a number of shares of Common Stock determined by dividing such Participant's Payroll deductions accumulated prior to such Purchase Date and retained in the Participant's account as of the Purchase Date by the applicable purchase price; provided that in no event will a Participant be permitted to purchase (x) on each Purchase Date more than 7,500 shares of Common Stock and (y) during each Offering Period more than 30,000 shares of Common Stock, in each case, subject to any adjustment pursuant to Section 17, and provided further that such purchase will be subject to the limitations set forth in Sections 3(b), 3(c) and 12. The Participant may accept the grant of such Purchase Right with respect to an Offering Period by electing to participate in the Plan in accordance

with the requirements of Section 5. The Administrator may, for future Offering Periods, increase or decrease, in its absolute discretion, the maximum number of shares of Common Stock that a Participant may purchase during each Offering Period, subject to the limitations set forth in Sections 3(b), 3(c) and 12. Exercise of the Purchase Right will occur as provided in Section 8, unless the Participant has withdrawn pursuant to Section 10. The Purchase Right will expire on the last day of the Offering Period.

(b) Terms of Purchase Rights. Except as otherwise determined by the Administrator, each Purchase Right shall have the following terms:

(i) The per-share price of the shares subject to a Purchase Right shall be 85% of the lower of the Fair Market Value of a share of Common Stock on (a) the Offering Date on which the Purchase Right was granted and (b) the Purchase Date.

(ii) Payment for shares purchased by exercise of Purchase Rights shall be made only through Payroll deductions under Section 6.

(iii) Upon purchase or disposition of shares acquired by exercise of a Purchase Right, the Participant shall pay, or make provision satisfactory to the Administrator for payment of, all tax (and similar) withholdings that the Administrator determines, in its discretion, are required due to the acquisition or disposition, including without limitation any such withholding that the Administrator determines in its discretion is necessary to allow the Company and its Subsidiaries to claim tax deductions or other benefits in connection with the acquisition or disposition.

(iv) During his or her lifetime, a Participant's Purchase Right is exercisable only by the Participant.

(v) Purchase Rights will in all respects be subject to the terms and conditions of this Plan, as interpreted by the Administrator from time to time.

8. Purchase Dates; Purchase of Shares; Refund of Excess Cash.

(a) The Administrator shall establish one or more Purchase Dates for each Offering Period. Unless otherwise determined by the Administrator, the trading day immediately prior to each June 8 and December 8 in an Offering Period shall be a Purchase Date.

(b) Except as otherwise determined by the Administrator, and subject to subsection (c), below, each then-outstanding Purchase Right shall be exercised automatically on each Purchase Date, following addition to the Participant's account of that day's Payroll deductions, to purchase the maximum number of full shares of Common Stock at the applicable price using the Participant's accumulated Payroll deductions. No fractional shares of Common Stock will be purchased; any Payroll deductions accumulated in a Participant's account, which are not sufficient to purchase a full share will be promptly refunded to a Participant after a given Purchase Date. To the extent that Payroll deductions accumulate in a Participant's account that exceed the aggregate purchase price of the maximum amount of shares purchasable on a given Purchase Date, such excess amounts will be promptly refunded to a Participant after the given Purchase Date.

(c) The shares purchased upon exercise of a Purchase Right shall be deemed to be transferred to the Participant on the Purchase Date.

9. Registration and Delivery of Share Certificates.

(a) Shares purchased by a Participant under this Plan will be registered in the name of the Participant, or in the name of the Participant and his or her spouse, or in the name of the Participant and joint tenant(s) (with right of survivorship), as designated by the Participant.

(b) As soon as administratively feasible after each Purchase Date, the Company shall deliver to the Participant a certificate representing the shares purchased upon exercise of a Purchase Right. If approved by the Administrator in its discretion, the Company may instead (i) deliver a certificate (or equivalent) to a broker for crediting to the Participant's account or (ii) make a notation in the Participant's favor of non-certificated shares on the Company's stock records.

10. Withdrawal; Termination of Employment.

(a) A Participant may withdraw all, but not less than all, the Payroll deductions credited to his account under this Plan before a Purchase Date by giving written notice to the Administrator, in a form the Administrator prescribes from time to time, at least 15 days before the Purchase Date. Payroll deductions will then cease as to the

Participant, no purchase of shares will be made for the Participant on the Purchase Date, and all Payroll deductions then credited to the Participant's account will be refunded promptly.

(b) Upon termination of a Participant's Continuous Employment for any reason, including retirement or death, all Payroll deductions credited to the Participant's account will be promptly refunded to the Participant or, in the case of death, to the person or persons entitled thereto under Section 14, and the Participant's Purchase Right will automatically terminate.

(c) A Participant's withdrawal from an offering will not affect the Participant's eligibility to participate in a succeeding offering or in any similar plan that may be adopted by the Company.

11. Use of Funds; No Interest. Amounts withheld from Participants under this Plan shall constitute general funds of the Company, may be used for any corporate purpose, and need not be segregated from other funds unless otherwise required under local law, as determined by the Administrator (in which case, the affected Purchase Rights will be granted under the Non-423 Plan Component, if necessary). No interest shall accrue on a Participant's Payroll deductions, except as may be required by applicable law, as determined by the Administrator, for Participants in the Non-423 Plan Component (or the Code Section 423 Plan Component if permitted under Code Section 423).

12. Number of Shares Reserved.

(a) The following numbers of shares of Common Stock are reserved for issuance under this Plan, and such number may be issued at any time before termination of this Plan (for the avoidance of doubt, all share numbers in this Section 12 reflect share numbers as adjusted for two separate 2 for 1 stock splits adopted by the Board in February 2004 and February 2006, respectively, and approved by the stockholders at the 2004 annual meeting of stockholders held on May 28, 2004 and the 2006 annual meeting of stockholders held on June 9, 2006, respectively):

(i) Beginning the date of approval of this Plan by the stockholders of the Company, 4,000,000 shares of Common Stock; and

(ii) Beginning the first business day of each calendar year starting January 1, 2010 and ending as of January 4, 2022, the lesser of an additional (A) 8,000,000 shares of Common Stock, or (B) 1.5% of the outstanding shares of capital stock on such date, or (C) an amount determined by the Board (provided that the amount approved by the Board shall not be greater than (A) or (B)). As of January 29, 2022, a total of 2,368,730 shares had been purchased under this Plan and 46,150,352 remained available for purchase.

(b) If the total number of shares that would otherwise be subject to Purchase Rights granted on an Offering Date exceeds the number of shares then available under this Plan (after deduction of all shares for which Purchase Rights have been exercised or are then exercisable), the Administrator shall make a pro-rata allocation of the available shares in a manner that it determines to be as uniform and equitable as practicable. In such event, the Administrator shall give written notice of the reduction and allocation to each Participant.

(c) The Administrator may, in its discretion, transfer shares reserved for issuance under this Plan into a plan or plans of similar terms, as approved by the Board, providing for the purchase of shares of Common Stock to employees of Designated Subsidiaries that do not (or do not thereafter) participate in this Plan. Such additional plans may, without limitation, provide for variances from the terms of this Plan to take into account special circumstances (such as foreign legal restrictions) affecting the employees of the Designated Subsidiaries.

13. Administration. This Plan shall be administered by the Board or by such directors, officers, and employees of the Company as the Board may select from time to time (the "Administrator"). All costs and expenses incurred in administering this Plan shall be paid by the Company, provided that any taxes applicable to an Employee's participation in this Plan may be charged to the Employee by the Company. The Administrator may make such rules and regulations as it deems necessary to administer this Plan and to interpret any provision of this Plan, and shall apply those rules and regulations so that all employees granted options under the Plan have the same rights and privileges (except that the right to purchase stock under the Plan may bear a uniform relationship to total compensation). Notwithstanding any provision to the contrary in this Plan, the Administrator may adopt rules or procedures relating to the operation and administration of the Non-423 Plan Component to accommodate the specific requirements of local laws and procedures for jurisdictions outside of the United States. Further, the Administrator is authorized to adopt sub-plans applicable to particular Designated Subsidiaries or locations under the Non-423 Plan Component. The rules of such sub-plans may take precedence over other provisions of this Plan, with the exception of Section 12(a) hereof, but unless otherwise superseded by the terms of such sub-plan, the provisions of this Plan shall govern the operation of such sub-plan. Any determination, decision, or action of the Administrator in connection with the construction, interpretation, administration, or application of this Plan or any right granted under this Plan shall be final, conclusive, and binding upon all persons, and no member of the Administrator shall be liable for any such determination, decision, or action made in good faith.

14. Designation of Beneficiary.

(a) A Participant may file a written designation of a beneficiary who is to receive any shares and cash, if any, from the Participant's account under this Plan in the event of the Participant's death.

(b) A designation of beneficiary may be changed by the Participant at any time by written notice. In the event of the death of a Participant, and in the absence of a beneficiary validly designated under this Plan who is living at the time of the Participant's death, the Administrator shall deliver such shares and/or cash to the executor or administrator of the Participant's estate, or if no such executor or administrator has been appointed (to the Administrator's knowledge), the Administrator, in its discretion, may deliver such shares and/or cash to the spouse or to any one or more dependents or relatives of the Participant or, if no spouse, dependent, or relative is known to the Administrator, then to such other person as the Administrator may designate.

15. Transferability. Neither Payroll deductions credited to a Participant's account nor any rights with regard to the exercise of a Purchase Right or to receive shares under this Plan may be assigned, transferred, pledged, or otherwise disposed of in any way (other than by will, the laws of descent and distribution, or as provided in Section 14) by the Participant. Any such attempt at assignment, transfer, pledge, or other disposition shall be without effect, except that the Administrator may treat such act as an election to withdraw funds in accordance with Section 10.

16. Reports. Individual accounts will be maintained for each Participant in this Plan. Statements of account will be given to participating Employees promptly following each Purchase Date, setting forth the amounts of Payroll deductions, per-share purchase price, number of shares purchased, and remaining cash balance, if any.

17. Adjustments upon Changes in Capitalization.

(a) Subject to any required action by the stockholders of the Company, the class(es) and the number of securities covered by each unexercised Purchase Right and the class(es) and the maximum number of securities authorized for issuance under this Plan but not yet been placed under a Purchase Right (collectively, the "Reserves"), as well as the price per security covered by each unexercised Purchase Right, shall be proportionately adjusted for any change that is made in, or other events that occur with respect to, the shares of Common Stock, effected without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock split, reverse stock split, stock dividend, combination or reclassification of the Common Stock, exchange of shares, change in corporate structure or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto) (not counting shares issued upon conversion of convertible securities of the Company as "effected without receipt of consideration"). Such adjustment shall be made by the Board and shall be final, binding, and conclusive. Except as expressly provided herein, no issue by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no consequent adjustment shall be made with respect to, the number or price of shares of Common Stock subject to a Purchase Right.

(b) In the event of the proposed dissolution or liquidation of the Company, the then-current Offering Period will terminate immediately before the consummation of the proposed action, unless otherwise provided by the Board. In the event of a proposed sale of all or substantially all of the Company's assets, or the merger of the Company with or into another corporation (if the Company's stockholders own less than 50% of the total outstanding voting power in the surviving entity or a parent of the surviving entity after the merger), each Purchase Right under this Plan shall be assumed or an equivalent purchase right shall be substituted by the successor corporation or a parent or subsidiary of the successor corporation, unless the successor corporation does not agree to assume the Purchase Rights or to substitute equivalent purchase rights, in which case the Board may, in lieu of such assumption or substitution, accelerate the exercisability of Purchase Rights and allow Purchase Rights to be exercisable as to shares as to which they would not otherwise be exercisable, on terms and for a period that the Board determines in its discretion. To the extent that the Board accelerates exercisability of Purchase Rights as described above, it shall promptly so notify all Participants in writing.

(c) The Board may, in its discretion, also make provision for adjusting the Reserves, as well as the price per share of Common Stock covered by each outstanding Purchase Right, if the Company effects one or more reorganizations, recapitalizations, rights offerings, or other increases or reductions of shares of its outstanding Common Stock, or if the Company consolidates with or merges into any other corporation, in a transaction not otherwise covered by this Section 17.

18. Amendment or Termination.

(a) The Board may at any time terminate or amend this Plan. No amendment may be made without prior approval of the stockholders of the Company (obtained in the manner described in Section 20) if it would increase the number of shares that may be issued under this Plan.

(b) The Board may elect to terminate any or all outstanding Purchase Rights at any time, except to the extent that exercisability of such Purchase Rights has been accelerated pursuant to Section 17(b). If this Plan is terminated, the Board may also elect to terminate Purchase Rights upon completion of the purchase of shares on the next Purchase Date or to permit Purchase Rights to expire in accordance with their terms (with participation to continue through such expiration dates). If Purchase Rights are terminated before expiration, any funds contributed to this Plan that have not been used to purchase shares shall be refunded to Participants as soon as administratively feasible.

19. Notices. All notices or other communications by a Participant to the Company or the Administrator under or in connection with this Plan shall be deemed to have been duly given when received in the form specified by the Administrator at the location, or by the person, designated by the Administrator for that purpose.

20. Shareholder Approval. This Plan was submitted to and approved by the stockholders of the Company within 12 months after the date this Plan was initially adopted by the Board. Amendments to the Plan approved by the Board on March 1, 2022 were approved by the stockholders on June 23, 2022.

21. Conditions upon Issuance of Shares.

(a) Shares shall not be issued with respect to a Purchase Right unless the exercise of such Purchase Right and the issuance and delivery of such shares pursuant thereto complies with all applicable provisions of law, domestic or foreign, including, without limitation, the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, the rules and regulations promulgated thereunder, and the requirements of any stock exchange upon which the shares may then be listed, and shall be further subject to the approval of counsel for the Company with respect to such compliance.

(b) As a condition to the exercise of a Purchase Right, the Company may require the person exercising such Purchase Right to represent and warrant at the time of any such exercise that the shares are being purchased only for investment and without any present intention to sell or distribute such shares if, in the opinion of counsel for the Company, such a representation is required by any of the aforementioned applicable provisions of law.

22. Term of Plan. This Plan became effective upon its initial approval by the stockholders of the Company on June 17, 2000 as described in Section 20. It shall continue in effect indefinitely unless sooner terminated under Section 18.

23. Glossary. The following definitions apply for purposes of this Plan:

(a) "Administrator" means the Board or the persons appointed by the Board to administer this Plan pursuant to Section 13.

(b) "Board" means the Board of Directors of the Company.

(c) "Code" means the Internal Revenue Code of 1986, as amended.

(d) "Code Section 423 Plan Component" means the component of this Plan that is intended to meet the requirements set forth in Section 423(b) of the Code, as amended. The provisions of the Code Section 423 Plan Component shall be construed, administered and enforced in accordance with Section 423(b).

(e) "Common Stock" means the Common Shares of the Company.

(f) "Company" means Marvell Technology, Inc. , a Delaware corporation.

(g) "Continuous Employment" means the absence of any interruption or termination of service as an Employee. Continuous Employment shall not be considered interrupted in the case of a leave of absence agreed to in writing by the Company, provided that either (i) the leave does not exceed 90 days or (ii) re-employment upon expiration of the leave is guaranteed by contract or statute.

(h) "Designated Subsidiaries" means the Subsidiaries that have been designated by the Board from time to time in its sole discretion to participate in this Plan. The Administrator will determine whether Employees of any Designated Subsidiary shall participate in the Code Section 423 Plan Component or the Non-423 Plan Component.

(i) "Employee" means any person, including an officer, who is customarily employed for at least 20 hours per week and five months per year by the Company or one of its Designated Subsidiaries, other than an employee of a Designated Subsidiary under the Non-423 Plan Component, who, as of the Offering Date, is otherwise determined ineligible for participation in the Non-423 Plan Component, at the discretion of the Administrator. Whether an individual qualifies as an Employee shall be determined by the Administrator, in its sole discretion, by reference to Section 3401(c) of the Code and the regulations promulgated thereunder; unless the

Administrator makes a contrary determination, the Employees of the Company shall, for all purposes of this Plan, be those individuals who satisfy the customary employment criteria set forth above and are carried as employees by the Company or a Designated Subsidiary for regular payroll purposes. Notwithstanding the foregoing, for Purchase Rights granted under the Non-423 Plan Component, Employee shall also mean any other employee of a Designated Subsidiary to the extent that local law requires participation in the Plan to be extended to such employee, as determined by the Administrator.

(j) "Fair Market Value" means as, as of any date, the value of Common Stock as follows:

(i) If the Common Stock is quoted on an established stock exchange or national market system, including without limitation the National Association of Securities Dealers, Inc. Automated Quotation ("NASDAQ") National Market System, Fair Market Value shall be the closing sales price (or the closing bid, if no sales are reported) as quoted on that exchange or system for the day of the determination, as reported in The Wall Street Journal or an equivalent source, or if the determination date is not a trading day, then on the most recent preceding trading day;

(ii) If the Common Stock is quoted on NASDAQ (but not on the National Market System) or regularly quoted by a recognized securities dealer but selling prices are not reported, Fair Market Value shall be the mean between the high bid and low asked prices for the Common Stock on the day of the determination, or on the most recent preceding trading day if the determination date is not a trading day; or

(iii) In the absence of an established market for the Common Stock, Fair Market Value shall be determined by the Administrator.

(k) "Non-423 Plan Component" means a component of this Plan that is not intended to meet the requirements set forth in Section 423(b) of the Code, as amended.

(l) "Offering Date" means the first trading day of an Offering Period.

(m) "Offering Period" means a period established by the Administrator pursuant to Section 4 during which Payroll deductions are accumulated from Participants and applied to the purchase of Common Stock. The duration and timing of an Offering Period may be changed pursuant to Sections 4 and 18.

(n) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code.

(o) "Participant" means an Employee who has elected to participate, or has been deemed to participate by means of an automatic enrollment, in this Plan pursuant to Section 5.

(p) "Payroll" means all regular, straight-time gross earnings, exclusive of payments for overtime, shift premium, incentive compensation or payments, bonuses, and commissions.

(q) "Plan" means this Marvell Technology, Inc. 2000 Employee Stock Purchase Plan, as amended and restated, which includes a Code Section 423 Plan Component and a Non-423 Plan Component.

(r) "Purchase Date" means such trading days during each Offering Period as may be established by the Administrator for the purchase of Common Stock pursuant to Section 8.

(s) "Purchase Right" means a right to purchase Common Stock granted pursuant to Section 7.

(t) "Restatement Effective Date" means October 31, 2011, the date of the amendment and restatement of the Plan.

(u) "Subsidiary" means, from time to time, any corporation, domestic or foreign, of which not less than 50% of the voting shares are held by the Company or another Subsidiary of the Company.

Exhibit 10.9.1

MARVELL TECHNOLOGY, INC.

SEVERANCE AGREEMENT

As amended June 1, 2022

This Severance Agreement (the "Agreement") is made and entered into by and between Matthew Murphy (the "Employee") and Marvell Technology, Inc. (the "Company" which includes all of its subsidiaries), effective on the last date signed below.

RECITALS

The Company believes that it is imperative to provide the Employee with certain severance benefits upon certain terminations of employment. These benefits will provide the Employee with enhanced financial security and incentive and encouragement to remain with the Company.

Certain capitalized terms used in the Agreement are defined below.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties hereto agree as follows:

1. Term of Agreement. This Agreement shall terminate upon the later of (i) January 1, 2026, or (ii) if Employee is terminated involuntarily by Company without Cause prior to January 1, 2026, the date that all of the obligations of the parties hereto with respect to this Agreement have been satisfied.

2. At-Will Employment. The Company and the Employee acknowledge that the Employee's employment is and shall continue to be at-will, as defined under applicable law, except as may otherwise be specifically provided by applicable law or under the terms of any written formal employment agreement or offer letter between the Company and the Employee (an "Employment Agreement"). This Agreement does not constitute an agreement to employ Employee for any specific time.

3. Severance Benefits.

(a) In the event the Employee is terminated involuntarily by Company without Cause, as defined below, or as a result of the Employee resigning for Good Reason, as defined below, and provided the Employee executes and does not revoke a full release of claims with the Company (in a form satisfactory to the Company) (the "Release"), the Employee will be entitled to receive the severance benefits set out in Section 3(b). "Cause" is defined as: (A) an act of material dishonesty in connection with your job responsibilities; (B) conviction of, or plea of nolo contendere to, a felony or any crime involving fraud, embezzlement or moral turpitude; (C) gross misconduct; (D) willful unauthorized use or disclosure of any proprietary information or trade secrets of the Company ; (E) willful breach of any obligations under any written agreement with the Company that is not cured within 10 days after your receipt of written notice

from the Company specifying the breach; (F) willful refusal to cooperate in good faith with a governmental or internal investigation of the Company or their directors, officers or employees, if the Company has requested your cooperation; or (G) willful failure to substantially perform your duties with the Company (other than as a result of incapacity due to physical or mental illness); provided that the action or conduct described in this clause (G) will constitute "Cause" only if such failure continues after the Company's Board of Directors or Chair of the Board has provided you with a written demand for substantial performance setting forth in detail the specific respects in which the Company believes you have willfully failed to substantially perform your duties thereof and you have been provided a reasonable opportunity (to be not less than 20 days) to cure the same. "Good Reason" is defined as the occurrence of any of the following conditions without the Employee's consent: (X) a change in the Employee's position within the Company (or a parent or subsidiary employing the Employee) that materially reduces the Employee's level of duties, authority or responsibilities; provided, however, that if there is a change in the Employee's role after which the Employee does not have the role as chief executive officer with respect to a parent entity whose stock is publicly-traded, then such a change shall affirmatively constitute Good Reason; (Y) a reduction of 10% or greater in the Employee's level of annual base salary or incentive compensation eligibility; or (Z) the Company requires the Employee to relocate the principal place of performance of the Employee's duties to a location (i) more than 30 miles from the Employee's principal place of performance and (ii) the relocation results in a greater commute by the Employee.

The Employee's resignation will not constitute a resignation for "Good Reason" unless the Employee first provides the Company (or a parent or subsidiary employing the Employee) with written notice of the acts or omissions constituting the grounds for "Good Reason" within 90 days of the initial existence of the grounds for "Good Reason" and provides the Company with 30 days following the date of such notice to cure the condition constituting "Good Reason."

(b) Benefits Provided. The Company shall provide the following payments and benefits to the Employee upon termination of employment in accordance with Section 3(a):

(i) A cash payment in a lump sum (less any withholding taxes) equal to 24 months of base salary (as in effect immediately prior to the termination); and

(ii) A cash payment in a lump sum (less any withholding taxes) equal to the Employee's annual target incentive bonus (as in effect immediately prior to the termination) which is currently 200% of 12 months of base salary; and

(iii) If the Employee, and any spouse and/or dependents of the Employee ("Family Members") has coverage on the date of the Employee's employment termination under a group health plan sponsored by the Company, the Company will reimburse the Employee the total applicable premium cost for continued group health plan coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA") for a period of twelve (12) months following the Employee's employment termination, provided that the Employee validly elects and is eligible to continue coverage under COBRA for the Employee and his Family Members. However, if the Company determines in its sole discretion that it cannot provide the COBRA reimbursement benefits without potentially violating applicable laws (including, without limitation, Section 2716 of the Public Health Service Act and the Employee Retirement Income Security Act of 1974, as amended), the Company will in lieu thereof provide to the Employee a monthly payment in an amount equal to the monthly COBRA premium (on an after-tax basis) that the Employee would be required to pay to continue the group health coverage in effect on the date of the Employee's termination of employment (which amount will

be based on the premium for the first month of COBRA coverage) for such twelve-month period, which payments will be made regardless of whether the Employee elects COBRA continuation coverage; and

(iv) Notwithstanding anything to the contrary in any plan, agreement, or arrangement governing an Equity Award, (a) for each Equity Award subject only to time-based vesting, the vesting will be accelerated as if Employee had remained employed through the date 18 months following the termination of employment date, (b) for each Equity Award subject to performance-based vesting to the extent performance measurement has been completed and shares based on that performance will vest thereafter solely based on time, the vesting will be accelerated as if Employee had remained employed through the date 18 months following the termination of employment date, (c) for each Equity Award subject to performance-based vesting to the extent the performance measurement has not been completed, then the vesting of shares subject to each Equity Award will be accelerated by multiplying the number of shares at Target by the Pro Rata Acceleration Fraction (as defined below), and (d) for each Equity Award subject to performance-based vesting to the extent one but not all of the performance measurement components have been completed(for example, the Earnings Per Share performance multiplier component in the April 2022 annual focal grants has been completed but the Total Shareholder Return performance component has not been completed), then the vesting of shares subject to each such Equity Award will be accelerated by (i) multiplying the number of shares at Target by the Pro Rata Acceleration Fraction (as defined below) the result of which is then multiplied by the completed performance measurement. . Except as provided above, there shall be no acceleration with respect to that portion of any Equity Awards based on performance where the performance measurement has not been achieved. For purposes of this Agreement "Equity Award" means any equity awards covering shares of the Company's common stock, including stock options, restricted stock, restricted stock units, stock appreciation rights, performance units, performance shares and/or any other equity-based awards. An illustrative example of the foregoing is provided in Exhibit A.

(A) The Pro Rata Acceleration Fraction means the fraction in which the numerator is the number of days elapsed starting on the date of grant of the Equity Award until termination of employment in accordance with Section 3(a) divided by the total number of days in the performance measurement period (provided, however, in the event there are 2 performance measurement periods for a particular Equity Award, then the longest period is used for purposes of the Pro Rata Acceleration Fraction).

(c) Release Effectiveness. The receipt of any severance pursuant to Section 3(b) will be subject to Employee signing and not revoking the Release and further subject to the Release becoming effective within sixty (60) days following Employee's termination of employment (the "Release Deadline Date").

(d) Timing of Severance Payments. Any cash severance payment to which Employee is entitled shall be paid by the Company to Employee in a single lump sum in cash on the first Company payroll after the Release Deadline Date, subject to any delay required by Section 3(f).

(e) Change of Control Benefits. In the event the Employee receives severance and other benefits pursuant to a change in control agreement that are greater than or equal to the amounts payable hereunder, then the Employee shall not be entitled to receive severance or any other benefits under this Agreement.

(f) Section 409A.

(i) Notwithstanding anything to the contrary in this Agreement, if Employee is a "specified employee" within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code") and the final regulations and any guidance promulgated thereunder ("Section 409A") at the time of Employee's termination (other than due to death) or resignation, then the severance payable to Employee, if any, pursuant to this Agreement, when considered together with any other severance payments or separation benefits that are considered deferred compensation under Section 409A (together, the "Deferred Compensation Separation Benefits") that are payable within the first six (6) months following Employee's termination of employment, will become payable on or within ten days following the first payroll date that occurs on or after the date six (6) months and one (1) day following the date of Employee's termination of employment. All subsequent Deferred Compensation Separation Benefits, if any, will be payable in accordance with the payment schedule applicable to each payment or benefit. Notwithstanding anything herein to the contrary, if Employee dies following his termination but prior to the six (6) month anniversary of his termination, then any payments delayed in accordance with this paragraph will be payable in a lump sum as soon as administratively practicable after the date of Employee's death and all other Deferred Compensation Separation Benefits will be payable in accordance with the payment schedule applicable to each payment or benefit. Each payment and benefit payable under this Agreement is intended to constitute separate payments for purposes of Section 1.409A-2(b)(2) of the Treasury Regulations.

(ii) Any amount paid under this Agreement that satisfies the requirements of the "short-term deferral" rule set forth in Section 1.409A-1(b)(4) of the Treasury Regulations shall not constitute Deferred Compensation Separation Benefits for purposes of clause (i) above.

(iii) Any amount paid under this Agreement that qualifies as a payment made as a result of an involuntary separation from service pursuant to Section 1.409A-1(b)(9)(iii) of the Treasury Regulations that do not exceed the Section 409A Limit shall not constitute Deferred Compensation Separation Benefits for purposes of clause (i) above. "Section 409A Limit" will mean the lesser of two (2) times: (i) Employee's annualized compensation based upon the annual rate of pay paid to Employee during the Employee's taxable year preceding the Employee's taxable year of Employee's termination of employment as determined under, and with such adjustments as are set forth in, Treasury Regulation 1.409A-1(b)(9)(iii)(A)(1) and any Internal Revenue Service guidance issued with respect thereto; or (ii) the maximum amount that may be taken into account under a qualified plan pursuant to Section 401(a)(17) of the Code for the year in which Employee's employment is terminated.

(iv) The foregoing provisions are intended to comply with the requirements of Section 409A so that none of the severance payments and benefits to be provided hereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to so comply. The Company and Employee agree to work together in good faith to consider amendments to this Agreement and to take such reasonable actions which are necessary, appropriate or desirable to avoid imposition of any additional tax or income recognition prior to actual payment to Employee under Section 409A.

4. Successors.

(a) The Company's Successors. Any successor to the Company (whether direct or indirect and whether by purchase, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets shall assume the obligations under

this Agreement and agree expressly to perform the obligations under this Agreement in the same manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. For all purposes under this Agreement, the term "Company" shall include any successor to the Company's business and/or assets which executes and delivers the assumption agreement described in this Section 4(a) or which becomes bound by the terms of this Agreement by operation of law. The term "Company" shall also include any direct or indirect subsidiary that is majority owned by the Company.

(b) The Employee's Successors. The terms of this Agreement and all rights of the Employee hereunder shall inure to the benefit of, and be enforceable by, the Employee's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

5. Notice. All notices and other communications required or permitted hereunder shall be in writing, shall be effective when given, and shall in any event be deemed to be given upon receipt or, if earlier, (a) five (5) days after deposit with the U.S. Postal Service or other applicable postal service, if delivered by first class mail, postage prepaid, (b) upon delivery, if delivered by hand, (c) one (1) business day after the business day of deposit with Federal Express or similar overnight courier, freight prepaid or (d) one (1) business day after the business day of facsimile or e-mail transmission, if delivered by facsimile transmission or e-mail with a copy by first class mail, postage prepaid, and shall be addressed (i) if to Employee, at his or her last known residential address and (ii) if to the Company, at the address of its principal corporate offices (attention: Secretary), or in any such case at such other address as a party may designate by ten (10) days' advance written notice to the other party pursuant to the provisions above.

6. Miscellaneous Provisions.

(a) No Duty to Mitigate. The Employee shall not be required to mitigate the amount of any payment contemplated by this Agreement, nor shall any such payment be reduced, except as provided above in Section 3(e), by any earnings that the Employee may receive from any other source.

(b) Waiver. No provision of this Agreement shall be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by the Employee and by an authorized officer of the Company (other than the Employee). No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party shall be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(c) Headings. All captions and section headings used in this Agreement are for convenient reference only and do not form a part of this Agreement.

(d) Entire Agreement. This Agreement constitutes the entire agreement of the parties hereto and supersedes in their entirety all prior representations, understandings, undertakings or agreements (whether oral or written and whether expressed or implied) of the parties with respect to the subject matter hereof.

(e) Choice of Law. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of California. The Superior Court of Santa Clara County and/or the United States District Court for the Northern District of

California shall have exclusive jurisdiction and venue over all controversies in connection with this Agreement.

(f) Severability. The invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision hereof, which shall remain in full force and effect.

(g) Withholding. All payments made pursuant to this Agreement will be subject to withholding of applicable income and employment taxes.

(h) Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together will constitute one and the same instrument.

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the day and year set forth below.

COMPANY MARVELL TECHNOLOGY, INC.

By: _____

Name: Mark Casper

Title: General Counsel, Senior VP

Date: September 19, 2022

EMPLOYEE _____

Name: Matthew Murphy

Date: September 19, 2022

Exhibit A
Illustrative Examples

Time Based Vesting

No. of Shares granted	Grant Date	Vesting type	Vesting term	Employment Termination Date	No. of shares vested as of Termination date	No. of additional shares to be vested (18 months)	Total Vested
100,000	April 15, 2020	quarterly	3 years from grant date	April 15, 2021	33,333	50,000	83,333

Performance Based Vesting – TSR without EPS multiplier

No. of Shares granted at Target	Grant Date	Vesting Type	Performance Measurement Start Date	Performance Measurement End Date	Employment Termination Date	No. of shares vested as of term date	Number. of shares to be vested based on Pro Rata Acceleration Fraction
200,000	April 15, 2020	3-year cliff based on performance	April 15, 2020	April 5, 2023	April 15, 2021	0	67,281 (200,000 shares * 365 days/1085 days)

Performance Based Vesting – TSR (see above) with EPS multiplier (Neither Performance Measure Achieved)

No. of Shares granted at Target: 200,000
Grant Date: April 15, 2020
Employment Termination Date: April 15, 2021
Number of shares vested as a Termination Date: 0

Award Component	Performance multiplier achieved	Performance Measurement Start Date	Performance Measurement End Date	Number of additional shares to be vested based on Pro Rata Acceleration Fraction
EPS	100% (at target)	April 15, 2020	January 29, 2022	-
TSR	100% (at target)	April 15, 2020	April 5, 2023	-
Total	100%*100%=100% 200,000 shares			67,281 (200,000 shares * 365 days/1085 days)

Performance Based Vesting – TSR with EPS multiplier completed at 150% at year 2

No. of Shares granted at Target: 200,000
Grant Date: April 15, 2020
Employment Termination Date: April 15, 2022
Number of shares vested as a Termination Date: 0

Award Component	Performance multiplier achieved	Performance Measurement Start Date	Performance Measurement End Date	Pro-Rata Acceleration Fraction	Total Shares to Vest
EPS	150%	April 15, 2020	January 29, 2022	-	-
TSR	100% (at target)	April 15, 2020	April 5, 2023	-	-
Total	-	-	-	(730 days/1085 day) = .672811	200,000 *(.672811 * 150%) = **201,843**

Exhibit 10.21

MARVELL TECHNOLOGY, INC.
CHANGE IN CONTROL SEVERANCE PLAN
AND SUMMARY PLAN DESCRIPTION
Updated November 18, 2022

1. **Introduction**. The purpose of this Marvell Technology, Inc. Change in Control Severance Plan (the "**Plan**") is to provide assurances of specified benefits to certain employees of the Company whose employment is subject to being involuntarily terminated other than for death, Disability, or Cause or voluntarily terminated for Good Reason under the circumstances described in the Plan. This Plan is an "employee welfare benefit plan," as defined in Section 3(1) of ERISA. This document constitutes both the written instrument under which the Plan is maintained and the required summary plan description for the Plan.

2. **Important Terms**. The following words and phrases, when the initial letter of the term is capitalized, will have the meanings set forth in this Section 2, unless a different meaning is plainly required by the context:

1.1. **"Administrator"** means the Company, acting through the Compensation Committee or another duly constituted committee of members of the Board, or any person to whom the Administrator has delegated any authority or responsibility with respect to the Plan pursuant to Section 12, but only to the extent of such delegation.

1.2. **"Board"** means the Board of Directors of the Company.

1.3. **"Cause"** shall mean any of the following reasons:

(a) an act of material dishonesty made by the Participant in connection with the Participant's job responsibilities as an employee;

(b) the Participant's conviction of, or plea of *nolo contendere* to, a felony or any crime involving fraud, embezzlement or moral turpitude;

(c) the Participant's gross misconduct;

(d) the Participant's willful unauthorized use or disclosure of any proprietary information or trade secrets of the Company (or a parent or subsidiary employing the Participant);

(e) the Participant's willful breach of any obligations under any written agreement with the Company (or a parent or subsidiary employing the Participant) that is not cured within 10 days after Participant's receipt of written notice from the Company or Marvell specifying the breach;

(f) the Participant's willful refusal to cooperate in good faith with a governmental or internal investigation of the Company (or a parent or subsidiary employing the Participant) or their directors, officers or employees, if the Company has requested the Participant's cooperation; or

(g) the Participant's willful failure to substantially perform the Participant's employment duties with the Company (or a parent or subsidiary employing the Participant), other than as a result of incapacity due to physical or mental illness; provided that the action or conduct described in this clause (g) will constitute "Cause" only if such failure continues after the Company's Board of

Directors or Chair of the Board has provided Participant with a written demand for substantial performance setting forth in detail the specific respects in which the Company believes Participant has willfully failed to substantially perform his duties thereof and Participant has been provided a reasonable opportunity (to be not less than 20 days) to cure the same.

With respect to clauses (a)-(f), if the condition triggering Cause is curable in the good faith judgment of the Administrator, Participant will be provided written notice which specifically sets forth the factual basis for the Company's belief that Cause has occurred, and a termination for Cause will not occur until Participant has been provided 10 business days after Participant's receipt of the written notice to cure the condition.

1.4. **"Change in Control"** means:

(a) a merger or consolidation in which the holders of stock possessing a majority of the voting power in the surviving entity (or a parent of the surviving entity) did not own a majority of the common stock immediately before the transaction;

(b) the sale of all or substantially all of the Company's assets to any other person or entity (other than a subsidiary);

(c) the liquidation or dissolution of the Company; or

(d) the direct or indirect acquisition by any person or related group of persons of beneficial ownership (within the meaning of Rule–13d-3 of the Exchange Act) of securities possessing more than 50% of the total combined voting power of the Company's outstanding securities pursuant to a tender or exchange offer made directly to the Company's shareholders that the Board does not recommend that the shareholders accept.

Notwithstanding the preceding, no transaction will be a Change in Control under this definition unless it is also a "change in control" within the meaning of Treasury Regulation Section 1.409A-3(i)(5) if it would cause a payment or benefit under the Plan that is subject to Section 409A to fail to meet the requirements of Section 409A.

1.5. **"Change in Control Period"** means the time period beginning on the date that the Company enters into a definitive agreement whose consummation would result in a Change in Control and ending on the date that is 24 months following the Change in Control.

1.6. **"Code"** means the Internal Revenue Code of 1986, as amended.

1.7. **"Company"** means Marvell Technology, Inc., a Delaware corporation, and any successor that assumes the obligations of the Company under the Plan, by way of merger, acquisition, consolidation or other transaction. In addition, unless superseded by a newer agreement, Participation Agreements between Marvell Technology Group, Ltd., the predecessor to the Company, and Participants remain valid and in full force.

1.8. **"Designated Participant"** means each of the Chief Executive Officer, Chief Financial Officer, Chief Legal Officer, General Counsel, the head of Human Resources (e.g., Senior Vice President, Human Resources), and the head of Worldwide Sales (e.g., Executive Vice President, Worldwide Sales) of the Company at the start to the Change in Control Period.

1.9. **"Disability"** will mean that a Participant has been unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or can be expected to last for a continuous period of not less than 12

months. Alternatively, a Participant will be deemed disabled if determined to be totally disabled by the Social Security Administration.

1.10. **"ECC"** means the Executive Compensation Committee of the Board.

1.11. "**Effective Date**" means June 14, 2016, the date the Plan was originally adopted.

1.12. "**Exchange Act**" means the U.S. Securities Exchange Act of 1934, as amended.

1.13. "**Equity Awards**" means a Participant's outstanding stock options, stock appreciation rights, restricted stock, restricted stock units, performance shares, performance stock units and any other Company equity compensation awards.

1.14. **"ERISA"** means the Employee Retirement Income Security Act of 1974, as amended.

1.15. **"Good Reason"** means a Participant's voluntary resignation as an employee of the Company within 30 days following the expiration of any Cure Period after one of the following conditions has come into existence without his or her consent:

(a) a material reduction in the Participant's level of duties, authority or responsibilities from those immediately prior to the start of the Change in Control Period; provided, however, that with respect to a Designated Participant, if there is a change in Participant's role after which Participant does not have the role as chief executive officer, chief financial officer, chief legal officer, general counsel, head of human resources, or head of worldwide sales, as applicable, with respect to a parent entity whose stock is publicly-traded, then such a change shall affirmatively constitute Good Reason;

(b) a reduction of 10% or greater in the Participant's level of annual base salary or incentive compensation eligibility; or

(c) the Company requires the Participant to relocate the principal place of performance of the Participant's duties to (i) a location more than 30 miles from the Participant's principal place of performance immediately prior to the start of the Change in Control Period and (ii) the relocation results in a greater commute by the Participant.

The Participant's resignation will not constitute a resignation for "Good Reason" unless the Participant first provides the Company (or a parent or subsidiary employing the Participant) with written notice of the acts or omissions constituting the grounds for "Good Reason" within 90 days of the initial existence of the grounds for "Good Reason" and provides the Company with 30 days following the date of such notice to cure the condition constituting "Good Reason" (the "**Cure Period**").

The determination of whether Good Reason exists, including the determination of the cure of any condition constituting Good Reason, shall be made in all cases by the Administrator in accordance with authorities and deference afforded to the Administrator under Section 12 of the Plan.

For purposes of the determination of whether one of the above conditions has occurred under this Section 2.15 that would give rise to Good Reason, the Company shall look to the duties and responsibilities, pay, or principal place of employment of the Participant on the day before the start of the Change in Control Period. Notwithstanding the prior sentence, if a Participant's duties or compensation is increased during the Change in Control Period, then the Company shall look to the increased duties or compensation for purposes of the determination under this Section 2.15.

1.16. **"Involuntary Termination"** means a termination of employment of a Participant under the circumstances described in Section 5.

1.17. **"Participant"** means an employee of the Company or of any parent or subsidiary of the Company who (a) has been designated by the Administrator to participate in the Plan and (b) has timely and properly executed and delivered a Participation Agreement to the Company.

1.18. "**Participation Agreement**" means the individual agreement (as will be provided in separate cover as Appendix A) provided by the Administrator to a Participant under the Plan, which has been signed and accepted by the Participant.

1.19. **"Plan"** means the Marvell Technology, Inc. Change in Control Severance Plan, as set forth in this document, and as hereafter amended from time to time.

1.20. "**Pre-Closing Change in Control Period**" means the time period beginning at the time the Company enters into a definitive agreement whose consummation would result in a Change in Control and ending on date the Change in Control is completed.

1.21. "**Post-Closing Change in Control Period**" means the time period beginning on the date the Change in Control is completed and ending on the date that is 24 months following the Change in Control.

1.22. **"Section 409A Limit"** means 2 times the lesser of: (i) the Participant's annualized compensation based upon the annual rate of pay paid to the Participant during the Participant's taxable year preceding the Participant's taxable year of the Participant's termination of employment as determined under, and with such adjustments as are set forth in, Treasury Regulation 1.409A-1(b)(9)(iii)(A)(1) and any Internal Revenue Service guidance issued with respect thereto; or (ii) the maximum amount that may be taken into account under a qualified plan pursuant to Section 401(a)(17) of the Code for the year in which the Participant's employment is terminated.

1.23. **"Severance Benefits"** means the compensation and other benefits that the Participant will be provided in the circumstances described in Section 5.

3. **Treatment of Equity Awards that are Not Assumed or Substituted for in the Event of a Change in Control**. In the event of a Change in Control where the successor corporation does not assume a Participant's Equity Awards or substitute Equity Awards for substantially similar awards with the same or more favorable vesting schedule and other terms as the Participant's Equity Awards, then the Participant's Equity Awards will vest in full and the Participant will have the right to exercise all of his or her outstanding stock options and stock appreciation rights, including shares as to which such Equity Awards would not otherwise be vested or exercisable, all restrictions on his or her restricted stock and restricted stock units will lapse, and, with respect to his or her Equity Awards with performance-based vesting, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels and all other terms and conditions met; provided however, that (A) if there is no "target" level, then the number that will vest shall be 100% of the maximum amount that could vest with respect to that relevant measurement period(s); and (B) if the performance period has been completed and the actual performance achieved is greater than the target level, then the number that will vest shall be 100% of the amount that would vest based on that actual performance achievement level with respect to that relevant measurement period; and (C) if the performance criteria is a Total Shareholder Return ("**TSR**") or other measure based on the value of the Company's stock, the amount that will vest will be calculated as if the measurement period ended on the date of the Change in Control (and including the final closing price of the Company's stock on such date). In addition, if any of the Participant's stock options or stock appreciation rights are not assumed or substituted for in the Change in Control, the Company will notify the Participant in writing or electronically that such stock options or stock appreciation rights will be exercisable for a period of time determined by the Board in

its sole discretion, and the stock options or stock appreciation rights will terminate upon the expiration of such period.

4. **Eligibility for Severance Benefits**. An individual is eligible for Severance Benefits under the Plan, as described in Section 5, only if he or she experiences an Involuntary Termination and complies with Section 7 hereof.

5. **Involuntary Termination During the Change in Control Period**. If, (a) during the Pre-Closing Change in Control Period, a condition specified in Section 2.15(b) or Section 2.15(c) occurs and a Participant terminates his or her employment with the Company (or any parent or subsidiary of the Company) for Good Reason, (b) during the Post Change in Control Period a Participant terminates his or her employment with the Company (or any parent or subsidiary of the Company) for Good Reason, or (c) during the Change in Control Period the Company (or any parent or subsidiary of the Company) terminates the Participant's employment for a reason other than Cause or the Participant's death or Disability (in either case, an "**Involuntary Termination**"), then, in each case, subject to the Participant's compliance with Section 7, the Participant will receive the following Severance Benefits:

5.1 **Cash Severance Benefits**. A lump-sum payment of cash severance equal to the amount set forth in the Participant's Participation Agreement;

5.2 **Equity Award Vesting Acceleration Benefit**. The Participant's Equity Awards will accelerate and vest to the amount set forth in the Participant's Participation Agreement; and

5.3 **Continued Medical Benefits**. If the Participant, and any spouse and/or dependents of the Participant ("**Family Members**") has coverage on the date of the Participant's Involuntary Termination under a group health plan sponsored by the Company, the Company will reimburse the Participant the total applicable premium cost for continued group health plan coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("**COBRA**") during the period of time following the Participant's employment termination, as set forth in the Participant's Participation Agreement, provided that the Participant validly elects and is eligible to continue coverage under COBRA for the Participant and his Family Members. However, if the Company determines in its sole discretion that it cannot provide the COBRA reimbursement benefits without potentially violating applicable laws (including, without limitation, Section 2716 of the Public Health Service Act and the Employee Retirement Income Security Act of 1974, as amended), the Company will in lieu thereof provide to the Participant a monthly payment in an amount equal to the monthly COBRA premium (on an after-tax basis) that the Participant would be required to pay to continue the group health coverage in effect on the date of the Participant's termination of employment (which amount will be based on the premium for the first month of COBRA coverage) for the period of time set forth in the Participant's Participation Agreement following the termination, which payments will be made regardless of whether the Participant elects COBRA continuation coverage.

6. **Limitation on Payments**. In the event that the severance and other benefits provided for in this Plan or otherwise ("**280G Payments**") payable to a Participant (i) constitute "parachute payments" within the meaning of Section 280G of the Code, and (ii) but for this Section 6, would be subject to the excise tax imposed by Section 4999 of the Code, then the 280G Payments will be either:

(a) delivered in full, or

(b) delivered as to such lesser extent which would result in no portion of such benefits being subject to excise tax under Section 4999 of the Code, whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the excise tax imposed by Section 4999, results in the receipt by the Participant on an after-tax basis, of the greatest amount of benefits, notwithstanding that all or some portion of such benefits may be taxable under

Section 4999 of the Code. If a reduction in severance and other benefits constituting "parachute payments" is necessary so that benefits are delivered to a lesser extent, reduction will occur in the following order: (i) cancellation of awards granted "contingent on a change in ownership or control" (within the meaning of Code Section 280G); (ii) a pro rata reduction of (A) cash payments that are subject to Section 409A as deferred compensation and (B) cash payments not subject to Section 409A of the Code; (iii) a pro rata reduction of (A) employee benefits that are subject to Section 409A as deferred compensation and (B) employee benefits not subject to Section 409A; and (iv) a pro rata cancellation of (A) accelerated vesting equity awards that are subject to Section 409A as deferred compensation and (B) equity awards not subject to Section 409A. In the event that acceleration of vesting of equity awards is to be cancelled, such acceleration of vesting will be cancelled in the reverse order of the date of grant of the Participant's equity awards. Notwithstanding the foregoing, to the extent the Company submits any payment or benefit payable to the Participant under this Plan or otherwise to the Company's stockholders for approval in accordance with Treasury Regulation Section 1.280G-1 Q&A 7, the foregoing provisions shall not apply following such submission and such payments and benefits will be treated in accordance with the results of such vote, except that any reduction in, or waiver of, such payments or benefits required by such vote will be applied without any application of discretion by the Participant and in the order prescribed by this Section 6.

Unless the Participant and the Company otherwise agree in writing, any determination required under this Section 6 will be made in writing by the Company's independent public accountants immediately prior to the Change in Control or such other person or entity to which the parties mutually agree (the "**Firm**"), whose determination will be conclusive and binding upon the Participant and the Company. For purposes of making the calculations required by this Section 6 the Firm may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Participant and the Company will furnish to the Firm such information and documents as the Firm may reasonably request in order to make a determination under this Section 6. The Company will bear all costs the Firm may incur in connection with any calculations contemplated by this Section 6.

7. **Conditions to Receipt of Severance**.

7.1 **Release Agreement**. As a condition to receiving the Severance Benefits under this Plan, each Participant will be required to sign and not revoke a separation and release of claims agreement in a form reasonably satisfactory to the Company (the "**Release**"). The Release will not include any post-employment restrictions beyond any such restrictions that a Participant has previously agreed to in written agreements with the Company. In all cases, the Release will be prepared by the Company. Participant must sign and not revoke the Release no later than the later of: (i) 60th day following the Participant's Involuntary Termination; or (ii) the Change in Control (the "**Release Deadline Date**"). If the Participant does not irrevocably sign the Release by the Release Deadline Date, the Participant will forfeit any right to the Severance Benefits. In no event will the Severance Benefits be paid or provided until the Release becomes effective and irrevocable.

7.2 **Other Requirements**. A Participant's receipt of Severance Benefits will be subject to the Participant continuing to comply with the provisions of this Section 7 and the terms of any confidentiality, proprietary information and inventions agreement and any other agreement between the Participant and the Company under which the Participant has a material duty or obligation to the Company. Severance Benefits under this Plan will terminate immediately for a Participant if the Participant, at any time, violates any such agreement and/or the provisions of this Section 7.

8. **Timing of Severance Benefits**. Provided that the Release becomes effective and irrevocable by the Release Deadline Date and subject to Section 10, the Severance Benefits will be paid (or in the case of Severance Benefits scheduled to be paid installments, will commence) on the first Company payroll date following the Release Deadline Date (such payment date, the "**Severance Start Date**"), and any severance payments or benefits otherwise payable to the Participant during the

period immediately following the Participant's termination of employment with the Company through the Severance Start Date will be paid in a lump sum to the Participant on the Severance Start Date, with any remaining payments to be made as provided in this Plan.

9. **Exclusive Benefit.** The benefits provided under this Plan shall be the exclusive benefit for a Participant related to termination of employment and/or change in control. For the avoidance of doubt, if a Participant was due benefits under a separate agreement because of a separation prior to a Change in Control, and the separation qualifies as an Involuntary Termination under the Plan, then such Participant shall only receive the superior of the applicable benefits, on a benefit-by-benefit basis. Further and also for the avoidance of doubt, any performance-based restricted stock unit otherwise eligible for acceleration under this Plan will not forfeit by its terms because of an Involuntary Termination prior to a Change in Control until after the earlier of: (a) the date the Change in Control is completed, or (b) the date the award vests pursuant to the original vesting terms. For purposes of (b) above, the performance-based restricted stock until will be eligible vest by its terms notwithstanding the termination of services by the Participant.

10. **Section 409A**.

10.1 Notwithstanding anything to the contrary in this Plan, no severance payments or benefits to be paid or provided to a Participant, if any, under this Plan that, when considered together with any other severance payments or separation benefits, are considered deferred compensation under Section 409A of the Code, and the final regulations and any guidance promulgated thereunder ("**Section 409A**") (together, the "**Deferred Payments**") will be paid or provided until the Participant has a "separation from service" within the meaning of Section 409A. Similarly, no severance payable to a Participant, if any, under this Plan that otherwise would be exempt from Section 409A pursuant to Treasury Regulation Section 1.409A-1(b)(9) will be payable until the Participant has a "separation from service" within the meaning of Section 409A.

10.2 It is intended that none of the severance payments or benefits under this Plan will constitute Deferred Payments but rather will be exempt from Section 409A as a payment that would fall within the "short-term deferral period" as described in Section 10.3 below or resulting from an involuntary separation from service as described in Section 10.4 below. In no event will a Participant have discretion to determine the taxable year of payment of any Deferred Payment.

10.3 Notwithstanding anything to the contrary in this Plan, if a Participant is a "specified employee" within the meaning of Section 409A at the time of the Participant's separation from service (other than due to death), then the Deferred Payments, if any, that are payable within the first 6 months following the Participant's separation from service, will become payable on the date 6 months and 1 day following the date of the Participant's separation from service. All subsequent Deferred Payments, if any, will be payable in accordance with the payment schedule applicable to each payment or benefit. Notwithstanding anything herein to the contrary, in the event of the Participant's death following the Participant's separation from service, but before the 6 month anniversary of the separation from service, then any payments delayed in accordance with this paragraph will be payable in a lump sum as soon as administratively practicable after the date of the Participant's death and all other Deferred Payments will be payable in accordance with the payment schedule applicable to each payment or benefit. Each payment and benefit payable under this Plan is intended to constitute a separate payment under Section 1.409A-2(b)(2) of the Treasury Regulations.

10.4 Any amount paid under this Plan that satisfies the requirements of the "short-term deferral" rule set forth in Section 1.409A-1(b)(4) of the Treasury Regulations will not constitute Deferred Payments for purposes of Section 10 above.

10.5 Any amount paid under this Plan that qualifies as a payment made as a result of an involuntary separation from service pursuant to Section 1.409A-1(b)(9)(iii) of the Treasury

Regulations that does not exceed the Section 409A Limit will not constitute Deferred Payments for purposes of Section 10 above.

10.6 The foregoing provisions are intended to comply with or be exempt from the requirements of Section 409A so that none of the payments and benefits to be provided under the Plan will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to so comply or be exempt. Notwithstanding anything to the contrary in the Plan, including but not limited to Sections 12 and 15, the Company reserves the right to amend the Plan as it deems necessary or advisable, in its sole discretion and without the consent of the Participants, to comply with Section 409A or to avoid income recognition under Section 409A prior to the actual payment of benefits under the Plan or imposition of any additional tax. In no event will the Company reimburse a Participant for any taxes that may be imposed on the Participant as result of Section 409A.

11. **Withholdings**. The Company will withhold from any payments or benefits under the Plan all applicable U.S. federal, state, local and non-U.S. taxes required to be withheld and any other required payroll deductions.

12. **Administration**. The Company is the administrator of the Plan (within the meaning of section 3(16)(A) of ERISA). The Plan will be administered and interpreted by the Administrator (in its sole discretion). The Administrator is the "named fiduciary" of the Plan for purposes of ERISA and will be subject to the fiduciary standards of ERISA when acting in such capacity. Any decision made or other action taken by the Administrator with respect to the Plan, and any interpretation by the Administrator of any term or condition of the Plan, or any related document, will be conclusive and binding on all persons and be given the maximum possible deference allowed by law. In accordance with Section 2.1, the Administrator (a) may, in its sole discretion and on such terms and conditions as it may provide, delegate in writing to one or more officers of the Company all or any portion of its authority or responsibility with respect to the Plan, and (b) has the authority to act for the Company (in a non-fiduciary capacity) as to any matter pertaining to the Plan; *provided, however,* that any Plan amendment or termination or any other action that reasonably could be expected to increase materially the cost of the Plan must be approved by the Board.

13. **Eligibility to Participate**. To the extent that the Administrator has delegated administrative authority or responsibility to one or more officers of the Company in accordance with Sections 2.1 and 12, each such officer will not be excluded from participating in the Plan if otherwise eligible, but he or she is not entitled to act upon or make determinations regarding any matters pertaining specifically to his or her own benefit or eligibility under the Plan. The Administrator will act upon and make determinations regarding any matters pertaining specifically to the benefit or eligibility of each such officer under the Plan.

14. **Term**. This Plan will be effective on the Effective Date and automatically terminate on the date that is 24 months following the effective date of a Change in Control (the "**Automatic Termination Date**"); provided, however, the Plan may be terminated earlier in accordance with Section 15. If the Participant becomes entitled to benefits during the term of this Plan, the Plan will not terminate with respect to such Participant until all of the obligations of the Company and such Participant with respect to this Plan have been satisfied. If an initial occurrence of an act or omission by the Company (or its successor) constituting the grounds for Involuntary Termination for Good Reason for a Participant has occurred (the "**Initial Grounds**"), and the expiration date of the Company cure period (as such term is used in the Good Reason definition) with respect to such Initial Grounds could occur following Automatic Termination Date, then the term of the Plan will extend automatically through the date that is 30 days following the expiration of such cure period, but such extension of the term shall only apply with respect to the Initial Grounds.

15. **Amendment or Termination**. The Company, by action of the Administrator, reserves the right to amend or terminate the Plan at any time without advance notice to any Participant and

without regard to the effect of the amendment or termination on any Participant or on any other individual. Any amendment or termination of the Plan will be in writing. Notwithstanding the foregoing, any amendment to the Plan that (a) causes an individual or group of individuals to cease to be Participants or (b) reduces or alters to the detriment of a Participant the Severance Benefits potentially payable to that Participant (including, without limitation, imposing additional conditions or modifying the timing of payment), will not be effective unless it both is approved by the Administrator and communicated to the affected individual(s) in writing at least 90 days prior to the effective date of the amendment or termination, and once a Participant has incurred an Involuntary Termination, no amendment or termination of the Plan may, without that Participant's written consent, reduce or alter to the detriment of the Participant, the Severance Benefits payable to that Participant. In addition, notwithstanding the preceding, upon or after a Change in Control, the Company may not, without a Participant's written consent, amend or terminate the Plan in any way, nor take any other action, that (i) prevents that Participant from becoming eligible for the Severance Benefits under the Plan, or (ii) reduces or alters to the detriment of the Participant the Severance Benefits payable, or potentially payable, to a Participant under the Plan (including, without limitation, imposing additional conditions). Any action of the Company in amending or terminating the Plan will be taken in a non-fiduciary capacity.

16. **Claims and Appeals**.

(a) **Claims Procedure**. Any employee or other person who believes he or she is entitled to any payment under the Plan may submit a claim in writing to the Administrator within 90 days of the earlier of (i) the date the claimant learned the amount of his or her benefits under the Plan or (ii) the date the claimant learned that he or she will not be entitled to any benefits under the Plan. If the claim is denied (in full or in part), the claimant will be provided a written notice explaining the specific reasons for the denial and referring to the provisions of the Plan on which the denial is based. The notice also will describe any additional information needed to support the claim and the Plan's procedures for appealing the denial. The denial notice will be provided within 90 days after the claim is received. If special circumstances require an extension of time (up to 90 days), written notice of the extension will be given within the initial 90 day period. This notice of extension will indicate the special circumstances requiring the extension of time and the date by which the Administrator expects to render its decision on the claim.

(b) **Appeal Procedure**. If the claimant's claim is denied, the claimant (or his or her authorized representative) may apply in writing to the Administrator for a review of the decision denying the claim. Review must be requested within 60 days following the date the claimant received the written notice of their claim denial or else the claimant loses the right to review. The claimant (or representative) then has the right to review and obtain copies of all documents and other information relevant to the claim, upon request and at no charge, and to submit issues and comments in writing. The Administrator will provide written notice of its decision on review within 60 days after it receives a review request. If additional time (up to 60 days) is needed to review the request, the claimant (or representative) will be given written notice of the reason for the delay. This notice of extension will indicate the special circumstances requiring the extension of time and the date by which the Administrator expects to render its decision. If the claim is denied (in full or in part), the claimant will be provided a written notice explaining the specific reasons for the denial and referring to the provisions of the Plan on which the denial is based. The notice also will include a statement that the claimant will be provided, upon request and free of charge, reasonable access to, and copies of, all documents and other information relevant to the claim and a statement regarding the claimant's right to bring an action under Section 502(a) of ERISA.

17. **Attorneys' Fees**. The parties shall each bear their own expenses, legal fees and other fees incurred in connection with this Plan.

18. **Source of Payments**. All payments under the Plan will be paid from the general funds of the Company; no separate fund will be established under the Plan, and the Plan will have no assets. No right of any person to receive any payment under the Plan will be any greater than the right of any other general unsecured creditor of the Company.

19. **Inalienability**. In no event may any current or former employee of the Company or any of its subsidiaries or affiliates sell, transfer, anticipate, assign or otherwise dispose of any right or interest under the Plan. At no time will any such right or interest be subject to the claims of creditors nor liable to attachment, execution or other legal process.

20. **No Enlargement of Employment Rights**. Neither the establishment or maintenance or amendment of the Plan, nor the making of any benefit payment hereunder, will be construed to confer upon any individual any right to continue to be an employee of the Company. The Company expressly reserves the right to discharge any of its employees at any time, with or without cause. However, as described in the Plan, a Participant may be entitled to benefits under the Plan depending upon the circumstances of his or her termination of employment.

21. **Successors**. Any successor to the Company of all or substantially all of the Company's business and/or assets (whether direct or indirect and whether by purchase, merger, consolidation, liquidation or other transaction) will assume the obligations under the Plan and agree expressly to perform the obligations under the Plan in the same manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. For all purposes under the Plan, the term "Company" will include any successor to the Company's business and/or assets which become bound by the terms of the Plan by operation of law, or otherwise.

22. **Applicable Law**. The provisions of the Plan will be construed, administered and enforced in accordance with ERISA and, to the extent applicable, the internal substantive laws of the state of California (but not its conflict of laws provisions).

23. **Severability**. If any provision of the Plan is held invalid or unenforceable, its invalidity or unenforceability will not affect any other provision of the Plan, and the Plan will be construed and enforced as if such provision had not been included.

24. **Headings**. Headings in this Plan document are for purposes of reference only and will not limit or otherwise affect the meaning hereof.

25. **Indemnification**. The Company hereby agrees to indemnify and hold harmless the officers and employees of the Company, and the members of its Board, from all losses, claims, costs or other liabilities arising from their acts or omissions in connection with the administration, amendment or termination of the Plan, to the maximum extent permitted by applicable law. This indemnity will cover all such liabilities, including judgments, settlements and costs of defense. The Company will provide this indemnity from its own funds to the extent that insurance does not cover such liabilities. This indemnity is in addition to and not in lieu of any other indemnity provided to such person by the Company.

26. **Additional Information**.

Plan Name: Marvell Technology, Inc. Change in Control Severance Plan

Plan Sponsor: Marvell Technology, Inc.
c/o Marvell Semiconductor, Inc., *Attn: Chief Legal Officer*

5488 Marvell Lane
Santa Clara, CA 95054

Identification Numbers: **EIN:** 77-0398669
PLAN: 501

Plan Year: Company's fiscal year

Plan Administrator: Marvell Technology, Inc.
Attention: Administrator of the Marvell Technology, Inc. Change in Control Severance Plan

c/o Marvell Semiconductor, Inc.

5488 Marvell Lane
Santa Clara, CA 95054
408-222-2500

Agent for Service of Legal Process: Marvell Technology, Inc.

c/o Marvell Semiconductor, Inc. *Attn: Chief Legal Officer*
5488 Marvell Lane
Santa Clara, CA 95054
408-222-2500

Service of process also may be made upon the Administrator.

Type of Plan Severance Plan/Employee Welfare Benefit Plan

Plan Costs The cost of the Plan is paid by the Employer.

27. **Statement of ERISA Rights**.

As a Participant under the Plan, you have certain rights and protections under ERISA:

(a) You may examine (without charge) all Plan documents, including any amendments and copies of all documents filed with the U.S. Department of Labor. These documents are available for your review in the Company's Human Resources Department.

(b) You may obtain copies of all Plan documents and other Plan information upon written request to the Administrator. A reasonable charge may be made for such copies.

In addition to creating rights for Participants, ERISA imposes duties upon the people who are responsible for the operation of the Plan. The people who operate the Plan (called "fiduciaries") have a duty to do so prudently and in the interests of you and the other Participants. No one, including the Company or any other person, may fire you or otherwise discriminate against you in any way to prevent you from obtaining a benefit under the Plan or exercising your rights under ERISA. If your claim for payments or benefits under the Plan is denied, in whole or in part, you must receive a written explanation of the reason for the denial. You have the right to have the denial of your claim reviewed. (The claim review procedure is explained in Section 16 above.)

Under ERISA, there are steps you can take to enforce the above rights. For example, if you request materials and do not receive them within 30 days, you may file suit in a federal court. In such a case, the court may require the Administrator to provide the materials and to pay you up to $110 a day until you receive the materials, unless the materials were not sent due to reasons beyond the control of the Administrator. If you have a claim which is denied or ignored, in whole or in part, you may file suit in a federal court. If it should happen that you are discriminated against for asserting your rights, you may seek assistance from the U.S. Department of Labor, or you may file suit in a federal court.

In any case, the court will decide who will pay court costs and legal fees. If you are successful, the court may order the person you have sued to pay these costs and fees. If you lose, the court may order you to pay these costs and fees, for example, if it finds that your claim is frivolous.

If you have any questions regarding the Plan, please contact the Administrator. If you have any questions about this statement or about your rights under ERISA, you may contact the nearest area office of the Employee Benefits Security Administration (formerly the Pension and Welfare Benefits Administration), U.S. Department of Labor, listed in your telephone directory, or the Division of Technical Assistance and Inquiries, Employee Benefits Security Administration, U.S. Department of Labor, 200 Constitution Avenue, N.W. Washington, D.C. 20210. You also may obtain certain publications about your rights and responsibilities under ERISA by calling the publications hotline of the Employee Benefits Security Administration.

TIER 1

Appendix A

Marvell Technology, Inc. Change in Control Severance Plan
Participation Agreement

Marvell Technology, Inc. (the "**Company**") is pleased to inform you, _____, that you have been selected to participate in the Company's Change in Control Severance Plan (the "**Plan**") as a Participant.

A copy of the Plan was delivered to you with this Participation Agreement. Your participation in the Plan is subject to all of the terms and conditions of the Plan. The capitalized terms used but not defined herein will have the meanings ascribed to them in the Plan.

In order to actually become a participant in the Plan, you must complete and sign this Participation Agreement and return it to [NAME] no later than [DATE].

In the event of a Change in Control where the successor corporation does not assume your Equity Awards or substitute Equity Awards for substantially similar awards with the same or more favorable vesting schedule as your Equity Awards, then your Equity Awards will accelerate and vest in full in accordance with Section 3 of the Plan.

Also, the Plan describes in detail certain circumstances under which you may become eligible for certain Severance Benefits under Section 5 of the Plan if, during the Change in Control Period, you incur an Involuntary Termination. If you become eligible for Severance Benefits as described in the Plan, then subject to the terms and conditions of the Plan, you will receive:

1. **Cash Severance Benefits**.

a. *Base Salary*. A lump-sum payment (less applicable withholding taxes) equal to 24 months of your annual base salary as in effect immediately prior to your Involuntary Termination (or if your Involuntary Termination is a termination for Good Reason due to a material reduction in your level of annual base salary, your annual base salary as in effect immediately prior to such reduction) or, if greater, at the level in effect immediately prior to the Change in Control.

b. *Bonus*. A lump-sum payment equal to 200% of your annual target bonus for the fiscal year in which your Involuntary Termination occurs or, if greater, your annual target bonus in effect immediately prior to the Change in Control.

c. *Pro-Rata Bonus*. A lump-sum payment equal to your annual target bonus for the fiscal year in which your Involuntary Termination occurs, pro-rated for the number of full months employed during the fiscal year.

2. **Equity Award Vesting Acceleration**. 100% of your then-outstanding and unvested Equity Awards will become vested in full. If, however, an outstanding Equity Award is to vest and/or the amount of the award to vest is to be determined based on the achievement of performance criteria, then the Equity Award will vest as to 100% of the amount of the Equity Award assuming the performance criteria had been achieved at target levels for the relevant performance period(s); provided however, that (A) if there is no "target" level, then the number that will vest shall be 100% of the maximum amount that could vest with respect to that relevant measurement period(s); and (B) if the performance period has been completed and the actual

performance achieved is greater than the target level, then the number that will vest shall be 100% of the amount that would vest based on that actual performance achievement level with respect to that relevant measurement period; and (C) if the performance criteria is a Total Shareholder Return ("TSR") or other measure based on the value of the Company's stock, the amount that will vest will be calculated as if the measurement period ended on the date of the Change in Control (and including the final closing price of the Company's stock on such date). Any Company stock options and stock appreciation rights shall thereafter remain exercisable following the Employee's employment termination for the period prescribed in the respective option and stock appreciation right agreements.

Notwithstanding anything to the contrary herein, if you incur an Involuntary Termination in the Pre-Closing Change in Control Period, then any Equity Awards subject to performance-based vesting shall remain eligible to vest by their terms based on (i) actual performance if the performance period ends prior to the Change in Control; or (ii) in accordance with the above paragraph if the performance period remains outstanding as of the Change in Control.

3. **Continued Medical Benefits**. Your reimbursement of continued health coverage under COBRA or taxable monthly payment in lieu of reimbursement, as applicable, and as described in Section 5.3 of the Plan will be provided for a period of 24 months following your termination of employment. Notwithstanding the foregoing, if you are not employed in the United States, the benefit under this paragraph will be a regional equivalent to COBRA determined by the Administrator in its sole discretion.

In order to receive any Severance Benefits for which you otherwise become eligible under the Plan, you must sign and deliver to the Company the Release, which must have become effective and irrevocable within the requisite period.

By your signature below, you and the Company agree that your participation in the Plan is governed by this Participation Agreement and the provisions of the Plan. Your signature below confirms that: (1) you have received a copy of the Change in Control Severance Plan and Summary Plan Description; (2) you have carefully read this Participation Agreement and the Change in Control Severance Plan and Summary Plan Description; (3) decisions and determinations by the Administrator under the Plan will be final and binding on you and your successors; and (4) if you have previously entered into a Participation Agreement with the Company then you are revoking your prior Participation Agreement.

MARVELL TECHNOLOGY, INC. **PARTICIPANT**

____ _____
Signature Signature

____ _____
Name Date

____
Title

Attachment: Marvell Technology, Inc. Change in Control Severance Plan and Summary Plan Description

[Signature Page to the Participation Agreement]

TIER 2

Appendix A

Marvell Technology, Inc. Change in Control Severance Plan
Participation Agreement

Marvell Technology, Inc. (the "**Company**") is pleased to inform you, _____, that you have been selected to participate in the Company's Change in Control Severance Plan (the "**Plan**") as a Participant.

A copy of the Plan was delivered to you with this Participation Agreement. Your participation in the Plan is subject to all of the terms and conditions of the Plan. The capitalized terms used but not defined herein will have the meanings ascribed to them in the Plan.

In order to actually become a participant in the Plan, you must complete and sign this Participation Agreement and return it to [NAME] no later than [DATE].

In the event of a Change in Control where the successor corporation does not assume your Equity Awards or substitute Equity Awards for substantially similar awards with the same or more favorable vesting schedule as your Equity Awards, then your Equity Awards will accelerate and vest in full in accordance with Section 3 of the Plan.

Also, the Plan describes in detail certain circumstances under which you may become eligible for certain Severance Benefits under Section 5 of the Plan if, during the Change in Control Period, you incur an Involuntary Termination. If you become eligible for Severance Benefits as described in the Plan, then subject to the terms and conditions of the Plan, you will receive:

1. **Cash Severance Benefits**.

a. *Base Salary*. A lump-sum payment (less applicable withholding taxes) equal to 18 months of your annual base salary as in effect immediately prior to your Involuntary Termination (or if your Involuntary Termination is a termination for Good Reason due to a material reduction in your level of annual base salary, your annual base salary as in effect immediately prior to such reduction) or, if greater, at the level in effect immediately prior to the Change in Control.

b. *Bonus*. A lump-sum payment equal to 150% of your annual target bonus for the fiscal year in which your Involuntary Termination occurs or, if greater, your annual target bonus in effect immediately prior to the Change in Control.

c. *Pro-Rata Bonus*. A lump-sum payment equal to your annual target bonus for the fiscal year in which your Involuntary Termination occurs, pro-rated for the number of full months employed during the fiscal year.

2. **Equity Award Vesting Acceleration**. 100% of your then-outstanding and unvested Equity Awards will become vested in full. If, however, an outstanding Equity Award is to vest and/or the amount of the award to vest is to be determined based on the achievement of performance criteria, then the Equity Award will vest as to 100% of the amount of the Equity Award assuming the performance criteria had been achieved at target levels for the relevant performance period(s); provided however, that (A) if there is no "target" level, then the number that will vest shall be 100% of the maximum amount that could vest with respect to that relevant measurement period(s); and (B) if the performance period has been completed and the actual

performance achieved is greater than the target level, then the number that will vest shall be 100% of the amount that would vest based on that actual performance achievement level with respect to that relevant measurement period; and (C) if the performance criteria is a Total Shareholder Return ("**TSR**") or other measure based on the value of the Company's stock, the amount that will vest will be calculated as if the measurement period ended on the date of the Change in Control (and including the final closing price of the Company's stock on such date). Any Company stock options and stock appreciation rights shall thereafter remain exercisable following the Employee's employment termination for the period prescribed in the respective option and stock appreciation right agreements.

Notwithstanding anything to the contrary herein, if you incur an Involuntary Termination in the Pre-Closing Change in control Period, then any Equity Awards subject to performance-based vesting shall remain eligible to vest by their terms based on (i) actual performance if the performance period ends prior to the Change in Control; or (ii) in accordance with the above paragraph if the performance period remains outstanding as of the Change in Control.

3. **Continued Medical Benefits**. Your reimbursement of continued health coverage under COBRA or taxable monthly payment in lieu of reimbursement, as applicable, and as described in Section 5.3 of the Plan will be provided for a period of 18 months following your termination of employment. Notwithstanding the foregoing, if you are not employed in the United States, the benefit under this paragraph will be a regional equivalent to COBRA determined by the Administrator in its sole discretion.

In order to receive any Severance Benefits for which you otherwise become eligible under the Plan, you must sign and deliver to the Company the Release, which must have become effective and irrevocable within the requisite period.

By your signature below, you and the Company agree that your participation in the Plan is governed by this Participation Agreement and the provisions of the Plan. Your signature below confirms that: (1) you have received a copy of the Change in Control Severance Plan and Summary Plan Description; (2) you have carefully read this Participation Agreement and the Change in Control Severance Plan and Summary Plan Description; (3) decisions and determinations by the Administrator under the Plan will be final and binding on you and your successors; and (4) if you have previously entered into a Participation Agreement with the Company then you are revoking your prior Participation Agreement.

MARVELL TECHNOLOGY, INC. **PARTICIPANT**

_____ _____
Signature Signature

_____ _____
Name Date

_____
Title

Attachment: Marvell Technology, Inc. Change in Control Severance Plan and Summary Plan Description

[Signature Page to the Participation Agreement]

TIER 3

Appendix A

Marvell Technology, Inc. Change in Control Severance Plan
Participation Agreement

Marvell Technology, Inc. (the "**Company**") is pleased to inform you, _____, that you have been selected to participate in the Company's Change in Control Severance Plan (the "**Plan**") as a Participant.

A copy of the Plan was delivered to you with this Participation Agreement. Your participation in the Plan is subject to all of the terms and conditions of the Plan. The capitalized terms used but not defined herein will have the meanings ascribed to them in the Plan.

In order to actually become a participant in the Plan, you must complete and sign this Participation Agreement and return it to [NAME] no later than [DATE].

In the event of a Change in Control where the successor corporation does not assume your Equity Awards or substitute Equity Awards for substantially similar awards with the same or more favorable vesting schedule as your Equity Awards, then your Equity Awards will accelerate and vest in full in accordance with Section 3 of the Plan.

Also, the Plan describes in detail certain circumstances under which you may become eligible for certain Severance Benefits under Section 5 of the Plan if, during the Change in Control Period, you incur an Involuntary Termination. If you become eligible for Severance Benefits as described in the Plan, then subject to the terms and conditions of the Plan, you will receive:

1. **Cash Severance Benefits**.

a. *Base Salary*. A lump-sum payment (less applicable withholding taxes) equal to 12 months of your annual base salary as in effect immediately prior to your Involuntary Termination (or if your Involuntary Termination is a termination for Good Reason due to a material reduction in your level of annual base salary, your annual base salary as in effect immediately prior to such reduction) or, if greater, at the level in effect immediately prior to the Change in Control.

b. *Bonus*. A lump-sum payment equal to 100% of your annual target bonus for the fiscal year in which your Involuntary Termination occurs or, if greater, your annual target bonus in effect immediately prior to the Change in Control.

c. *Pro-Rata Bonus*. A lump-sum payment equal to your annual target bonus for the fiscal year in which your Involuntary Termination occurs, pro-rated for the number of full months employed during the fiscal year.

2. **Equity Award Vesting Acceleration**. 100% of your then-outstanding and unvested Equity Awards will become vested in full. If, however, an outstanding Equity Award is to vest and/or the amount of the award to vest is to be determined based on the achievement of performance criteria, then the Equity Award will vest as to 100% of the amount of the Equity

Award assuming the performance criteria had been achieved at target levels for the relevant performance period(s); provided however, that (A) if there is no "target" level, then the number that will vest shall be 100% of the maximum amount that could vest with respect to that relevant measurement period(s); and (B) if the performance period has been completed and the actual performance achieved is greater than the target level, then the number that will vest shall be 100% of the amount that would vest based on that actual performance achievement level with respect to that relevant measurement period; and (C) if the performance criteria is a Total Shareholder Return ("TSR") or other measure based on the value of the Company's stock, the amount that will vest will be calculated as if the measurement period ended on the date of the Change in Control (and including the final closing price of the Company's stock on such date). Any Company stock options and stock appreciation rights shall thereafter remain exercisable following the Employee's employment termination for the period prescribed in the respective option and stock appreciation right agreements.

Notwithstanding anything to the contrary herein, if you incur an Involuntary Termination in the Pre-Closing Change in control Period, then any Equity Awards subject to performance-based vesting shall remain eligible to vest by their terms based on (i) actual performance if the performance period ends prior to the Change in Control; or (ii) in accordance with the above paragraph if the performance period remains outstanding as of the Change in Control.

3. **Continued Medical Benefits**. Your reimbursement of continued health coverage under COBRA or taxable monthly payment in lieu of reimbursement, as applicable, and as described in Section 5.3 of the Plan will be provided for a period of 12 months following your termination of employment. Notwithstanding the foregoing, if you are not employed in the United States, the benefit under this paragraph will be a regional equivalent to COBRA determined by the Administrator in its sole discretion.

In order to receive any Severance Benefits for which you otherwise become eligible under the Plan, you must sign and deliver to the Company the Release, which must have become effective and irrevocable within the requisite period.

By your signature below, you and the Company agree that your participation in the Plan is governed by this Participation Agreement and the provisions of the Plan. Your signature below confirms that: (1) you have received a copy of the Change in Control Severance Plan and Summary Plan Description; (2) you have carefully read this Participation Agreement and the Change in Control Severance Plan and Summary Plan Description; (3) decisions and determinations by the Administrator under the Plan will be final and binding on you and your successors; and (4) if you have previously entered into a Participation Agreement with the Company then you are revoking your prior Participation Agreement.

MARVELL TECHNOLOGY, INC. **PARTICIPANT**

_____ _____
Signature Signature

_____ _____
Name Date

_____
Title

Attachment: Marvell Technology, Inc. Change in Control Severance Plan and Summary Plan Description

[Signature Page to the Participation Agreement]

TIER 4

Appendix A

Marvell Technology, Inc. Change in Control Severance Plan
Participation Agreement

Marvell Technology, Inc. (the "**Company**") is pleased to inform you, _____, that you have been selected to participate in the Company's Change in Control Severance Plan (the "**Plan**") as a Participant.

A copy of the Plan was delivered to you with this Participation Agreement. Your participation in the Plan is subject to all of the terms and conditions of the Plan. The capitalized terms used but not defined herein will have the meanings ascribed to them in the Plan.

In order to actually become a participant in the Plan, you must complete and sign this Participation Agreement and return it to [NAME] no later than [DATE].

In the event of a Change in Control where the successor corporation does not assume your Equity Awards or substitute Equity Awards for substantially similar awards with the same or more favorable vesting schedule as your Equity Awards, then your Equity Awards will accelerate and vest in full in accordance with Section 3 of the Plan.

Also, the Plan describes in detail certain circumstances under which you may become eligible for certain Severance Benefits under Section 5 of the Plan if, during the Change in Control Period, you incur an Involuntary Termination. If you become eligible for Severance Benefits as described in the Plan, then subject to the terms and conditions of the Plan, you will receive:

1. **Cash Severance Benefits**.

a. *Base Salary*. A lump-sum payment (less applicable withholding taxes) equal to 6 months of your annual base salary as in effect immediately prior to your Involuntary Termination (or if your Involuntary Termination is a termination for Good Reason due to a material reduction in your level of annual base salary, your annual base salary as in effect immediately prior to such reduction) or, if greater, at the level in effect immediately prior to the Change in Control.

b. *Bonus*. A lump-sum payment equal to 50% of your annual target bonus for the fiscal year in which your Involuntary Termination occurs or, if greater, your annual target bonus in effect immediately prior to the Change in Control.

c. *Pro-Rata Bonus*. A lump-sum payment equal to your annual target bonus for the fiscal year in which your Involuntary Termination occurs, pro-rated for the number of full months employed during the fiscal year.

2. **Equity Award Vesting Acceleration**. 100% of your then-outstanding and unvested Equity Awards will become vested in full. If, however, an outstanding Equity Award is to vest and/or the amount of the award to vest is to be determined based on the achievement of performance criteria, then the Equity Award will vest as to 100% of the amount of the Equity Award assuming the performance criteria had been achieved at target levels for the relevant performance period(s); provided however, that (A) if there is no "target" level, then the number that will vest shall be 100% of the maximum amount that could vest with respect to that relevant measurement period(s); and (B) if the performance period has been completed and the actual

performance achieved is greater than the target level, then the number that will vest shall be 100% of the amount that would vest based on that actual performance achievement level with respect to that relevant measurement period; and (C) if the performance criteria is a Total Shareholder Return ("**TSR**") or other measure based on the value of the Company's stock, the amount that will vest will be calculated as if the measurement period ended on the date of the Change in Control (and including the final closing price of the Company's stock on such date). Any Company stock options and stock appreciation rights shall thereafter remain exercisable following the Employee's employment termination for the period prescribed in the respective option and stock appreciation right agreements.

Notwithstanding anything to the contrary herein, if you incur an Involuntary Termination in the Pre-Closing Change in control Period, then any Equity Awards subject to performance-based vesting shall remain eligible to vest by their terms based on (i) actual performance if the performance period ends prior to the Change in Control; or (ii) in accordance with the above paragraph if the performance period remains outstanding as of the Change in Control.

3. **Continued Medical Benefits**. Your reimbursement of continued health coverage under COBRA or taxable monthly payment in lieu of reimbursement, as applicable, and as described in Section 5.3 of the Plan will be provided for a period of 6 months following your termination of employment. Notwithstanding the foregoing, if you are not employed in the United States, the benefit under this paragraph will be a regional equivalent to COBRA determined by the Administrator in its sole discretion.

In order to receive any Severance Benefits for which you otherwise become eligible under the Plan, you must sign and deliver to the Company the Release, which must have become effective and irrevocable within the requisite period.

By your signature below, you and the Company agree that your participation in the Plan is governed by this Participation Agreement and the provisions of the Plan. Your signature below confirms that: (1) you have received a copy of the Change in Control Severance Plan and Summary Plan Description; (2) you have carefully read this Participation Agreement and the Change in Control Severance Plan and Summary Plan Description; (3) decisions and determinations by the Administrator under the Plan will be final and binding on you and your successors; and (4) if you have previously entered into a Participation Agreement with the Company then you are revoking your prior Participation Agreement.

MARVELL TECHNOLOGY INC. **PARTICIPANT**

Signature _____ Signature

Name _____ Date

Title

Attachment: Marvell Technology, Inc. Change in Control Severance Plan and Summary Plan Description

[Signature Page to the Participation Agreement]

Exhibit 10.29

January 9, 2023

Dear Willem,

I'd like to extend my heartfelt congratulations on your promotion to Chief Financial Officer effective January 20, 2023. I have strong confidence in your ability to step into this role and lead the organization as we enter the next chapter in the company's journey.

You will report directly to me and your primary work location will remain in Austin, TX. Below are the details of your new compensation package which will be effective January 20, 2023.

New Job Title: **Chief Financial Officer**

New Grade Level: **EX1 – Executive Vice President**

New Annual Base Salary: **$600,000**

New Bonus Target: **100% of annual base salary**

- Your FY24 actual bonus payout will be determined 100% on company performance, subject to approval by the Executive Compensation Committee of the Board of Directors, and no longer has an individual performance weighting component.

Promotion equity grant: **$3,000,000**

- 60% of the grant value ($1.8M) will be issued as PSUs (Performance Stock Units) and will vest on the third anniversary of the January 15, 2023 grant date. The final value of the award will be based on Marvell's Total Stockholder Return (TSR) compared to the S&P 500, plus the addition of an EPS Modifier that can provide, with the TSR payout, up to a total maximum 250% payout based on Marvell's non- GAAP EPS CAGR percentile rank compared to the non-GAAP EPS CAGR of each company in our peer group
- 40% of the grant value ($1.2M) will be issued as RSUs (Restricted Stock Units) and will vest over three years in twelve quarterly installments.

Change in Control Agreement Tier: **Tier 2**

- Details of the Tier 2 Change in Control Severance Plan will be provided in a separate document

Thank you for helping make Marvell one of the best places to work. I look forward to partnering with you in the years ahead. Thank you, again, for all you do!

Congratulations,

Matt Murphy

Exhibit 21.1

SUBSIDIARIES OF MARVELL

Subsidiary	Jurisdiction
Aquantia LLC	Delaware, United States
Cavium India Holdings, LLC	California, United States
Cavium International	Cayman Islands
Cavium Networks International	Cayman Islands
Cavium Networks International, Inc.	Delaware, United States
Cavium, LLC	Delaware, United States
Clarice Acquisition Corporation	Delaware, United States
Clariphy Argentina, S.A.U.	Argentina
Cortina Network Devices Sdn Bhd	Malaysia
Cortina Network Systems (Shenzhen) Co. Ltd	China
Cortina Network Systems Private Limited	India
Cortina Systems HK Limited	Hong Kong
Cortina Systems International	Cayman Islands
eSilicon Corporation	Delaware, United States
Innovium India Private Limited	India
Innovium, Inc.	Delaware, United States
Inphi Corporation	Delaware, United States
Inphi Micro-Electronics (Nanjing) Co. Ltd.	China
Marvell Aquantia US, Inc.	Delaware, United States
Marvell Asia Pte Ltd	Singapore
Marvell Government Solutions, LLC	Delaware, United States
Marvell India Private Limited	India
Marvell International Holdings Corporation	Cayman Islands
Marvell International Ltd.	Bermuda
Marvell Israel (M.I.S.L) Ltd.	Israel
Marvell Italia S.r.l.	Italy
Marvell Japan K.K.	Japan
Marvell Netherlands B.V.	Netherlands
Marvell Semiconductor Canada Inc.	Canada
Marvell Semiconductor Germany GmbH	Germany
Marvell Semiconductor Korea, Ltd.	Korea
Marvell Semiconductor, Inc.	California, United States
Marvell Semiconductor, Ltd.	Delaware, United States
Marvell Switzerland Sàrl	Switzerland
Marvell Taiwan Ltd.	Taiwan
Marvell Tamba LLC	Delaware, United States
Marvell Technology (Beijing), Ltd.	China
Marvell Technology (Chengdu), Ltd.	China
Marvell Technology (Nanjing), Ltd.	China
Marvell Technology (Shanghai), Ltd.	China
Marvell Technology Cayman I	Cayman Islands

Marvell Technology Cayman II	Cayman Islands
Marvell Technology Denmark APS	Denmark
Marvell Technology Group Ltd.	Bermuda
Marvell Technology Holdings, Inc.	Delaware, United States
Marvell Technology Hong Kong Limited	Hong Kong
Marvell Technology Italy S.r.l.	Italy
Marvell Technology Japan Y.K.	Japan
Marvell Technology Poland sp. z o.o.	Poland
Marvell Technology Romania S.R.L.	Romania
Marvell Technology Sweden AB	Sweden
Marvell Technology UK Limited	United Kingdom
Marvell Technology Vietnam Limited Liability Company	Vietnam
Marvell World Trade Ltd.	Barbados
NetXen, Inc.	Delaware, United States
QLGC Limited	Ireland
QLogic International Holdings, Inc.	Delaware, United States
QLogic International Ltd.	Bermuda
QLogic LLC	Delaware, United States
QLogic Switch Products, LLC	Minnesota, United States
SkandySys Private Limited	India
SpicaWorks India Private Limited	India
SpicaWorks US Inc.	Delaware, United States
Tanzanite Silicon Solutions Inc.	California, United States
Tanzanite Silicon Solutions Private Limited	India
Utopia Capital Holdings, Ltd.	Bermuda

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statements on Form S-3 (No. 333-259141) and Form S-8 (Nos. 333-260060, 333-255384, and 333-263423) of our reports dated March 9, 2023, relating to the financial statements of Marvell Technology, Inc. and the effectiveness of Marvell Technology Inc.'s internal control over financial reporting appearing in this Annual Report on Form 10-K for the year ended January 28, 2023.

/s/ Deloitte & Touche LLP

San Jose, California
March 9, 2023

Exhibit 31.1

CERTIFICATION

I, Matthew J. Murphy, certify that:

1. I have reviewed this Annual Report on Form 10-K of Marvell Technology, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 9, 2023

By: /S/ MATTHEW J. MURPHY

Matthew J. Murphy
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION

I, Willem Meintjes, certify that:

1. I have reviewed this Annual Report on Form 10-K of Marvell Technology, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 9, 2023

By: /S/ WILLEM MEINTJES

Willem Meintjes
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION

I, Matthew J. Murphy, the Principal Executive Officer of Marvell Technology, Inc. (the "Registrant"), certify for the purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge,

(i) the Annual Report of the Registrant on Form 10-K for the fiscal year ended January 28, 2023 (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: March 9, 2023

By: /S/ MATTHEW J. MURPHY

Matthew J. Murphy
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 32.2

CERTIFICATION

I, Willem Meintjes, the Principal Financial Officer of Marvell Technology, Inc. (the "Registrant"), certify for the purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge,

(i) the Annual Report of the Registrant on Form 10-K for the fiscal year ended January 28, 2023 (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: March 9, 2023

By: /S/ WILLEM MEINTJES

Willem Meintjes
Chief Financial Officer
(Principal Financial Officer)