ANNUAL REPORT 2023

SYNAPTICS FINANCIAL & OPERATING HIGHLIGHTS

OPERATING DATA - in millions (except per share and percentage)

FISCAL YEAR ENDED JUNE	2019	2020	2021	2022	2023
Net Revenue	$1,472.2	$1,333.9	$1,339.6	$1,739.7	$1,355.1
Gross Margin Percentage	33.8%	40.7%	45.6%	54.2%	52.8%
Operating Income/(Loss)	$(6.3)	$68.9	$147.0	$350.4	$154.3
Net Income/(Loss)	$(22.9)	$118.8	$79.6	$257.5	$73.6
Net Income/(Loss) Per Share - Diluted					
GAAP	$(0.66)	$3.41	$2.08	$6.33	$1.83
Non-GAAP*	$4.00	$5.95	$8.26	$13.54	$8.12

* Non-GAAP results presented exclude certain non-cash expenses and other items that may be either recurring or non-recurring that we do not consider to be indicative of our core ongoing operating performance. See the Non-GAAP financial information and the GAAP to non-GAAP reconciliation at the end of this report.

BALANCE SHEET AND CASH FLOW DATA - in millions (except per share amounts)

FISCAL YEAR ENDED JUNE	2019	2020	2021	2022	2023
Cash and cash equivalents	$327.8	$763.4	$836.3	$824.0	$924.7
Total Assets	$1,409.8	$1,693.8	$2,226.8	$2,858.1	$2,611.4
Stockholders' Equity	$657.3	$819.1	$967.2	$1,266.4	$1,243.4
Book Value Per Diluted Share	$19.00	$23.54	$25.25	$31.12	$30.93
Cumulative Cash Used For Share Repurchases	$1,192.4	$1,222.6	$1,222.6	$1,222.6	$1406.1
Cash Flow From Operating Activities	$154.2	$221.8	$319.2	$462.7	$331.5

2023 Letter to Stockholders

As we began our fiscal year, we saw a rapid easing of the supply constraints that had plagued us for the better part of the past two years. However, we found that during the prolonged period of tightness, customers had accumulated significant amounts of inventory. On top of that, the world entered significant economic uncertainty. In response to rising inflation, the U.S. Federal Reserve and other central banks began rapidly increasing interest rates. Naturally, this had a significant impact on our business as customers lowered forecasts in response to uncertain enterprise and consumer buying patterns. The high inventory levels and reduced demand led to weak top-line performance for Synaptics. Sales declined in each sequential quarter of the fiscal year. After three very successful fiscal years, we experienced by far our most difficult as a management team.

While the macro-economic driven dynamics were disappointing, the company continued to maintain its financial discipline, delivering strong annual performance with Non-GAAP gross margins at a historic high of 60.1% and Non-GAAP earnings per share of $8.12.[1] Further, with the support of the company's board of directors, our strong cash flows enabled us to repurchase approximately 2 million shares during the fiscal year, or about 5% of the public shares outstanding.

Strategic Focus of IoT products

Our goal is to be the semiconductor leader for the IoT market. Since 2019, there has been a remarkable strategic shift at Synaptics, with our IoT portfolio increasing from 21% of our annual sales to 70% in 2023. The incredible transformation in the company's sales profile was achieved by both smart organic and inorganic investments. Today, we have a wide array of IoT-centric technologies that enable us to serve large end markets such as enterprise, consumer and automotive. This gives us a strong foundation to build from as we look to 2024 and beyond.

Going forward we intend to maintain this strategic focus on IoT and have outlined a new goal for the company: to grow our annual revenue from our Wireless products to over $1 billion. We believe Wi-Fi, Bluetooth, GPS, and other wireless connectivity technologies will serve as a central long-term theme as we embark on our next phase of growth. In addition, we believe the future of our society will include an ever-increasing number of intelligent devices. As machine learning becomes increasingly prevalent, we intend to reshape our existing processing technology to create products that intercept this opportunity. As we go forward, these two product areas, wireless and processors, will be our focus within the IoT portfolio as they offer us the greatest prospects for sustainable long-term growth.

Looking forward

As we move into fiscal year 2024, we remain confident in our ability to navigate ongoing economic challenges and expect our customers' abrupt shift in demand to reverse course over the next twelve months. Internally, we intend to focus on executing on technology roadmaps which further enhance stockholder value as we pursue growth in IoT. I want to express my sincere appreciation to our dedicated employees worldwide as our success would not have been possible if not for their devotion to our business. I also want to thank our customers, partners, suppliers, and stockholders for their continued support of Synaptics.

Michael Hurlston
President and CEO
September 2023

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[1] A reconciliation of GAAP to Non-GAAP gross margins and earnings per share can be found at the end of this annual report.

Statement Regarding Forward-Looking Information

This 2023 Annual Report contains forward-looking statements that are subject to the safe harbors created under the Securities Act of 1933, as amended (the “Securities Act”), and the Securities Act of 1934, as amended (the “Exchange Act”). Forward-looking statements give our current expectations and projections relating to our financial condition, results of operations, plans, objectives, future performance and business, and can be identified by the fact that they do not relate strictly to historical or current facts. Such forward-looking statements may include words such as “expect,” “anticipate,” “intend,” “believe,” “estimate,” “plan,” “target,” “strategy,” “continue,” “may,” “will,” “should,” variations of such words, or other words and terms of similar meaning. All forward-looking statements reflect our best judgment and are based on several factors relating to our operations and business environment, all of which are difficult to predict and many of which are beyond our control. Such factors include, but are not limited to, the risks as identified in the “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business” sections in this 2023 Annual Report, and other risks as identified from time to time in our Securities and Exchange Commission reports. Forward-looking statements are based on information available to us on the date hereof, and we do not have, and expressly disclaim, any obligation to publicly release any updates or any changes in our expectations, or any change in events, conditions, or circumstances on which any forward-looking statement is based. Our actual results and the timing of certain events could differ materially from the forward-looking statements. These forward-looking statements do not reflect the potential impact of any mergers, acquisitions, or other business combinations that had not been completed as of the date of this 2023 Annual Report.

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

FORM 10-K

(Mark One)

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

For the Fiscal Year Ended June 24, 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 000-49602

SYNAPTICS INCORPORATED
(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	77-0118518 (I.R.S. Employer Identification No.)
1109 McKay Drive San Jose, California (Address of principal executive offices)	95131 (Zip Code)

(408) 904-1100
Registrant's telephone number, including area code

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value $.001 per share	SYNA	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 Act. Yes ☐ No ☒

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 checkmark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

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

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

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

The aggregate market value of Common Stock held by nonaffiliates of the registrant (34,662,099 shares), based on the closing price of the registrant's Common Stock as reported on the Nasdaq Global Select Market on December 23, 2022 of $94.15, was $3,263,436,621. For purposes of this computation, all officers, directors, and 10% beneficial owners of the registrant are deemed to be affiliates. Such determination should not be deemed to be an admission that such officers, directors, or 10% beneficial owners are, in fact, affiliates of the registrant.

As of August 11, 2023, there were 38,584,203 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.

SYNAPTICS INCORPORATED
FORM 10-K
FOR THE FISCAL YEAR ENDED JUNE 24, 2023

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Statement Regarding Forward-Looking Statements

This report on Form 10-K for the year ended June 24, 2023 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. Forward-looking statements give our current expectations and projections relating to our financial condition, results of operations, plans, objectives, future performance and business, and can be identified by the fact that they do not relate strictly to historical or current facts. Such forward-looking statements may include words such as “expect,” “anticipate,” “intend,” “believe,” “estimate,” “plan,” “target,” “strategy,” “continue,” “may,” “will,” “should,” variations of such words, or other words and terms of similar meaning. All forward-looking statements reflect our best judgment and are based on several factors relating to our operations and business environment, all of which are difficult to predict and many of which are beyond our control. Such factors include, but are not limited to, the risks as identified in the “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business” sections in this report on Form 10-K, and other risks as identified from time-to-time in our Securities and Exchange Commission reports. Forward-looking statements are based on information available to us on the date hereof, and we do not have, and expressly disclaim, any obligation to publicly release any updates or any changes in our expectations, or any change in events, conditions, or circumstances on which any forward-looking statement is based. Our actual results and the timing of certain events could differ materially from the forward-looking statements. These forward-looking statements do not reflect the potential impact of any mergers, acquisitions, or other business combinations that had not been completed as of the date of this filing.

Statements made in this report, unless the context otherwise requires, include the use of the terms “us,” “we,” “our,” the “company” and “Synaptics” to refer to Synaptics Incorporated and its consolidated subsidiaries.

PART I

ITEM 1. BUSINESS

Overview

We are a leading worldwide developer and fabless supplier of premium mixed signal semiconductor solutions that enable people to engage with connected devices and data, engineering exceptional experiences throughout the home, at work, in the car and on the go. We supply connectivity, sensors, and AI-enhanced processor solutions to original equipment manufacturers, or OEMs, that design Internet of Things (IoT) products and devices for automobiles, virtual reality, smartphones, tablets, and notebook computers. Our current served markets include Internet of Things, or IoT, personal computer, or PC, and Mobile. Our solutions either contain or consist of our wireless, voice and speech, video, fingerprint, authentication, display driver, or touch semiconductor solutions, which include our hardware, and, where applicable, firmware and software.

Our website is located at www.synaptics.com. Through our website, we make available, free of charge, all our Securities and Exchange Commission, or SEC, filings, including our annual reports on Form 10-K, our proxy statements, our quarterly reports on Form 10-Q, and our current reports on Form 8-K, as well as Form 3, Form 4, and Form 5 Reports for our directors, officers, and principal stockholders, together with amendments to those reports filed or furnished pursuant to Sections 13(a), 15(d), or 16 under the Securities Exchange Act of 1934, as amended, or the Exchange Act. These reports are available on our website promptly after their electronic filing with the SEC. You can also read these SEC filings and reports over the Internet at the SEC's website at www.sec.gov. Our website also includes corporate governance information, including our Code of Conduct, our Code of Ethics for the Chief Executive Officer and Senior Financial Officers, and our Board Committee Charters. The contents of our website, including the content contained in any website addresses or links included elsewhere in this report, are not incorporated into or deemed to be a part of this report.

We were initially incorporated in California in 1986 and were re-incorporated in Delaware in 2002. Our fiscal year is the 52- or 53-week period ending on the last Saturday in June. The fiscal years presented in this report were the 52-week periods ended June 24, 2023, June 25, 2022, and June 26, 2021.

IoT Applications Market

Our IoT market solutions broadly consist of wireless connectivity (Wi-Fi, Bluetooth and global positioning system, or GPS) products, System-on-Chip, or SoC, products, display and touch integrated circuits for use in automobiles, and a wide range of audio and video products and solutions. Our products enable smart devices at the edge of a network such as smart assistant speakers, over-the-top multimedia devices, wireless speakers, voice driven intelligent devices including those integrating far-field technology, personal voice and audio products, set-top boxes, video interface solutions for docking stations, high-speed connectivity for virtual reality devices, video surveillance, voice over IP SoCs, image processing solutions for use in printers, and fax modems. In addition, our automotive solutions include over a decade of mass production experience in mature touch solutions and display drivers adapted from our mobile consumer business to meet automotive-grade quality standards.

Within the growing consumer IoT market, we continue to expand our footprint in various devices by bringing converged video, vision, audio, and voice technologies coupled with artificial intelligence and wireless connectivity capabilities. Our deep investment in far-field voice technology, our intellectual property portfolio for video, vision, audio and security, and our significant experience enabling Android-based platforms for service providers, coupled with our focus on enabling high performance, low power, and highly secure SoC solutions enable us to effectively serve our existing customers and position us to grow within the addressable market of consumer IoT devices.

PC Product Applications Market

We provide custom and semi-custom product solutions for navigation, cursor control, access to devices or applications through fingerprint authentication, and human presence detection solutions, for many of the world's premier PC OEMs. These functions are offered as both stand-alone and integrated touch pads plus fingerprint biometric solutions and as chipsets with integrated visual sensing software algorithms. In addition to notebook applications, other PC product applications for our technology include peripherals, such as high-end keyboards and accessory touchpads.

We continue to expand our available product offerings through technology development enabling us to increase our product content within each notebook unit. We are also applying our technologies to enable adoption of fingerprint recognition solutions to broaden our market opportunities. Based on the strength of our technology and engineering know-how, we believe we are well positioned to continue to take advantage of opportunities in the PC product applications market.

Mobile Product Applications Markets

We believe our intellectual property portfolio, engineering know-how, systems engineering experience, technological expertise, and experience in providing human experience product solutions to major OEMs position us to be a key technological enabler for multiple consumer electronic devices targeted to meet the mobile product applications markets. Mobile product applications include smartphones, tablets, large touchscreen applications, as well as a variety of mobile, handheld, and entertainment devices.

We believe our existing technologies, our range of product solutions, and our emphasis on ease of use, advanced functionality, small size, low power consumption, durability, and reliability enable us to serve the markets for mobile product applications and other electronic devices.

Acquisitions

In February 2023, we completed the acquisition of certain GPS developed technology intangible assets from Broadcom. These assets expand and enhance our wireless connectivity technology product offerings to our customer base.

In October 2022, we completed the acquisition of Emza Visual Sense, Ltd., or Emza, a developer of ultra-low-power artificial intelligence visual sensing solutions. Emza's technology extends our position in Edge AI and allows us to serve the personal computing market with a solution for human presence detection, or HPD.

In December 2021, we completed our merger with DSP Group, Inc, or DSPG, a global provider of voice processing and wireless chipset solutions for converged communications. DSPG's capabilities in low power AI align with our vision of embedding more intelligence in connected devices. The addition of DSPG's Ultra Low Energy, or ULE, wireless technology and Voice over IP, or VOIP, processing solutions enhances our ability to offer and deliver differentiated solutions to our customer base.

Our Strategy

Our objective is to continue to enhance our position as a leading supplier of premium semiconductor product solutions for each of the target markets in which we operate, including the IoT applications market, the PC product applications market, and the mobile product applications markets, with a key focus on expanding our market share. Key aspects of our strategy to achieve this objective include those set forth below.

Extend Our Technological Leadership

We plan to utilize our extensive intellectual property portfolio, engineering know-how, and technological expertise to extend the functionality of our current product solutions and offer new and innovative product solutions to customers across multiple markets. We intend to continue utilizing our technological expertise to reduce the overall size, cost, and power consumption of our product solutions while increasing their applications, capabilities, and performance. We plan to continue enhancing the ease of use and functionality of our solutions. We plan to invest in our research and development efforts through our engineering activities, including advancement of existing technologies, the hiring of key engineering personnel, and strategic acquisitions and alliances. We believe that these efforts will enable us to meet customer expectations and achieve our goal of supplying, on a timely and cost-effective basis, easy to use, functional human experience semiconductor product solutions to our target markets.

Focus on and Grow in the IoT Market

We intend to capitalize on the growth of the IoT market including solutions for smart home and home automation, video delivery over wired and wireless, voice enabled assistants, virtual reality, video interface docking, and wearables. We intend to build upon our existing innovative and intuitive and intelligent semiconductor product solutions portfolio and continue to address the evolving portability, connectivity, security, and functionality requirements of these new markets. We will offer our solutions to existing and potential customers to enable increased functionality, reduced size, lower cost, simplified security, enhanced industrial design features, and to enhance the user experience of our OEMs' products. We plan to utilize our existing technologies as well as aggressively pursue new technologies as new markets evolve that demand new solutions.

Pursue Strategic Relationships and Acquisitions

We intend to develop and expand our strategic relationships to enhance our ability to offer value-added semiconductor product solutions to our customers, penetrate new markets, and strengthen the technological leadership of our product solutions. We also intend to evaluate the potential acquisitions of companies and assets in order to expand our technological expertise and to establish or strengthen our presence in selected target markets.

Fabless Semiconductor Manufacturing

We plan to selectively partner with foundries and backend processors to solidify our longstanding key supply chain relationships. This strategy results in a scalable business model, enables us to concentrate on our core competencies of research and development and product design and engineering, and reduces our capital expenditures and working capital requirements. Our fabless semiconductor manufacturing strategy allows us to maintain a variable cost model, in which we do not incur most of our manufacturing costs until our product solutions have been shipped and invoiced to our customers.

Products

Our family of product solutions allows our customers to solve their interface needs and differentiate their products from those of their competitors.

Voice Over IP

Our Digital Voice Family, or DVF, of SoC products is a comprehensive solution for developing affordable, scalable and power efficient VoIP, home and office products. DVF facilitates rapid introduction of embedded features into residential devices such as cordless IP and instant messaging phones. DVF enables development of low-power enterprise IP, analog terminal adapters, or ATAs, and home VoIP phones that offer superb acoustic echo cancellation, high-quality HD voice, multi-line capabilities, and an enhanced user interface. Built on an open platform with multi-ARM processors running on Linux OS, DVF includes IPfonePro™, an extensive software development kit for IP phones and ATAs.

DECT Cordless

Our Digital Enhanced Cordless Telecommunications, or DECT, SoC solutions provide integrated digital solutions and include all relevant digital baseband, analog interface and RF functionality. Enhanced with our hardware and software technologies, these chipsets are highly versatile and enable the development of an array of cordless telephony solutions that allow for faster time to market than alternative custom silicon and software offerings. This portfolio supports cordless phones, cordless headsets, remote controls, home DECT-enabled gateways, fixed-mobile convergence solutions and home automation devices.

Ultra-Low Power Edge AI

Our ultra-low power edge AI platform includes a highly integrated edge AI SOC designed for battery powered wireless devices equipped with audio or camera capabilities for consumer and industrial IoT applications. These solutions are designed for a wide range of power constrained IoT applications used in office buildings, retail, factories, warehouses, robotics, and smart homes and cities.

Wireless Connectivity

Our wireless connectivity solutions include state-of-the-art Wi-Fi, Bluetooth, GPS, GNSS, and ULE to address broad IoT market applications including home automation, multimedia streamers, security sensors, surveillance cameras, wireless speakers, games, drones, printers, wearable and fitness devices, in addition to numerous other applications which require a wireless connection.

AudioSmart®

AudioSmart products bring forward optimum analog, mixed-signal and digital signal processor, or DSP, technologies for high-fidelity voice and audio processing. Our AudioSmart products include far-field voice technologies that enable accurate voice command recognition from a distance while disregarding other sounds, such as music, in order to activate smart devices such as smart speakers. AudioSmart also includes personal voice and audio solutions for high-performance headsets that enable active noise cancellation.

ConnectSmart™

Our ConnectSmart video interface IC portfolio offers a full range of high-speed video/audio/data connectivity solutions that are designed for linking CPUs/GPUs and various endpoints for applications including PC docking stations, travel docks, dongles, protocol converters and virtual reality head mounted displays.

DisplayLink®

Our DisplayLink products utilize highly efficient video encode/decode algorithms to deliver a semiconductor-based solution which transmits compressed video frames across low bandwidth connections. These solutions are used in PC docking applications, conference room video display systems, and video casting applications.

VideoSmart™

Our VideoSmart series SoCs include CPUs running at up to 40K Dhrystone Million Instructions per Second, gaming-grade Graphics Processing Unit, or GPUs, voice, and neural network processing units, or NPU. These powerful solutions combine a central processing unit, or CPU, NPU, and GPU, into a single software-enriched SoC. They enable smart multimedia devices including set-top boxes, or STB, over-the-top, or OTT, streaming devices, soundbars, surveillance cameras and smart displays.

ImagingSmart™

Our ImagingSmart solutions include a product portfolio that spans four distinct product areas including document and photo imaging controllers, digital video, fax, and modem solutions. ImagingSmart products leverage image processing IP, JPEG encoders and DSP technology to deliver a wide range of fax, modem, digital video and printer solutions for home, mobile and imaging applications.

Natural ID®

Our Natural ID family of capacitive-based fingerprint ID products is designed for use in notebook PCs, PC peripherals, automobiles, and other applications. Thin form factors provide industrial design flexibility, while robust matching algorithms and anti-spoofing technology provide strong security. Our Natural ID family of products spans a range of form factors, colors, and materials suitable for design on the front, back or side of a device.

Natural ID products are designed to be compatible with Fast IDentity Online, or FIDO, protocols, enhancing security and interoperability with a broad range of solutions. FIDO was formed to enhance online authentication by developing open, scalable technical standards to help facilitate the adoption of robust, easy to use authentication that reduces the reliance on passwords. Natural ID products increase the security of automobile and PC products while maintaining ease of use for the customer.

TouchPad™

Our TouchPad family of products, which can take the place of, and exceed the functionality of a mouse, consists of a touch-sensitive pad that senses the position and movement of one or more fingers on its surface through the measurement of capacitance. Our TouchPad provides an accurate, comfortable, and reliable method for screen navigation, cursor movement, and gestures, and provides a platform for interactive input for both the consumer and corporate markets. Our TouchPad solutions allow our OEMs to provide stylish, simple, user-friendly, and intuitive solutions to consumers. Our TouchPad solutions also offer various advanced features, including scrolling, customizable tap zones, tapping and dragging of icons, and device interaction.

SecurePad™

Our SecurePad integrates our Natural ID fingerprint sensor directly into the TouchPad area, improving usability and simplifying the supply chain for notebook PC manufacturers.

ClickPad™

Our ClickPad introduces a clickable mechanical design to the TouchPad solution, eliminating the need for physical buttons. The button-less design of our ClickPad allows for unique, intuitive industrial design and makes an excellent alternative to conventional input and navigation devices. Our ClickPad is activated by pressing down on the internal tact switch to perform left-button or right-button clicks and provides tactile feedback similar to pressing a physical button. The latest version of ClickPad features ClickEQ™, a mechanical solution that provides uniform click depth to maximize the surface area available for gestures and improves click performance over hinged designs.

ForcePad®

Our ForcePad is a thinner version of our ClickPad, which introduces a new dimension in control through the addition of variable force sensitivity. ForcePad is designed to provide consistent performance across OEM models through its design intelligence and self-calibration features. By detecting the amount of force applied, ForcePad is engineered to enable more intuitive and precise user interactions in operating system controls and applications. Designed with thin and light notebooks in mind, ForcePad is 40% thinner than a conventional touch pad.

ClearPad®

Our ClearPad family of products enables the user to interact directly with the display on electronic devices, such as mobile smartphones, tablets, and automobiles. Our ClearPad has distinct advantages, including low-profile form factor; high reliability, durability, and accuracy; and low power consumption. We typically sell our ClearPad solution as a chip, together with customer-specific firmware, to sensor manufacturers, OLED manufacturers or LCD manufacturers, to integrate into their touch-enabled products.

ClearView™

Our ClearView display driver products offer advanced image processing and low power technology for displays on electronic devices, including smartphones and tablets. ClearView products include adaptive image processing that works in concert with proprietary customization options to enable development of efficient and cost-effective high-performance solutions and faster time to market. Our display driver products offer automatic regional control of color balance that optimizes light and dark areas of an image simultaneously, and sunlight readability enhancement capabilities that optimize image quality under various lighting conditions. Our virtual reality bridge and virtual reality display driver integrated circuit, or DDIC, chips enable our customers to move to higher resolution and faster response displays.

TouchView™

Our TouchView solutions include our TDDI products that combine two functions, a touch controller, and a display driver, into a single chip that incorporates all the features of our ClearView and ClearPad products. TouchView products enable thinner form factors to help customers minimize component count and add flexibility to their industrial designs. These products are used in large screen devices, including notebooks and tablets, and are also certified for automotive display applications.

Other Products

Other product solutions we offer include Dual Pointing Solutions, and TouchStyk™. Our dual pointing solutions offer TouchPad with a pointing stick in a single notebook computer, enabling users to select their interface of choice. TouchStyk is a self-contained pointing stick module that uses capacitive technology similar to that used in our TouchPad.

Technologies

We have developed and own an extensive array of technologies, encompassing ASICs, firmware, software, mechanical and electrical designs, display systems, pattern recognition, touch-sensing technologies, fingerprint sensing, voice, audio, imaging, modem, and multimedia technologies. We continue to develop technology in these areas. We believe these

technologies and the related intellectual property rights create barriers for competitors and allow us to provide high-value human experience semiconductor product solutions in a variety of high-growth markets.

Our broad line of semiconductor product solutions is currently based upon the following key technologies:

- Proprietary microcontroller technology;
- Proprietary vector co-processor technology;
- Multimedia processing technology;
- Voice and audio technology;
- Pattern recognition technology;
- Deep learning and neural network inferencing technology.
- Mixed-signal integrated circuit technology;
- Wireless connectivity technology;
- Video interface and compression technology;
- Imaging and modem technology;
- Capacitive position and force sensing technology;
- Capacitive active pen technology;
- Multi-touch technology; and
- Display systems and circuit technology.

In addition to these technologies, we develop firmware and device driver software that we incorporate into our products, which provide unique and advanced features. In addition, our ability to integrate all our products to interface with major operating systems provides us with a competitive advantage.

Proprietary Microcontroller Technology. One example of our microcontroller technology is our proprietary 16-bit microcontroller core that is embedded in the digital portion of our capacitive touch mixed signal ASICs, which is allowing us to optimize our ASICs for position sensing tasks. Our embedded microcontroller provides great flexibility in customizing our products via firmware, which eliminates the need to design new circuitry for each new application.

Proprietary Vector Co-Processor Technology. Our vector co-processor technology is designed for use in our ASICs, accompanying either one of our own proprietary microcontroller cores or a commercially available one. The co-processor boosts an ASIC's computational performance by efficiently processing vectors of data for a range of mathematical operations. This allows us to implement more computationally intensive algorithms within our firmware.

Multimedia Processing Technology. This technology allows us to create multimedia SoC products for set-top boxes, soundbars, digital personal assistants, smart displays, virtual reality, OTT, audio, and video. Our video processing technology includes hardware and algorithms to reduce analog and digital noise, convert to different video formats, and enhance color and contrast. Our products include security and secure encrypt/decrypt technology, including secure boot and hardware root of trust.

Voice and Audio Technology. This technology allows us to develop human experience and communication products based on voice and audio interaction. The technology embodies a broad range of analog and mixed signal circuits expertise and audio signal processing algorithms, including:

- Noise suppression;
- Acoustic echo cancellation;
- Active noise cancellation;
- Trigger word detection;
- Mid-field and far-field voice processing;

- Audio digital signal processor architecture;
- Audio codecs;
- Audio post processing;
- High performance audio analog-to-digital converters, or ADCs, and digital-to-analog converters, or DACs;
- Audio amplifiers;
- Low power audio processing;
- Speaker protection; and
- Product acoustic design.

Pattern Recognition Technology. This technology is a set of software algorithms and techniques for converting real world data, such as gestures and handwriting, into a digital form that can be recognized and manipulated within a computer. Our technology provides reliable gesture decoding and handwriting recognition and can be used in other applications such as signature verification for a richer user experience.

Deep Learning and Neural Network Inferencing Technology. This technology allows us to create and train deep neural networks for audio, image processing, video processing and computer vision functions. Some of our products contain hardware designed to evaluate deep neural networks securely and with low latency. We also have technology that allows us to compress our trained neural networks for more efficient AI-at-the-edge on our hardware. These neural network algorithms improve the quality of the sensed data (for example, reduce the noise, or increase the resolution) as well as interpret the sensed data.

Mixed-Signal Integrated Circuit Technology. This hybrid analog-digital integrated circuit technology combines the power of digital computation with the ability to interface with non-digital, real-world signals, such as the position of a finger or stylus on a surface. Our patented design techniques permit us to utilize this technology to optimize our core ASIC engine for all our products. Our mixed-signal technology consists of a broad portfolio of circuit expertise in areas such as the following:

- High-speed serial interfaces;
- Analog-to-digital and digital-to-analog converters;
- Electromagnetic emissions suppression and susceptibility hardening;
- Very Large Scale Integrated, or VLSI, digital circuits with multiple clock and power domains;
- Communications and signal processing circuits;
- Power management (switching converters, charge pumps, and LDOs);
- Precision capacitance measurement;
- Display timing controllers, or TCONs.

Wireless Technology. Our wireless connectivity solutions include discrete and integrated Wi-Fi and Bluetooth solutions, and satellite-based GPS/GNSS mobile navigation receivers. Wi-Fi allows devices on a local area network to communicate wirelessly, adding the convenience of mobility to the utility of high-speed data networks. We offer a family of high performance, low power Wi-Fi chipsets. We offer products which incorporate the latest Wi-Fi standards such as 802.11AX, which is known as Wifi-6 and Wifi-6E. Bluetooth is a low power technology that enables direct connectivity between devices. We offer a family of Bluetooth silicon and software solutions that enable customers to easily and cost-effectively add Bluetooth functionality to virtually any device, including Bluetooth 6.0 and Bluetooth Enterprise True Wireless Stereo (TWS). These solutions include combination chips that offer integrated Wi-Fi and Bluetooth functionality, which provides significant performance advantages over discrete solutions.

We also offer a family of GPS and GNSS semiconductor products, software, and location data services. These products are part of a broad location platform that enable customer devices to wirelessly communicate and receive precise location and navigational data from satellite constellations for use in various location services applications.

As part of our wireless technology, DECT based devices provide worldwide coverage for telephony applications, supporting most RF bands and cordless protocols standardized around the world. This includes 1.7GHz -1.9GHz used in Europe, U.S., Korea, Japan and Latin America; and 2.4GHz – used in Japan, China, India and the U.S., along with other proprietary protocols for specific use cases.

Video Compression Technology. Our video interface solutions include our ConnectSmart and DisplayLink portfolios, offering a full range of interface solutions that connect devices to external displays and support the latest versions of the most widely used protocols, connectors, and operating systems. Our flexible product lines for connecting devices combine high-performance interface with low power consumption and are designed for both commercial and consumer end-products. Our solutions have been broadly adopted by the top OEMs and original device manufacturers, or ODMs, to enable video expansion and protocol conversion, leverage high-end features, and deliver the bandwidth needed to drive multiple high-resolution external displays simultaneously.

Imaging and Modem Technology. This technology allows us to create a family of SoC integrated circuits and software for printers, video cameras, fax machines and modems. Key functional blocks include:

- Image processing hardware accelerators;
- Printer imaging pipeline;
- Inkjet, laser, and thermal print engine and motor control;
- Scan/camera and peripheral control; and
- Data and fax modem hardware and firmware.

Capacitive Fingerprint Sensing Technology. Our fingerprint sensing technology simplifies the system or application authentication process by substituting the user's fingerprint for the login name and password. Our capacitive fingerprint sensing technology provides for fingerprint authentication by scanning and matching an image of a user's fingerprint, as well as initial fingerprint enrollment. Our sensing technology also incorporates spoof detection and includes many implementation choices including the back of the phone or PC, button integration, touchpad integration, and under glass.

Capacitive Position and Force Sensing Technology. Our Position Sensing technology provides a method for sensing the presence, position, and contact area of one or more fingers or a stylus on a flat or curved surface. Our technology works with very light touch, supports full multi-touch capabilities, and provides highly responsive cursor navigation, scrolling, and selection. It uses no moving parts, can be implemented under plastic or glass, and is extremely durable. Our technology can also track one or more fingers in proximity to the touch surface. Our Force Sensing technology senses the direction and magnitude of a force applied to an object. Our electronic circuitry determines the magnitude and direction of an applied force, permits very accurate sensing of tiny changes in capacitance, and minimizes electrical interference from other sources. Our capacitive force sensing technology can be integrated with our position sensing technology.

Capacitive Active Pen Technology. This technology allows us to develop a pen that can be used for input on a capacitive touchscreen. As well as generating a signal that allows the touchscreen to track the pen, additional data, such as the pen applied force and pen button states, are also communicated to the touchscreen device. Information can also be communicated from the touchscreen to the pen.

Multi-touch Technology. This technology allows us to create capacitive touch products that simultaneously track the presence, position, and other characteristics of multiple objects in contact with or in close proximity to a flat or curved touch surface. It enables, for example, the recognition of multi-finger gestures, the tracking of a stylus position while the user's palm is also in contact with the touch surface, and the simultaneous interaction of multiple users with the same touch surface.

Display Systems and Circuit Technology. This technology enables us to develop optimized human experience semiconductor product solutions with improved compatibility with their application environments. This technology consists of mobile and large format display semiconductor expertise, including the following functional blocks:

- TCONs;
- Thin-Film-Transistor, or TFT, gamma references;
- Smooth dimming and content adaptive brightness control;
- Contrast enhancement;

- Color enhancement;
- Gamma curve control;
- Force, touch, and display synchronization;
- Local area active contrast optimization;
- Adaptive image compression and decompression;
- Sub-pixel rendering;
- Demura compensation;
- Rounded corner processing;
- Frame rate control;
- High-speed serial interfaces such as mobile industry processor interface display serial interface, or MIPI DSI, and Qualcomm mobile display digital interface, or MDDI; and
- Display power circuits such as inductive switchers, charge pumps, and LDOs.

This technology also enables us to develop advanced products that combine the functions of the display and touch sensing systems to enable highly integrated display and touch functionality with improved performance, thinner form factors, and lower system cost.

Our latest addition to our automotive portfolio is an automotive-grade TDDI for indium gallium zinc oxide and amorphous silicon gate-in-panel displays and low-temperature polycrystalline panels up to 4K resolution.

Research and Development

We conduct ongoing research and development programs that focus on advancing our existing technologies, improving our current product solutions, developing new products, improving design and manufacturing processes, enhancing the quality and performance of our product solutions, and expanding our technologies to serve new markets. Our goal is to provide our customers with innovative solutions that address their needs and improve their competitive positions.

Our research and development programs focus on the development of accurate, easy to use, reliable, and intuitive human experiences for electronic devices. We believe our innovative interface technologies can be applied to many diverse products, and we believe the interface is a key factor in the differentiation of many products. AI-at-the-edge is a focus area for us in enabling better performance and enhancing user experience in many of these products. We believe that our technologies enable us to provide customers with product solutions that have significant advantages over alternative technologies in terms of functionality, size, power consumption, durability, and reliability. We also intend to pursue strategic relationships and acquisitions to enhance our research and development capabilities, leverage our technology, and shorten our time to market with new technological applications.

Our research, design, and engineering teams frequently work directly with our customers to design custom solutions for specific applications. We focus on enabling our customers to overcome their technical barriers and enhance the performance of their products. We believe our engineering know-how and electronic systems expertise provide significant benefits to our customers by enabling them to concentrate on their core competencies of production and marketing.

As of the end of fiscal 2023, we employed 1,416 people in our technology, engineering, and product design functions in the United States, China, Taiwan, Japan, Israel, the United Kingdom, India, Germany, Poland, and Korea.

Intellectual Property Rights

Our success and ability to compete depend in part on our ability to maintain the proprietary aspects of our technologies and products. We rely on a combination of patents, trademarks, trade secrets, copyrights, confidentiality agreements, and other statutory and contractual provisions to protect our intellectual property, but these measures may provide only limited protection.

As of June 2023, we held 2,583 active patents and 569 pending patent applications worldwide that expire between 2023 and 2043. Collectively, these patents and patent applications cover various aspects of our key technologies, including those

for touch sensing, voice processing, secure biometrics, display drivers, touch and display integration, docks and adapters, video interfaces, wired and wireless connectivity, audio processing, video processing, edge computing, open AI tools, and computer vision. Our proprietary firmware and software, including source code, are also protected by copyright laws and applicable trade secret laws.

Our extensive array of technologies includes those related to ICs, firmware, software, and mechanical hardware. Our products rely on a combination of these technologies, making it difficult to use any single technology as the basis for replicating our products. Furthermore, the lengths of our customers' design cycles and the customizations required within the products we provide to our customers also serve to protect our intellectual property rights.

Customers

Our customers include many of the world's largest mobile and PC OEMs, based on unit shipments, as well as many large IoT OEMs, automotive manufacturers and a variety of consumer electronics manufacturers. Our demonstrated track record of technological leadership, design innovation, product performance, cost-effectiveness, and on-time deliveries have resulted in our leadership position in providing human experience semiconductor product solutions. We believe our strong relationship with our OEM customers, many of which are also currently developing product solutions which are focused in several of our target markets, will continue to position us as a source of supply for their product offerings.

We generally supply our products to OEMs through their contract manufacturers, supply chain or distributors. We consider both the OEMs and their contract manufacturers or supply chain partners to be our customers, as well as in some cases, our distributors. Both the OEMs and their partners may determine the design and pricing requirements and make the overall decision regarding the use of our human experience semiconductor product solutions in their products. The contract manufacturers and distributors place orders with us for the purchase of our products, take title to the products purchased upon delivery by us, and pay us directly for those purchases. The majority of these customers do not have return rights except for warranty provisions.

Sales and Marketing

We sell our product solutions for incorporation into the products of our OEM customers. We generate sales through direct sales employees as well as outside sales representatives, distributors and value-added resellers. Our sales personnel receive substantial technical assistance and support from our internal technical marketing and engineering resources because of the highly technical nature of our product solutions. Sales frequently result from multi-level sales efforts that involve senior management, design engineers, and our sales personnel interacting with our customers' decision makers throughout the product development and order process.

As of the end of fiscal 2023, we employed 399 sales and marketing professionals. We maintain customer support offices domestically and internationally, which are located in the U.S., Taiwan, China, India, Korea, Japan, United Kingdom and Switzerland. In addition, we utilize value-added resellers and sales distributors that are primarily located in the U.S., China, Korea, Japan, Taiwan and Germany.

International sales constituted nearly all of our revenue for each of fiscal 2023, 2022, and 2021. Approximately 63%, 66% and 68% of our sales in fiscal 2023, 2022 and 2021, respectively, were made to companies located in China and Taiwan that provide design and manufacturing services for major IoT, notebook computer, and mobile product applications OEMs. Our sales are almost exclusively denominated in U.S. dollars. This information should be read in conjunction with Note 15 Segment, Customers, and Geographic Information to the consolidated financial statements contained elsewhere in this report.

Manufacturing

We employ a fabless semiconductor manufacturing platform through third-party relationships. We currently utilize third-party semiconductor wafer manufacturers to supply us with silicon wafers integrating our proprietary design specifications. The completed silicon wafers are forwarded to third-party package and test processors for further processing into die and packaged ASICs, as applicable, which are then utilized in our custom module products or processed as our ASIC-based solution.

After processing and testing, the die and ASICs are consigned to various contract manufacturers for assembly or are shipped directly to our customers. During the assembly process, our die or ASIC is either combined with other components to complete the module for our custom product solutions or the ASIC is maintained as a standalone finished good. The finished assembled product is subsequently shipped directly to our customers or by our contract manufacturers directly to our customers for integration into their products.

We believe our third-party manufacturing strategy provides a scalable business model, enables us to concentrate on our core competencies of research and development, technological advances, and product design and engineering, and reduces our capital investment.

Our third-party contract manufacturers and semiconductor fabricators are predominately Asia-based organizations. We generally provide our contract manufacturers with six-month rolling forecasts of our production requirements. As a result of recent supply constraints and capacity shortages affecting the global semiconductor industry, we have entered into long-term capacity and pricing agreements with some suppliers. Our reliance on these parties exposes us to vulnerability owing to our dependence on a few sources of supply. In some cases, we have alternative sources of suppliers to mitigate supplier risk; however, in the current environment, all of them could be constrained. We may establish relationships with other contract manufacturers in order to reduce our dependence on any single source of supply.

Periodically, we purchase inventory from our contract manufacturers when a customer delays its delivery schedule or cancels its order. In those circumstances in which our customer has cancelled its order and we purchase inventory from our contract manufacturers, we consider a write-down to reduce the carrying value of the inventory purchased to its net realizable value. We charge write-downs to reduce the carrying value of obsolete, slow moving, and non-usable inventory to its net realizable value and charge such write-downs to cost of revenue. We also record a liability and charge to cost of revenue for estimated losses on inventory we are obligated to purchase from our contract manufacturers when such losses become probable from customer delays or order cancellations. In addition, the impact of entering into long-term capacity agreements could create significant inventory write-down if the end customer demand substantially declines.

Competition

IoT

Our diverse SoC solutions integrate artificial intelligence hardware engines, video processing, far-field voice and linguistics processing products and are sold into market segments that offer significant potential growth, ranging from home automation applications, smart assistant platforms, surveillance cameras, to set-top-box/over-the-top, or STB/OTT platforms to a wide variety of embedded products in the broader IoT market. The markets for STB/OTT products, surveillance cameras, home automation, smart assistant solutions and embedded IoT products require strong technology innovation in silicon and software along with deep systems and systems engineering expertise. Our principal competition in these markets include Broadcom, MediaTek, NXP, AmLogic, and Ambarella, among others.

We provide voice processing silicon and software solutions for voice-enabled devices, consumer and commercial imaging, and next-generation audio applications. In addition to our voice solutions, we support the audio headphone and virtual reality head mounted display industry with universal serial bus-c, or USB-C, audio codec solutions for next generation wireless audio devices and wearables. Our competitors in the sale of audio products include Cirrus Logic, BES Technic, Realtek, and Qualcomm.

Our wireless products for use in IoT application markets include our technologies such as Wi-Fi, Bluetooth, Wi-Fi-Bluetooth combinations, and GPS/GNSS support our customers’ need to develop products which can wirelessly communicate to networks, remote control of edge-devices, machine-to-machine communication, among other purposes. Our principal competition includes Infineon, Qualcomm, MediaTek, NXP, and Silicon Labs, among others.

Our automotive products include touch, display driver, SmartBridge, and TDDI solutions for major automotive OEMs. Our principal competitors for these products include Focaltech, Himax, Novatek Microelectronics and Microchip. Our IoT video interface products are sold into PC and smartphone docks and wireless adapter market applications. Our principal competitors in the sale of IoT interface products are Parade, Megachips, and Realtek.

We also provide fax, modem and image processors and software solutions for printers, fax machines, point of sale terminals, and medical applications. Our principal competitors in these markets are Skyworks, Marvell, and Qbit.

PC and Mobile

Our touch, display and fingerprint-based semiconductor products are sold into markets for PC product applications, mobile product applications, and other electronic devices. The markets for touchscreen products are characterized by rapidly changing technology and intense competition. Our principal competition in the sale of touchscreen products includes Broadcom, Goodix, Focaltech, ST Micro and various other companies involved in human experience semiconductor product solutions. Our principal competitors in the sale of notebook touch pads are Cirque Corporation, Elan Microelectronics and Goodix. Our principal competitors in the sale of display driver products for mobile product applications market include Novatek Microelectronics, Samsung LSI, LX Semicon and Raydium. Our principal competitors in the sale of display driver products for virtual reality applications market include Novatek Microelectronics and Samsung LSI Our principal competitors in the sale of fingerprint authentication solutions for PC product applications markets are Egis Technology, Elan Microelectronics, and Goodix.

Corporate Social Responsibility

We strive to be a leading corporate citizen. We uphold the most ethical standards in our business practices and policies, and we believe that sustainable corporate practices and consistent attention to social and governance priorities will help enhance long-term value for our stockholders. With guidance from our Board of Directors, our management team applies an integrated methodology to financial matters, corporate governance, and corporate responsibility, leading to increased accountability, better decision making and ultimately enhanced long-term value. This focus on the environment, social, and governance, or ESG, influences the way we consider our business goals and strategies.

Environmental

In the last several years, we have improved our internal and external policies, better aligning our corporate actions with our commitment to a greener planet. We have implemented internal green programs and initiatives to reinforce our commitment to minimizing natural resource consumption, improving sustainability, disposing of end-of-life products in an environmentally safe manner, reducing waste, and increasing reuse and recycling programs company-wide. In addition, we recently completed a comprehensive review of Scope 3 GHG emissions across our Company.

We participate in the Climate Disclosure Program (CDP) and have also implemented a Supplier environmental conservation program. We have set specific goals to reduce Scope 1 and Scope 2 GHG emissions, increase the use of renewable energy, and reduce waste generation at our facilities. These goals can be found on our website at www.synaptics.com/corporate-environmental-policy. Our climate change management currently involves a focus on education, increasing internal awareness of climate change mitigation and impact reduction through on-going training and internal education.

Our Chief Information Officer, or CIO, also acts as our Chief Sustainability Officer and has responsibility for our Global Workplace Resources function and executes our climate strategy and related issues. The CIO 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. As a member of our senior executive team, the CIO is responsible for elevating climate topics to senior leadership and, ultimately, to the Board's Nominations and Corporate Governance Committee and Audit Committee.

Social

Our employees and communities are the heart of our company, and we take pride in our social responsibility to them as well becoming better global citizens. We support our local communities through charitable causes and events, and we have numerous programs in place around the world that promote our commitments to diversity, equality of opportunity, non-discrimination, and the highest standards of human rights.

We support and contribute toward educational programs with the intent to help reduce social and economic inequalities. Our employees are passionate about their communities, and we support global causes that they care about and volunteer toward.

We are committed to the use of a socially responsible supply chain. We have adopted a supplier and vendor code of conduct, and businesses in our supply chain are contractually obligated to comply with and support the Responsible Business Alliance (RBA) Code of Conduct. We expect suppliers and vendors to uphold the highest standards of human rights including anti-discrimination and humane treatment, freedom of association and collective bargaining, prevention of child labor, limits on working hours, minimum fair and living wage, worker feedback and grievance systems. We expect suppliers to exercise due diligence on relevant minerals in their supply chains and to have a policy to reasonably assure that the tantalum, tin, tungsten, and gold in the products they manufacture does not directly or indirectly finance or benefit armed groups that perpetrate serious human rights abuses in the Democratic Republic of the Congo or an adjoining country. Our vendors and suppliers are also required to obtain and maintain all required health and safety permits, provide reasonable working and living conditions, have incident management systems and emergency preparedness and response protocols.

Governance

We are dedicated to supporting leading corporate governance and board practices to ensure oversight accountability and transparency in our business practices. We place a high value on ethical actions, individual integrity, and fair dealing in every aspect of what we do. Our Board of Directors is responsible for overseeing our ESG policies and practices generally. The Nominations and Corporate Governance Committee has oversight of ESG strategy and receives regular updates from management on our ESG performance. The Audit Committee provides oversight of business risks and our company's Code of Business Conduct and Ethics. Our Board of Directors receives periodic updates from Nominations and Corporate Governance Committee and management on our ESG performance.

Accountability

Our Board of Directors and management are strongly committed to our corporate responsibility policies and will continue to regularly evaluate these policies to ensure an effective outcome and strict adherence by our employees, suppliers, vendors, and partners. We actively monitor and evaluate our internal compliance with our Code of Conduct and other corporate social responsibility policies and programs.

Human Capital

Our company has been built on the collective contributions from people of many countries, religions, and ethnic backgrounds. People are our most critical asset and are the core component behind our success. We want to attract, develop, and retain the world's best talent.

Competition for talent in our industry is extremely intense. Our human resource strategy and programs are focused on attracting, engaging, developing and retaining this talent. We believe our company attributes differentiate us and, in part, allow us to consistently retain our employees throughout fiscal year 2023, as our attrition rate continues to be lower than benchmark data. Our employee average tenure globally is 7.6 years.

Our Board of Directors and Board committees provide oversight on certain workforce management matters including, among other aspects, management depth and strength assessment, diversity, equity, inclusion and belonging, and our employee survey results. The Audit Committee's oversight of business risks and our company's Code of Business Conduct and Ethics is relevant to human capital management. The Nominations and Corporate Governance Committee's oversight of ESG strategy includes talent attraction and retention and inclusion and diversity. The Compensation Committee provides oversight of our overall compensation philosophy, policies, and programs, and assesses whether our compensation establishes appropriate incentives for executive officers and other employees.

As of June 24, 2023, we employed 1,891 employees. Our workforce is distributed globally across 16 countries with 23% of our employees located in North America, 60% located in Asia Pacific and 17% located in Europe and the Middle East, or EMEA.

Competitive Compensation and Benefits

We provide competitive benefits related to health, wellness, mental health and family resources designed to meet the needs of our diverse global workforce. We have a robust pay for performance philosophy and compensation framework to reward high performance. We align executive compensation with our corporate strategies, business objectives and the creation of long-term value for our stockholders without encouraging unnecessary or excessive risk-taking.

Engagement and Development

We strive to create exceptional employee experiences. Our focus is on creating a space for employees to do their best work and feel valued and engaged. As part of our dedication to and investment in our employees, we conduct organizational health surveys designed to assess employee engagement, leadership, work environment, and culture.

Employees have various opportunities to learn though technical, compliance and other professional trainings. We offer career advancement opportunities to our employees and are focused on leadership development. Investing in our employees and their professional development is a priority for our company.

Diversity, Equity, Inclusion and Belonging

We embrace diversity and inclusion and strive to provide a rich environment with diverse skills, backgrounds and perspectives. We strongly believe diverse teams are more innovative and productive. Our goal is to cultivate an environment that not only allows for, but also encourages, everyone to collaborate and participate equally to foster individual and company growth. As of June 2023, 20% of global employees and 38% of our board of directors identified as female. We are committed to diversity, equity and inclusion. Fiscal 2023 was a year of program development and growth around this topic including a comprehensive internal assessment, internal communications campaign, several diversity, equity, inclusion, and belonging events, and employee resource group development.

Community Impact

We believe in giving back to the communities where our employees live and work. We provide opportunities for employees to donate or volunteer their time through various programs and charitable events. Our employees regularly participate in events focused on youth and underrepresented communities.

Information about our Executive Officers

The following table sets forth certain information regarding our executive officers as of August 11, 2023:

Name	Age	Position
Michael Hurlston	56	President and Chief Executive Officer
Dean Butler	41	Chief Financial Officer
Saleel Awsare	58	Senior Vice President and General Manager, PC & Peripherals Divisions
John McFarland	56	Senior Vice President, General Counsel and Secretary
Vikram Gupta	54	Senior Vice President and General Manager, IoT Processors and Chief Product Officer

Michael Hurlston has been the President and Chief Executive Officer of our company since August 19, 2019. Prior to joining our company, Mr. Hurlston served as the Chief Executive Officer and a member of the Board of Directors of Finisar Corporation (“Finisar”) from January 2018 to August 2019. Prior to joining Finisar, he served as Senior Vice President and General Manager of the Mobile Connectivity Products/Wireless Communications and Connectivity Division and held senior leadership positions in sales, marketing, and general management at Broadcom Limited (“Broadcom”) and its predecessor corporation from November 2001 through October 2017. Prior to joining Broadcom in 2001, Mr. Hurlston held senior marketing and engineering positions at Oren Semiconductor, Inc., Avasem, Integrated Circuit Systems, Micro Power Systems, Exar and IC Works from 1991 until 2001. Mr. Hurlston is a member of the board of directors of Flex Ltd. Mr. Hurlston serves on the Board of Executive Trustees of the UC Davis Foundation and on the Dean’s Executive Committee for the College of Engineering and the Dean’s Advisory Counsel for the Graduate School of Management at the University of California, Davis. Mr. Hurlston holds Bachelor of Science and Master of Science degrees in Electrical Engineering and a Master of Business Administration degree from the University of California, Davis.

Dean Butler has been the Chief Financial Officer of our company since October 21, 2019. Prior to joining our company, Mr. Butler served as Vice President of Finance at Marvell Technology Inc. (“Marvell”) from July 2016 to October 2019. Prior to joining Marvell, he served as Controller of the Ethernet Switching Division at Broadcom from January 2015 through July 2016. Prior to joining Broadcom, Mr. Butler held senior finance positions at Maxim Integrated from May 2007 to December 2014. Mr. Butler holds a Bachelor of Business Administration degree in Finance from the University of Minnesota Duluth.

Saleel Awsare has been the Senior Vice President and General Manager of our PC and Peripherals unit since July 2020. Previously, Mr. Awsare was the Senior Vice President and General Manager of our IoT Division from April 2019 to July 2020 and the Senior Vice President of Corporate Marketing & Investor Relations from December 2018 until April 2019. Prior to joining our company as Corporate Vice President and General Manager of Audio & Imaging Products in July 2017, he was President of Conexant Systems, LLC (“Conexant”) from March 2016 to July 2017, and Senior Vice President & General Manager of Audio & Imaging from April 2012 to March 2016. Synaptics acquired Conexant in July 2017. Prior to joining Conexant, Mr. Awsare served as President of Nuvoton Technology Corporation's (“Nuvoton”) U.S. operations and General Manager of Nuvoton’s audio and voice divisions from December 2008 to March 2012. Prior to joining Nuvoton, Mr. Awsare was the Executive Vice President and General Manager of mixed signal products for Winbond Electronics Corporation America (“Winbond”). Prior to joining Winbond, Mr. Awsare was a director of engineering for Information Storage Devices. Mr. Awsare is a member of the Board of Trustees of Stevens Institute of Technology. Mr. Awsare holds a Bachelor of Science degree in Electrical Engineering from Stevens Institute of Technology and a Master of Science degree in Engineering Management from Santa Clara University.

Vikram Gupta has been the SVP and GM of IoT Processors and Chief Product Officer since January 2023. Prior to joining Synaptics, Mr. Gupta was the SVP and GM of IoT Compute and Wireless Business Lines for Infineon Technologies, where he led the integration and transformation efforts for the $1B+ multi-site business with three product lines following Infineon’s acquisition of Cypress Semiconductor, where he served as VP of Engineering of the IoT Business Unit. Prior to Cypress Semiconductor, Mr. Gupta navigated a progressive tenure with Broadcom, advancing in leadership and responsibility across both engineering and business. Earlier in his career he was a co-founder of Zeevo, a developer of system-on-chip solutions for Bluetooth and other wireless communications applications, which was ultimately purchased by Broadcom. He holds a Bachelor’s Degree in Electrical and Electronics Engineering from Birla Institute of Technology & Science in India and a Master’s Degree in Electrical Engineering from the University of Hawaii at Manoa.

John McFarland has been the Senior Vice President, General Counsel and Secretary of our company since November 2013. Prior to joining our company, Mr. McFarland served for nine years as the Executive Vice President, General Counsel and Secretary of Magnachip Semiconductor. Mr. McFarland spent his early career at law firms in Palo Alto, California, and

Seoul, Korea. Mr. McFarland holds a Bachelor of Arts degree in Asian Studies, conferred with highest distinction from the University of Michigan, and a Juris Doctor degree from the University of California, Los Angeles, School of Law.

ITEM 1A. RISK FACTORS

You should carefully consider the following factors, together with all the other information included in this report, in evaluating our company and our business.

Risks Related to Our Markets and Customers

We currently depend on our solutions for the IoT, PC, and mobile product applications markets for a substantial portion of our revenue, and any downturn in sales of these products would adversely affect our business, revenue, operating results, and financial condition.

We currently depend on our solutions for the IoT, PC, and mobile product applications markets for a substantial portion of our revenue. Any downturn in sales of our products into any of these markets would adversely affect our business, revenue, operating results, and financial condition. Similarly, a softening of demand in any of these markets, or a slowdown of growth in any of these markets because of changes in customer preferences, the emergence of applications not including our solutions, or other factors would cause our business, operating results, and financial position to suffer.

A significant portion of our sales comes from one or more large customers, the loss of which could harm our business, financial condition, and operating results.

Historically, we have relied on a limited number of customers for a substantial portion of our total revenue. If we lost key customers, or if key customers reduced or stopped placing orders for our high-volume products, our financial results could be adversely affected. Sales to one direct customer accounted for 10% or more of our net revenue in fiscal 2023. During fiscal 2023, we had five OEM customers that integrated our products into their products representing approximately 37% of our revenue; we sold to these customers primarily indirectly through multiple distributors. Significant reductions in sales to our largest customers, the loss of other major customers, or a general decrease in demand for our products within a short period of time could adversely affect our revenue, financial condition, and business.

We sell to contract manufacturers that serve our OEM customers. Any material delay, cancellation, or reduction of orders from any one or more of these contract manufacturers or the OEMs they serve could harm our business, financial condition, and operating results. The adverse effect could be more substantial if our other customers do not increase their orders or if we are unsuccessful in generating orders for our solutions with new customers. Many of these contract manufacturers sell to the same OEMs, and therefore our concentration with certain OEMs may be higher than with any individual contract manufacturer. Concentration in our customer base may make fluctuations in revenue and earnings more severe and make business planning more difficult.

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

Customer demand for our products may be impacted by weak macroeconomic 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 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 prevent us from accessing preferred sources of liquidity, and causing our borrowing costs to potentially increase. Thus, if general macroeconomic conditions, 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 subject to risk from inflation and increasing market prices of certain components and supplies, which are incorporated into our end products or used by our manufacturing partners or suppliers to manufacture our end products. These components and supplies have, from time-to-time, become restricted. Additionally, general market factors and conditions have in the past, and may in the future, affect pricing of such components and supplies (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."

We are exposed to industry downturns and cyclicality in our target markets that may result in fluctuations in our operating results.

The consumer electronics industry has experienced significant economic downturns at various times. These downturns are characterized by diminished product demand, accelerated erosion of average selling prices, production overcapacity, and increased inventory and credit risk. In addition, the consumer electronics industry is cyclical in nature. We seek to reduce our exposure to industry downturns and cyclicality by providing design and production services for leading companies in rapidly expanding industry segments. We may, however, experience substantial period-to-period fluctuations in future operating results because of general industry conditions or events occurring in the general economy.

We cannot assure you that our product solutions for new markets will be successful or that we will be able to continue to generate significant revenue from these markets.

Our product solutions may not be successful in new markets. Various target markets for our product solutions, such as IoT, may develop slower than anticipated or could utilize competing technologies. The markets for certain of these products depend in part upon the continued development and deployment of wireless and other technologies, which may or may not address the needs of the users of these products.

Our ability to generate significant revenue from new markets will depend on various factors, including the following:

- the development and growth of these markets;
- the ability of our technologies and product solutions to address the needs of these markets, the price and performance requirements of OEMs, and the preferences of end users; and
- our ability to provide OEMs with solutions that provide advantages in terms of size, power consumption, reliability, durability, performance, and value-added features compared with alternative solutions.

Many manufacturers of these products have well-established relationships with competitive suppliers. Our ongoing success in these markets will require us to offer better performance alternatives to other solutions at competitive costs. The failure of any of these target markets to develop as we expect, or our failure to serve these markets to a significant extent, will impede our sales growth and could result in substantially reduced earnings and a restructuring of our operations. We cannot predict the size or growth rate of these markets or the market share we will achieve or maintain in these markets in the future.

If we fail to maintain and build relationships with our customers, or our customers' products that utilize our solutions do not gain widespread market acceptance, our revenue may stagnate or decline.

We do not sell any products to end users and we do not control or influence the manufacture, promotion, distribution, or pricing of the products that incorporate our solutions. Instead, we design various solutions that our OEM customers incorporate into their products, and we depend on such OEM customers to successfully manufacture and distribute products incorporating our solutions and to generate consumer demand through marketing and promotional activities. As a result of this, our success depends almost entirely upon the widespread market acceptance of our OEM customers' products that incorporate our solutions. Even if our technologies successfully meet our customers' price and performance goals, our sales could decline or fail to develop if our customers do not achieve commercial success in selling their products that incorporate our solutions.

We must maintain our relationships with our existing customers and expand our relationships with OEMs in new markets. Our customers generally do not provide us with firm, long-term volume purchase commitments, opting instead to issue purchase orders that they can cancel, reduce, or delay, subject to certain limitations. In order to meet the expectations of our customers, we must provide innovative solutions on a timely and cost-effective basis. This requires us to match our design and production capacity with customer demand, maintain satisfactory delivery schedules, and meet performance goals. If we are unable to achieve these goals for any reason, our sales may decline or fail to develop, which would result in decreasing revenue.

In addition to maintaining and expanding our customer relationships, we must also identify areas of significant growth potential in other markets, establish relationships with OEMs in those markets, and assist those OEMs in developing products that incorporate our solutions. Our failure to identify potential growth opportunities in the markets in which we operate, particularly in the IoT market, or our failure to establish and maintain relationships with OEMs in those markets, would prevent our business from growing in those markets.

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 other reasons.

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. Any increase in the price of components used in our products will adversely affect our gross margins.

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 our fiscal 2023, 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. 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.

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 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.

Risks Related to Our Supply Chain

We depend on third parties to maintain satisfactory manufacturing yields and delivery schedules, and their inability to do so could increase our costs, disrupt our supply chain, and result in our inability to deliver our products, which would adversely affect our operating results.

We depend on our contract manufacturers and semiconductor fabricators to maintain high levels of productivity and satisfactory delivery schedules at manufacturing and assembly facilities located primarily in Asia. We provide our contract manufacturers with six-month rolling forecasts of our production requirements. We generally do not, however, have long-term agreements with our contract manufacturers that guarantee production capacity, prices, lead times, or delivery schedules. In our fiscal 2022, we faced manufacturing capacity constraints as a result of the supply constraints and capacity shortages affecting the global semiconductor industry that materially limited our ability to meet our customers' demand forecasts, thereby limiting our potential revenue growth during the fiscal year. As a result of the supply shortages, we have entered into long-term capacity and pricing agreements with certain of our suppliers. If end customer demand declines, these long-term capacity agreements could result in significant write-downs of inventory. On occasion, customers require rapid increases in production, which can strain our resources and reduce our margins. Although we have been able to obtain increased production capacity from our third-party contract manufacturers in the past, there is no guarantee that our contract manufacturers will be able to increase production capacity to enable us to meet our customer demands in the future. Our contract manufacturers also serve other customers, a number of which have greater production requirements than we do. As a result, our contract manufacturers could determine to prioritize production capacity for other customers or reduce or eliminate deliveries to us on short notice.

Qualifying new contract manufacturers, and specifically semiconductor foundries, is time consuming and might result in unforeseen manufacturing and operations problems. We may also encounter lower manufacturing yields and longer delivery schedules in commencing volume production of new products that we introduce, which could increase our costs or disrupt our supply of such products. The loss of relationships with our contract manufacturers or assemblers, or their inability to conduct their manufacturing and assembly services for us as anticipated in terms of capacity, cost, quality, and timeliness could adversely affect our ability to fill customer orders in accordance with required delivery, quality, and performance requirements, and adversely affect our operating results.

Shortages of components and materials may delay or reduce our sales and increase our costs, thereby harming our operating results.

The inability to obtain sufficient quantities of components and other materials necessary for the production of our products could result in reduced or delayed sales or lost orders. Many of the materials used in the production of our products are available only from a limited number of foreign suppliers, particularly suppliers located in Asia. In most cases, neither we nor our contract manufacturers have long-term supply contracts with these suppliers. As a result, we are subject to increased costs, supply interruptions, and difficulties in obtaining materials. Our customers also may encounter difficulties or increased costs in obtaining the materials necessary to produce their products into which our product solutions are incorporated. Future shortages of materials and components, including potential supply constraints of silicon, could cause delayed shipments and customer dissatisfaction, which may result in lower revenue.

Risks Related to Product Development

We are subject to lengthy development periods and product acceptance cycles, which can result in development and engineering costs without any future revenue.

We provide solutions that are incorporated by OEMs into the products they sell. OEMs make the determination during their product development programs whether to incorporate our solutions or pursue other alternatives. This process requires us to make significant investments of time and resources in the design of solutions for our OEMs' products well before our customers introduce their products incorporating our interface solutions into the market, and before we can be sure that we will generate any significant sales to our customers or even recover our investment. During a customer's entire product development process, we face the risk that our interfaces will fail to meet our customer's technical, performance, or cost requirements, or that our products will be replaced by competitive products or alternative technological solutions. Even if we complete our design process in a manner satisfactory to our customer, the customer may delay or terminate its product development efforts. The occurrence of any of these events could cause sales to not materialize, be deferred, or be cancelled, which could adversely affect our operating results.

We face intense competition that could result in our losing or failing to gain market share and suffering reduced revenue.

We serve intensely competitive markets that are characterized by price erosion, rapid technological change, and competition from major domestic and international companies. This intense competition could result in pricing pressures, lower sales, reduced margins, and lower market share. Depressed economic conditions, a slowdown in the markets in which we operate, the emergence of new products not including our product solutions, rapid changes in the markets in which we operate, and competitive pressures may result in lower demand for our product solutions and reduced unit margins.

Some of our competitors have greater market recognition, larger customer bases, and substantially greater financial, technical, marketing, distribution, and other resources than we possess and that afford them greater competitive advantages. As a result, they may be able to devote greater resources to the promotion and sale of products, negotiate lower prices for raw materials and components, deliver competitive products at lower prices, and introduce new product solutions and respond to customer requirements more quickly than we can. Our competitive position could suffer if one or more of our customers determine not to utilize our custom engineered, total solutions approach and instead, decide to design and manufacture their own interfaces, contract with our competitors, or use alternative technologies.

If we do not keep pace with technological innovations, our products may not remain competitive and our revenue and operating results may suffer.

We operate in rapidly changing, highly competitive markets. Technological advances, the introduction of new products and new design techniques could adversely affect our business unless we are able to adapt to changing conditions. Technological advances could render our solutions less competitive or obsolete, and we may not be able to respond effectively to the technological requirements of evolving markets. Therefore, we may be required to expend substantial funds for and commit significant resources to enhancing and developing new technology, which may include purchasing advanced design tools and test equipment, hiring additional highly qualified engineering and other technical personnel, and continuing and expanding research and development activities on existing and potential solutions.

Our research and development efforts with respect to new technologies may not result in customer or market acceptance. Some or all of those technologies may not successfully make the transition from the research and development stage to cost-effective production as a result of technology problems, competitive cost issues, yield problems, and other factors. Even if we successfully complete a research and development effort with respect to a particular technology, our customers may decide not

to introduce or may terminate products utilizing the technology for a variety of reasons, including difficulties with other suppliers of components for the products, superior technologies developed by our competitors and unfavorable comparisons of our solutions with these technologies, price considerations and lack of anticipated or actual market demand for the products.

Our business could be harmed if we are unable to develop and utilize new technologies that address the needs of our customers, or our competitors or customers develop and utilize new technologies more effectively or more quickly than we can. Any investments made to enhance or develop new technologies that are not successful could have an adverse effect on our net revenue and operating results.

We may not be able to enhance our existing product solutions and develop new product solutions in a timely manner.

Our future operating results will depend to a significant extent on our ability to continue to provide new solutions that compare favorably with alternative solutions on the basis of time to introduction, cost, performance, and end user preferences. Our success in maintaining existing customers, attracting new customers, and developing new business depends on various factors, including the following:

- innovative development of new solutions for customer products;
- utilization of advances in technology;
- maintenance of quality standards;
- performance advantages;
- efficient and cost-effective solutions; and
- timely completion of the design and introduction of new solutions.

Our inability to enhance our existing product solutions and develop new product solutions on a timely basis could harm our operating results and impede our growth.

If we become subject to product returns or claims resulting from defects in our products, we may incur significant costs resulting in a decrease in revenue.

We develop complex products in an evolving marketplace and generally warrant our products for a period of 12 months from the date of delivery. Despite testing by us and our customers, defects may be found in existing or new products. We handle product quality matters sustainably by working on a one-on-one basis with our customers. We have never formally recalled a product or had a mass defect that affected an entire product line. Nevertheless, manufacturing errors or product defects could result in a delay in recognition or loss of revenue, loss of market share, or failure to achieve market acceptance. Additionally, defects could result in financial or other damages to our customers, causing us to incur significant warranty, support, and repair costs, and diverting the attention of our engineering personnel from key product development efforts.

We must finance the growth of our business and the development of new products, which could have an adverse effect on our operating results.

To remain competitive, we must continue to make significant investments in research and development, marketing, and business development. Our failure to sufficiently increase our net revenue to offset these increased costs would adversely affect our operating results.

From time-to-time, we may seek additional equity or debt financing to provide for funds required to expand our business, including through acquisitions. We cannot predict the timing or amount of any such requirements at this time. If such financing is not available to us on satisfactory terms, we may be unable to expand our business or to develop new business at the rate desired and our operating results may suffer. If obtained, the financing itself carries risks including the following: (i) debt financing increases expenses and must be repaid regardless of operating results; and (ii) equity financing, including the issuance of convertible notes or additional shares in connection with acquisitions, could result in dilution to existing stockholders and could adversely affect the price of our common stock.

Risks Related to International Sales and Operations

Changes to import, export and economic sanction laws may expose us to liability, increase our costs and adversely affect our operating results.

As a global company headquartered in the U.S., we are subject to U.S. laws and regulations, including import, export, and economic sanction laws. These laws may include prohibitions on the sale or supply of certain products to embargoed or sanctioned countries, regions, governments, persons, and entities, may require an export license prior to the export of the controlled item, or may otherwise limit and restrict the export of certain products and technologies. Many of our customers, suppliers and contract manufacturers are foreign companies or have significant foreign operations. The imposition of new or additional economic and trade sanctions against our major customers, suppliers or contract manufacturers could result in our inability to sell to, and generate revenue from such customer, supplier, or contract manufacturer. As a result of restrictive export laws, our customers may also develop their own solutions to replace our products or seek to obtain a greater supply of similar or substitute products from our competitors that are not subject to these restrictions, which could material and adversely affect our business and operating results.

In addition, compliance with additional export regulations may result in increased costs to the company. Although we have an export compliance program, maintaining and adapting our export controls program to new and shifting regulations is expensive, time-consuming and requires significant management attention. Failure to comply with trade or economic sanctions could subject the company to legal liabilities and fines from the U.S. government. We must also comply with export restrictions and laws imposed by other countries affecting trade and investments. Although these restrictions and laws have not materially restricted our operations in the recent past, there is a significant risk that they could do so in the future, which would materially and adversely affect our business and operating results.

Changes to international trade policy and rising concerns of international tariffs, including tariffs applied to goods traded between the U.S. and China, could materially and adversely affect our business and results of operations.

Many of the materials used in the production of our products are available only from a limited number of foreign suppliers, particularly suppliers located in Asia. The imposition of tariffs against foreign imports of certain materials could make it more difficult or expensive for us or our OEMs to obtain sufficient quantities of components and other materials necessary for the production of our products or products which incorporate our product solutions. Any interruptions to supply could result in delay or cancellation of our products, which could adversely affect our business and operating results.

In addition, the institution of trade tariffs both globally and between the U.S. and China carry the risk that China's overall economic condition may be negatively affected, which could affect our China operations, including the manufacturing operations on which we rely in China. Further, imposition of tariffs could cause a decrease in the sales of our products to customers located in China or to our OEMs selling to customers in China, which could impact our business, revenue, and operating results.

International sales and manufacturing risks could adversely affect our operating results.

Our manufacturing and assembly operations are primarily conducted in Taiwan, China, and Korea by contract manufacturers and semiconductor fabricators. We have sales and logistics operations in Hong Kong, and sales and engineering design support operations in China, France, Germany, India, Israel, Japan, Korea, Poland, Switzerland, Taiwan, and the U.K. These international operations expose us to various economic, political, regulatory, and other risks that could adversely affect our operations and operating results, including the following:

- difficulties and costs of staffing and managing a multinational organization;
- unexpected changes in regulatory requirements;
- differing labor regulations;
- differing environmental laws and regulations, including in response to climate change;
- potentially adverse tax consequences;
- possible employee turnover or labor unrest;
- greater difficulty in collecting accounts receivable;
- the burdens and costs of compliance with a variety of foreign laws;
- the volatility of currency exchange rates;

- potentially reduced protection for intellectual property rights;
- political or economic instability in certain parts of the world; and
- natural disasters, including earthquakes or tsunamis.

If any of these risks associated with international operations materialize, our operations could significantly increase in cost or be disrupted, which would negatively affect our revenue and operating results.

Our operating results could be adversely affected by fluctuations in the value of the U.S. dollar against foreign currencies.

We transact business predominantly in U.S. dollars, and we invoice and collect our sales in U.S. dollars. A weakening of the U.S. dollar could cause our overseas vendors to require renegotiation of either the prices or currency we pay for their goods and services. In the future, customers may negotiate pricing and make payments in non-U.S. currencies. For fiscal 2023, approximately 13% of our costs were denominated in non-U.S. currencies, including British pounds, Canadian dollars, European Union euro, Hong Kong dollars, Indian rupee, New Taiwan dollars, Japanese yen, Korean won, Chinese yuan, Polish zloty, Israeli New Shekel, and Swiss francs.

If our overseas vendors or customers require us to transact business in non-U.S. currencies, fluctuations in foreign currency exchange rates could affect our cost of goods, operating expenses, and operating margins, and could result in exchange losses. In addition, currency devaluation could result in a loss to us if we hold deposits of that currency. Hedging foreign currencies can be difficult, especially if the currency is not freely traded. We cannot predict the impact of future exchange rate fluctuations on our operating results.

Risks Related to Our Employees

We depend on key personnel who would be difficult to replace, and our business will likely be harmed if we lose their services or cannot hire additional qualified personnel.

Our success depends substantially on the efforts and abilities of our senior management and other key personnel. The competition for qualified management and key personnel, especially engineers, is intense. Although we maintain nondisclosure covenants with most of our key personnel, and our key executives have change of control severance agreements, we do not have employment agreements with many of them. The loss of services of one or more of our key employees or the inability to hire, train, and retain key personnel, especially engineers and technical support personnel, and capable sales and customer-support employees outside the U.S., could delay the development and sale of our products, disrupt our business, and interfere with our ability to execute our business plan.

If we are unable to obtain stockholder approval of share-based compensation award programs or additional shares for such programs, we could be at a competitive disadvantage in the marketplace for qualified personnel or may be required to increase the cash element of our compensation program.

Competition for qualified personnel in our industry is extremely intense, particularly for engineering and other technical personnel. Our compensation program, which includes cash and share-based compensation award components, has been instrumental in attracting, hiring, motivating, and retaining qualified personnel. Our success depends on our continued ability to use our share-based compensation programs to effectively compete for engineering and other technical personnel and professional talent without significantly increasing cash compensation costs. In the future, if we are unable to obtain stockholder approval of our share-based compensation programs or additional shares for such programs, we could be at a competitive disadvantage in the marketplace for qualified personnel or we may be required to increase the cash elements of our compensation program to account for this disadvantage.

Risks Related to Our Intellectual Property

Our ability to compete successfully and continue growing as a company depends on our ability to adequately protect our proprietary technology and confidential information.

We protect our proprietary technology and confidential information through the use of patents, trade secrets, trademarks, copyrights, confidentiality agreements and other contractual provisions. The process of seeking patent protection is lengthy and expensive. Further, there can be no assurance that even if a patent is issued, that it will not be challenged, invalidated, or circumvented, or that the rights granted under the patents will provide us with meaningful protection or any commercial

advantage. Failure to obtain trademark registrations could compromise our ability to fully protect our trademarks and brands and could increase the risk of challenge from third parties to our use of our trademarks and brands. Effective intellectual property protection may be unavailable or limited in some foreign countries in which we operate. In particular, the validity, enforceability and scope of protection of intellectual property in China, where we derive a significant portion of our net sales, and certain other countries where we derive net sales, are still evolving and historically, have not protected and may not protect in the future, intellectual property rights to the same extent as laws developed in the U.S.

We do not consistently rely on written agreements with our customers, suppliers, manufacturers, and other recipients of our technologies and products and therefore, some trade secret protection may be lost and our ability to enforce our intellectual property rights may be limited. Confidentiality and non-disclosure agreements that are in place may not be adequate to protect our proprietary technologies or may be breached by other parties. Additionally, our customers, suppliers, manufacturers, and other recipients of our technologies and products may seek to use our technologies and products without appropriate limitations. In the past, we did not consistently require our employees and consultants to enter into confidentiality, employment, or proprietary information and invention assignment agreements. Therefore, our former employees and consultants may try to claim some ownership interest in our technologies and products or may use our technologies and products competitively and without appropriate limitations. Unauthorized parties may attempt to copy or otherwise use aspects of our technologies and products that we regard as proprietary. Other companies, including our competitors, may independently develop technologies that are similar or superior to our technologies, duplicate our technologies, or design around our patents. If our intellectual property protection is insufficient to protect our intellectual property rights, we could face increased competition in the markets for our technologies and products.

We may pursue, and from time-to-time defend, litigation to enforce our intellectual property rights, to protect our trade secrets, and to determine the validity and scope of the proprietary rights of others. Litigation whether successful or unsuccessful, could result in substantial costs and diversion of resources, which could have a material adverse effect on our business, financial condition, and operating results.

Any claims that our technologies infringe the intellectual property rights of third parties could result in significant costs and have a material adverse effect on our business.

We cannot be certain that our technologies and products do not and will not infringe issued patents or other third-party proprietary rights. Any claims, with or without merit, could result in significant litigation costs and diversion of resources, including the attention of management, and could require us to enter into royalty or licensing agreements, any of which could have a material adverse effect on our business. There can be no assurance that such licenses could be obtained on commercially reasonable terms, if at all, or that the terms of any offered licenses would be acceptable to us. We may also have to pay substantial damages to third parties or indemnify customers or licensees for damages they suffer if the products they purchase from us or the technology they license from us violates any third-party intellectual property rights. An adverse determination in a judicial or administrative proceeding, or a failure to obtain necessary licenses to use such third-party technology could prevent us from manufacturing, using, or selling certain of our products, and there is no guarantee that we will be able to develop or acquire alternate non-infringing technology.

In addition, we license certain technology used in and for our products from third parties. These third-party licenses are granted with restrictions, and there can be no assurances that such third-party technology will remain available to us on commercially acceptable terms. Any breach or violation of the terms and conditions specified in these license agreements could have significant adverse consequences on our operations and financial performance and may result in legal action, monetary penalties, or the termination of the license, which would impact our ability to offer certain products or services.

If third-party technology currently utilized in our products is no longer available to us on commercially acceptable terms, or if any third-party initiates litigation against us for alleged infringement of their proprietary rights, we may not be able to sell certain of our products and we could incur significant costs in defending against litigation or attempting to develop or acquire alternate non-infringing products, which would have an adverse effect on our operating results.

Risks Related to Acquisitions

Any acquisitions that we undertake could be difficult to integrate, disrupt our business, dilute stockholder value, and harm our operating results.

We expect to continue to pursue opportunities to acquire other businesses and technologies in order to complement our current solutions, expand the breadth of our markets, enhance our technical capabilities, or otherwise create growth opportunities. We cannot accurately predict the timing, size, and success of any currently planned or future acquisitions. We

may be unable to identify suitable acquisition candidates or to complete the acquisitions of candidates that we identify. Increased competition for acquisition candidates or increased asking prices by acquisition candidates may increase purchase prices for acquisitions to levels beyond our financial capability or to levels that would not result in the returns required by our acquisition criteria. Acquisitions may also become more difficult in the future as we or others acquire the most attractive candidates. Unforeseen expenses, difficulties, and delays frequently encountered in connection with rapid expansion through acquisitions could inhibit our growth and negatively impact our operating results. If we make any future acquisitions, we could issue stock that would dilute existing stockholders' percentage ownership, incur substantial debt, assume contingent liabilities, or experience higher operating expenses.

We may be unable to effectively complete an integration of the management, operations, facilities, and accounting and information systems of acquired businesses with our own; efficiently manage, combine or restructure the operations of the acquired businesses with our operations; achieve our operating, growth, and performance goals for acquired businesses; achieve additional revenue as a result of our expanded operations; or achieve operating efficiencies or otherwise realize cost savings as a result of anticipated acquisition synergies. The integration of acquired businesses involves numerous risks, including the following:

- the potential disruption of our core business;
- the potential strain on our financial and managerial controls, reporting systems and procedures;
- potential unknown liabilities associated with the acquired business;
- costs relating to liabilities which we agree to assume;
- unanticipated costs associated with the acquisition;
- diversion of management’s attention from our core business;
- problems assimilating the purchased operations, technologies, or products;
- risks associated with entering markets and businesses in which we have little or no prior experience;
- failure of acquired businesses to achieve expected results;
- adverse effects on existing business relationships with suppliers and customers;
- failure to retain key customers, suppliers, or personnel of acquired businesses;
- the risk of impairment charges related to potential write-downs of acquired assets; and
- the potential inability to create uniform standards, controls, procedures, policies, and information systems.

We cannot assure you that we would be successful in overcoming problems encountered in connection with any acquisitions, and our inability to do so could disrupt our operations, result in goodwill or intangible asset impairment charges, and adversely affect our business.

Potential strategic alliances may not achieve their objectives, and the failure to do so could impede our growth.

We have entered, and we anticipate that we will continue to enter, into strategic alliances. We continually explore strategic alliances designed to enhance or complement our technology or to work in conjunction with our technology; to provide necessary know-how, components, or supplies; and to develop, introduce, and distribute products utilizing our technology. Certain strategic alliances may not achieve their intended objectives, and parties to our strategic alliances may not perform as contemplated. The failure of these alliances to achieve their objectives may impede our ability to introduce new products and enter new markets.

We may incur material environmental liabilities as a result of prior operations at an acquired company.

In connection with our acquisition in July 2017 of Conexant Systems, we agreed to assume certain environmental liabilities, including remediation of environmental impacts at a property formerly owned and operated by Conexant (the “Conexant Site”) and for potential future claims alleging personal injury or property damage related to the environmental impacts at and about the Conexant Site. We continue to incur costs to investigate and remediate the Conexant Site’s environmental impacts, and we are at risk for future personal injury and property damage claims related to the Conexant Site. Various federal, state, and local authorities regulate the release of hazardous substances into the environment and can impose substantial fines if our remediation efforts at or about the Conexant Site fail or are deemed inadequate. In addition, changes in laws, regulations and enforcement policies, the discovery of previously unknown contamination at the Conexant Site, the

implementation of new technology at the Conexant Site, or the establishment or imposition of stricter federal, state, or local cleanup standards or requirements with respect to the Conexant Site could require us to incur additional costs in the future that could have a negative effect on our financial condition or results of operations.

Risks Factors Related to Our Indebtedness

Our indebtedness could adversely affect our financial condition or operating flexibility and prevent us from fulfilling our obligations outstanding under our credit agreement, our 4.000% senior notes due 2029, or the Senior Notes, and other indebtedness we may incur from time-to-time.

On March 11, 2021, we completed the offering of the Senior Notes in the aggregate principal amount of $400.0 million, with a corresponding amendment and restatement of our credit agreement, or as amended and supplemented, the Credit Agreement, with the lenders party thereto, or the Lenders, and Wells Fargo Bank, National Association, or the Administrative Agent, as administrative agent for the Lenders. The Senior Notes include a mandatory semi-annual payment of a 4.000% coupon. We are permitted under the indenture governing our Senior Notes and the Credit Agreement to incur additional debt under certain conditions, including additional secured debt. If new debt were to be incurred in the future, the related risks that we now face could intensify.

Our level of indebtedness could have important consequences on our future operations, including:

- making it more difficult for us to satisfy our payment and other obligations under the Notes, the Credit Agreement, or our other outstanding debt from time-to-time;
- risking an event of default if we fail to comply with the financial and other covenants contained in the Notes indenture or the Credit Agreement, which could result in the Senior Notes or any outstanding bank debt becoming immediately due and payable and could permit the lenders under the Credit Agreement to foreclose on the assets securing such bank debt;
- subjecting us to the risk of increased sensitivity to interest rate increases on our debt with variable interest rates, including the debt that we may incur under the Credit Agreement;
- reducing the availability of our cash flows to fund working capital, capital expenditures, acquisitions and other general corporate purposes, and limiting our ability to obtain additional financing for these purposes;
- limiting our flexibility in planning for, or reacting to, and increasing our vulnerability to, changes in our business, the industry in which we operate and the general economy; and
- placing us at a competitive disadvantage compared to our competitors that have less debt or are less leveraged.

Our business may not generate sufficient cash flow from operations and future borrowings may not be available to us under the Credit Agreement, the indenture governing the Senior Notes or otherwise in an amount sufficient to enable us to pay our debt or to fund our other liquidity needs.

The covenants in the Credit Agreement and Senior Notes impose restrictions that may limit our operating and financial flexibility.

The Credit Agreement includes certain covenants that limit (subject to certain exceptions) our ability to, among other things: (i) incur or guarantee additional indebtedness; (ii) incur or suffer to exist liens securing indebtedness; (iii) make investments; (iv) consolidate, merge or transfer all or substantially all of our assets; (v) sell assets; (vi) pay dividends or other distributions on, redeem or repurchase capital stock; (vii) enter into transactions with affiliates; (viii) amend, modify, prepay or redeem subordinated indebtedness; (ix) enter into certain restrictive agreements; and (x) engage in a new line of business. In addition, the Credit Agreement contains financial covenants that (i) require the ratio of the amount of our consolidated total indebtedness to consolidated EBITDA to be less than certain maximum ratio levels, and (ii) require the ratio of the amount of our consolidated EBITDA to consolidated interest expense to be greater than a certain minimum ratio level.

If we violate these covenants and are unable to obtain waivers, our debt under the Credit Agreement would be in default and could be accelerated, and could permit, in the case of secured debt, the lenders to foreclose on our assets securing the Credit Agreement. If the indebtedness is accelerated, we may not be able to repay our debt or borrow sufficient funds to refinance it. Even if we are able to obtain new financing, it may not be on commercially reasonable terms or on terms that are acceptable to us. If our debt is in default for any reason, our cash flows, results of operations or financial condition could be materially and adversely affected. In addition, complying with these covenants may also cause us to take actions that may make it more

difficult for us to successfully execute our business strategy and compete against companies that are not subject to such restrictions.

General Risk Factors

If we fail to manage our growth effectively, our infrastructure, management, and resources could be strained, our ability to effectively manage our business could be diminished, and our operating results could suffer.

The failure to manage our planned growth effectively could strain our resources, which would impede our ability to increase revenue. We have increased the number of our solutions in the past and may plan to further expand the number and diversity of our solutions and their use in the future. Our ability to manage our planned diversification and growth effectively will require us to:

- successfully hire, train, retain, and motivate additional employees, including employees outside the U.S.;
- efficiently plan, expand, or cost-effectively reduce our facilities to meet headcount requirements;
- enhance our global operational, financial, and management infrastructure; and
- expand our development and production capacity.

In connection with the expansion and diversification of our product and customer base, we may increase our personnel and make other expenditures to meet demand for our expanding product offerings, including offerings in the IoT market, the PC applications market, and the mobile product applications market. Any increase in expenses or investments in infrastructure and facilities in anticipation of future orders that do not materialize would adversely affect our profitability. Our customers also may require rapid increases in design and production services that place an excessive short-term burden on our resources and the resources of our contract manufacturers. An inability to quickly expand our development, design or production capacity or an inability of our third-party manufacturers to quickly expand development, design, or production capacity to meet this customer demand could result in a decrease to our revenue or operating results. If we cannot manage our growth effectively, our business and operating results could suffer.

We face risks associated with security breaches or cyberattacks.

We face risks associated with security breaches or cyberattacks of our computer systems or those of our third-party representatives, vendors, and service providers. Although we have implemented security procedures and controls to address these threats, our systems may still be vulnerable to data theft, computer viruses, programming errors, ransomware, and other attacks by third parties, or similar disruptive problems. If our systems, or systems owned by third parties affiliated with our company, were breached or attacked, the proprietary and confidential information of our company, our employees and our customers could be disclosed and we may be required to incur substantial costs and liabilities, including the following: liability for stolen assets or information; fines imposed on us by governmental authorities for failure to comply with privacy laws or for disclosure of any personally identifiable information as a part of such attack; costs of repairing damage to our systems; lost revenue and income resulting from any system downtime caused by such breach or attack; loss of competitive advantage if our proprietary information is obtained by competitors as a result of such breach or attack; increased costs of cyber security protection; costs of incentives we may be required to offer to our customers or business partners to retain their business; damage to our reputation; and expenses to rectify the consequences of the security breach or cyberattack. In addition, any compromise of security from a security breach or cyberattack could deter customers or business partners from entering into transactions that involve providing confidential information to us. As a result, any compromise to the security of our systems could have a material adverse effect on our business, reputation, financial condition, and operating results.

If tax laws change in the jurisdictions in which we do business or if we receive a material tax assessment in connection with an examination of our income tax returns, our consolidated financial position, results of operations and cash flows could be adversely affected.

We are subject to U.S. federal, state, and foreign income taxes in the various jurisdictions in which we do business. In addition, we are required to pay U.S. federal taxes on the operating earnings of certain of our foreign subsidiaries. Our future effective tax rates and the value of our deferred tax assets could be adversely affected by changes in tax laws in the U.S. or in the foreign jurisdictions in which we operate. In addition, we are subject to the examination of our income tax returns by the tax authorities in the jurisdictions in which we do business. The calculation of tax liabilities involves significant judgment in estimating the impact of uncertainties in the application of highly complex tax laws. Our results have in the past, and could in the future, include favorable and unfavorable adjustments to our estimated tax liabilities in the period a determination of such estimated tax liability is made or resolved, upon the filing of an amended return, upon a change in facts, circumstances, or interpretation, or upon the expiration of a statute of limitation. While we believe we have adequately provided for reasonably foreseeable outcomes in connection with the resolution of income tax uncertainties, the resolution of these uncertainties in a manner inconsistent with our expectations could have a material impact on our consolidated financial position, result of operations, or cash flows.

We are subject to governmental laws, regulations and other legal obligations related to privacy and data protection.

We collect, use, and store personally identifiable information, or PII, as part of our business and operations. We are subject to federal, state, and international laws relating to the collection, use, retention, security, and transfer of PII. The legislative and regulatory framework for privacy and data protection issues worldwide is rapidly evolving and is likely to remain uncertain for the foreseeable future. The cost of complying with and implementing these privacy-related and data governance measures could be significant as they may create additional burdensome security, business process, business record or data localization requirements. The theft, loss or misuse of PII collected, used, stored or transferred by us, our any inability, or perceived inability, to adequately address privacy and data protection concerns, even if unfounded, or our failure to comply with applicable laws, regulations, policies, industry standards, contractual obligations or other legal obligations, could result in additional cost and liability to us, including litigation, which could have an adverse effect on our business, operating results, cash flows, and financial condition.

Our charter documents and Delaware law could make it more difficult for a third-party to acquire us and discourage a takeover.

Our certificate of incorporation and the Delaware General Corporation Law contain provisions that may have the effect of making more difficult or delaying attempts by others to obtain control of our company, even when such attempts may be in the best interests of our stockholders. Our certificate of incorporation also authorizes our Board of Directors, without stockholder approval, to issue one or more series of preferred stock, which could have voting and conversion rights that adversely affect or dilute the voting power of the holders of our common stock. Delaware law also imposes conditions on certain business combination transactions with "interested stockholders." Our certificate of incorporation divides our Board of Directors into three classes, with one class to stand for election each year for a three-year term after the election. The classification of directors tends to discourage a third-party from initiating a proxy solicitation or otherwise attempting to obtain control of our company and may maintain the incumbency of our Board of Directors, as this structure generally increases the difficulty of, or may delay, replacing a majority of directors. Our certificate of incorporation authorizes our Board of Directors

to fill vacancies or newly created directorships. A majority of the directors then in office may elect a successor to fill any vacancies or newly created directorships, thereby increasing the difficulty of, or delaying a third-party's efforts in, replacing a majority of directors.

The market price of our common stock has been and may continue to be volatile.

The trading price of our common stock has been and may continue to be subject to wide fluctuations in response to various factors, including the following:

- variations in our quarterly results;
- the financial guidance we may provide to the public, any changes in such guidance, or our failure to meet such guidance;
- changes in financial estimates by industry or securities analysts or our failure to meet such estimates;
- various market factors or perceived market factors, including rumors, whether or not correct, involving us, our customers, our suppliers, our competitors, or a potential acquisition of our company;
- announcements of technological innovations by us, our competitors, or our customers;
- introductions of new products or new pricing policies by us, our competitors, or our customers;
- acquisitions or strategic alliances by us, our competitors, or our customers;
- recruitment or departure of key personnel;
- the gain or loss of significant orders;
- the gain or loss of significant customers;
- market conditions in our industry, the industries of our customers, and the economy as a whole;
- short positions held by investors;
- new federal and state laws and regulations affecting our industry; and
- general financial market conditions or occurrences, including market volatility resulting from geopolitical risks, and rivalries, acts of war, terrorist attacks, cybersecurity attacks, health pandemics, financial market technological glitches and interruptions of trading activity.

In addition, stocks of technology companies have experienced extreme price and volume fluctuations that often have been unrelated or disproportionate to these companies' operating performance. Public announcements by technology companies concerning, among other things, their performance, accounting practices, or legal problems could cause the market price of our common stock to decline regardless of our actual operating performance.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

Our principal executive offices, as well as our principal research and development, sales, marketing, and administrative functions, are located in San Jose, California, where we lease approximately 111,000 square feet of facilities. We also have research and development functions in leased offices in California, Georgia, and Massachusetts. Our two Asia Pacific principal offices are located in leased offices in Hong Kong and Japan, where we have sales, operations, and research and development functions. We have a leased facility with logistics operations in Taiwan, leased facilities with sales and support operations in China, Hong Kong, Japan, Korea, Switzerland, and Taiwan, and leased facilities with engineering design support operations in China, France, Germany, India, Israel, Japan, Korea, Poland, Switzerland, Taiwan, the U.K. and California, U.S.

ITEM 3. LEGAL PROCEEDINGS

We are party to various litigation matters and claims arising from time-to-time in the ordinary course of business. While the results of such matters cannot be predicted with certainty, we believe that the final outcome of such matters will not have a material adverse effect on our business, financial condition, results of operations or cash flows.

For further information regarding current legal proceedings, see Note 10, Indemnifications and Contingencies to the consolidated financial statements contained elsewhere in this report.

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 on Common Stock

Our common stock has been listed on the Nasdaq Global Select Market (formerly the Nasdaq National Market) under the symbol "SYNA" since January 29, 2002. Prior to that time, there was no public market for our common stock.

Stockholders

As of August 11, 2023, there were approximately 115 holders of record of our common stock. The closing price of our common stock as quoted on the Nasdaq Global Select Market as of August 11, 2023 was $89.20.

Dividends

We have never declared or paid cash dividends on our common stock. We currently plan to retain all earnings to finance the growth of our business, make our debt payments, or purchase shares under our common stock repurchase program. Payments of any cash dividends in the future will depend on our financial condition, operating results, and capital requirements, as well as other factors deemed relevant by our Board of Directors.

Our Credit Agreement and the indenture governing our Senior Notes also place restrictions on the payment of any dividends. For a further description of the terms of the Credit Agreement and our Senior Notes indenture, see Note 8 Debt to the consolidated financial statements contained elsewhere in this report.

Stock-Based Compensation

For information on securities authorized for issuance under our equity compensation plans, see Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

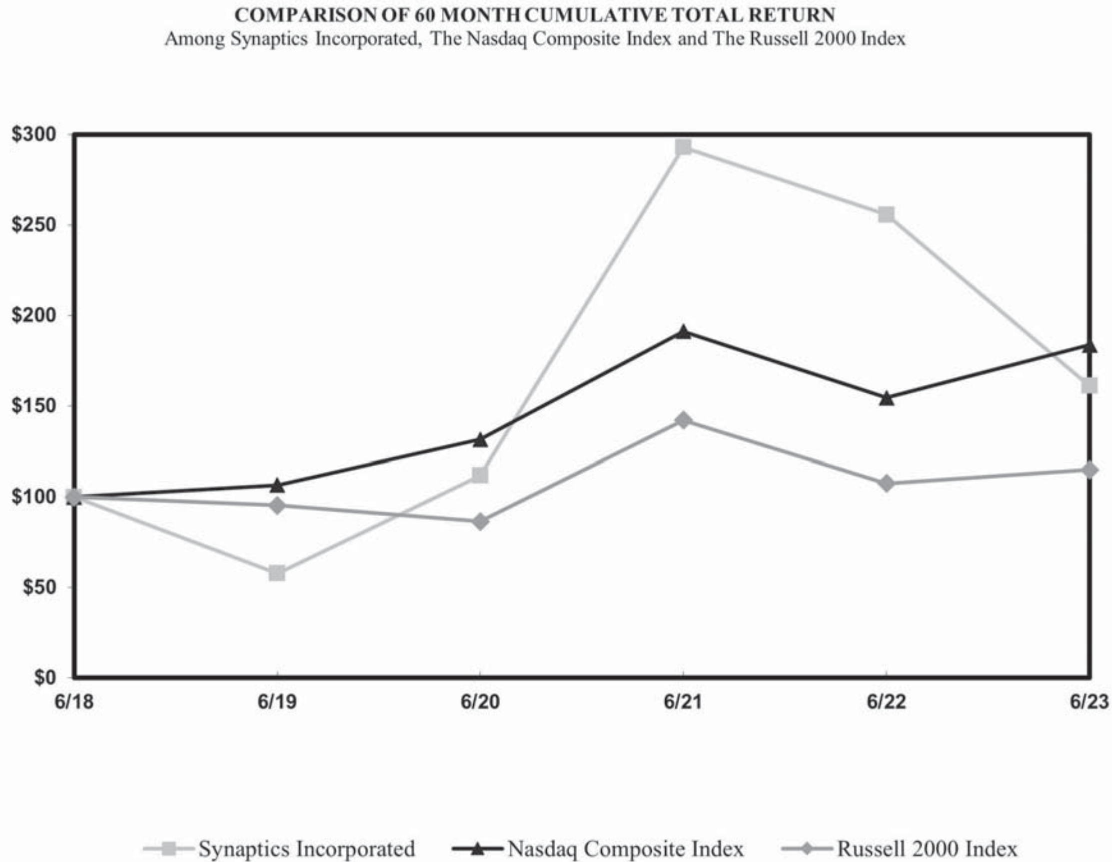
Issuer Purchases of Equity Securities

From April 2005 through April 2023, our Board of Directors cumulatively authorized the repurchase of up to $2.3 billion for our common stock under our stock repurchase program, which expires in July 2025. As of the end of fiscal 2023, the remaining amount authorized for repurchase under our stock repurchase program was $893.9 million. During the three-month period ended June 24, 2023, repurchases under the stock repurchase program were as follows:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Program	Maximum Dollar Value of Shares that May Yet Be Purchased Under the Program
March 26, 2023 - April 22, 2023	—	—	—	—
April 23, 2023 - May 20, 2023	—	—	—	—
May 21, 2023 - June 24, 2023	998,942	$ 83.50	998,942	$893,922,447
Total	998,942			

Performance Graph

The following line graph compares cumulative total stockholder returns for the five years ended June 24, 2023 for (i) our common stock, (ii) the Nasdaq Composite Index and (iii) the Russell 2000 Index. The graph assumes an investment of $100 on June 30, 2018. The calculations of cumulative stockholder return on the Nasdaq Composite Index and the Russell 2000 Index include reinvestment of dividends. The calculation of cumulative stockholder return on our common stock does not include reinvestment of dividends because we did not pay any dividends during the measurement period. The historical performance shown is not necessarily indicative of future performance.



The performance graph above shall not be deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section. The performance graph above will not be deemed incorporated by reference into any filing of our company under the Exchange Act or the Securities Act.

ITEM 6. RESERVED

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Forward-Looking Statements and Factors That May Affect Results

You should read the following discussion and analysis in conjunction with our financial statements and related notes contained elsewhere in this report. This discussion contains forward-looking statements that involve risks, uncertainties, and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of a variety of factors, including those set forth elsewhere in this report and under Item 1A. Risk Factors.

Impact of COVID-19

Many of the restrictions and other containment measures implemented by governmental authorities in response to the COVID-19 pandemic have since been lifted or scaled back. We did not incur significant disruptions to our business or a materially negative impact on our consolidated results of operations and financial condition from the COVID-19 pandemic and our business was not severely impacted.

Overview

We are a leading worldwide developer and fabless supplier of premium mixed signal semiconductor solutions changing the way humans engage with connected devices and data, engineering exceptional experiences throughout the home, at work, in the car and on the go. We believe our results to date reflect the combination of our customer focus and the strength of our intellectual property and our engineering know-how, which allow us to develop or engineer products that meet the demanding design specifications of our OEMs.

We recognize revenue when control of the promised goods or services is transferred to our customers, in an amount that reflects the consideration we expect to receive in exchange for those goods or services. Most of our revenue is recognized at a point in time, either on shipment or delivery of the product, depending on customer terms and conditions. We also generate revenue from license-based arrangements. We license the rights to certain of our intellectual properties to customers granting them the right to manufacture and sell licensed products. For fiscal 2023, revenue from the IoT product applications market accounted for 70.0% of our net revenue, revenue from the PC product applications market accounted for 16.0% of our net revenue, and revenue from the mobile product applications market accounted for 14.0% of our net revenue.

Many of our customers have manufacturing operations in China, and many of our OEM customers have established design centers in Asia. With our expanding global presence, including offices in China, France, Germany, Hong Kong, India, Israel, Japan, Korea, Poland, Switzerland, Taiwan, the U.K., and the U.S., we are well positioned to provide local sales, operational, and engineering support services to our existing customers, as well as potential new customers, on a global basis.

Our manufacturing operations are based on a variable cost model in which we outsource all of our production requirements and generally drop ship our products directly to our customers from our contract manufacturers' facilities, eliminating the need for significant capital expenditures and allowing us to minimize our investment in inventories. This approach requires us to work closely with our contract manufacturers and semiconductor fabricators to ensure adequate production capacity to meet our forecasted volume requirements. As a result of recent supply constraints and capacity shortages affecting the global semiconductor industry, we have entered into long-term capacity and pricing agreements with some suppliers. We use third-party wafer manufacturers to supply wafers and third-party packaging manufacturers to package our proprietary ASICs. In certain cases, we rely on a single source or a limited number of suppliers to provide other key components of our products. Our cost of revenue includes all costs associated with the production of our products, including materials; logistics; amortization of intangibles related to acquired developed technology; backlog; supplier arrangements; manufacturing, assembly, royalties paid to third-party intellectual property providers and test costs paid to third-party manufacturers; and related overhead costs associated with our indirect manufacturing operations personnel. Additionally, we charge all warranty costs, losses on inventory purchase obligations, and write-downs to reduce the carrying value of obsolete, slow moving, and non-usable inventory to net realizable value, to cost of revenue.

Our gross margin generally reflects the combination of the added value we bring to our OEM customers' products by meeting their custom design requirements and the impact of our ongoing cost-improvement programs. These cost-improvement programs include reducing materials and component costs and implementing design and process improvements. Our newly introduced products may have lower margins than our more mature products, which have realized greater benefits associated with our ongoing cost-improvement programs. As a result, new product introductions may initially negatively impact our gross margin.

Our research and development expenses include costs for supplies and materials related to product development, as well as the engineering costs incurred to design ASICs and human experience solutions for OEM customers prior to and after our OEMs' commitment to incorporate those solutions into their products. In addition, we expense in-process research and development projects acquired as part of a business acquisition, which have not yet reached technological feasibility, and which have no foreseeable alternative future use. We continue to commit to the technological and design innovation required to maintain our position in our existing markets, and to adapt our existing technologies or develop new technologies for new markets.

Selling, general, and administrative expenses include expenses related to sales, marketing, and administrative personnel; internal sales and outside sales representatives' commissions; market and usability research; outside legal, accounting, and consulting costs; and other marketing and sales activities.

Acquired intangibles amortization, included in operating expenses, consists primarily of amortization of customer relationship and tradenames intangible assets recognized under the purchase method for business combinations.

Restructuring costs primarily reflect severance costs related to the restructuring of our operations to reduce operating expenses and gain efficiencies from our recent acquisitions. These headcount related costs were in cost of revenue, research and development, and selling, general and administrative expenses. See Note 16 Restructuring Activities to the consolidated financial statements contained elsewhere in this report.

Interest and other expense, net, primarily reflects interest expense on our Senior Notes, Term Loan Facility and revolving line of credit as well as the amortization of debt issuance costs and discount on our debt, partially offset by interest income earned on our cash, cash equivalents and short-term investments.

Acquisitions

Broadcom

In February 2023, we completed the acquisition of certain GPS developed technology intangible assets from Broadcom for an aggregate consideration of $30.0 million, which was paid in cash in the previous fiscal year.

Emza

On October 2022, we completed the acquisition of Emza Visual Sense, Ltd., or Emza, for total purchase consideration of $15.8 million. Emza is a developer of ultra-low-power artificial intelligence visual sensing solutions. Emza's technology extends our position in Edge AI and allows us to serve the personal computing market with a solution for human presence detection, or HPD. For further discussion of the Emza acquisition, see Note 4 Acquisitions, Divestiture and Investment included in the consolidated financial statements contained elsewhere in this report.

Critical Accounting Policies and Estimates

The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles, or GAAP, requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates, including those related to revenue recognition, allowance for doubtful accounts, cost of revenue, inventories, product warranty, share-based compensation costs, provision for income taxes, deferred income tax asset, valuation allowances, uncertain tax positions, tax contingencies, goodwill, intangible assets, investments, and contingencies. We base our estimates on historical experience, applicable laws and regulations, and various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

The methods, estimates, interpretations, and judgments we use in applying our most critical accounting policies can have a significant impact on the results that we report in our consolidated financial statements. The SEC considers an entity's most critical accounting policies to be those policies that are both most important to the portrayal of the entity's financial condition and results of operations and those that require the entity's most difficult, subjective, or complex judgments, often as a result of the need to make assumptions and estimates about matters that are inherently uncertain. We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements:

- Revenue Recognition
- Inventory Valuation
- Business Combinations
- Income Taxes
- Goodwill

Revenue Recognition

Our revenue is primarily generated from the sale of ASIC chips, either directly to a customer or to a distributor. Revenue is recognized when control of the promised goods or services is transferred to our customers, in an amount that reflects the consideration we expect to receive in exchange for those goods or services. All of our revenue, except an inconsequential amount, is recognized at a point in time, either on shipment or delivery of the product, depending on customer terms and conditions. We generally warrant our products for a period of 12 months from the date of sale and estimate probable product warranty costs at the time we recognize revenue as the warranty is considered an assurance warranty and not a performance obligation. Non-product revenue is recognized over the same period of time such performance obligations are satisfied. We then select an appropriate method for measuring satisfaction of the performance obligations.

Revenue from sales to distributors is recognized upon shipment of the product to the distributors (sell-in basis). Master sales agreements are in place with certain customers, and these agreements typically contain terms and conditions with respect to payment, delivery, warranty, and supply. In the absence of a master sales agreement, we consider a customer's purchase order or our standard terms and conditions to be the contract with the customer.

Rights to our intellectual property, or IP, are either sold or licensed to customers. Revenue recognition from the licensing of our IP is dependent on the nature and terms of each agreement. We recognize revenue from the licensing of our IP upon delivery of the IP if there are no substantive future obligations to perform under the arrangement. Sales-based or usage-based royalties from the license of IP are recognized at the later of the period the sale or usage occurs, or the satisfaction of the performance obligation to which some or all of the sales-based or usage-based royalties have been allocated.

Our pricing terms are negotiated independently, on a stand-alone basis. In determining the transaction price, we evaluate whether the price is subject to refund or adjustment to determine the net consideration which we expect to receive for the sale of such products. In limited situations, we make sales to certain customers under arrangements where we grant stock rotation rights, price protection and price allowances; variable consideration associated with these rights is expected to be inconsequential. These adjustments and incentives are accounted for as variable consideration, classified as other current liabilities under the new revenue standard and are shown as customer obligations within Other Accrued Liabilities as disclosed in Note 1 Organization and Summary of Significant Accounting Policies to the consolidated financial statements contained elsewhere in this report. We estimate the amount of variable consideration for such arrangements based on the expected value to be provided to customers, and we do not believe that there will be significant changes to our estimates of variable consideration. When incentives, stock rotation rights, price protection, volume discounts, or price allowances are applicable, they are estimated and recorded in the period the related revenue is recognized. Stock rotation reserves are based on historical return rates applied to distributor inventory subject to stock rotation rights and recorded as a reduction to revenue with a corresponding reduction to cost of goods sold for the estimated cost of inventory that is expected to be returned and recorded as prepaid expenses and other current assets. In limited circumstances, we enter into volume-based tiered pricing arrangements and we estimate total unit volumes under such arrangement to determine the expected transaction price for the units expected to be transferred. Such arrangements are accounted for as contract liabilities within other accrued liabilities. Sales returns liabilities are recorded as refund liabilities within other accrued liabilities.

Our accounts receivable balance is from contracts with customers and represents our unconditional right to receive consideration from customers. Payments are generally due within three months of completion of the performance obligation and subsequent invoicing and, therefore, do not include significant financing components. To date, there have been no material impairment losses on accounts receivable.

We invoice customers and recognize all of our revenue, except an inconsequential amount, at a point in time, either on shipment or delivery of the product, depending on customer terms and conditions. We account for shipping and handling costs as fulfillment costs before the customer obtains control of the goods. We continue to account for collection of all taxes on a net basis.

We incur commission expense that is incremental to obtaining contracts with customers. Sales commissions (which are recorded in the selling, general and administrative expense line item in the consolidated statements of operations) are expensed when the product is shipped because such commissions are owed after shipment.

Inventory Valuation

We state our inventories at the lower of cost or net realizable value. We base our assessment of the ultimate realization of inventories on our projections of future demand and market conditions. Sudden declines in demand, rapid product improvements, or technological changes, or any combination of these factors can cause us to have excess or obsolete inventories. On an ongoing basis, we review for estimated excess, obsolete, or unmarketable inventories and write down our inventories to their net realizable value based on our forecasts of future demand and market conditions. If actual market conditions are less favorable than our forecasts, additional inventory write-downs may be required. The following factors influence our estimates: changes to or cancellations of customer orders, unexpected or sudden decline in demand, rapid product improvements, technological advances, and termination or changes by our OEM customers of any product offerings incorporating our product solutions.

Periodically, we purchase inventory from our contract manufacturers when a customer delays its delivery schedule or cancels its order. In those circumstances, we record a write-down, if necessary, to reduce the carrying value of the inventory purchased to its net realizable value. The effect of these write-downs is to establish a new cost basis in the related inventory, which we do not subsequently write up. We also record a liability and charge to cost of revenue for estimated losses on inventory we are obligated to purchase from our contract manufacturers when such losses become probable from customer delays, order cancellations, or other factors.

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 recorded at fair value as an intangible asset with an indefinite life and assessed for impairment thereafter. When an IPR&D project is completed, IPR&D is reclassified as an amortizable 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 requires that we use valuation techniques such as the income approach that 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.

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 the provisions of enacted tax law and the effects of future changes in tax laws or rates are not anticipated. Taxes payable on Global Intangible Low-Taxed Income, or GILTI, inclusions in the U.S. are recognized as a current period expense when incurred.

Evaluating the need for a valuation allowance for deferred tax assets requires judgment and analysis of all positive and negative evidence available, including recent earnings history and taxable income 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. 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 state research and development credits and certain capital losses 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.

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 Japan, India, Hong Kong, Israel and the United States.

The recognition and measurement of income 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.

Goodwill

Goodwill is the excess of the aggregate of the consideration transferred over the identifiable assets acquired and liabilities assumed in connection with business combinations. Our reporting units are at the operating segment level. Our goodwill is contained within two reporting units: IoT, and Mobile/PC.

We perform our goodwill impairment analysis in the fourth quarter of each year and, if certain events or circumstances indicate that an impairment loss may have been incurred, on a more frequent basis. The analysis may include both qualitative and quantitative factors to assess the likelihood of an impairment, which occurs when the carrying value of a reporting unit exceeds its fair value. Significant judgment is required in estimating the fair value of our reporting units to determine if the fair values of those units exceed their carrying values and an impairment to goodwill is required when a quantitative goodwill impairment test is performed. The fair values of our reporting units are estimated using a combination of the income approach, which requires estimating the present value of expected future cash flows of a reporting unit, and the market approach, which uses various financial data and ratios of comparable companies to arrive at an estimated value for the reporting unit. Significant estimates and assumptions used in the income approach include assessments of macroeconomic conditions, projected growth rates of our reporting units in the near and long-term, expectations of our ability to execute on our roadmap, and the discount rate applied to cash flows. Significant estimates used in the market approach include the identification of comparable companies for each reporting unit, the determination of an appropriate control premium that a market participant would apply to a reporting unit, and the determination of appropriate multiples to apply to a reporting unit based on adjustments and consideration of specific attributes of that reporting unit.

Our quantitative assessment for the current year indicated that the fair value of our reporting units substantially exceeded their carrying value.

Trends and Uncertainties

Current Economic Conditions

The impact of rising rates over the course of the past 18 months has had a material impact on many sectors of the economy leading to broad-based workforce reductions, a slowing or deferral of investment in information technology spending, and increased concern of a global recession. We believe the threat of global recession is the primary driver for the slowdown in orders from our customer base that we have experienced. During fiscal 2023, we experienced a broad reduction in demand in most of our product applications as many customers and channel partners continue to consume their accumulation of inventories, combined with customer requests to delay orders. Inflation in the costs of goods and services has not had a material impact on our results of operations, but rising inflation could increase our operating expenses and reduce our net income. Further, rising interest rates have increased our borrowing costs on our variable rate Term Loan Facility, which will continue to drive an increase in interest costs in future accounting periods and potentially limit our borrowing capacity if a future acquisition opportunity requiring financing presents itself.

Results of Operations

The following sets forth certain of our consolidated statements of operations data for fiscal 2023 and 2022 along with comparative information regarding the absolute and percentage changes in these amounts (in millions, except percentages):

	2023	2022	$ Change	% Change
IoT product applications	$ 946.3	$ 1,100.9	$ (154.6)	(14.0%)
PC product applications	217.3	343.0	(125.7)	(36.6%)
Mobile product applications	191.5	295.8	(104.3)	(35.3%)
Net revenue	1,355.1	1,739.7	(384.6)	(22.1%)
Gross margin	715.9	943.1	(227.2)	(24.1%)
Operating expenses:				
Research and development	351.2	367.3	(16.1)	(4.4%)
Selling, general, and administrative	175.0	168.4	6.6	3.9%
Acquired intangibles amortization	35.4	38.7	(3.3)	(8.5%)
Restructuring costs	-	18.3	(18.3)	(100.0%)
Operating income	154.3	350.4	(196.1)	(56.0%)
Interest and other income, net	27.2	3.0	24.2	806.7%
Interest expense	(55.5)	(30.2)	(25.3)	83.8%
Loss on extinguishment of debt	-	(8.1)	8.1	(100.0%)
Gain from sale and leaseback transaction	-	5.4	(5.4)	(100.0%)
Income before provision for income taxes	126.0	320.5	(194.5)	(60.7%)
Provision for income taxes	52.4	64.6	(12.2)	(18.9%)
Equity investment loss	-	1.6	(1.6)	(100.0%)
Net income	$ 73.6	$ 257.5	$ (183.9)	(71.4%)

The following sets forth certain of our consolidated statements of operations data as a percentage of net revenues for fiscal 2023 and 2022:

	2023	2022	Percentage Point Increase (Decrease)
IoT product applications	69.8%	63.3%	6.5%
PC product applications	16.0%	19.7%	(3.7%)
Mobile product applications	14.2%	17.0%	(2.8%)
Net revenue	100.0%	100.0%	
Gross margin	52.8%	54.2%	(1.4%)
Operating expenses:			
Research and development	25.9%	21.1%	4.8%
Selling, general, and administrative	12.9%	9.7%	3.2%
Acquired intangibles amortization	2.6%	2.2%	0.4%
Restructuring costs	0.0%	1.1%	(1.1%)
Operating income	11.4%	20.1%	(8.7%)
Interest and other income, net	2.0%	0.2%	1.8%
Interest expense	(4.1%)	(1.7%)	(2.4%)
Loss on extinguishment of debt	0.0%	(0.5%)	0.5%
Gain from sale and leaseback transaction	0.0%	0.3%	(0.3%)
Income before provision for income taxes	9.3%	18.4%	(9.1%)
Provision for income taxes	3.9%	3.7%	0.2%
Equity investment loss	0.0%	0.1%	(0.1%)
Net income	5.4%	14.8%	(9.4%)

Fiscal 2023 Compared with Fiscal 2022

Net Revenue.

Net revenue was $1,355.1 million for fiscal 2023 compared with $1,739.7 for fiscal 2022, a decrease of $384.6 million, or 22.1%. Of our fiscal 2023 net revenue, $946.3 million, or 69.8%, of net revenue was from the IoT product applications market, $217.3 million, or 16.0%, of net revenue was from the PC product applications market, and $191.5 million, or 14.2%, of net revenue was from the mobile product applications market. The overall decrease in net revenue for fiscal 2023 was due to demand and inventory corrections in our market areas resulting in a decrease in revenues in all our product applications. Net revenue from IoT product applications decreased $154.6 million, or 14.0%, net revenue from PC product applications decreased $125.7 million, or 36.6%, and net revenue from mobile product applications decreased $104.3 million, or 35.3%. The decrease in net revenue from IoT product applications was primarily driven by a 11.6% decrease in the units sold as well as a 2.7% decrease in average selling prices. The decrease in net revenue from PC product applications was driven by a 38.3% decrease in the units sold, partially offset by a 2.7% increase in average selling prices. The decrease in mobile product applications was driven by a 29.3% decrease in the units sold as well as a 8.4% decrease in average selling prices.

The overall decrease in our revenues in fiscal 2023 compared to fiscal 2022 is the result of a broad reduction in demand in most of our product applications as many customers and channel partners continued to consume their accumulation of inventories, combined with customer requests to delay orders and downward pressure on product pricing.

Gross Margin.

Gross margin as a percentage of net revenue was 52.8%, or $715.9 million, for fiscal 2023 compared with 54.2%, or $943.1 million, for fiscal 2022. The 140 basis point decrease in gross margin was primarily due to a decrease in units sold as well as an overall decline in average selling prices in all our product applications.

Because we sell our technology solutions in designs that are generally unique or specific to an OEM customer's application, gross margin varies on a product-by-product basis, making our cumulative gross margin a blend of our product specific designs. We charge losses on inventory purchase obligations and write-downs to reduce the carrying value of obsolete, slow moving, and non-usable inventory to net realizable value (including warranty costs) to cost of revenue.

Operating Expenses.

Research and Development Expenses. Research and development expenses decreased $16.1 million, to $351.2 million, for fiscal 2023 compared with fiscal 2022. The decrease in research and development expenses primarily reflected a $21.8 million decrease in variable compensation and a $17.0 million decrease in share-based compensation costs primarily related to our phantom stock awards. The final vesting of our phantom stock awards occurred in the second quarter of fiscal 2023 and there are no phantom stock awards outstanding. Total compensation costs associated with our phantom stock awards for fiscal 2023 and 2022 were $0.3 million and $27.2 million, respectively. These decreases were partially offset by an increase in payroll related costs of $17.8 million as a result of increases in headcount and an increase of $3.9 million in new product development activities.

Selling, General, and Administrative Expenses. Selling, general, and administrative expenses increased $6.6 million, to $175.0 million, for fiscal 2023 compared with fiscal 2022. The increase in selling, general, and administrative expenses primarily reflected a net increase of $6.8 million in share-based compensation costs. The net increase in share-based compensation was a combination of increases in share-based compensation from equity awards granted during fiscal 2023, partially offset by decreases in phantom stock and performance-based stock awards year over year. Payroll related costs increased $4.1 million as a result of increases in headcount. The increase in selling, general and administrative expense was partially offset by a decrease of $11.2 million in variable compensation costs.

Acquired Intangibles Amortization. Acquired intangibles amortization reflects the amortization of intangibles acquired through recent acquisitions. See Note 7 Goodwill and Acquired Intangible Assets to the consolidated financial statements contained elsewhere in this report.

Restructuring Costs. Restructuring costs primarily reflect employee severance costs and facilities consolidation costs related to the restructuring of operations, improve efficiencies in our operational activities and gain synergies from acquisitions. These headcount-related costs included personnel in operations, research and development, and selling, general and administrative functions. There were no restructuring costs incurred during fiscal 2023. Restructuring costs incurred in fiscal 2022 were $18.3 million. See Note 16 Restructuring Activities to the consolidated financial statements contained elsewhere in this report.

Non-Operating Income.

Interest and Other Income, Net. Interest and other income, net increased $24.2 million, to $27.2 million for fiscal 2023 compared with fiscal 2022. The increase is due to higher interest rates on our cash, cash equivalents and short-term investments.

Interest Expense. Interest expense and amortization of debt issuance costs increased $25.3 million to $55.5 million during fiscal 2023 as compared to $30.2 million during fiscal 2022. Interest expense on the $600 million incremental Term Loan Facility increased by $26.0 million during fiscal 2023 compared to the same period a year ago, as the interest rate on the Term Loan Facility increased by approximately 340 basis points period-over-period. Additionally, the Term Loan Facility was funded in December 2021 and included approximately seven months of interest expense during fiscal 2022. The interest expense on the Term Loan Facility during fiscal 2023 and 2022 was $36.2 million and $10.2 million, respectively.

Loss on redemption of convertible notes. Loss on redemption of convertible notes represents the difference between fair value and the carrying value as of the redemption date of the convertible notes. The loss on redemption of convertible notes for fiscal 2022 was $8.1 million.

Gain from sale and leaseback transaction. Gain from sale and leaseback transaction represents the gain from the sale of our headquarters buildings and properties located San Jose, California in fiscal 2022. The gain from the sale and leaseback transaction for fiscal 2022 was $5.4 million.

Provision for Income Taxes. The provision for income taxes was $52.4 million and $64.6 million in fiscal 2023 and 2022, respectively, represented estimated federal, foreign, and state income taxes. The effective tax rate for fiscal 2023 diverged from the combined U.S. federal and state statutory tax rate primarily due to tax law changes becoming effective in our fiscal 2023, including non-creditable foreign withholding taxes resulting from the final foreign tax credit regulations published in January 2022 and the research and development capitalization rules increasing our GILTI, resulting from the U.S. Tax Cuts and Jobs Act of 2017, and non-deductible officer compensation, partially offset by the benefit of foreign income taxed at lower rates, and research credits. See "Note 14 Income Taxes" to the consolidated financial statements contained elsewhere in this report for the table reconciling the provision for income taxes from the federal statutory rate for fiscal 2023, 2022 and 2021.

Fiscal 2022 Compared with Fiscal 2021.

For discussion related to the results of operations and changes in financial condition for fiscal 2022 compared to fiscal 2021, please refer to "Part II, Item 7. Management's Discussion and Analysis of Financial Conditions and Results of Operations" in our fiscal 2022 Form 10-K, which was filed with the SEC on August 22, 2022.

Liquidity and Capital Resources

Our cash and cash equivalents were $924.7 million as of the end of fiscal 2023 compared with $824.0 million as of the end of fiscal 2022, an increase of $100.7 million. The increase primarily reflected cash flows provided by operating activities of $331.5 million, offset by $221.3 million of cash used by financing activities.

We consider almost all earnings of our foreign subsidiaries as not indefinitely reinvested overseas and have made appropriate provisions for income or withholding taxes, that may result from a future repatriation of those earnings. As of the end of fiscal 2023, $824.4 million of cash and cash equivalents was held by our foreign subsidiaries. If these funds are needed for our operations in the U.S., we will be able to repatriate these funds without any further impact on our tax provision.

Cash Flows from Operating Activities. For fiscal 2023, the $331.5 million in net cash provided by operating activities was primarily attributable to net income of $73.6 million plus adjustments for non-cash charges, including acquired intangibles amortization of $130.4 million, share-based compensation costs of $122.0 million, depreciation and amortization of $27.4 million, as well as other non-cash adjustments of $1.5 million, and a net change in operating assets and liabilities of $23.4 million. The net change in operating assets and liabilities related primarily to a $161.3 million decrease in accounts receivable primarily related to a decrease in sales, a decrease of $24.6 million in inventories as we continued our efforts to control inventory spend while turning over the inventories we accumulated during the first half of fiscal 2023, a decrease of $95.6 million in accounts payable due to timing of payments and a decrease of $45.4 in accrued compensation primarily related to decreases in our annual bonus accrual. Our days sales outstanding was 65 days in fiscal 2023 as compared to 61 days in fiscal 2022. Our inventory turns decreased to three times in fiscal 2023 from four times in fiscal 2022.

For fiscal 2022, the $462.7 million in net cash provided by operating activities was primarily attributable to net income of $257.5 million plus adjustments for non-cash charges, including acquired intangibles amortization of $123.5 million, share-based compensation costs of $100.8 million, depreciation and amortization of $24.0 million, as well as other non-cash adjustments of $24.2 million, and a net change in operating assets and liabilities of $18.9 million. The net change in operating assets and liabilities related primarily to an $81.1 million increase in accounts receivable, an increase of $54.2 million in inventories, an increase of $23.2 million in accounts payable, an increase of $48.6 million in income taxes payable and an increase of $17.4 million in other accrued liabilities. Our days sales outstanding was 61 days in fiscal 2022 as compared to 63 days in fiscal 2021. Our inventory turns decreased to four times in fiscal 2022 from seven times from fiscal 2021.

Cash Flows from Investing Activities. Net cash used in investing activities for fiscal 2023 was $6.0 million and consisted primarily of $15.5 million used for the acquisition of businesses, net of cash and cash equivalents acquired, and $34.2 million used for the purchases of property and equipment; partially offset by $43.6 in proceeds from maturities and sales of our short-term investments.

Net cash used in investing activities for fiscal 2022 was $482.7 million and consisted primarily of $501.1 million used for the acquisition of businesses, net of cash and cash equivalents acquired, and $31.1 million used for the purchases of property and equipment; partially offset by proceeds from sale and leaseback transaction of $55.9 million and $24.4 million in proceeds from sales of investments.

Cash Flows from Financing Activities. Net cash used in financing activities for fiscal 2023 was $221.3 million and was primarily attributable to $183.5 million in repurchases of our common stock, $6.0 in debt repayments and $54.5 million used for payroll taxes for restricted stock units, or RSUs, market stock units, or MSUs, and performance stock units, or PSUs, partially offset by $17.6 million in proceeds from issuance of shares.

Our net cash provided by financing activities for fiscal 2022 was $14.3 million and was primarily attributable to $600.0 million in proceeds from issuance of debt and $15.2 million in proceeds from issuance of shares, partially offset by $3.0 million of payment on debt, $67.3 million used for payroll taxes for restricted stock units, or RSUs, market stock units, or MSUs, and performance stock units, or PSUs, and $505.6 million used for payment for redemption of convertible notes.

For discussion related to the statement of cash flows for fiscal 2021, please refer to "Part II, Item 7. Management's Discussion and Analysis of Financial Conditions and Results of Operations" in our fiscal 2021 Form 10-K, which was filed with the SEC on August 23, 2021.

Common Stock Repurchase Program. As of the end of fiscal 2023, our Board of Directors had cumulatively authorized the purchase of up to an aggregate of $2.3 billion of our common stock pursuant to our common stock repurchase program through July 2025. The program authorizes us to purchase our common stock in the open market or in privately negotiated transactions, depending upon market conditions and other factors. The number of shares purchased, and the timing of purchases is based on the level of our cash balances, general business and market conditions, and other factors, including alternative investment opportunities. Common stock purchased under this program is held as treasury stock. From April 2005 through the end of fiscal 2023, we purchased, net of issuances for settlement of our convertible notes, 30,116,439 shares of our common stock in the open market for an aggregate cost of $878.0 million. As of the end of fiscal 2023, the remaining available authorization under our common stock repurchase program was $893.9 million.

Senior Notes. On March 11, 2021, we completed an offering of $400.0 million aggregate principal amount of 4.0% senior notes due 2029, or the Senior Notes, in a private offering. The Senior Notes were issued pursuant to an Indenture, dated as of March 11, 2021, or the Indenture, by and among our company, the guarantors named therein and Wells Fargo Bank, National Association, as trustee. The Senior Notes requires bi-annual interest only payments. In fiscal 2023, we paid interest expense of $16.0 million on the Senior Notes.

Bank Credit Facility. On March 16, 2023, we entered into the Second Amendment to our Credit Agreement, dated March 11, 2021. The Second Amendment replaces the LIBOR-based interest rate applicable to borrowings under the Credit Agreement with SOFR-based interest rate. On July 28, 2023, we entered into the Third Amendment to our Credit Agreement, which provides that the consolidated interest coverage ratio financial covenant will only apply if, as of the last day of any fiscal quarter, our aggregate cash and cash equivalents are less than $450 million. The Credit Agreement provides for a revolving credit facility in a principal amount of up to $250 million, which includes a $20 million sublimit for letters of credit and a $25 million sublimit for swingline loans. Under the terms of the Credit Agreement, we may, subject to the satisfaction of certain conditions, request increases in the revolving credit facility commitments in an aggregate principal amount of up to $150 million to the extent existing or new lenders agree to provide such increased or additional commitments, as applicable. Future proceeds under the revolving credit facility are available for working capital and general corporate purposes. As of June 2023, there was no balance outstanding under the revolving credit facility.

Term Loan Facility. In December 2021, we entered into that certain First Amendment and Lender Joinder Agreement to the Credit Agreement, to, among other things, establish a new $600.0 million incremental term loan facility, or the Term Loan Facility. The Term Loan Facility was advanced under the Credit Agreement to finance our DSPG acquisition. The Term Loan Facility matures on December 2, 2028. Principal on the Term Loan Facility is payable in equal quarterly installments on the last day of each March, June, September and December of each year, beginning December 31, 2021, at a rate of 1.00% per annum, plus an applicable margin. For the year-ended June 2023, we repaid $6.0 million of the principal outstanding on the Term Loan Facility.

See "Note 8. Debt" in the Notes to the Condensed Consolidated Financial Statements for additional information on our outstanding debt obligations.

$100 Million Shelf Registration. We have registered an aggregate of $100.0 million of common stock and preferred stock for issuance in connection with acquisitions, which shares generally will be freely tradeable after their issuance under Rule 145 of the Securities Act unless held by an affiliate of the acquired company, in which case such shares will be subject to the volume and manner of sale restrictions of Rule 144 of the Securities Act.

Working Capital Needs. We believe our existing cash and cash equivalents, anticipated cash flows from operating activities, anticipated cash flows from financing activities, and available credit under our revolving credit facility, will be sufficient to meet our working capital and other cash requirements, including small tuck-in acquisitions, and our debt service obligations for at least the next 12 months. Our future capital requirements will depend on many factors, including our revenue, the timing and extent of spending to support product development efforts, costs associated with restructuring activities net of projected savings from those activities, costs related to protecting our intellectual property, the expansion of sales and marketing activities, timing of introduction of new products and enhancements to existing products, costs to ensure access to adequate manufacturing, costs of maintaining sufficient space for our workforce, the continuing market acceptance of our product solutions, our common stock repurchase program, and the amount and timing of our investments in, or acquisitions of, other technologies or companies. Further equity or debt financing may not be available to us on acceptable terms or at all. If sufficient funds are not available or are not available on acceptable terms, our ability to fund our future long-term working capital needs, take advantage of business opportunities or to respond to competitive pressures could be limited or severely constrained.

The undistributed earnings of our foreign subsidiaries are not currently required to meet our United States working capital and other cash requirements, but should we repatriate a portion of these earnings, we may be required to pay certain previously accrued state and foreign taxes, which would impact our cash flows.

Contractual Obligations and Commercial Commitments. The following table sets forth a summary of our material contractual obligations and commercial commitments as of the end of fiscal 2023 (in millions):

	Payments due by period				
Contractual Obligations	**Total**	**Less than 1 year**	**1-3 Years**	**3-5 Years**	**Thereafter**
Long-term debt [1]	$ 1,339.0	$ 67.2	$ 133.8	$ 131.9	$ 1,006.1
Leases	62.0	10.3	18.3	13.3	20.1
Purchase obligations and other commitments [2]	142.7	71.2	71.5	—	—
Total	$ 1,543.7	$ 148.7	$ 223.6	$ 145.2	$ 1,026.2

(1) Represents the principal and interest payable through the maturity date of the underlying contractual obligation.

(2) Purchase obligations and other commitments include payments due for inventory purchase obligations with contract manufacturers, long-term software tool licenses, and other licenses.

The amounts in the table above exclude gross unrecognized tax benefits related to uncertain tax positions of $43.7 million. As of the end of fiscal 2023, we were unable to make a reasonably reliable estimate of when cash settlement with a taxing authority may occur in connection with our gross unrecognized tax benefit.

We do not have any transactions, arrangements, or other relationships with unconsolidated entities that are reasonably likely to materially affect our financial condition, revenues or expenses, results of operations, liquidity, or capital resources. We have no special purpose or limited purpose entities that provide off-balance sheet financing, liquidity, or market or credit risk support; engage in leasing, hedging, or research and development services; or have other relationships that expose us to liability that is not reflected in our financial statements.

Recent Accounting Pronouncements

Please see "Note 1 - Organization and Summary of Significant Accounting Policies - Accounting Pronouncements Issued But Not Yet Adopted" in our Notes to the Consolidated Financial Statements set forth in Part II, Item 8 of this Annual Report on Form 10-K.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to certain market risks in the ordinary course of our business. These risks primarily include:

Foreign Currency Exchange Risk

Our total net revenue for fiscal 2023 and 2022 was denominated in U.S. dollars. Costs denominated in foreign currencies were approximately 13% of our total costs in each of fiscal years 2023 and 2022.

We face the risk that our accounts payable and acquisition-related liabilities denominated in foreign currencies will increase if such foreign currencies strengthen quickly and significantly against the U.S. dollar. Approximately 12% and 2% of our accounts payable were denominated in foreign currencies in June 2023 and June 2022, respectively.

To provide an assessment of the foreign currency exchange risk associated with our foreign currency exposures within revenue, cost, and operating expenses, we performed a sensitivity analysis to determine the impact that an adverse change in exchange rates would have on our financial statements. A hypothetical weighted-average change of 10% in currency exchange rates would have changed our operating income before taxes by approximately $15.5 million and our net income by approximately $19.3 million for fiscal 2023, assuming no offsetting hedge positions. However, this quantitative measure has inherent limitations. The sensitivity analysis disregards the possibility that U.S. dollar and other exchange rates can move in opposite directions and that gains from one currency may or may not be offset by losses from another currency.

Interest Rate Risk on Cash, Cash Equivalents

Our exposure to market risk for changes in interest rates relates primarily to our cash and cash equivalents and short-term investments. We do not use our investment portfolio for trading or other speculative purposes. There have been no significant changes in the maturity dates and average interest rates for our cash equivalents subsequent to fiscal 2023.

Interest Rate Risk on Debt

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 Term Loan. See "Note 8. Debt" for further information. A hypothetical increase in the interest rate by 1% would result in an increase in annual interest expense by approximately $6.0 million.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Reference is made to the financial statements, the report of our independent registered public accounting firm, and the notes thereto commencing at page F-1 of this report, which financial statements, report, and notes are incorporated herein by reference. Reference is also made to the quarterly results of operations included elsewhere in this report, which are incorporated herein by reference.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Conclusions Regarding Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act). Based on this evaluation, our Chief Executive Officer and Chief Financial Officer, as of June 24, 2023, concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) were effective to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) for our company. Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in the *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO 2013 framework).

Based on our evaluation under the COSO 2013 framework and the satisfactory completion of the remediation actions described below, our management concluded that our internal control over financial reporting was effective, at the reasonable assurance level, as of June 24, 2023. The effectiveness of our internal control over financial reporting, as of June 24, 2023, has been audited by KPMG LLP, an independent registered public accounting firm, as stated in their report included herein on page F-2.

Remediated Material Weakness

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of a company's annual or interim financial statements will not be prevented or detected on a timely basis. During the quarter ended June 24, 2023, the Company identified a material weakness in internal control related to the identification and monitoring of the sales reporting requirements of a single non-royalty bearing intellectual property license agreement. The material weakness was primarily due to ineffective risk assessment related to identifying and analyzing risks and ineffective information and communication processes related to identifying and assessing the accuracy of the information used in reporting under certain non-royalty bearing intellectual property license agreements. As a result of this lack of controls, an immaterial error in financial reporting was identified.

The Company has concluded that the material weakness described above was fully remediated as of June 24, 2023, due to the implementation of specific processes and controls to identify reporting requirements for non-royalty bearing intellectual property license agreements and to monitor the Company's ongoing compliance with periodic sales reporting in accordance with the terms of such agreements. These controls were tested and determined to be operating effectively as of June 24, 2023.

Changes in Internal Control Over Financial Reporting

Except for the identified material weakness and remediation described above under the heading "*Remediated Material Weakness*," there were no other changes to our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the quarter ended June 24, 2023, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal controls over financial reporting will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, 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. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, misstatements, errors, and instances of fraud, if any, within our company have been or will be prevented or detected. Further, internal controls may become inadequate as a result of changes in conditions, or through the deterioration of the degree of compliance with policies or procedures.

ITEM 9B. OTHER INFORMATION

There were no items requiring reporting on Form 8-K that were not reported on Form 8-K during the fourth quarter of the year covered by this Form 10-K.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item relating to directors of our company and corporate governance is incorporated herein by reference to the definitive Proxy Statement to be filed pursuant to Regulation 14A of the Exchange Act for our 2023 Annual Meeting of Stockholders. The information required by this Item relating to our executive officers is included in Item 1. Business – Information about our Executive Officers.

We have adopted a code of ethics that applies to our chief executive officer, chief financial officer, chief accounting officer, and other senior accounting personnel. The "Code of Ethics for the CEO and Senior Financial Officers" is located on our website at www.synaptics.com in the Investor Relations section under Corporate Governance.

We intend to satisfy the disclosure requirement under Item 5.05(c) of Form 8-K regarding any amendment to, or waiver from, a provision of this code of ethics by posting such information on our website, at the address and location specified above.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item is incorporated herein by reference to the definitive Proxy Statement (particularly under the caption "Executive Compensation") to be filed pursuant to Regulation 14A of the Exchange Act for our 2023 Annual Meeting of Stockholders.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item is incorporated herein by reference to the definitive Proxy Statement (particularly under the captions "Security Ownership of Principal Stockholders, Directors, and Officers" and "Executive Compensation—Stock-Based Compensation Plan Information") to be filed pursuant to Regulation 14A of the Exchange Act for our 2023 Annual Meeting of Stockholders.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item is incorporated herein by reference to the definitive Proxy Statement (particularly under the caption "Certain Relationships and Related Transactions") to be filed pursuant to Regulation 14A of the Exchange Act for our 2023 Annual Meeting of Stockholders.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this Item is incorporated herein by reference to the definitive Proxy Statement (particularly under the caption "Ratification of Appointment of Independent Auditor") to be filed pursuant to Regulation 14A of the Exchange Act for our 2023 Annual Meeting of Stockholders.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Financial Statements and Financial Statement Schedules

(1) Financial Statements are listed in the Index to Financial Statements on page F-1 of this report.

(b) Exhibits

Exhibit Number	Exhibit	Incorporated by Reference To	Date Filed
2.2[#]	Agreement and Plan of Merger, dated July 17, 2020, by and among Synaptics Incorporated, DisplayLink Corp., Falcon Merger Sub, Inc., the sellers who became parties thereto and Shareholder Representative Services LLC	Quarterly Report on Form 10-Q	November 5, 2020
2.3	Agreement and Plan of Merger by and among DSP Group, Inc., Synaptics Incorporated and Osprey Merger Sub, Inc., dated as of August 30, 2021.	Quarterly Report on Form 10-Q	November 4, 2021
3.1	Certificate of Incorporation	Quarterly Report on Form 10-Q	February 21, 2002
3.2	Certificate of Designation of Series A Junior Participating Preferred Stock	Registration Statement on Form 8-A	August 16, 2002
3.3	Third Amended and Restated Bylaws (amended and restated as of July 27, 2010)	Current Report on Form 8-K	August 2, 2010
3.4	Certificate of Amendment of Certificate of Incorporation of the registrant	Current Report on Form 8-K	December 7, 2004
3.5	Certificate of Amendment of Certificate of Incorporation of the registrant	Current Report on Form 8-K	October 22, 2010
4.1	Form of Common Stock Certificate	Annual Report on Form 10-K	September 12, 2002
4.2	Description of Registrant's Securities	Annual Report on Form 10-K	August 23, 2019
4.3	Indenture, dated as of March 11, 2021, by and among the Company, the guarantors named therein and Wells Fargo Bank, National Association, as trustee	Current Report on Form 8-K	March 11, 2021
4.6	Form of 4.000% Senior Notes due 2029 (included in Exhibit 4.3).		
10.1(a)	Second Amended and Restated Credit Agreement, dated March 11, 2021, by and among Synaptics Incorporated, as borrower, the lenders from time to time party thereto, Wells Fargo Bank, National Association, as administrative agent, swingline lender and issuing lender, Wells Fargo Securities, LLC, as joint lead arranger and joint bookrunner, MUFG Union Bank, N.A. and BMO Capital Markets Corp., as joint lead arrangers, joint bookrunners and co-syndication agents	Current Report on Form 8-K	March 11, 2021
10.1(b)	First Amendment and Lender Joinder Agreement, dated as of December 2, 2021, by and among Synaptics Incorporated, the Lenders party thereto, and Wells Fargo Bank, National Association, as Administrative Agent	Current Report on Form 8-K	December 2, 2021

10.1(c)	Second Amendment, dated as of March 16, 2023, by and among Synaptics Incorporated, the Lenders party thereto, and Wells Fargo Bank, National Association, as Administrative Agent	Current Report on Form 8-K	March 17, 2023
10.1(d)	Third Amendment, dated as of July 28, 2023, by and among Synaptics Incorporated, the Revolving Credit Lenders party thereto, and Wells Fargo Bank, National Association, as Administrative Agent	Current Report on Form 8-K	August 3, 2023
10.2(a)*	Synaptics Incorporated 2019 Inducement Equity Plan	Registration Statement on Form S-8	August 16, 2019
10.2(b)*	Form of Restricted Stock Unit Inducement Award Agreement for 2019 Inducement Equity Plan	Registration Statement on Form S-8	August 16, 2019
10.2(c)*	Form of Market Stock Unit Inducement Award Agreement for 2019 Inducement Equity Plan	Registration Statement on Form S-8	August 16, 2019
10.2(d)*	Form of Performance Stock Unit Inducement Award Agreement for 2019 Inducement Equity Plan	Registration Statement on Form S-8	August 16, 2019
10.3(a)*	2019 Equity and Incentive Compensation Plan	Registration Statement on Form S-8	November 1, 2019
10.3(b)*	Amended and Restated 2019 Equity and Incentive Compensation Plan	Current Report on Form 8-K	October 29, 2020
10.3(c)*	Amended and Restated 2019 Equity and Incentive Compensation Plan	Current Report on Form 8-K	October 28, 2021
10.3(d)*	Amended and Restated 2019 Equity Incentive Compensation Plan	Current Report on Form 8-K	October 27, 2022
10.3(e)*	Form of Restricted Stock Unit Award Agreement under the 2019 Equity and Incentive Compensation Plan (for awards granted before July 27, 2021)	Registration Statement on Form S-8	November 1, 2019
10.3(f)*	Form of Performance Stock Unit Award Agreement under the 2019 Equity and Incentive Compensation Plan (for awards granted before July 27, 2021)	Registration Statement on Form S-8	November 1, 2019
10.3(g)*	Form of Market Stock Unit Award Agreement under the 2019 Equity and Incentive Compensation Plan	Registration Statement on Form S-8	November 1, 2019
10.3(h)*	Form of Restricted Stock Unit Award Agreement under the 2019 Equity and Incentive Compensation Plan (for awards granted after July 27, 2021)	Annual Report on Form 10-K	August 23, 2021
10.3(i)*	Form of Performance Stock Unit Award Agreement under the 2019 Equity and Incentive Compensation Plan (for awards granted after July 27, 2021)	Annual Report on Form 10-K	August 23, 2021
10.3(j)*	Form of Market Stock Unit Award Agreement under the 2019 Equity and Incentive Compensation Plan	Quarterly Report on Form 10-Q	November 5, 2020
10.3(k)*	Form of Performance Stock Unit Award Agreement under the 2019 Equity and Incentive Compensation Plan	Quarterly Report on Form 10-Q	November 5, 2020

10.3(l)*	Form of Market Stock Unit Award Agreement under the 2019 Equity and Incentive Compensation Plan	Annual Report on Form 10-K	August 22, 2022
10.4*	2019 Employee Stock Purchase Plan	Registration Statement on Form S-8	November 1, 2019
10.5(a)*	Amended and Restated 2010 Incentive Compensation Plan, as amended effective on October 30, 2018	Current Report on Form 8-K	November 1, 2018
10.5(b)*	Form of Non-Qualified Stock Option Agreement for 2010 Incentive Compensation Plan	Annual Report on Form 10-K	August 18, 2017
10.5(c)*	Form of Incentive Stock Option Agreement for 2010 Incentive Compensation Plan	Current Report on Form 8-K	October 22, 2010
10.5(d)*	Form of Deferred Stock Award Agreement for 2010 Incentive Compensation Plan	Annual Report on Form 10-K	August 18, 2017
10.5(e)*	Form of Deferred Stock Award Agreement for Market Stock Units for Amended and Restated 2010 Incentive Compensation Plan	Quarterly Report on Form 10-Q	February 8, 2018
10.5(f)*	Form of Deferred Stock Award Agreement for Performance Stock Units for Amended and Restated 2010 Incentive Compensation Plan	Quarterly Report on Form 10-Q	February 8, 2018
10.6*	Change of Control Severance Policy for Principal Executive Officers	Annual Report on Form 10-K	August 23, 2019
10.7*	Severance Policy for Principal Executive Officers	Annual Report on Form 10-K	August 23, 2019
10.8*	Form of Director and Officer Indemnification Agreement	Current Report on Form 8-K	May 17, 2016
10.9*	Written Description of the Synaptics Incorporated Retention Program Adopted May 6, 2019	Annual Report on Form 10-K	August 23, 2019
10.10*	Employment Offer Letter, dated August 1, 2019 between the registrant and Michael Hurlston	Quarterly Report on Form 10-Q	November 17, 2019
10.11*	Employment Offer Letter, dated October 7, 2019 between the registrant and Dean Butler	Quarterly Report on Form 10-Q	February 6, 2020
10.12*	Employment Offer Letter, dated December 4, 2018 between the registrant and Saleel Awsare	Annual Report on Form 10-K	August 21, 2020
21	List of Subsidiaries	Filed herewith	
23.1	Consent of Independent Registered Public Accounting Firm	Filed herewith	
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a)/15d-14(a)	Filed herewith	
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a)/15d-14(a)	Filed herewith	
32.1##	Section 1350 Certification of Chief Executive Officer	Furnished herewith	
32.2##	Section 1350 Certification of Chief Financial Officer	Furnished herewith	
101.INS Inline	XBRL Instance Document	Filed herewith	
101.SCH	XBRL Taxonomy Extension Schema Document	Filed herewith	

Inline		
101.CAL Inline	XBRL Taxonomy Extension Calculation Linkbase Document	Filed herewith
101.DEF Inline	XBRL Taxonomy Extension Definition Linkbase Document	Filed herewith
101.LAB Inline	XBRL Taxonomy Extension Label Linkbase Document	Filed herewith
101.PRE Inline	XBRL Taxonomy Extension Presentation Linkbase Document	Filed herewith
104	Cover Page Interactive Data File – The cover page interactive data file does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document	Filed herewith

* Indicates a contract with management or compensatory plan or arrangement.
\# Certain schedules have been omitted pursuant to Item 601(b)(2) of Regulation S-K. A copy of any omitted schedule will be furnished as a supplement to the Securities and Exchange Commission upon request.
\## This certification is being furnished solely pursuant to 18 U.S.C. § 1350 and shall not be deemed filed by the Company for purposes of Section 18 of the Exchange Act or incorporated by reference in any registration statement of the Company filed under the Securities Act.

ITEM 16. FORM 10-K SUMMARY

Not applicable.

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.

SYNAPTICS INCORPORATED

Date: August 18, 2023

By: /s/ Michael E. Hurlston
Michael E. Hurlston
President and Chief Executive Officer

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

Signature	Title	Date
/s/ Michael E. Hurlston Michael E. Hurlston	President and Chief Executive Officer, and Director (Principal Executive Officer)	August 18, 2023
/s/ *Dean Butler* Dean Butler	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	August 18, 2023
/s/ Kermit Nolan Kermit Nolan	Corporate Vice President and Chief Accounting Officer (Principal Accounting Officer)	August 18, 2023
/s/ Nelson C. Chan Nelson C. Chan	Chair of the Board	August 18, 2023
/s/ Jeffrey D. Buchanan Jeffrey D. Buchanan	Director	August 18, 2023
/s/ Keith B. Geeslin Keith B. Geeslin	Director	August 18, 2023
/s/ Susan Hardman Susan Hardman	Director	August 18, 2023
/s/ Patricia Kummrow Patricia Kummrow	Director	August 18, 2023
/s/ Vivie Lee Vivie Lee	Director	August 18, 2023
/s/ James L. Whims James L. Whims	Director	August 18, 2023

INDEX TO FINANCIAL STATEMENTS

SYNAPTICS INCORPORATED AND SUBSIDIARIES

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Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Synaptics Incorporated:

Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of Synaptics Incorporated and subsidiaries (the Company) as of June 24, 2023 and June 25, 2022, the related consolidated statements of operations, comprehensive income, stockholders' equity, and cash flows for each of the fiscal years in the three fiscal year period ended June 24, 2023, and the related notes (collectively, the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of June 24, 2023, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of June 24, 2023 and June 25, 2022, and the results of its operations and its cash flows for each of the fiscal years in the three fiscal year period ended June 24, 2023, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of June 24, 2023 based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, 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 consolidated financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated 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 consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing separate opinions on the critical audit matter or on the accounts or disclosures to which they relate.

Valuation of inventories

As discussed in Note 1 to the consolidated financial statements, the Company held $137.2 million of inventories as of June 24, 2023 which are stated at the lower of cost or net realizable value. The Company records a write-down for excess, obsolete or unmarketable inventories based on forecasts of future demand and market conditions.

We identified the valuation of inventories associated with excess, obsolete or unmarketable inventories as a critical audit matter. A higher degree of auditor judgment was required to evaluate the Company's estimate of net realizable value for these inventories. Specifically, there is a high degree of subjectivity in evaluating the effect of any unexpected or sudden declines in market demand which may result from changes to or cancellations of customer orders, rapid product improvements or technological advances, due to the nature of the evidence available related to these factors.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Company's process to develop the estimated net realizable value of inventory. For a selection of inventory items, we assessed the Company's assumptions by comparing them to historical activity and demand forecasts. As part of the procedure, we considered customer communications, as well as end user and third-party publications. For a sample of inventory items, we recalculated the required write-downs and compared this to the recorded amounts. Additionally, we tested a sample of returns which resulted from quality related issues of the Company's products during the year and subsequent to period-end to evaluate if additional write-downs were warranted.

/s/ KPMG LLP

We have served as the Company's auditor since 2003.

Santa Clara, California
August 18, 2023

SYNAPTICS INCORPORATED AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in millions, except par value and share amounts)

	June 2023	June 2022
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 924.7	$ 824.0
Short-term investments	9.6	52.0
Accounts receivable, net of allowance for credit losses of $5.0 and $6.0 at June 2023 and 2022, respectively	163.9	322.1
Inventories	137.2	169.7
Prepaid expenses and other current assets	36.6	35.6
Total current assets	1,272.0	1,403.4
Property and equipment, net	66.4	62.9
Goodwill	816.4	806.6
Acquired intangibles, net	298.5	390.0
Right-of-use assets	49.0	61.2
Non-current other assets	109.1	134.0
	$ 2,611.4	$ 2,858.1
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities:		
Accounts payable	$ 45.8	$ 141.8
Accrued compensation	45.9	90.6
Income taxes payable	54.0	79.7
Other accrued liabilities	108.4	145.3
Current portion of long-term debt	6.0	6.0
Total current liabilities	260.1	463.4
Long-term debt	972.0	975.7
Other long-term liabilities	135.9	152.6
Total liabilities	1,368.0	1,591.7
Commitments and contingencies		
Stockholders' Equity:		
Preferred stock:		
$0.001 par value; 10,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock:		
$0.001 par value; 120,000,000 shares authorized, 68,687,511 and 67,745,800 shares issued, and 38,571,072 and 39,621,179 shares outstanding, at June 2023 and 2022, respectively	0.1	0.1
Additional paid-in capital	1,009.2	924.1
Treasury stock: 30,116,439 and 28,124,621 common shares at June 2023 and 2022, respectively, at cost	(878.0)	(694.5)
Accumulated other comprehensive loss	-	(1.8)
Retained earnings	1,112.1	1,038.5
Total stockholders' equity	1,243.4	1,266.4
	$ 2,611.4	$ 2,858.1

See accompanying notes to consolidated financial statements.

SYNAPTICS INCORPORATED AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(in millions, except per share amounts)

	Fiscal Year		
	2023	**2022**	**2021**
Net revenue	$ 1,355.1	$ 1,739.7	$ 1,339.6
Cost of revenue	639.2	796.6	728.4
Gross margin	715.9	943.1	611.2
Operating expenses:			
Research and development	351.2	367.3	313.4
Selling, general, and administrative	175.0	168.4	144.9
Acquired intangibles amortization	35.4	38.7	32.7
Restructuring costs	—	18.3	7.4
Gain on sale of audio technology assets	—	—	(34.2)
Total operating expenses	561.6	592.7	464.2
Operating income	154.3	350.4	147.0
Interest and other income	27.2	3.0	2.9
Interest expense	(55.5)	(30.2)	(29.5)
Loss on redemption of convertible notes	—	(8.1)	(0.3)
Gain from sale and leaseback transaction	—	5.4	—
Income before provision for income taxes and equity investment gain (loss)	126.0	320.5	120.1
Provision for income taxes	52.4	64.6	31.4
Equity investment gain (loss)	—	1.6	(9.1)
Net income	$ 73.6	$ 257.5	$ 79.6
Net income per share:			
Basic	$ 1.86	$ 6.60	$ 2.29
Diluted	$ 1.83	$ 6.33	$ 2.08
Shares used in computing net income per share:			
Basic	39.6	39.0	34.8
Diluted	40.2	40.7	38.3

See accompanying notes to consolidated financial statements.

SYNAPTICS INCORPORATED AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in millions)

	Fiscal Year		
	2023	2022	2021
Net income	$ 73.6	$ 257.5	$ 79.6
Other comprehensive income (loss)			
Unrealized gain (loss) on available-for-sale securities	0.6	(1.8)	—
Reclassification adjustments for losses included in net income	1.2	—	—
Other comprehensive income (loss)	1.8	(1.8)	—
Comprehensive income	$ 75.4	$ 255.7	$ 79.6

See accompanying notes to consolidated financial statements.

SYNAPTICS INCORPORATED AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in millions, except share amounts)

	Common Stock		Additional Paid-in Capital	Treasury Stock	Accumulated Other Comprehensive Income (loss)	Retained Earnings	Total Stockholders' Equity
	Shares	Amount					
Balance at June 2020	65,871,648	$ 0.1	$ 1,340.2	$ (1,222.6)	$ —	$ 701.4	$ 819.1
Net income	—	—	—	—	—	79.6	79.6
Issuance of common stock for share-based award compensation plans	1,091,358	—	27.8	—	—	—	27.8
Payroll taxes related to net share settlement of share-based awards	—	—	(28.3)	—	—	—	(28.3)
Treasury stock issued for redemption of convertible notes	—	—	(17.5)	17.2	—	—	(0.3)
Share-based compensation attributable to acquisition	—	—	3.2	—	—	—	3.2
Share-based compensation	—	—	66.1	—	—		66.1
Balance at June 2021	66,963,006	0.1	1,391.5	(1,205.4)	—	781.0	967.2
Net income	—	—	—	—	—	257.5	257.5
Other comprehensive loss	—	—	—	—	(1.8)	—	(1.8)
Issuance of common stock for share-based award compensation plans	782,794	—	15.2	—	—	—	15.2
Treasury stock issued for redemption of convertible notes	—	—	(517.8)	510.9	—	—	(6.9)
Payroll taxes related to net share settlement of share-based awards	—	—	(67.3)	—	—	—	(67.3)
Share-based compensation attributable to acquisition	—	—	1.7	—	—	—	1.7
Share-based compensation	—	—	100.8	—	—	—	100.8
Balance at June 2022	67,745,800	0.1	924.1	(694.5)	(1.8)	1,038.5	1,266.4
Net income	—	—	—	—	—	73.6	73.6
Other comprehensive income	—	—	—	—	1.8	—	1.8
Issuance of common stock for share-based award compensation plans	941,711	—	17.6	—	—	—	17.6
Payroll taxes related to net share settlement of share-based awards	—	—	(54.5)	—	—	—	(54.5)
Common stock repurchased	—	—	—	(183.5)	—	—	(183.5)
Share-based compensation	—	—	122.0	—	—	—	122.0
Balance at June 2023	68,687,511	$ 0.1	$ 1,009.2	$ (878.0)	$ —	$ 1,112.1	$ 1,243.4

See accompanying notes to consolidated financial statements.

SYNAPTICS INCORPORATED AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)

	Fiscal Year		
	2023	2022	2021
Cash flows from operating activities			
Net income	$ 73.6	$ 257.5	$ 79.6
Adjustments to reconcile net income to net cash provided by operating activities:			
Share-based compensation costs	122.0	100.8	66.1
Depreciation and amortization	27.4	24.0	21.6
Acquired intangibles amortization	130.4	123.5	110.1
Gain on sale of audio technology assets	—	—	(34.2)
Gain on sale and leaseback transaction	—	(5.4)	—
Loss on redemption of convertible notes	—	8.1	0.3
Deferred taxes	(25.9)	(29.7)	(5.2)
Amortization of convertible debt discount and issuance costs	2.6	3.4	19.8
Amortization of right-of-use assets	9.7	10.8	8.6
Amortization of cost of development services	5.8	10.0	9.2
Provision for inventory excess and obsolescence	7.9	(10.9)	9.7
Equity investment (gain) loss	—	(1.6)	9.1
Foreign currency remeasurement (gain) loss	1.7	(7.6)	(2.8)
Other	(0.3)	(1.3)	—
Changes in operating assets and liabilities, net of acquisitions:			
Accounts receivable, net	161.3	(81.1)	(25.9)
Inventories	24.6	(54.2)	43.4
Prepaid expenses and other current assets	(6.1)	6.9	(9.4)
Other assets	9.4	15.0	(8.6)
Accounts payable	(95.6)	23.2	32.2
Accrued compensation	(45.4)	5.3	14.9
Income taxes payable	(15.6)	48.6	(2.1)
Other accrued liabilities	(56.0)	17.4	(17.2)
Net cash provided by operating activities	331.5	462.7	319.2
Cash flows from investing activities			
Proceeds from sale of assets	0.2	55.9	—
Acquisition of businesses, net of cash and cash equivalents acquired	(15.5)	(501.1)	(626.5)
Advance payment on intangible assets	—	(30.0)	—
Proceeds from sale of audio technology assets	—	—	34.2
Proceeds from maturity of investments	21.4	—	—
Proceeds from sale of investments	22.2	24.4	95.8
Purchase of short-term securities	—	(5.8)	—
Purchases of property and equipment	(34.2)	(31.1)	(21.1)
Receipt of liquidation payment on equity investment	0.8	—	—
Purchase of intangible assets	(0.9)	—	—
Proceeds from sale of equity method investment	—	5.0	—
Cost method investment	—	—	(5.0)
Net cash used in investing activities	(6.0)	(482.7)	(522.6)
Cash flows from financing activities			
Proceeds from issuance of debt	—	600.0	400.0
Payment of debt issuance costs	—	(11.2)	(6.0)
Proceeds from issuance of shares	17.6	15.2	27.8
Payroll taxes related to net share settlement of share-based awards	(54.5)	(67.3)	(28.3)
Repurchases of common stock	(183.5)	—	—
Repayment on line of credit borrowings and debt	(6.0)	(3.0)	(100.0)
Payment for redemption of convertible notes	—	(505.6)	(19.4)
Refundable deposit paid to vendor	—	(16.6)	—
Return of deposit received from vendor and other	5.1	2.8	—
Net cash provided by (used in) financing activities	(221.3)	14.3	274.1
Effect of exchange rate changes on cash and cash equivalents	(3.5)	(6.6)	2.2
Net increase (decrease) in cash and cash equivalents	100.7	(12.3)	72.9
Cash and cash equivalents, beginning of period	824.0	836.3	763.4
Cash and cash equivalents, end of period	$ 924.7	$ 824.0	$ 836.3
Supplemental disclosures of cash flow information			
Cash paid for taxes, net of refunds	$ 91.4	$ 38.3	$ 39.4
Cash paid for interest	$ 51.9	$ 25.0	$ 9.6
Supplemental disclosures of non-cash transactions			
Purchases of property and equipment in current liabilities	$ 2.2	$ 3.6	$ 0.8
Receipt of intangible assets from advance payment made in previous fiscal year	$ 30.0	$ —	$ —

See accompanying notes to consolidated financial statements.

1. Organization and Summary of Significant Accounting Policies

Organization

We are a leading worldwide developer and fabless supplier of premium mixed signal semiconductor solutions changing the way humans engage with connected devices and data, engineering exceptional experiences throughout the home, at work, in the car and on the go. Our current served markets include Internet of Things, or IoT, personal computer, or PC, and Mobile. We deliver complete chip, firmware and software semiconductor solutions that allow our customers to seamlessly integrate advanced functions into their end products.

Basis of Presentation and Principles of Consolidation

Our fiscal year is the 52- or 53-week period ending on the last Saturday in June. 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 first quarter, making such quarter a 14-week period. The fiscal years presented in this report were 52-week periods ended June 24, 2023, June 25, 2022, and June 26, 2021.

The consolidated financial statements are presented in accordance with U.S. generally accepted accounting principles, or U.S. GAAP, and include our financial statements and those of our wholly owned subsidiaries. All significant intercompany balances and transactions have been eliminated upon consolidation. Certain reclassifications have been made to the amounts for prior years in order to conform to the current year's presentation

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates, including those related to revenue, allowance for doubtful accounts, cost of revenue, inventories, loss on purchase commitments, product warranty, accrued liabilities, share-based compensation costs, provision for income taxes, deferred income tax asset valuation allowances, uncertain tax positions, goodwill, intangible assets, investments, and loss contingencies. We base our estimates on historical experience, applicable laws and regulations, and various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Cash Equivalents and Investments

Cash equivalents consist of highly liquid investments with original maturities of three months or less at the time of purchase. Our cash equivalents as of the end of fiscal 2023 and 2022 consisted of bank deposits and money market funds with a fair value of $924.7 million and $824.0 million, respectively.

Short-Term Investments

We classify our investments in debt securities as available-for-sale and record these investments at fair value. Investments with an original maturity of three months or less at the date of purchase are considered cash equivalents, while all other investments are classified as short-term based on management's intent and ability to use the funds in current operations. Unrealized gains and losses are reported as a component of other comprehensive income (loss). Realized gains and losses are determined based on the specific identification method, and are reflected as other income (expense), net in our Consolidated Statements of Operations.

We regularly review our investment portfolio to identify and evaluate investments that have indicators of possible impairment. Some of the factors we consider include, but are not limited to, the following: the length of time and extent a security's fair value has been below its cost, the financial condition and near-term prospects of the investee, the credit quality of the security's issuer, likelihood of recovery and our intent and ability to hold the security for a period of time sufficient to allow for any anticipated recovery in value. For our debt instruments, we also evaluate whether we have the intent to sell the security or it is more likely than not that we will be required to sell the security before recovery of its cost basis.

Fair Value Measurements

We apply fair value accounting for all financial assets and liabilities that are required to be recognized or disclosed at fair value in the Consolidated Financial Statements. Fair value is defined as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When

determining the fair value measurements for assets and liabilities, we consider the principal or most advantageous market in which we would transact, and the market-based risk measurements or assumptions that market participants would use in pricing the asset or liability, such as inherent risk, transfer restrictions and credit risk. The carrying amounts reported in the consolidated financial statements approximate the fair value for cash, accounts receivable, accounts payable and accrued liabilities due to their short-term nature.

Intangible assets, property and equipment, and goodwill are measured at fair value on a non-recurring basis if impairment is indicated. The interest rate on our bank debt is variable, which is subject to change from time-to-time to reflect a market interest rate; accordingly, the carrying value of our bank debt approximates fair value.

Concentration of Credit Risk

Financial instruments that potentially subject us to concentrations of credit risk consist primarily of cash equivalents, investments, and accounts receivable. Our investment policy, which is predicated on capital preservation and liquidity, limits investments to U.S. government treasuries and agency issues, taxable securities, and municipal issued securities with a minimum rating of investment grade by the rating agencies.

We sell our products to contract manufacturers that provide manufacturing services for OEMs, to some OEMs directly, and to distributors. We extend credit based on an evaluation of a customer’s financial condition, and we generally do not require collateral.

The following customers accounted for more than 10% of our accounts receivable balance as of the end of fiscal 2023 and 2022:

	2023	2022
Customer A	10%	17%
Customer B	20%	15%

Other Concentrations

Our products include certain components that are currently single sourced. We believe other vendors would be able to provide similar components, however, the qualification of such vendors may require additional lead time. In order to mitigate any potential adverse impact from a supply disruption, we strive to maintain an adequate supply of critical single-sourced components.

Revenue Recognition

Our revenue is primarily generated from the sale of ASIC chips, either directly to a customer or to a distributor. Revenue is recognized when control of the promised goods or services is transferred to our customers, in an amount that reflects the consideration we expect to receive in exchange for those goods or services. All of our revenue, except an inconsequential amount, is recognized at a point in time, either on shipment or delivery of the product, depending on customer terms and conditions. Non-product revenue is recognized over the same period of time such performance obligations are satisfied. We then select an appropriate method for measuring satisfaction of the performance obligations.

Rights to our intellectual property, or IP, are either sold or licensed to customers. Revenue recognition from the licensing of our IP is dependent on the nature and terms of each agreement. We recognize revenue from the licensing of our IP upon delivery of the IP if there are no substantive future obligations to perform under the arrangement. Sales-based or usage-based royalties from the license of IP are recognized at the later of the period the sale or usage occurs, or the satisfaction of the performance obligation to which some or all of the sales-based or usage-based royalties have been allocated.

Revenue from sales to distributors is recognized upon shipment of the product to the distributors (sell-in basis). Master sales agreements are in place with certain customers, and these agreements typically contain terms and conditions with respect to payment, delivery, warranty and supply. In the absence of a master sales agreement, we consider a customer's purchase order or our standard terms and conditions to be the contract with the customer.

Our pricing terms are negotiated independently, on a stand-alone basis. In determining the transaction price, we evaluate whether the price is subject to refund or adjustment to determine the net consideration which we expect to receive for the sale of such products. In limited situations, we make sales to certain customers under arrangements where we grant stock rotation rights, price protection and price allowances; variable consideration associated with these rights is expected to be inconsequential. These adjustments and incentives are accounted for as variable consideration, classified as other current liabilities under the revenue standard and are shown as customer obligations in other accrued liabilities on our consolidated balance sheets. We estimate the amount of variable consideration for such arrangements based on the expected value to be provided to customers, and we do not believe that there will be significant changes to our estimates of variable consideration. When incentives, stock rotation rights, price protection, volume discounts, or price allowances are applicable, they are estimated and recorded in the period the related revenue is recognized. Stock rotation reserves are based on historical return rates applied to distributor inventory subject to stock rotation rights and recorded as a reduction to revenue with a corresponding reduction to cost of goods sold for the estimated cost of inventory that is expected to be returned and recorded as prepaid expenses and other current assets. In limited circumstances, we enter into volume-based tiered pricing arrangements and we estimate total unit volumes under such arrangement to determine the expected transaction price for the units expected to be transferred. Such arrangements are accounted for as contract liabilities within other accrued liabilities. Sales returns liabilities are recorded as refund liabilities within other accrued liabilities.

Our accounts receivable balance is from contracts with customers and represents our unconditional right to receive consideration from customers. Payments are generally due within three months of completion of the performance obligation and subsequent invoicing and, therefore, do not include significant financing components. There was $1.3 million of contract assets (i.e., unbilled accounts receivable, deferred commissions) recorded on the consolidated balance sheets as of June 2023, and $1.2 million as of June 2022. Contract assets are presented as part of prepaid expenses and other current assets. Contract liabilities and refund liabilities were $18.7 million and $39.8 million, respectively, as of June 2023, and $27.3 million and $61.3 million, respectively, as of June 2022. Both contract liabilities and refund liabilities are presented as part of customer obligations in other accrued liabilities on our consolidated balance sheets. During fiscal 2023 and 2022, we recognized $21.9 million and $3.6 million, respectively, in revenue related to contract liabilities outstanding as of the beginning of each such fiscal year.

We invoice customers for each delivery upon shipment and recognize revenue in accordance with delivery terms. As of June 2023, we did not have any remaining unsatisfied performance obligations with an original duration greater than one year. Accordingly, under the optional exception provided by the ASC, we do not disclose revenues allocated to future performance obligations of partially completed contracts. We have elected to account for shipping and handling costs as fulfillment costs before the customer obtains control of the goods. We continue to classify shipping and handling costs as a cost of revenue. We have elected to continue to account for collection of all taxes on a net basis.

We incur commission expense that is incremental to obtaining contracts with customers. Sales commissions (which are recorded in the selling, general and administrative expense line item in the consolidated statements of operations) are expensed when the product is shipped because such commissions are incurred after the product has been shipped.

Revenue from contracts with customers disaggregated by geographic area based on customer location and groups of similar products is presented in Note 15 Segment, Customers, and Geographical Information.

Advertising Costs

Advertising costs, if any, are expensed when incurred.

Allowance for Credit Losses

We maintain allowances for credit losses resulting from the inability of customers to meet their financial obligations. On an ongoing basis, we evaluate the collectability of accounts receivable based on a combination of factors. In circumstances in which we are aware of a specific customer's potential inability to meet its financial obligation, we record a specific reserve of the credit loss against amounts due. In addition, we make judgments and estimates on the collectability of accounts receivable based on our historical bad debt experience, customers' creditworthiness, current economic trends, recent changes in customers' payment trends, and deterioration in customers' operating results or financial position. If circumstances change adversely, additional credit loss allowances may be required. At June 2023 and June 2022, the allowance for credit losses on our trade receivables was $5.0 million and $6.0 million, respectively.

Cost of Revenue

Our cost of revenue includes the cost of products shipped to our customers, which primarily includes the cost of products built to our specifications by our contract manufacturers, the cost of silicon wafers supplied by independent semiconductor

wafer manufacturers, and the related assembly, package, and test costs of our products. Also included in our cost of revenue are personnel and related costs, including share-based compensation for quality assurance and manufacturing support personnel; logistics costs; depreciation of equipment supporting manufacturing; acquired intangibles amortization; fair value adjustments associated with acquired businesses; inventory write-downs and losses on purchase obligations; and warranty costs.

Inventories

Inventories are stated at the lower of cost (first-in, first-out method) or net realizable value as of the end of fiscal 2023 and 2022, and consisted of the following (in millions):

	2023	2022
Raw materials and work-in-progress	$ 70.5	$ 92.2
Finished goods	66.7	77.5
	$ 137.2	$ 169.7

Inventories are recorded at standard cost, which approximates actual cost computed on a first-in, first-out basis. We record a write-down, if necessary, to reduce the carrying value of inventory to its net realizable value. The effect of these write-downs is to establish a new cost basis in the related inventory, which we do not subsequently write-up. We also record a liability and charge to cost of revenue for estimated losses on inventory we are obligated to purchase from our contract manufacturers when such losses become probable from customer delays, order cancellations, or other factors. The following factors influence our estimates: changes to or cancellations of customer orders, unexpected or sudden decline in demand, rapid product improvements, technological advances, and termination or changes by our OEM customers of any product offerings incorporating our product solutions.

Property and Equipment

We state property and equipment at cost less accumulated depreciation and amortization. We compute depreciation using the straight-line method over the estimated useful lives of the assets. We amortize leasehold improvements over the shorter of the lease term or the estimated useful life of the asset.

Foreign Currency

The U.S. dollar is our functional and reporting currency. We remeasure our monetary assets and liabilities not denominated in our functional currency into U.S. dollar equivalents at the rate of exchange in effect on the balance sheet date. We measure and record non-monetary balance sheet accounts at the historical rate in effect at the date of transaction. We remeasure foreign currency expenses at the weighted average exchange rate in the month that the transaction occurred. These foreign currency transactions and remeasurement gains and losses, resulted in a net loss of $2.3 million in fiscal 2023, a net gain of $5.6 million in fiscal 2022 and a net loss of $1.4 million in fiscal 2021. Gains and losses resulting from foreign currency transactions are included in selling, general, and administrative expenses in the consolidated statements of operations.

Goodwill

Goodwill represents the excess of the purchase price of an acquired business over the identifiable assets acquired and liabilities assumed. We test for impairment of goodwill on an annual basis in the fourth quarter and at any other time when events occur or circumstances indicate that the carrying amount of goodwill may not be recoverable. We have the option to first assess qualitative factors to determine whether it is necessary to perform the quantitative goodwill impairment test. The qualitative factors we assess include long-term prospects of our performance, share price trends and market capitalization, and Company specific events. Unanticipated events and circumstances may occur that affect the accuracy of our assumptions, estimates and judgments.

If we determine that as a result of the qualitative assessment that it is more likely than not (i.e., greater than 50% likelihood) that the fair value of a reporting unit is less than its carrying amount, then the quantitative test is required. Otherwise, no further testing is required. The quantitative goodwill impairment test requires us to estimate the fair value of our reporting units. If the carrying value of a reporting unit exceeds its fair value, the goodwill of that reporting unit is potentially impaired and we record an impairment loss equal to the excess of the carrying value of the reporting unit over its fair value, not to exceed the carrying amount of goodwill. The fair value of each of our goodwill reporting units is generally estimated using discounted cash flow methodologies.

We elected not to perform the qualitative assessment and performed the quantitative goodwill impairment test in fiscal 2023. Based on the impairment analysis performed in the fourth quarter of each year presented, the fair value of our reporting units exceeded their carrying values and no goodwill impairment was recognized.

Intangible Assets

Intangible assets consist primarily of intangible assets purchased through acquisitions. Finite-lived intangible assets are amortized for financial reporting purposes using the straight-line method over the estimated useful lives of the assets ranging from 1 to 6 years. Indefinite-lived intangible assets are not amortized but tested annually for impairment in the fourth quarter, or when events or changes in circumstances indicate that indefinite-lived intangible assets might be impaired.

Impairment of Long-Lived Assets

We evaluate long-lived assets, such as property and equipment and intangible assets subject to amortization, for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. We measure recoverability of assets to be held and used by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. We review the carrying value of indefinite-lived intangible assets for impairment at least annually during the last quarter of our fiscal year, or more frequently if we believe indicators of impairment exist. If the carrying amount of the asset exceeds its estimated undiscounted future cash flows, we recognize an impairment charge in an amount by which the carrying amount of the asset exceeds the fair value of the asset. Assets to be disposed of would be separately presented in the consolidated balance sheets and reported at the lower of the carrying amount or fair value less costs to sell and would no longer be depreciated. The assets and liabilities of a disposed group classified as held for sale would be presented separately in the appropriate asset and liability sections of the consolidated balance sheets. No impairment of long-lived assets was recognized for fiscal 2023, 2022, and 2021.

Leases

We determine 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 our leases do not provide an implicit rate, we use our 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.

We have elected, for all classes of underlying assets, not to recognize ROU assets and lease liabilities for leases with a term of twelve months or less. Lease cost for short-term leases is recognized on a straight-line basis over the lease term.

Other Accrued Liabilities and Other Long-Term Liabilities

As of the end of fiscal 2023 and 2022, other accrued liabilities consisted of the following (in millions):

	2023	2022
Customer obligations	$ 58.5	$ 88.6
Inventory obligations	7.0	14.1
Operating lease liabilities	9.0	7.6
Other	33.9	35.0
	$ 108.4	$ 145.3

As of the end of fiscal 2023 and 2022, other long-term accrued liabilities consisted of the following (in millions):

	2023	2022
Operating lease liabilities, long-term	$ 42.4	$ 51.5
Deferred tax liability	39.1	52.6
Income taxes payable, long-term	38.1	29.1
Other	16.3	19.4
	$ 135.9	$ 152.6

Share-Based Compensation

We charge the estimated fair value less actual forfeitures to earnings on a straight-line basis over the vesting period of the entire underlying award, which is generally three or four years for our restricted stock units, or RSU, awards, three years for our market stock units, or MSU, awards, three years for our performance stock units, or PSU, awards, and up to one year for shares purchased under our 2019 employee stock purchase plan.

We estimate the fair value of market-based MSUs at the date of grant using a Monte Carlo simulation model and amortize those fair values over the requisite service period, which is generally three years. The Monte Carlo simulation model that we use to estimate the fair value of market-based MSUs at the date of grant incorporates into the valuation the possibility that the market condition may not be satisfied. Provided that the requisite service is rendered, the total fair value of the market-based MSUs at the date of grant must be recognized as compensation expense even if the market condition is not achieved. However, the number of shares that ultimately vest can vary significantly with the performance of the specified market criteria.

We value PSUs using the aggregate intrinsic value on the grant date and amortize the compensation expense over the three-year service period on a ratable basis, dependent upon the probability of meeting the performance measures.

We recognize compensation expense for phantom stock units on a straight-line basis for each tranche of each award based on the average closing price of our common stock over the thirty calendar days ended prior to each balance sheet date. As our phantom stock is a cash-settled award, it is recorded as a liability and remeasured each reporting period.

Income Taxes

We account for income taxes under the asset and liability method. We recognize deferred tax assets and liabilities for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases, and operating loss and tax credit carryforwards. We measure deferred tax assets and liabilities using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. We recognize the effect of a change in tax rates in income on deferred tax assets and liabilities in the period that includes the enactment date. We establish valuation allowances when necessary to reduce deferred tax assets to the amounts that are more likely than not to be realized.

We use a two-step approach to recognizing and measuring uncertain tax positions. The first step is to determine whether it is more-likely-than-not that a tax position will be sustained upon examination, including resolution of any related appeals or litigation processes. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon ultimate settlement with a taxing authority. The calculation of tax liabilities involves significant judgment in estimating the impact of uncertainties in the application of highly complex tax laws. Resolution of these uncertainties in a manner inconsistent with our expectations could have a material impact on our consolidated financial position, results of operations, and cash flows. We believe we have adequately provided for reasonably foreseeable outcomes in connection with the resolution of income tax uncertainties. However, our results have in the past, and could in the future, include favorable and unfavorable adjustments to our estimated tax liabilities in the period a determination of such estimated tax liability is made or resolved, upon the filing of an amended return, upon a change in facts, circumstances, or interpretation, or upon the expiration of a statute of limitation. Accordingly, our effective tax rate could fluctuate materially from period to period.

Product Warranty

We generally provide warranties to cover defects in workmanship, materials and manufacturing for a period of twelve months to meet the stated functionality as agreed to in each sales arrangement. Products are tested against specified functionality requirements prior to delivery, but we nevertheless from time-to-time experience claims under our warranty guarantees. These standard warranties are assurance type warranties and do not offer any services in addition to the assurance that the product will continue working as specified. Therefore, warranties are not considered separate performance obligations in the arrangement. We accrue for estimated warranty costs under those guarantees based upon historical experience, and for specific items, at the time their existence is known and the amounts are determinable.

Acquisitions

In accordance with the guidance for business combinations, we determine whether a transaction or other event is a business combination, which requires that the assets acquired and liabilities assumed constitute a business. Each business combination is then accounted for by applying the acquisition method. If the assets acquired are not a business, we account for the transaction or other event as an asset acquisition. Under both methods, we recognize the identifiable assets acquired, the liabilities assumed, and any noncontrolling interest in the acquired entity. We capitalize acquisition-related costs and fees associated with asset acquisitions and immediately expense acquisition-related costs and fees associated with business combinations.

We allocate the fair value of purchase consideration to the tangible assets acquired, liabilities assumed and intangible assets acquired 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. When determining the fair values of assets acquired and liabilities assumed, we make significant estimates and assumptions, especially with respect to intangible assets. Critical estimates in valuing certain intangible assets include, but are not limited to, future expected cash flows from customer relationships and acquired developed technology and discount rates. Our estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ materially from estimates. Other estimates associated with the accounting for acquisitions may change as additional information becomes available regarding the assets acquired and liabilities assumed. Any change in facts and circumstances that existed as of the acquisition date and impacts our preliminary estimates is recorded to goodwill if identified within the measurement period. Any adjustments subsequent to the measurement period or our final determination of fair value of assets and liabilities, will be charged to earnings.

Research and Development

Research and development costs are expensed as incurred.

Accounting Pronouncements Issued But Not Yet Adopted

In December 2022, the FASB issued ASU 2022-06, Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848. ASU 2022-06 defers the sunset date of Topic 848 from December 31, 2022 to December 31, 2024. Effective March 16, 2023, we transitioned our credit and loan agreements from LIBOR to the Secured Overnight Financing Rate, or SOFR. We are currently evaluating the timing of adoption and impact, if any, of this standard on our consolidated financial statements.

In October 2021, the FASB issued ASU 2021-08, “Business Combinations (Topic 805): Accounting for Acquired Contract Assets and Contract Liabilities” which improves comparability for both the recognition and measurement of acquired revenue contracts with customers at the date of and after a business combination by providing consistent recognition guidance. This standard is effective for fiscal years beginning after December 15, 2022. We will adopt this standard in the first quarter of our fiscal 2024 and do not expect it to have a material impact on our consolidated financial statements.

2. Net Income Per Share

The computation of basic and diluted net income per share for fiscal 2023, 2022, and 2021 was as follows (in millions, except per share amounts):

	2023	2022	2021
Numerator:			
Net income	$ 73.6	$ 257.5	$ 79.6
Denominator:			
Shares, basic	39.6	39.0	34.8
Effect of dilutive share-based awards and convertible notes	0.6	1.7	3.5
Shares, diluted	40.2	40.7	38.3
Net income per share:			
Basic	$ 1.86	$ 6.60	$ 2.29
Diluted	$ 1.83	$ 6.33	$ 2.08

Diluted net income per share does not include the effect of potential common shares related to certain share-based awards for fiscal 2023, 2022, and 2021 as follows (in millions):

	2023	2022	2021
Share-based awards	0.7	0.1	—

These share-based awards were not included in the computation of diluted net income per share because the proceeds received, if any, from such share-based awards combined with the average unamortized compensation costs, were greater than the average market price of our common stock, and therefore, their effect would have been antidilutive.

Our basic net income per share amounts for each period presented have been computed using the weighted average number of shares of common stock outstanding. Our diluted net income per share amounts for each period presented include

the weighted average effect of potentially dilutive shares. We used the "treasury stock" method to determine the dilutive effect of outstanding share-based awards and convertible notes.

3. Property and Equipment

Property and equipment as of the end of fiscal 2023 and 2022 consisted of the following (in millions):

	Life	2023	2022
Computer equipment	3 - 5 years	$ 20.1	$ 19.3
Manufacturing equipment	1 - 5 years	105.9	93.3
Furniture, fixtures, and leasehold improvements	3 - 10 years	43.4	39.6
Capitalized software	3 - 7 years	22.5	24.3
Construction in progress		7.0	9.2
		198.9	185.7
Accumulated depreciation and amortization		(132.5)	(122.8)
Property and equipment, net		$ 66.4	$ 62.9

Our construction in progress primarily includes machinery and equipment that we expect to place in service in the next 12 months.

4. Acquisitions

Asset Acquisition

During the third quarter of fiscal 2023, we completed the acquisition of certain developed technology intangible assets from Broadcom for an aggregate consideration of $30.0 million, which was paid in cash in the previous fiscal year. This transaction did not meet the definition of a business combination as substantially all of the fair value of the gross assets acquired was concentrated in the finite-lived developed technology intangible asset. As a result, this transaction was accounted for as an asset acquisition and the total purchase consideration was allocated to intangible assets, amortized over an estimated useful life of six years.

Emza Visual Sense, Ltd.

On October 25, 2022, we acquired all of the outstanding shares of *Emza Visual Sense, Ltd.*, or Emza, a developer of ultra-low-power artificial intelligence visual sensing solutions, for total purchase consideration of $15.8 million. The purchase price was attributed to $0.3 million cash acquired, $8.0 million of intangible assets, $9.8 million of goodwill and $2.3 million net liabilities assumed. Goodwill recognized from the acquisition of Emza is not deductible for income tax purposes. Pro forma results of operations for this acquisition have not been presented because they are not material to our consolidated results of operations, either individually or in the aggregate.

DSP Group, Inc.

On August 30, 2021, we entered into an agreement and plan of merger with DSP Group, Inc., or DSPG, to acquire all of the equity of DSPG, a leading global provider of voice and wireless chipset solutions for converged communications, for $22.00 per share in an all-cash transaction, referred to as the DSPG acquisition. The DSPG acquisition closed on December 2, 2021, or the DSPG Closing Date, whereupon we obtained voice and wireless technology and product solutions for converged communications. In addition, under the terms of the agreement and plan of merger, we provided replacement equity awards to the transferred employees and allocated $1.7 million of the replacement equity awards value to consideration transferred.

The DSPG acquisition has been accounted for using the purchase method of accounting in accordance with the business acquisition guidance. Under the purchase accounting method, the total estimated purchase consideration of the acquisition was allocated to the tangible and identifiable intangible assets acquired and liabilities assumed based on their relative fair values. The excess of the purchase consideration over the net tangible and identifiable intangible assets acquired and liabilities has been recorded as goodwill. Our estimate of the fair values of the acquired intangible assets at June 25, 2022, was based on established and accepted valuation techniques performed with the assistance of our third-party valuation specialists.

The adjusted purchase price paid for DSPG was $543.3 million. The final purchase price allocation is as follows (in millions):

	Final As Adjusted June 25, 2022
Cash and cash equivalents	$ 40.5
Short-term investments	71.9
Accounts receivable, net	12.9
Inventory	22.6
Prepaid expenses and other current assets	4.0
Property and equipment	5.9
Intangible assets	212.0
Right-of-use lease asset	9.8
Severance pay fund	16.2
Deferred tax asset	6.7
Non-current other assets	2.3
Total identifiable assets acquired	404.8
Accounts payable	(6.7)
Other accrued expenses	(19.8)
Short-term lease liabilities	(1.5)
Long-term lease liabilities	(8.2)
Accrued severance	(16.4)
Deferred tax liability	(39.4)
Other long-term liabilities	(6.1)
Total liabilities	(98.1)
Net identifiable assets acquired	306.7
Goodwill	236.6
Net assets acquired	$ 543.3

There were no measurement period adjustments during fiscal 2023.

The following table summarizes the estimated fair value of the intangible assets as of the DSPG Closing Date (in millions):

	Estimated Weighted Average Useful Lives in Years	Estimated Fair Value
Developed technology	5.2	$ 150.0
Customer contracts and related relationships	4.0	45.0
In process research and development	N/A	16.0
Trade names	1.0	1.0
Estimated fair value of acquired intangibles		$ 212.0

We estimated the fair value of the identified intangible assets using a discounted cash flow model for each of the underlying identified intangible assets. These fair value measurements were based on significant inputs not observable in the market and thus represent a Level 3 measurement. Key assumptions include the level and timing of expected future cash flows, conditions and demands specific to each intangible asset over its remaining useful life, and discount rates we believe to be consistent with the inherent risks associated with each type of asset, which range from 4% to 18%. The fair value of these intangible assets is primarily affected by the projected revenue, gross margins, operating expenses, the technology migration curve, customer ramp up period and the anticipated timing of the projected income associated with each intangible asset coupled with the discount rates used to derive their estimated present values. We believe the level and timing of expected future cash flows appropriately reflects market participant assumptions.

In-process research and development consists of advanced semiconductor telecommunications products for the Internet of Things, or IoT, market. We expect to complete the in-process research and development project in calendar year 2024.

The value of goodwill reflects the anticipated synergies of the combined operations and workforce of DSPG as of the DSPG Closing Date. None of the goodwill is expected to be deductible for income tax purposes.

Prior to the DSPG acquisition, we did not have an existing relationship or transactions with DSPG.

The consolidated financial statements include approximately $83.8 million of revenue from the DSPG Closing Date through June 2022. It is impracticable to determine the effect on net income attributable to DSPG as we completed the integration of DSPG into our ongoing operations during the third quarter of fiscal 2022.

In fiscal year 2022, we incurred $4.4 million in acquisition related costs which were recorded in selling, general and administrative expense in the consolidated statements of operations. In December 2021, we executed the Term Loan Facility agreement in the amount of $600.0 million, the proceeds of which were used to finance the DSPG acquisition and we incurred $11.2 million of debt financing costs thereon. As of June 2023, $6.0 million of the Term Loan Facility is included in short-term debt, and $585.0 million is included in long-term debt on the accompanying consolidated balance sheets. See "Note 8 – Debt" for additional information.

Supplemental Pro Forma Information (Unaudited)

The 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 acquisition 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 we believe are reasonable under the circumstances.

The following supplemental pro forma information presents the combined results of operations as if DSPG had been acquired as of the beginning of fiscal 2021. Pro forma adjustments used to arrive at pro forma net income included adjustments for the addition of intangible amortization expense for the value of intangibles under the purchase price allocation, adjustments to record acquired inventories at fair value, transaction and restructuring costs. The total pro forma adjustments for fiscal 2022 was an increase to net income of $5.9 million and a decrease in net income of $86.3 million in fiscal 2021. The unaudited supplemental pro forma financial information for the periods presented is as follows (in millions):

	2022	2021
Revenue	$ 1,802.6	$ 1,466.0
Net income (loss)	$ 263.4	$ (6.7)

5. Cash, Cash Equivalents and Short-Term Investments

The following table summarizes our cash, cash equivalents and short-term investments by category at June 2023 and June 2022 (in millions):

We use the specific-identification method to determine any realized gains or losses from the sale of our short-term investments classified as available-for-sale.

	June 2023			June 2022		
	Amortized Cost	Gross unrealized gain (loss)	Fair Value	Amortized Cost	Gross unrealized gain (loss)	Fair Value
Cash	$ 853.9	$ —	$ 853.9	$ 811.9	$ —	$ 811.9
Cash equivalents:						
Money market funds	54.4	—	54.4	12.1	—	12.1
Treasury bills	16.4	—	16.4	—	—	—
Total cash and cash equivalents	$ 924.7	$ —	$ 924.7	$ 824.0	$ —	$ 824.0
Short-term investments:						
Certificates of deposit	$ 0.2	$ —	$ 0.2	$ 2.4	$ —	$ 2.4
Corporate debt securities	6.5	(0.2)	6.3	43.7	(1.9)	41.8
Municipal bonds	3.1	—	3.1	7.9	(0.1)	7.8
Total short-term investments	$ 9.8	$ (0.2)	$ 9.6	$ 54.0	$ (2.0)	$ 52.0

The following table classifies our short-term investments by contractual maturities (*in millions*):

	June 2023		June 2022	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Due within 1 year	$ 9.8	$ 9.6	$ 21.0	$ 20.4
Due between 1 year to 5 years	—	—	33.0	31.6
	$ 9.8	$ 9.6	$ 54.0	$ 52.0

All available-for-sale securities have been classified as current, based on management's intent and ability to use the funds in current operations.

6. Fair Value Measurements

We determine fair value based on the fair value hierarchy, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value assumes that the transaction to sell the asset or transfer the liability occurs in the principal or most advantageous market for the asset or liability and establishes that the fair value of an asset or liability shall be determined based on the assumptions that market participants would use in pricing the asset or liability. The classification of a financial asset or liability within the hierarchy is based upon the lowest level input that is significant to the fair value measurement. The fair value hierarchy prioritizes the inputs into three levels that may be used to measure fair value:

- Level 1 – Valuation is based upon unadjusted quoted prices for identical assets or liabilities in active markets.
- Level 2 – Valuation is based upon quoted prices for similar assets and liabilities in active markets, or other inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instruments.
- Level 3 – Valuation is based upon other unobservable inputs that are significant to the fair value measurements.

The fair value of our Level 1 financial instruments are traded in active markets and are based on quoted market prices for identical instruments. The fair value of our Level 2 fixed income securities is obtained from an independent pricing service, which may use quoted market prices for identical or comparable instruments or model driven valuations using observable market data or inputs corroborated by observable market data. Our marketable securities are held by custodians who obtain investment prices from a third-party pricing provider that incorporates standard inputs in various asset price models.

At the end of June 2023 and 2022, financial assets measured at fair value on a recurring basis are summarized below (in millions):

	June 2023			June 2022		
	Level 1	Level 2	Total	Level 1	Level 2	Total
Assets:						
Cash equivalents:						
Money market funds	$ 54.4	$ —	$ 54.4	$ 12.1	$ —	$ 12.1
Treasury bills	16.4	—	16.4	—	—	—
Short-term investments:						
Certificates of deposit	—	0.2	0.2	—	2.4	2.4
Corporate debt securities	—	6.3	6.3	—	41.8	41.8
Municipal bonds	—	3.1	3.1	—	7.8	7.8
Total assets	$ 70.8	$ 9.6	$ 80.4	$ 12.1	$ 52.0	$ 64.1

The above table excludes $853.9 million of cash held in our bank accounts. We did not have any financial instruments measured at fair value on a recurring basis within Level 3 fair value during fiscal 2023 and 2022 and there were no transfers in or out of our Level 1 or 2 assets during the same periods.

Financial Instruments Not Recorded at Fair Value on a Recurring Basis

We report our financial instruments at fair value with the exception of the Senior Debt and Term Loan ("Note 8. Debt"). The estimated fair value of the notes was determined based on the trading price of the notes as of the last day of trading for the period. We consider the fair value of the notes to be a Level 2 measurement as they are not actively traded in markets.

The carrying amounts and estimated fair values of the Senior Notes and Term Debt are as follows for the periods presented (in millions):

	June 2023		June 2022	
	Carrying Amount	Estimated Fair Value	Carrying Amount	Estimated Fair Value
Senior Notes due 2029	$ 395.6	$ 337.2	$ 395.0	$ 326.9
Term Loan due 2028	582.4	$ 575.3	586.7	$ 575.0
	$ 978.0	$ 912.5	$ 981.7	$ 901.9

7. Goodwill and Acquired Intangible Assets

The following table presents our goodwill balance as of June 2023 and June 2022 (in millions):

	2023	2022
Beginning balance	$ 806.6	$ 570.0
Acquisition activity	9.8	236.6
Ending balance	$ 816.4	$ 806.6

The following table summarizes the life, the gross carrying value of our acquired intangible assets, and the related accumulated amortization as of the end of fiscal 2023 and 2022 (in millions):

		2023			2022		
	Weighted Average Life in Years	Gross Carrying Value	Accumulated Amortization	Net Carrying Value	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
Audio and video technology	5.6	$ 231.9	$ (150.7)	$ 81.2	$ 232.1	$ (109.3)	$ 122.8
Customer relationships	4.1	158.2	(117.8)	40.4	170.5	(99.7)	70.8
Wireless connectivity technology	5.8	158.0	(58.0)	100.0	128.0	(33.8)	94.2
Video interface technology	3.0	82.0	(79.7)	2.3	82.0	(52.4)	29.6
Human presence detection technology	5.0	5.2	(0.7)	4.5	—	—	—
Licensed technology and other	4.4	10.8	(8.9)	1.9	9.9	(7.5)	2.4
Patents	8.0	4.4	(4.3)	0.1	4.4	(3.7)	0.7
Tradename	4.4	5.8	(4.7)	1.1	5.8	(3.3)	2.5
In process research and development	Not applicable	67.0	—	67.0	67.0	—	67.0
Acquired intangibles, gross	4.9	$ 723.3	$ (424.8)	$ 298.5	$ 699.7	$ (309.7)	$ 390.0

During fiscal 2023, we retired fully amortized intangible assets of $20.4 million of display driver technology. During fiscal 2022, we retired fully amortized intangible assets of $21.5 million of audio and video developed technology, $12.0 million in backlog and $3.1 million in licensed technology and other.

Amortization expense is calculated using the straight-line method over the estimated useful lives of the acquired intangibles. The total amortization expense for the acquired intangible assets was $130.4 million in fiscal 2023, $123.5 million in fiscal 2022, and $110.1 million in fiscal 2021. This amortization expense was included in our consolidated statements of operations as acquired intangibles amortization and cost of revenue.

The following table presents expected annual aggregate amortization expense in future fiscal years (in millions):

2024	$ 73.8
2025	66.9
2026	53.8
2027	23.2
2028	10.6
Thereafter	3.2
To be determined	67.0
Future amortization	$ 298.5

8. Debt

Senior Debt

On March 11, 2021, we completed an offering of $400.0 million aggregate principal amount of 4.0% senior notes due 2029, or the Senior Notes, in a private offering. The Senior Notes were issued pursuant to an Indenture, dated as of March 11, 2021, or the Senior Notes Indenture, by and among our company, the guarantors named therein and Wells Fargo Bank, National Association, as trustee.

The Indenture provides that the Senior Notes will bear interest at a rate of 4.0% per annum, payable in cash semi-annually in arrears on December 15 and June 15 of each year, commencing on June 15, 2021. The Senior Notes will mature on June 15, 2029 and are fully and unconditionally guaranteed, jointly and severally, on a senior unsecured basis by each of our current and future domestic restricted subsidiaries that guarantee our obligations under our senior secured credit facilities.

Prior to June 15, 2024, we may redeem the Senior Notes, in whole or in part, at a redemption price of 100% of the principal amount thereof, plus a make-whole premium set forth in the Indenture, plus accrued and unpaid interest, if any, up to, but excluding, the redemption date.

On or after June 15, 2024, we may redeem some or all of the Senior Notes at the redemption prices specified below, plus accrued and unpaid interest, if any, up to, but excluding, the redemption date:

Year	Price
2024	102%
2025	101%
2026 and thereafter	100%

In addition, at any time prior to June 15, 2024, we may redeem up to 40% of the aggregate principal amount of the Senior Notes at a redemption price equal to 104% of the principal amount thereof, plus accrued and unpaid interest, if any, up to, but excluding, the applicable redemption date with the net cash proceeds from one or more equity offerings by us.

The Senior Notes are the general unsecured obligations of our company. The Senior Note guarantees are the senior unsecured obligations of each guarantor. Under certain circumstances, the guarantors may be released from their Senior Note guarantees without consent of the holders of Senior Notes. Under the terms of the Indenture, the Senior Notes rank equally in right of payment with all of our and the guarantors' existing and future senior indebtedness, and rank contractually senior in right of payment to our and the guarantors' future indebtedness and other obligations that are, by their terms, expressly subordinated in right of payment to the Senior Notes. The Senior Notes are effectively subordinated to our and the guarantors' existing and future secured indebtedness, including secured indebtedness under our senior secured credit facilities, to the extent of the value of the assets securing such indebtedness. The Senior Notes and guarantees are structurally subordinated to all

existing and future indebtedness and liabilities (including trade payables) of our subsidiaries that do not guarantee the Senior Notes.

The Indenture contains covenants that, subject to exceptions and qualifications, among other things, limit our ability and the ability of our Restricted Subsidiaries (as defined in the Indenture) to (i) incur additional indebtedness and guarantee indebtedness; (ii) pay dividends or make other distributions or repurchase or redeem our company's or any parent's capital stock; (iii) prepay, redeem or repurchase certain indebtedness; (iv) issue certain preferred stock or similar equity securities; (v) make loans and investments; (vi) dispose of assets; (vii) incur liens; (viii) enter into transactions with affiliates; (ix) enter into agreements restricting its subsidiaries' ability to pay dividends; and (x) consolidate, merge or sell all or substantially all of its assets.

The Indenture contains customary events of default including, without limitation, failure to make required payments, failure to comply with certain agreements or covenants, cross-acceleration to certain other indebtedness in excess of specified amounts, certain events of bankruptcy and insolvency, and failure to pay certain judgments. An event of default under the Indenture will allow either the trustee or the holders of at least 25% in aggregate principal amount of the then outstanding Senior Notes to accelerate, or in certain cases, will automatically cause the acceleration of, the maturity of the principal, and accrued and unpaid interest, if any, on all outstanding Notes.

Debt issuance costs relating to the Senior Notes of $5.7 million, netted against the debt amount on the consolidated balance sheet, are amortized as interest expense using the effective interest method over 99 months. The total interest expense and amortization of the debt issuance costs recorded on the Senior Notes during the fiscal year ended June 2023 and 2022 was $16.6 million in each year.

Revolving Credit Facility

On March 16, 2023, we entered into a Second Amendment, or the Second Amendment, and on July 28, 2023, we entered into a Third Amendment, or the Third Amendment, to our Second Amended and Restated Credit Agreement, as amended, the Credit Agreement, with the lenders party thereto and Wells Fargo Bank, National Association, as administrative agent, dated March 11, 2021. The Second Amendment replaces the LIBOR-based interest rate applicable to borrowings under the Credit Agreement with a SOFR-based interest rate, and the Third Amendment provides that the consolidated interest coverage ratio financial covenant only applies if, as of the last day of any fiscal quarter, our aggregate cash and cash equivalents balance is less than $450 million.

The Credit Agreement provides for a revolving credit facility in a principal amount of up to $250 million, which includes a $20 million sublimit for letters of credit and a $25 million sublimit for swingline loans. Under the terms of the Credit Agreement, we may, subject to the satisfaction of certain conditions, request increases in the revolving credit facility commitments in an aggregate principal amount of up to $150 million to the extent existing or new lenders agree to provide such increased or additional commitments, as applicable. Future proceeds under the revolving credit facility are available for working capital and general corporate purposes. As of June 2023, there was no balance outstanding under the revolving credit facility.

Borrowings under the revolving credit facility are required to be repaid in full by March 11, 2026. Debt issuance costs relating to the revolving credit facility of $1.6 million, included in non-current other assets on our consolidated balance sheet, are being amortized over 60 months.

Our obligations under the Credit Agreement are guaranteed by the material domestic subsidiaries of our company, subject to certain exceptions, who collectively with our company are referred to as the Credit Parties. The obligations of the Credit Parties under the Amended Credit Agreement and the other loan documents delivered in connection therewith are secured by a first priority security interest in substantially all of the existing and future personal property of the Credit Parties, including, without limitation, 65% of the voting capital stock and 100% of the non-voting capital stock of certain of the Credit Parties' direct foreign subsidiaries, subject to certain exceptions.

The Credit Agreement bears interest, at our election, of a Base Rate plus an Applicable Margin or Adjusted Term SOFR, as defined in the Second Amendment, plus an Applicable Margin. Swingline loans bear interest at a Base Rate plus an Applicable Margin. The Base Rate is a floating rate that is the greater of the Prime Rate, the Federal Funds Rate plus 50 basis points, or Adjusted Term SOFR plus 100 basis points. The Applicable Margin is based on a sliding scale which ranges from 25 to 100 basis points for Base Rate loans and 100 basis points to 175 basis points for Adjusted Term SOFR loans. We are required to pay a commitment fee on any unused commitments under the Credit Agreement which is determined on a leverage-based sliding scale ranging from 0.175% to 0.25% per annum. Interest and fees are payable on a quarterly basis.

Under the Credit Agreement, there are various restrictive covenants, including two financial covenants which limit the consolidated total leverage ratio, or leverage ratio, the consolidated interest coverage ratio, or interest coverage ratio, which after the Third Amendment, only applies if our cash and cash equivalents balance is less than $450 million as of the last day of any fiscal quarter. The leverage ratio is the ratio of net debt as of the measurement date to Consolidated EBITDA, for the four consecutive quarters ending with the quarter of measurement. The current leverage ratio shall not exceed 3.75 to 1.00 provided that for the four fiscal quarters ending after the date of a material acquisition, such maximum leverage ratio shall be adjusted to 4.25 to 1.00, and thereafter 3.75 to 1.0. The interest coverage ratio is Consolidated EBITDA to interest expense for the four consecutive quarters ending with the quarter of measurement. If our quarter-end cash and cash equivalents balance is less than $450.0 million, the interest coverage ratio must not be less than 3.50 to 1.0 as of the date of determination. As of the end of the quarter, we remain in compliance with the restrictive covenants.

Term Loan Facility

On December 2, 2021, we entered into that certain First Amendment and Lender Joinder Agreement to the Credit Agreement, to, among other things, establish a new $600.0 million incremental term loan facility, or the Term Loan Facility. The Term Loan Facility was advanced by certain existing and new lenders under the Credit Agreement to finance the DSPG acquisition. The Term Loan Facility matures on December 2, 2028. Principal on the Term Loan Facility is payable in equal quarterly installments on the last day of each March, June, September and December of each year, beginning December 31, 2021, at a rate of 1.00% per annum.

Borrowings under the Term Loan Facility accrue interest at the SOFR, plus 2.25%, or at the Base Rate plus 1.25%, subject to a 25 basis point step-down based on total gross leverage, and subject to an Adjusted Term SOFR floor of 50 basis points. The base rate is the highest of (i) the Federal Funds Rate plus 0.50%, (ii) the Prime Rate and (iii) the one-month Adjusted Term SOFR plus 1.00%. The Term Loan Facility contains customary representations and warranties, affirmative and negative covenants and events of default, in each case consistent with the Credit Agreement. The Term Loan Facility does not contain any financial covenants.

The Term Loan Facility is subject to a 1.00% prepayment premium in the event all or any portion of the Term Loan Facility is prepaid within the first 6 months in connection with a repricing transaction only. The Term Loan Facility is subject to customary mandatory prepayments, including, commencing June 30, 2023, an excess cash flow sweep, subject to customary step-downs and thresholds.

Debt issuance costs relating to the Term Loan Facility of $11.2 million, netted against the debt amount on the consolidated balance sheet, are amortized as interest expense over 96 months. The total interest expense and amortization of the debt issuance costs recorded on the Term Loan Facility during fiscal 2023 and 2022 was $37.9 million and $11.2 million, respectively.

The following table presents the future principal payments related to our Senior Notes and Term Loan Facility in future fiscal years (in millions):

	Senior Notes	Term Loan Facility	Total
2024	$ —	$ 6.0	$ 6.0
2025	—	6.0	6.0
2026	—	6.0	6.0
2027	—	6.0	6.0
2028	—	6.0	6.0
Thereafter	400.0	561.0	961.0
	$ 400.0	$ 591.0	$ 991.0

As of the end of fiscal 2023 and 2022, our total debt is presented in our consolidated balance sheet as follows (in millions):

	2023			2022		
	Total debt	Issuance costs	Total debt, net of issuance costs	Total debt	Issuance costs	Total debt, net of issuance costs
Current portion of long-term debt	$ 6.0	$ —	$ 6.0	$ 6.0	$ —	$ 6.0
Long-term debt	985.0	(13.0)	972.0	991.0	(15.3)	975.7
	$ 991.0	(13.0)	$ 978.0	$ 997.0	(15.3)	$ 981.7

Convertible Debt

On June 1, 2021, pursuant to the Indenture, dated as of June 26, 2017 between us and Wells Fargo Bank, National Association, as trustee, or the Convertible Notes Indenture, we provided an irrevocable notice of redemption, for all $525,000,000 aggregate principal amount of our outstanding 0.50% convertible senior notes due in 2022, or the Convertible Notes. The Convertible Notes were redeemable at a cash redemption price of 100.0% of the principal amount, plus accrued and unpaid interest, if any, to, but excluding, the redemption date of August 4, 2021.

Holders of the Convertible Notes had the right to convert the Convertible Notes called for redemption no later than August 3, 2021, or the Conversion Deadline. The conversion rate was equal to 13.7267 shares per $1,000 principal amount of the Convertible Notes, which was the initial conversion rate of 13.6947 shares per $1,000 principal amount of the Convertible Notes plus a number of additional shares equal to 0.0320 shares per $1,000 principal amount of the Convertible Notes. We elected to settle any conversions by Combination Settlement (as defined in the Convertible Notes Indenture) with a Specified Dollar Amount (as defined in the Convertible Notes Indenture) per $1,000 principal amount of Convertible Notes equal to $1,000, plus a number of shares of our common stock, to be determined pursuant to the Convertible Notes Indenture, together with additional cash, if applicable, in lieu of delivering any fractional shares of common stock. As a result of this election, on August 4, 2021, we settled or redeemed the remaining outstanding Convertible Notes for $505.6 million in cash representing the principal amount outstanding and delivered approximately 3.5 million shares in common stock from our treasury stock for additional amounts, resulting in a loss of approximately $8.1 million which is included in Interest and other expense, net on our condensed consolidated statements of operations included elsewhere in this report.

9. Leases

Our leases primarily include our headquarters office and worldwide office and research and development facilities which are all classified as operating leases. Certain leases include renewal options that are under our discretion. The leases expire at various dates through fiscal year 2034, some of which include options to extend the lease for up to seven years. During fiscal 2023 and 2022, we recorded approximately $12.0 million and $12.7 million of operating leases expense, respectively. Our short-term leases are immaterial and we do not have finance leases.

As of the end of fiscal 2023 and 2022, the components of leases are as follows (in millions):

	2023	2022
Operating lease right-of-use assets	$ 49.0	$ 61.2
Operating lease liabilities	$ 9.0	$ 7.6
Operating lease liabilities, long-term	42.4	51.5
Total operating lease liabilities	$ 51.4	$ 59.1

Supplemental cash flow information related to leases is as follows (in millions):

	2023	2022
Cash paid for operating leases included in operating cash flows	$ 10.6	$ 12.5
Supplemental non-cash information related to lease liabilities arising from obtaining right-of-use assets	7.3	42.5

As of the end of fiscal 2023, the weighted average remaining lease term was 7.38 years, and the weighted average discount rate was 5.15%.

Future minimum lease payments for the operating lease liabilities are as follows (in millions):

Fiscal Year	Operating Lease Payments
2024	$ 10.3
2025	9.9
2026	8.4
2027	7.4
2028	5.9
Thereafter	20.2
Total future minimum operating lease payments	62.1
Less: interest	(10.7)
Total lease liabilities	$ 51.4

Sale and Leaseback Transaction

On February 8, 2022, we executed a sale and leaseback transaction of our properties located at 1109-1251 McKay Drive and 1140-1150 Ringwood Court, San Jose, California, for a purchase price, net of closing and other expenses payable by us, of $55.9 million. Concurrent with the sale, we entered into a lease agreement with the buyer to lease back the land and properties located at 1109 and 1151 McKay Drive, San Jose, California, for an initial term of 12 years and a renewal option for an additional seven years. The transaction qualified for sale and leaseback and operating lease accounting classification, and we recorded a gain of $5.4 million which is recorded in the gain on sale and leaseback transaction line in the consolidated statements of operations.

10. Indemnifications and Contingencies

Legal proceedings

We are subject to a variety of claims and suits that arise from time-to-time in the ordinary course of our business. While management currently believes that resolving claims against us, individually or in the aggregate, will not have a material adverse impact on our financial position, results of operations or statements of cash flows, these matters are subject to inherent uncertainties and management's view of these matters may change in the future. We accrue for loss contingencies when it is both probable that we will incur the loss and when we can reasonably estimate the amount of the loss or range of loss.

During the fourth quarter of fiscal 2023, we accrued $4.0 million in relation to a contractual dispute with a vendor.

Contingencies

We have in the past and may in the future receive notices from third parties that claim our products infringe their intellectual property rights. We cannot be certain that our technologies and products do not and will not infringe issued patents or other proprietary rights of third parties.

Any infringement claims, with or without merit, could result in significant litigation costs and diversion of management and financial resources, including the payment of damages, which could have a material adverse effect on our business, financial condition, and results of operations.

Indemnifications

In connection with certain agreements, we are obligated to indemnify the counterparty against third-party claims alleging infringement of certain intellectual property rights by us. We have also entered into indemnification agreements with our officers and directors. Maximum potential future payments under these agreements cannot be estimated because these agreements do not have a maximum stated liability. However, historical costs related to these indemnification provisions have not been significant. We have not recorded any liability in our consolidated financial statements for such indemnification obligations.

11. Stockholders' Equity

Preferred Stock

We are authorized, subject to limitations imposed by Delaware law, to issue up to a total of 10,000,000 shares of preferred stock in one or more series without stockholder approval. Our Board of Directors has the power to establish, from time-to-time, the number of shares to be included in each series and to fix the rights, preferences, and privileges of the shares of each wholly unissued series and any of its qualifications, limitations, or restrictions. Our Board of Directors can also increase or decrease the number of shares of a series, but not below the number of shares of that series then outstanding, without any further vote or action by the stockholders.

Our Board of Directors may authorize the issuance of preferred stock with voting or conversion rights that could harm the voting power or other rights of the holders of our common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring, or preventing a change in control of our company and might harm the market price of our common stock and the voting power and other rights of the holders of our common stock. As of the end of fiscal 2023, there were no shares of preferred stock outstanding.

Shares Reserved for Future Issuance

Shares of common stock reserved for future issuance as of the end of fiscal 2023 were as follows:

Stock options outstanding	3,083
Restricted stock units outstanding	1,304,926
Market stock units outstanding	227,321
Performance stock units outstanding	253,359
Awards available for grant under all share-based compensation plans	3,994,824
Reserved for future issuance	5,783,513

Treasury Stock

Our cumulative authorization of repurchases under our common stock repurchase program as of the end of fiscal 2023 was $2.3 billion expiring July 2025. The program authorizes us to repurchase our common stock in the open market or in privately negotiated transactions depending upon market conditions and other factors. The number of shares repurchased and the timing of repurchases is based on the level of our cash balances, general business and market conditions, and other factors, including alternative investment opportunities. Common stock repurchased under this program is held as treasury stock. As of the end of fiscal 2023, we had $893.9 million of common stock remaining to be repurchased under our common stock repurchase program.

12. Share-Based Compensation

The purpose of our various share-based compensation plans is to attract, motivate, retain, and reward high-quality employees, directors, and consultants by enabling such persons to acquire or increase their proprietary interest in our common stock in order to strengthen the mutuality of interests between such persons and our stockholders and to provide such persons with annual and long-term performance incentives to focus their best efforts on the creation of stockholder value. Consequently, we determine whether to grant share-based compensatory awards subsequent to the initial award for our employees and consultants primarily on individual performance.

Share-Based Compensation Plans

On October 29, 2019, our stockholders approved: (i) our 2019 Equity and Incentive Compensation Plan, or the 2019 Incentive Plan, to replace our Amended and Restated 2010 Incentive Compensation Plan, or the 2010 Incentive Plan, and (ii) our 2019 Employee Stock Purchase Plan, or the 2019 ESPP, to replace our Amended and Restated 2010 Employee Stock Purchase Plan, or our 2010 ESPP. Upon approval of the 2019 Incentive Plan, new awards are no longer issued under the 2010 Incentive Plan. Awards outstanding at October 29, 2019 under our prior share-based compensation plans were not impacted by the approval of the 2019 Incentive Plan and continue to remain outstanding and vest by their terms under the applicable share-based compensation plan. Shares underlying certain share-based awards forfeited under the 2010 Incentive Plan subsequent to the approval of the 2019 Incentive Plan automatically transfer to and become available for award issuance from the 2019 Incentive Plan.

The 2019 Incentive Plan authorizes our Board of Directors to provide equity-based compensation in the form of stock options, stock appreciation rights, restricted stock units, cash incentive awards, performance shares, performance stock units, and other stock-based awards. The cumulative number of shares approved under the 2019 Incentive Plan was 5,288,000. The 2019 ESPP authorizes us to provide eligible employees with an opportunity to acquire an equity interest in our company through the purchase of stock at a discount, with an initial authorization of 1,500,000 shares.

Effective August 19, 2019, we adopted the 2019 Inducement Equity Plan. 650,000 shares of our common stock have been reserved for issuance under the 2019 Inducement Equity Plan, subject to adjustment for stock dividends, stock splits, or other changes in our common stock or capital structure. The 2019 Inducement Equity Plan is intended to comply with Rule 5635(c)(4) of the Nasdaq Stock Market Listing Rules, which provide an exception to the Nasdaq Stock Market Listing Rules' on the shareholder approval requirement for the issuance of securities with regards to grants to employees of the company or its subsidiaries as an inducement material to such individuals entering into employment with the company or its subsidiaries. An individual was eligible to receive an award under the 2019 Inducement Equity Plan only if he or she was not previously an employee or director of our company (or is returning to work after a bona-fide period of non-employment), and an award under the 2019 Inducement Equity Plan is a material inducement for him or her to accept employment with our company. As a result of approval by our stockholders of our amended and restated 2019 Incentive Plan on October 27, 2020, no new awards will be granted under the 2019 Inducement Equity Plan.

Share-based compensation awards available for grant or issuance for each plan as of the beginning of the fiscal year, including changes in the balance of awards available for grant for fiscal 2023, were as follows:

	Awards Available Under All Share-Based Award Plans	2019 Incentive Compensation Plan	2019 Employee Inducement Equity Plan	2019 Employee Stock Purchase Plan	2010 Incentive Compensation Plan	DSPG Replacement Award Plan
Balance at June 2022	4,449,604	3,379,524	—	1,070,080	—	—
Additional shares authorized	698,000	698,000	—	—	—	—
Transferred between plans	—	5,733	—	—	(5,733)	—
Restricted stock units granted	(808,153)	(808,153)	—	—	—	—
Market stock units granted	(110,885)	(110,885)	—	—	—	—
Performance stock units granted	(157,710)	(157,710)	—	—	—	—
Performance stock units performance adjustment	141,565	142,899	(1,334)	—	—	—
Market stock units performance adjustment	(168,796)	(148,347)	(20,449)	—	—	—
Purchases under employee stock purchase plan	(172,044)	—		(172,044)	—	—
Forfeited	103,689	95,727	—	—	5,733	2,229
Plan shares no longer available for new grants	19,554	—	21,783	—	—	(2,229)
Balance at June 2023	3,994,824	3,096,788	—	898,036	—	—

Share-based compensation and the related tax benefit for our stock-based awards and our cash settled phantom stock units, which we granted in October 2019 (see *Phantom Stock Units* below) recognized in our consolidated statements of income for fiscal 2023, 2022, and 2021 were as follows (in millions):

	2023		2022		2021	
	Stock-based awards	Phantom Stock Units	Stock-based awards	Phantom Stock Units	Stock-based awards	Phantom Stock Units
Cost of revenue	$ 4.0	$ —	$ 4.0	$ 0.2	$ 3.0	$ 0.4
Research and development	52.4	0.3	42.5	27.2	23.5	21.9
Selling, general, and administrative	65.6	0.3	54.3	4.7	39.6	4.7
Total	$ 122.0	$ 0.6	$ 100.8	$ 32.1	$ 66.1	$ 27.0
Income tax benefit on share-based compensation	$ 13.2		$ 23.1		$ 15.2	

We recognize a tax benefit upon expensing certain share-based awards associated with our share-based compensation plans, including RSUs, market stock units, or MSUs, PSUs, and phantom stock units. We do not recognize a tax benefit upon expensing all or a portion of share-based awards granted to certain executive officers and certain foreign-based employees.

We compare the actual tax benefit associated with the tax deduction from share-based award activity to the hypothetical tax benefit based on the grant date fair values of the corresponding share-based awards. Tax benefit associated with excess tax deduction creditable to our income tax provision is recognized when incurred. Tax deficiency associated with a tax deduction shortfall is debited to our income tax provision when incurred.

Historically, we have issued new shares in connection with our share-based compensation plans, however, treasury shares are also available for issuance. Any additional shares repurchased under our common stock repurchase program will be available for issuance under our share-based compensation plans.

Stock Options

Our share-based compensation plans with outstanding stock option awards include our 2010 Incentive Plan. Under our 2010 Incentive Plan, we were able to grant incentive stock options or nonqualified stock options to purchase shares of our common stock at not less than 100% of the fair market value, or FMV, on the date of grant. We ceased granting stock options in fiscal 2018.

Options granted under our 2010 Incentive Plan generally vest three to four years from the vesting commencement date and expire seven years after the date of grant if not exercised.

Certain stock option activity for fiscal 2023 and balances as of the end of fiscal 2023 were as follows:

	Stock Option Awards Outstanding	Weighted Average Exercise Price	Intrinsic Value (In millions)
Balance at June 2022	31,185	$ 61.50	
Exercised	(27,545)	$ 62.10	
Expired	(557)	$ 81.88	
Balance at June 2023	3,083	$ 52.53	$ 0.1
Exercisable at June 2023	3,083	$ 52.53	$ 0.1

The aggregate intrinsic value was determined using the closing price of our common stock on the last trading day of fiscal 2023, or June 23, 2023, of $81.16.

Cash received and the aggregate intrinsic value of stock options exercised for fiscal 2023, 2022, and 2021 were as follows (in millions):

	2023	2022	2021
Cash received	$ 3.3	$ 5.3	$ 23.9
Aggregate intrinsic value	$ 1.6	$ 3.6	$ 8.6

There was no unrecognized share-based compensation costs for stock options granted under our various plans.

Restricted Stock Units

Our 2019 Incentive Plan provides for the grant of RSUs to our employees, consultants, and directors, and previously our 2019 Inducement Equity Plan and our 2010 Incentive Plan provided for the grant of deferred stock units, or DSUs, to our employees, consultants, and directors. An RSU and a DSU are each a promise to deliver shares of our common stock at a future date in accordance with the terms of the grant agreement and the words can be used interchangeably. We began granting DSUs in January 2006 and RSUs in 2019. The use of RSUs will cover the meaning of both RSUs and DSUs.

RSUs granted generally vest ratably over three to four years from the vesting commencement date. Delivery of shares under the plans take place on the quarterly vesting dates. At the delivery date, we withhold shares to cover applicable statutory tax withholding for grantees subject to withholding and deliver a net quantity of shares to the grantee after such withholding. Until delivery of shares, the grantee has no rights as a stockholder with respect to any shares underlying the RSU award.

RSU activity, including RSUs granted, delivered, and forfeited in fiscal 2023, and the balance and aggregate intrinsic value of RSUs as of the end of fiscal 2023 were as follows:

	RSU Awards Outstanding	Average Grant Date Fair Value
Balance at June 2022	1,220,565	$ 119.83
Granted	808,153	$ 129.14
Vested	(631,492)	$ 115.30
Forfeited	(92,300)	$ 137.60
Balance at June 2023	1,304,926	$ 126.50

At the end of fiscal 2023, the aggregate intrinsic value of RSUs expected to vest was $105.9 million and the number of RSU awards expected to vest is 1.3 million shares. Our closing stock price of $81.16 on the last day of trading in fiscal 2023 was used to calculate the intrinsic value for the RSUs.

The unrecognized share-based compensation cost for RSUs granted under our 2019 Incentive Plan, our 2019 Inducement Equity Plan and our 2010 Incentive Plan was approximately $122.7 million as of the end of fiscal 2023, which will be recognized over a weighted average period of approximately 1.84 years.

Market Stock Units

Our 2019 Incentive Plan, and previously our 2019 Inducement Equity Plan, provide for the grant of MSU awards, to our employees, consultants, and directors. An MSU is a promise to deliver shares of our common stock at a future date based on the achievement of market-based performance requirements in accordance with the terms of the MSU grant agreement.

We have granted MSU awards to our executive officers and other management members under our 2010 Incentive Plan, our 2019 Incentive Plan and our 2019 Inducement Equity Plan, which are designed to vest in three or four tranches with the target quantity for each tranche equal to one-third or one-fourth of the total MSU grant. The first tranche vests based on a one-year performance period; the second tranche vests based on a two-year performance period; the third tranche vests based on a three-year performance period; and the fourth tranche (in the case of four-year vesting) vests based on a four-year performance period.

For MSU awards granted in fiscal 2023, performance is measured based on our achievement of a specified level of total stockholder return, or TSR, relative to the TSRs of each company in the Russell 2000 Index. The potential payout ranges from 0% to 300% of the target grant quantity based on our TSR performance relative to the TSRs of each company in the Russell 2000 Index. No payout will occur if our TSR performance falls below the 25th percentile of the TSRs of each company in the Russell 2000 Index, and a 300% payout will occur if our TSR performance exceeds the 80th percentile of the TSRs of each company in the Russell 2000 Index. Performance payouts between the 25th and 80th percentiles will be determined on a linear basis with performance at the 50th percentile equal to 100% of target.

The first tranche and the second tranche can payout up to 300%, and the payout for the third tranche will be calculated based on the total target quantity for the entire grant multiplied by the payout factor, based on performance for the three-year performance period, less shares issued for the first tranche and the second tranche, but not less than the third tranche target quantity multiplied by the final payout factor.

For MSU awards granted in fiscal 2022 and 2021, performance is measured based on our achievement of a specified level of total stockholder return, or TSR, relative to the TSRs of each company in the Russell 2000 Index. The potential payout ranges from 0% to 200% of the target grant quantity based on our TSR performance relative to the TSRs of each company in the Russell 2000 Index. No payout will occur if our TSR performance falls below the 25th percentile of the TSRs of each company in the Russell 2000 Index, and a 200% payout will occur if our TSR performance exceeds the 75th percentile of the TSRs of each company in the Russell 2000 Index. Performance payouts between the 25th and 75th percentiles will be determined on a linear basis with performance at the 50th percentile equal to 100% of target.

The first tranche and the second tranche can payout up to 200%, and the payout for the third tranche will be calculated based on the total target quantity for the entire grant multiplied by the payout factor, based on performance for the three-year performance period, less shares issued for the first tranche and the second tranche, but not less than the third tranche target quantity multiplied by the final payout factor.

For outstanding MSU awards granted in fiscal 2020, performance is measured based on our achievement of a specified level of TSR relative to the TSR of the S&P Semiconductor Select Industry Index, or the Index. The potential payout ranges from 0% to 200% of the target grant quantity and is adjusted on a two-to-one ratio based on our TSR performance relative to the Index.

The payout for the first tranche, the second tranche and the third tranche will not exceed 100% and the payout for the fourth tranche will be calculated based on the total target quantity for the entire grant multiplied by the payout factor, based on performance for the four-year performance period, less shares issued for the first tranche, the second tranche and the third tranche.

Delivery of shares earned, if any, will take place on the dates provided in the applicable MSU grant agreement, assuming the grantee is still an employee, consultant, or director of our company at the end of the applicable performance period. On the delivery date, we withhold shares to cover statutory tax withholding requirements and deliver a net quantity of shares to the recipient after such withholding. Until delivery of shares, the grantee has no rights as a stockholder with respect to any shares underlying the MSU award.

MSU activity, including MSUs granted, delivered, and forfeited in fiscal 2023, and the balance and aggregate intrinsic value of MSUs as of the end of fiscal 2023 were as follows:

	MSU Awards Outstanding	Weighted Average Grant Date Fair Value
Balance at June 2022	251,974	$ 138.51
Granted	110,885	$ 179.98
Performance adjustment	168,796	$ —
Vested	(304,334)	$ 104.04
Balance at June 2023	227,321	$ 235.67

As a result of Synaptics achieving the 80th percentile relative to the remaining constituents in the Russell 2000 Index, we delivered 200% of the targeted shares underlying tranche one of the fiscal 2022 MSU grants. As a result of Synaptics achieving the 84th percentile relative to the remaining constituents in the Russell 2000 Index, we delivered 200% of the targeted shares underlying tranche two of the fiscal 2021 MSU grants. As a result of the Synaptics TSR outperforming the Index TSR by 84.53 percentage points for the tranche three performance period, we delivered 200% of the targeted shares underlying the fiscal 2020 MSU grants, less shares issued for the first tranche and second tranche.

At the end of fiscal 2023, the aggregate intrinsic value of MSUs expected to vest was $18.5 million and the number of MSU awards expected to vest is 0.2 million shares. Our closing stock price of $81.16 on the last day of trading in fiscal 2023 was used to calculate the intrinsic value for the MSUs.

The fair value of each MSU granted from our plans for fiscal 2023, 2022, and 2021 was estimated at the date of grant using the Monte Carlo simulation model, assuming no expected dividends and the following assumptions:

	2023	2022	2021
Expected volatility of company	55.22%	52.61%	53.62%
Expected volatility of Index	17.9% - 320.7%	17.4% - 581.6%	19.6% - 197.6%
Correlation coefficient	0.61	0.53	0.51
Expected life in years	2.87	2.87	2.87
Risk-free interest rate	3.24%	0.40%	0.17%
Fair value per award	$218.15 - $438.24	$284.43 - $342.89	$131.34 - $175.15

We amortize the compensation expense over the three- or four-year performance and service period on a ratable basis. The unrecognized share-based compensation cost of our outstanding MSUs was approximately $22.3 million as of the end of fiscal 2023, which will be recognized over a weighted average period of approximately 0.73 years.

Performance Stock Units

Our 2019 Incentive Plan and our 2010 Incentive Plan provide for the grant of PSU awards to our employees, consultants, and directors. A PSU is a promise to deliver shares of our common stock at a future date based on the achievement of performance-based requirements in accordance with the terms of the PSU grant agreement.

We have granted PSU awards to our executive officers and other key management team members under our 2010 Incentive Plan, our 2019 Incentive Plan and our 2019 Inducement Equity Plan, which, generally, are designed to vest in three tranches with the target quantity for each tranche equal to one-third of the total PSU award. Generally, PSU awards have a specific one-year performance period and vesting occurs over three service periods with the final service period ending approximately three years from the grant date. Performance is measured based on the achievement of a specified level of performance relative to predefined performance criteria (for PSU awards granted in fiscal 2023 and 2022, the performance criteria was based on non-GAAP earnings per share, for PSU awards granted in fiscal 2021 the performance criteria was based on a combination of our design win revenue, non-GAAP gross margin percentage and non-GAAP operating expenses). For our fiscal 2023 PSU awards, the potential payout ranges from 0% to 200% of the target grant quantity and is adjusted on a linear basis with a payout triggering if our measurement results are greater than 65% of the target with a maximum payout achieved at 135% of target.

Delivery of shares earned, if any, will take place on the dates provided in the applicable PSU grant agreement, assuming the grantee is still an employee, consultant, or director of our company at the end of the applicable service period. On the delivery date, we withhold shares to cover statutory tax withholding requirements and deliver a net quantity of shares to the recipient after such withholding. Until delivery of shares, the grantee has no rights as a stockholder with respect to any shares underlying the PSU award.

PSU activity, including PSUs granted, delivered, and forfeited in fiscal 2023, and the balance and aggregate intrinsic value of PSUs as of the end of fiscal 2023 were as follows:

	PSU Awards Outstanding	Weighted Average Grant Date Fair Value
Balance at June 2022	257,903	$ 101.50
Granted	157,710	$ 119.50
Performance adjustment	128,622	$ —
Vested	(279,438)	$ 97.40
Forfeited	(11,438)	$ 123.12
Balance at June 2023	253,359	$ 125.40

We value PSUs using the aggregate intrinsic value on the grant date and amortize the compensation expense over the three-year service period on a ratable basis, dependent upon the probability of meeting the performance measures. The PSU awards outstanding balance at June 2023 is based on the target grant quantity and does not include any performance adjustment of shares for completed performance periods.

At the end of fiscal 2023, the aggregate intrinsic value of PSUs expected to vest was $20.6 million and the number of PSU awards expected to vest is 0.2 million shares. Our closing stock price of $81.16 on the last day of trading in fiscal 2023 was used to calculate the intrinsic value for the PSUs.

The unrecognized share-based compensation cost of our outstanding PSUs was approximately $3.3 million as of June 2023, which will be recognized over a weighted average period of approximately 0.67 years.

Phantom Stock Units

The 2019 Incentive Plan authorized the grant of phantom stock units to non-employee directors, officers and employees. We initially granted phantom stock units in October 2019. Phantom stock units were cash-settled and entitled the recipient to receive a cash payment equal to the value of a single share for each unit based on the average closing share price of our stock over the thirty calendar days prior to the vesting date. Grants of phantom stock units vested over three years, with an annual

vesting date of October 31 each year subsequent to the grant date. The final vesting occurred on October 31, 2022, and no phantom stock units remain outstanding under this plan.

Phantom stock activity was as follows:

	Phantom Stock Units Outstanding	Weighted Average Grant Date Fair Value
Balance as of June 2022	176,097	$ 42.11
Paid	(173,436)	$ 42.11
Forfeited	(2,661)	$ 42.11
Balance as of June 2023	—	$ 0.00

Employee Stock Purchase Plan

Our 2019 ESPP allows employees to designate up to 15% of their base compensation, subject to legal restrictions and limitations, to purchase shares of common stock at 85% of the lesser of the FMV at the beginning of the offering period or the exercise date. Under the 2019 ESPP, the offering period extends for up to one year and includes two exercise dates occurring at six-month intervals. Under the terms of our 2019 ESPP, if the FMV at an exercise date is less than the FMV at the beginning of the offering period, the current offering period will terminate and a new offering period will commence.

Shares purchased, weighted average purchase price, cash received, and the aggregate intrinsic value for employee stock purchase plan purchases in fiscal 2023, 2022, and 2021 were as follows (in millions, except shares purchased and weighted average purchase price):

	2023	2022	2021
Shares purchased	172,044	138,502	220,389
Weighted average purchase price	$ 91.88	$ 97.90	$ 57.00
Cash received	$ 15.8	$ 13.6	$ 12.6
Aggregate intrinsic value	$ 2.8	$ 12.5	$ 10.3

The fair value of each award granted under our 2019 ESPP for fiscal 2023, 2022, and 2021 was based on the Black-Scholes option pricing model. The fair value per award for fiscal 2023, 2022 and 2021 was $40.70, $38.93 and $20.82, respectively.

Unrecognized share-based compensation costs for awards granted under our 2019 ESPP at the end of fiscal 2023 were approximately $6.3 million that will be amortized over the next 8 months.

13. Employee Benefit Plans

401(k) Plan

We have a 401(k) Retirement Savings Plan for full-time employees in the U.S. Under the plan, eligible employees may contribute a portion of their net compensation up to the annual limit of $22,500 or $30,000 for employees who are 50 years or older. In fiscal 2023, we provided matching funds of 25% of our employees' contributions, excluding catch-up contributions. The employer matching funds vest immediately. We made matching contributions of $1.9 million, $1.7 million and $1.8 million in fiscal 2023, 2022, and 2021, respectively.

14. Income Taxes

Income/(loss) before provision for income taxes for fiscal 2023, 2022, and 2021 consisted of the following (in millions):

	2023	2022	2021
United States	$ (118.2)	$ (44.8)	$ (21.0)
Foreign	244.2	365.3	141.1
Income before provision for income taxes	$ 126.0	$ 320.5	$ 120.1

The provision for income taxes for fiscal 2023, 2022, and 2021 consisted of the following (in millions):

	2023	2022	2021
Current tax expense/(benefit)			
Federal	$ 15.8	$ (0.6)	$ 4.1
State	0.1	—	0.1
Foreign	62.4	94.9	36.1
	78.3	94.3	40.3
Deferred tax expense/(benefit)			
Federal	(12.7)	(21.8)	(0.5)
State	—	—	—
Foreign	(13.2)	(7.9)	(8.4)
	(25.9)	(29.7)	(8.9)
Provision for income taxes	$ 52.4	$ 64.6	$ 31.4

The provision for income taxes differs from the federal statutory rate for fiscal 2023, 2022, and 2021 as follows (in millions):

	2023	2022	2021
Provision at U.S. federal statutory tax rate	$ 26.4	$ 67.3	$ 25.1
State income taxes	—	—	0.1
Non-deductible share-based compensation	6.6	7.9	5.2
(Windfall)/shortfall related to share-based compensation	(1.3)	(18.1)	(3.8)
Non-deductible officer compensation	6.4	6.4	6.4
Business credits	(5.2)	(10.0)	(3.8)
Foreign tax differential	(0.5)	6.4	(6.7)
U.S. inclusion of foreign income	21.0	3.6	5.2
Deferred taxes on unremitted foreign earnings	0.3	0.7	3.5
Other differences	(1.3)	0.4	0.2
Provision for income taxes	$ 52.4	$ 64.6	$ 31.4

Non-current deferred tax assets and non-current deferred tax liabilities are included in "Non-current other assets" and "Other long-term liabilities," respectively, on our consolidated balance sheets.

Significant components of our deferred tax assets (liabilities) as of the end of fiscal 2023 and 2022 consisted of the following (in millions):

	2023	2022
Deferred tax assets:		
Capital loss carryforward	$ 34.1	$ 33.8
Inventory write downs	1.9	2.6
Property and equipment and intangible assets	42.1	11.7
Share-based compensation	10.3	12.0
Nondeductible interest	4.9	5.4
Lease liabilities	10.1	11.2
Business credit carryforward	45.1	62.0
Net operating loss carryforward	10.8	16.3
Other accruals	5.1	5.6
	164.4	160.6
Valuation allowance	(78.4)	(75.0)
	86.0	85.6
Deferred tax liabilities:		
Property and equipment	(1.9)	(2.0)
Right-of-use assets	(9.5)	(11.5)
Unremitted foreign earnings	(14.3)	(22.1)
Acquisition intangibles	(31.4)	(45.8)
	(57.1)	(81.4)
Net deferred tax assets	$ 28.9	$ 4.2

The fiscal 2022 capital loss carryforward deferred tax asset and its corresponding valuation allowance includes a reclassification adjustment of $16.0 million to conform to the current period presentation. This reclassification had no impact on previously reported deferred tax assets.

Realization of deferred tax assets depends on our generating sufficient U.S. and certain foreign taxable income in future years to obtain a benefit from the utilization of those deferred tax assets on our tax returns. Accordingly, the amount of deferred tax assets considered realizable may increase or decrease when we reevaluate the underlying basis for our estimates of future U.S. and foreign taxable income. As of the end of fiscal 2023, a valuation allowance of $78.4 million was maintained to reduce deferred tax assets primarily related to state tax credits and capital losses carryforwards that are not more likely than not to be realized through future taxable income. The net change in the valuation allowance during fiscal 2023 was an increase of $3.4 million, primarily due to an increase of unrealized deferred tax assets associated with state tax credits.

We consider most of the earnings of our foreign subsidiaries as not indefinitely reinvested overseas and have made appropriate provisions for income or withholding taxes, that may result from a future repatriation of those earnings. As a result, $14.3 million of our deferred tax liability is associated with unremitted foreign earnings, which if remitted would not result in a further provision for income taxes. We continue to indefinitely reinvest $200 million on certain accumulated earnings and outside basis differences primarily related to our DSPG acquisition. If the undistributed earnings and other outside basis differences were recognized in a taxable transaction, the associated foreign tax credits would be expected to reduce the U.S. income tax liability associated with the foreign distribution or the otherwise taxable transaction. As of our fiscal 2023, assuming full utilization of the associated foreign tax credits, the potential net deferred tax liability associated with these undistributed earnings and outside basis differences would be approximately $46 million.

As of the end of fiscal 2023, we had federal, California, and foreign net operating loss carryforwards of approximately $28.7 million, $25.0 million, and $49.6 million, respectively. The federal and California net operating loss will begin to expire in fiscal 2037 and 2027, respectively, if not utilized. Most of our foreign net operating losses have no expiration date. Under current tax law, net operating loss and tax credit carryforwards available to offset future income or income taxes may be limited by statute or upon the occurrence of certain events, including significant changes in ownership.

We had $16.4 million and $53.4 million of federal and state research tax credit carryforwards, respectively, as of the end of fiscal 2023. The federal research tax credit carryforward will begin to expire in 2029 and the state research tax credit can be carried forward indefinitely.

The total liability for gross unrecognized tax benefits related to uncertain tax positions, included in other liabilities in our consolidated balance sheets, increased by $13.9 million from $29.8 million in fiscal 2022 to $43.7 million in fiscal 2023. Of this amount, $33.1 million will reduce the effective tax rate on income from operations, if recognized. A reconciliation of the beginning and ending balance of gross unrecognized tax benefits for fiscal 2023, 2022, and 2021 consisted of the following (in millions):

	2023	2022	2021
Beginning balance	$ 29.8	$ 22.6	$ 20.1
Increase in unrecognized tax benefits related to current year tax positions	13.7	7.1	5.5
Increase in unrecognized tax benefits related to prior year tax positions	2.5	5.5	—
Decrease due to effective settlement with tax authorities	(1.1)	—	—
Remeasurement of unrecognized tax benefits	(0.3)	(0.5)	—
Decrease due to statute expiration	(0.9)	(4.9)	(3.0)
Ending Balance	$ 43.7	$ 29.8	$ 22.6

Accrued interest and penalties increased by $0.5 million in fiscal 2023 as compared to fiscal 2022 and increased by $0.8 million in fiscal 2022 as compared to fiscal 2021. Accrued interest and penalties were $3.0 million and $2.5 million as of the end of fiscal 2023and 2022, respectively. Our policy is to classify interest and penalties, if any, as components of income tax expense.

It is reasonably possible that the amount of liability for unrecognized tax benefits may change within the next 12 months; an estimate of the range of possible changes could result in a decrease of $1.4 million to an increase of $8.8 million. Any prospective adjustments to our unrecognized tax benefits will be recorded as an increase or decrease to income tax expense and cause a corresponding change to our effective tax rate. Accordingly, our effective tax rate could fluctuate materially from period to period.

Our major tax jurisdictions are the U.S., Hong Kong SAR, Japan, Israel and the U.K. From fiscal 2017 onward, we remain subject to examination by one or more of these jurisdictions.

15. Segment, Customers, and Geographic Information

We operate in one segment: the development, marketing, and sale of semiconductor products used in electronic devices and products. We generate our revenue from three broad product categories: the IoT product applications market, the personal computing, or PC, product applications market, and the mobile, product applications market. The chief executive officer was identified as the chief operating decision maker, or CODM, and is ultimately responsible for and actively involved in the allocation of resources and the assessment of our performance. The fact that we operate in only one reportable segment is based on the following:

- Our organizational structure is based along functional lines. Each of the functional department heads reports directly to the CODM.
- The assessments of our performance company-wide, including assessment of our incentive compensation plan, are based largely on our 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 our operations and product development.

Net revenue within geographic areas based on our customers' locations for fiscal 2023, 2022, and 2021, consisted of the following (in millions):

	2023	2022	2021
China	$ 485.0	$ 609.1	$ 524.0
Taiwan	367.4	539.4	382.6
Japan	337.7	453.1	330.7
Vietnam	61.5	11.8	3.4
Other	62.6	72.1	66.1
South Korea	35.0	39.1	28.5
United States	5.9	15.1	4.3
	$ 1,355.1	$ 1,739.7	$ 1,339.6

Net revenue from external customers for each group of similar products for fiscal 2023, 2022, and 2021 consisted of the following (in millions):

	2023	2022	2021
IoT product applications	$ 946.3	$ 1,100.9	$ 612.9
PC product applications	217.3	343.0	354.7
Mobile product applications	191.5	295.8	372.0
	$ 1,355.1	$ 1,739.7	$ 1,339.6

Long-lived assets within geographic areas as of the end of fiscal 2023 and 2022 consisted of the following (in millions):

	2023	2022
United States	$ 119.1	$ 118.1
Asia Pacific	195.8	196.4
EMEA	866.4	945.0
	$ 1,181.3	$ 1,259.5

The fiscal 2022 long-lived assets reported in the above table includes a reclassification of approximately $428.0 million to conform to the current period presentation. The reclassification relates to goodwill and intangible assets previously reported within the Asia Pacific region that are now presented within the EMEA region. This reclassification had no impact on previously reported geographic long-lived assets.

Our goodwill of $816.4 million has been allocated to two reporting units which include IoT and Mobile/PC.

Major customers' revenue as a percentage of total net revenue for fiscal 2023, 2022, and 2021 were as follows:

	2023	2022	2021
Customer A	10%	12%	10%
Customer B	*	13%	13%
Customer C	*	*	14%

* Less than 10%

16. Restructuring Activities

We have initiated various strategic restructuring actions primarily intended to reduce costs, gain synergies from our recent acquisitions and align our business in response to market conditions.

The following table summarizes the restructuring activity and related charges during the periods presented (in millions):

	Years Ended		
	2023	2022	2021
Balance, beginning of period	$ 1.4	$ 0.2	$ 6.1
Charges	—	18.3	7.4
Payments	(1.4)	(17.1)	(13.3)
Balance, end of period	$ —	$ 1.4	$ 0.2

During fiscal 2023, no restructuring charges were recorded.

During fiscal 2022, we recorded restructuring and related charges of $18.3 million in our consolidated statements of operations. The charges were for activities intended to further improve efficiencies in our operational activities and gain synergies from the DSPG acquisition. These activities from the restructuring actions taken during fiscal 2022 are complete as of the end of fiscal 2022.

During fiscal 2021, we recorded restructuring and related charges of $7.4 million in our consolidated statements of operations. The charges were for activities to gain synergies from our DisplayLink acquisition. The activities from the restructuring actions taken during fiscal 2021 were complete as of the end of fiscal 2021.

17. Subsequent Events

In July 2023, we entered into an agreement with Avago Technologies International Sales PTE. Limited, or Broadcom, to acquire certain developed technology intangible assets from Broadcom for an aggregate consideration of $130.0 million. We are still in the process of evaluating the proper accounting treatment under Topic 805 on Business Combinations.

On July 21, 2023, the IRS issued Notice 2023-55 which generally allows taxpayers to defer application of elements of the 2022 foreign tax credit final regulations, and related guidance, until 2024. In our case, foreign taxes which were creditable under the prior regulations will continue to be creditable for our fiscal 2023. As this Notice was issued subsequent to our fiscal 2023 and represents a retroactive change in tax law, we anticipate recording a discrete tax benefit in the first quarter of fiscal 2024 in the amount of approximately $12 million.

NON-GAAP FINANCIAL INFORMATION

In evaluating our business, we consider and use gross margin and operating profit as a percentage of revenue and net income/(loss) per share excluding certain acquisition/divestiture and integration related costs (including primarily amortization of acquired intangible assets, inventory fair value adjustments, integration costs, and legal and consulting costs), share-based compensation charges, loss/(recovery) on supply commitment charges, restructuring costs, retention costs, in-process research and development charges, CEO severance costs, non-cash interest on convertible debt, amortization prepaid development costs, vendor settlement accrual, gain on sale of audio technology assets, gain on sale of assets, gain on sale and leaseback transaction, gain on supplier settlement, loss on extinguishment of debt, other items, net (including non-cash interest, net, arbitration costs, equity investment gain/loss, and non-GAAP share adjustment), and tax adjustments as a supplemental measure of operating performance. These adjustments to gross margin and operating profit as a percentage of revenue and net income/(loss) per share eliminate the impact of certain non-cash expenses and other items that may be either recurring or non-recurring that we do not consider to be indicative of our core ongoing operating performance. These non-GAAP measures of gross margin and operating profit as a percentage of revenue and net income per share are not measurements of our financial performance under GAAP and should not be considered as an alternative to GAAP gross margin and operating profit as a percentage of revenue and net income/(loss) per share. We present non-GAAP gross margin and operating profit as a percentage of revenue and net income per share because we consider it an important supplemental measure of our performance. We believe these measures facilitate operating performance comparisons from period to period by eliminating potential differences in gross margin and operating profit as a percentage of revenue and net income/(loss) per share caused by the existence and timing of certain acquisition/divestiture and integration related costs (including primarily amortization of acquired intangible assets, inventory fair value adjustments, integration costs, and legal and consulting costs), share-based compensation charges, loss/(recovery) on supply commitment charges, restructuring costs, retention costs, in-process research and development charges, CEO severance costs, non-cash interest on convertible debt, amortization prepaid development costs, vendor settlement accrual, gain on sale of audio technology assets, gain on sale of assets, gain on sale and leaseback transaction, gain on supplier settlement, loss on extinguishment of debt, other items, net (including non-cash interest, net, arbitration costs, equity investment gain/loss, and non-GAAP share adjustment), and tax adjustments. Non-GAAP gross margin and operating profit as a percentage of revenue and net income per share have limitations as analytical tools and should not be considered in isolation or as a substitute for our GAAP gross margin and operating profit as a percentage of revenue and net income/(loss) per share. The principal limitation of these measures is they do not reflect our actual expenses and may thus have the effect of inflating our GAAP gross margin and operating profit as a percentage of revenue and net income/(loss) per share.

The following is a reconciliation of the differences between GAAP and non-GAAP gross margin as a percentage of revenue for the periods indicated:

	Fiscal Years Ended June				
	2023	2022	2021	2020	2019
GAAP gross margin as a percentage of revenue	52.8%	54.2%	45.6%	40.7%	33.8%
Acquisition and related costs [(1)]……………………………………	7.0%	5.6%	7.7%	3.0%	4.2%
Share-based compensation charge…………………………………	0.3%	0.2%	0.3%	0.2%	0.2%
Loss/(recovery) on supply commitment…………………………	-	-	-	-0.2%	0.6%
Retention costs………………………………………………………	-	-	-	0.1%	-
Non-GAAP gross margin as a percentage of revenue	60.1%	60.0%	53.6%	43.7%	38.8%

(1) Acquisition related costs consists of items related to acquisitions, including primarily amortization associated with certain acquired intangibles and inventory fair value adjustments.

The following is a reconciliation of the differences between GAAP and non-GAAP operating profit as a percentage of revenue for the periods indicated:

	Fiscal Years Ended June				
	2023	2022	2021	2020	2019
	(in millions, except percentages)				
GAAP Operating income /(loss)	$ 154.3	$ 350.4	$ 147.0	$ 68.9	$ (6.3)
GAAP operating margin/(loss) percentage	*11.4%*	*20.1%*	*11.0%*	*5.2%*	*-0.4%*
Acquisition/divestiture and integration related costs [(1)]	132.2	140.2	139.4	55.6	77.3
Share-based compensation charge	122.6	133.0	93.1	60.4	59.0
Loss/(recovery) on supply commitment	-	-	(0.6)	(3.0)	9.0
Restructuring costs	-	18.3	7.4	33.0	17.7
Retention costs	-	-	5.1	13.9	2.5
In-process research and development charge	-	-	-	2.4	-
CEO severance	-	-	-	-	2.2
Amortization prepaid development costs	5.8	10.0	9.2	-	-
Vendor settlement accrual	4.0	-	-	-	-
Gain on sale of audio technology assets	-	-	(34.2)	-	-
Other items, net[(2)]	-	-	-	-	(1.7)
Non-GAAP operating income	$ 418.9	$ 651.9	$ 366.4	$ 231.2	$ 159.7
Non-GAAP operating margin percentage	*30.9%*	*37.5%*	*27.4%*	*17.3%*	*10.8%*

(1) Acquisition/divestiture and integration related costs consists of items related to acquisitions, potential acquisitions and divestitures of businesses or assets, including primarily amortization associated with acquired intangibles, inventory fair value adjustments, integration costs, and legal and consulting costs.

(2) Other items, net, within operating income GAAP to Non-GAAP adjustments includes arbitration costs and acquisition related severance.

The following is a reconciliation of the differences between GAAP and non-GAAP net income/(loss) per share for the periods indicated:

	Fiscal Years Ended June				
	2023	2022	2021	2020	2019
GAAP net income/(loss) per share - diluted	$ 1.83	$ 6.33	$ 2.08	$ 3.41	$ (0.66)
Acquisition/divestiture and integration related costs [(1)]	3.29	3.44	3.64	1.60	2.23
Share-based compensation	3.05	3.27	2.43	1.73	1.71
Loss/(recovery) on supply commitment	-	-	(0.01)	(0.09)	0.26
Restructuring costs	-	0.45	0.19	0.95	0.51
Retention costs	-	-	0.13	0.40	0.07
In-process research and development charges	-	-	-	0.07	-
CEO severance	-	-	-	-	0.06
Gain on sale of audio technology assets	-	-	(0.89)	-	-
Amortization prepaid development costs	0.14	0.24	0.24	-	-
Vendor settlement accrual	0.10	-	-	-	-
Non-cash interest on convertible debt	-	0.04	0.50	0.53	0.50
Gain on sale of assets	-	-	-	(3.02)	-
Gain on sale and leaseback transaction	-	(0.13)	-	-	-
Gain on supplier settlement	-	(0.04)	-	-	-
Loss on extinguishment of debt	-	0.20	-	-	-
Other items, net[(2)]	0.06	0.01	0.26	0.07	(0.14)
Tax adjustments	(0.35)	(0.27)	(0.31)	0.30	(0.54)
Non-GAAP net income per share - diluted	$ 8.12	$ 13.54	$ 8.26	$ 5.95	$ 4.00

(1) Acquisition/divestiture and integration related costs consists of items related to acquisitions, potential acquisitions and divestitures of businesses or assets, including primarily amortization associated with acquired intangibles, inventory fair value adjustments, integration costs, and legal and consulting costs.

(2) Other items, net, within net income GAAP to Non-GAAP adjustments includes arbitration costs, equity investment loss, acquisition related severance, amortization of debt issuance costs and non-GAAP share adjustment.

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CORPORATE INFORMATION

EXECUTIVE TEAM

Michael Hurlston	President & Chief Executive Officer
Dean Butler	Senior Vice President & Chief Financial Officer
Saleel Awsare	Senior Vice President & General Manager of Enterprise/Mobile
Michael Brooker	Senior Vice President, Information Technology & Chief Information Officer
Satish Ganesan	Senior Vice President & General Manager of Automotive/VR, Chief Strategy Officer
Vikram Gupta	Senior Vice President & General Manager, IoT Processors and Chief Product Officer
Lori Stahl	Senior Vice President & Chief People Officer
Venkat Kodavati	Senior Vice President & General Manager, Wireless Products
Todd Lepinski	Senior Vice President, Worldwide Sales
John McFarland	Senior Vice President, General Counsel & Secretary
Kermit Nolan	Corporate Vice President & Chief Accounting Officer
Divyesh Shah	Senior Vice President, Operations

BOARD OF DIRECTORS

Nelson Chan	Chair of the Board, Synaptics
Jeffrey Buchanan	Independent Consultant
Keith Geeslin	Partner, Francisco Partners
Susan Hardman	Former Executive
Michael Hurlston	President & Chief Executive Officer, Synaptics
Patricia Kummrow	Vice President, Network and Edge Group, and General Manager, Ethernet Division, Intel Corporation
Vivie "YY" Lee	Independent Consultant
James Whims	Partner, Alsop-Louie Partners

STOCKHOLDERS MEETING

Our annual meeting of stockholders will take place on Tuesday, October 24, 2023, at 9:00 a.m. Pacific time and will be held via live interactive webcast on the internet at www.virtualshareholdermeeting.com/syna2023

ANNUAL REPORT COPIES

Stockholders may obtain copies of the company's Annual Report on Form 10-K, as filed with the Securities and Exchange Commission, without charge from Synaptics Incorporated, 1109 McKay Drive, San Jose, CA 95131. Such information is also available on the company's website at www.synaptics.com

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