

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

FORM 10-K

(Mark One)

Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended **January 30, 2022**
or

Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the transition period from _____ to _____
Commission File Number **001-06395**

SEMTECH CORPORATION

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

95-2119684
(I.R.S. Employer
Identification No.)

200 Flynn Road, Camarillo, California, 93012-8790
(Address of principal executive offices, Zip Code)

Registrant's telephone number, including area code: (805) 498-2111

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock par value \$0.01 per share	SMTC	The Nasdaq Global Select Market

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

None
(Title of Class)

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

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

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

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

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

Large Accelerated Filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

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

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

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

The aggregate market value of the common stock held by non-affiliates of the registrant (based upon the closing sale price of \$61.91 on The Nasdaq Global Select Market) as of August 1, 2021 was approximately \$3.1 billion. Stock held by directors, officers and stockholders owning 10% or more of the outstanding common stock (as reported by stockholders on Schedules 13D and 13G) were excluded as they may be deemed affiliates. This determination of affiliate status is not a conclusive determination for any other purpose.

Number of shares of our common stock, \$0.01 par value per share, outstanding at March 11, 2022: 64,106,315.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement in connection with registrant's 2022 annual meeting of stockholders to be filed with the Securities and Exchange Commission no later than 120 days after the end of the registrant's fiscal year ended January 30, 2022 are incorporated by reference into Part III hereof.

SEMTECH CORPORATION
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FOR THE YEAR ENDED JANUARY 30, 2022

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Unless the context otherwise requires, the use of the terms "Semtech," "the Company," "we," "us" and "our" in this Annual Report on Form 10-K refers to Semtech Corporation and, as applicable, its consolidated subsidiaries. This Annual Report on Form 10-K may contain references to the Company's trademarks and to trademarks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this Annual Report on Form 10-K, including logos, artwork and other visual displays, may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other companies' trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other company.

*Special Note
Regarding Forward-Looking and Cautionary Statements*

This Annual Report on Form 10-K contains "forward-looking statements" within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, as amended, based on our current expectations, estimates and projections about our operations, industry, financial condition, performance, operating results, and liquidity. Forward-looking statements are statements other than historical information or statements of current condition and relate to matters such as future financial performance, future operational performance, the anticipated impact of specific items on future earnings, and our plans, objectives and expectations. Statements containing words such as "may," "believe," "anticipate," "expect," "intend," "plan," "project," "estimate," "should," "will," "designed to," "projections," or "business outlook," or other similar expressions constitute forward-looking statements. Forward-looking statements involve known and unknown risks and uncertainties that could cause actual results and events to differ materially from those projected. Potential factors that could cause actual results to differ materially from those in the forward-looking statements include, but are not limited to those set forth under "Risk Factors" in Item 1A of this Annual Report on Form 10-K, as such risk factors may be amended, supplemented or superseded from time to time by other reports we file with the Securities and Exchange Commission ("SEC"). In light of the significant risks and uncertainties inherent in the forward-looking information included herein that may cause actual performance and results to differ materially from those predicted, any such forward-looking information should not be regarded as representations or guarantees by the Company of future performance or results, or that its objectives or plans will be achieved, or that any of its operating expectations or financial forecasts will be realized. Reported results should not be considered an indication of future performance. Investors are cautioned not to place undue reliance on any forward-looking information contained herein, which reflect management's analysis only as of the date hereof. Except as required by law, the Company assumes no obligation to publicly release the results of any update or revision to any forward-looking statement that may be made to reflect new information, events or circumstances after the date hereof or to reflect the occurrence of unanticipated or future events, or otherwise.

The factors noted above, and the risks included in our SEC filings, may be increased or intensified as a result of the COVID-19 pandemic. The extent to which the COVID-19 pandemic ultimately impacts our business, results of operations and financial condition will depend on future developments, which are highly uncertain and cannot be predicted. In addition to regarding forward-looking statements with caution, you should consider that the preparation of the consolidated financial statements requires us to draw conclusions and make interpretations, judgments, assumptions and estimates with respect to certain factual, legal, and accounting matters. Our consolidated financial statements might have been materially impacted if we had reached different conclusions or made different interpretations, judgments, assumptions or estimates.

PART I

Item 1. Business

General

We are a leading global supplier of high-performance analog and mixed-signal semiconductors and advanced algorithms and were incorporated in Delaware in 1960. We design, develop, manufacture and market a wide range of products for commercial applications, the majority of which are sold into the infrastructure, high-end consumer and industrial end markets.

Infrastructure: data centers, passive optical networks ("PON"), base stations, optical networks, servers, carrier networks, switches and routers, cable modems, wireless local area network ("LAN") and other communication infrastructure equipment.

High-End Consumer: smartphones, tablets, wearables, desktops, notebooks, and other handheld products, wireless charging, set-top boxes, digital televisions, monitors and displays, digital video recorders and other consumer equipment.

Industrial: Internet of Things ("IoT") applications, analog and digital video broadcast equipment, video-over-IP solutions, automated meter reading, smart grid, wireless charging, military and aerospace, medical, security systems, automotive, industrial and home automation and other industrial equipment.

Our end customers are primarily original equipment manufacturers ("OEMs") that produce and sell electronics.

Overview of the Semiconductor Industry

The semiconductor industry is broadly divided into analog and digital semiconductor products. Analog semiconductors condition and regulate "real world" functions such as temperature, speed, sound and electrical current. Digital semiconductors process binary information, such as that used by computers. Mixed-signal devices incorporate both analog and digital functions into a single chip and provide the ability for digital electronics to interface with the outside world.

The market for analog and mixed-signal semiconductors differs from the market for digital semiconductors. The analog and mixed-signal industry is typically characterized by longer product life cycles than the digital industry. In addition, analog semiconductor manufacturers tend to have lower capital investment requirements for manufacturing because their facilities tend to be less dependent than digital producers on state-of-the-art production equipment to manufacture leading edge process technologies. The end-product markets for analog and mixed-signal semiconductors are more varied and more specialized than the relatively standardized digital semiconductor product markets.

Another difference between the analog and digital markets is the amount of available talented labor. The analog industry relies more heavily than the digital industry on design and applications talent to distinguish its products from one another. Digital expertise is extensively taught in universities due to its overall market size, while analog and mixed-signal expertise tends to be learned over time based on experience and hands-on training. Consequently, personnel with analog training are scarcer than digital trained engineers. This difference has historically made it more difficult for new suppliers in the analog market to quickly develop products and gain significant market share.

Advancements in digital signal processing technology typically drive the need for corresponding advancements in analog and mixed-signal solutions. We believe that the diversity of our applications allows us to take advantage of areas of relative market strength and reduces our vulnerability to competitive pressure in any one area.

Business Strategy

Our objective is to be a leading supplier of high-performance analog and mixed-signal semiconductors and advanced algorithms to the fastest growing segments of our target markets. We intend to leverage our pool of skilled technical personnel to develop new products or, where appropriate, use strategic acquisitions or small strategic investments to either accelerate our position in the fastest growing areas or to gain entry into these areas. In order to capitalize on our strengths in analog and mixed-signal processing design, development and marketing, we intend to pursue the following strategies:

Leverage our rare analog and mixed-signal design expertise

We invest heavily in the human resources needed to define, design and market high-performance analog and mixed-signal platform products. We have built a team of experienced engineers who combine industry expertise with advanced semiconductor design expertise to meet customer requirements and enable our customers to get their products to market rapidly. We intend to leverage this strength to achieve new levels of integration, power reduction and performance, enabling our customers to achieve differentiation in their end systems.

Continue to release proprietary new products, achieve new design wins and cross-sell products

We are focused on developing unique, new, and proprietary products that bring value to our target customers in our target markets. These products are typically differentiated in performance but are priced competitively. We also focus on achieving design wins for our products with current and future customers. Design wins are indications by the customer that they intend to

incorporate our products into their end product designs. Although we believe that a design win is an indicator of future potential growth, it does not inevitably result in us being awarded business or receiving a purchase commitment. Our technical talent works closely with our customers in securing design wins, defining new products and in implementing and integrating our products into our customers' systems. We also focus on selling our complete portfolio of products to our existing customers, as we believe the technical expertise of our marketing and sales teams allows us to identify and capitalize on cross-selling opportunities.

Focus on fast-growing market segments and regions

We have chosen to target the analog and mixed-signal sub-segments of some of the most exciting and fastest growing end markets. We participate in these markets by focusing on specific product areas within the analog and mixed-signal market, including products for infrastructure, high-end consumer and industrial end markets. All of these markets are characterized by their need for leading-edge, high-performance analog and mixed-signal semiconductor technologies.

The infrastructure, high-end consumer and industrial end markets we supply are characterized by several trends that we believe drive demand for our products. The key trends that we believe are significant for our future growth include:

- Increasing bandwidth over high-speed networks, fueling growth in high speed multimedia transmission, as well as better connectivity;
- Demand for smaller, lighter, more highly integrated and feature-rich mobile devices; and
- Increasing demands for cloud and internet connectivity to low power sensors, enabling a more connected, intelligent and sustainable planet.

Our products address these market trends by providing solutions that are ultra-low power thereby extending battery life, small form factor enabling smaller more mobile devices, highly integrated enabling more functionality within devices, and high-performance enabling product differentiation within our customer base. Additionally, as communications functions are increasingly integrated into a range of systems and devices, these products require analog sensing, processing and control capabilities, which increases the number and size of our targeted end markets.

Leverage outsourced semiconductor fabrication capacity

We outsource most of our manufacturing in order to focus more of our resources on designing, developing and marketing our products. A significant amount of our third-party subcontractors and suppliers, including third-party foundries that supply silicon wafers, are located in the United States ("U.S."), Taiwan and China. We believe that outsourcing our manufacturing provides us numerous benefits, including capital efficiency, the flexibility to adopt and leverage emerging process technologies without significant investment risk, and a more variable cost of goods, all of which provide us with greater operating flexibility.

Products and Technology

We design, develop, manufacture and market high-performance analog and mixed-signal semiconductors and advanced algorithms. We operate and account for results in two reportable segments—the High-Performance Analog Group and the System Protection Group. The High-Performance Analog Group is comprised of our Signal Integrity and Wireless and Sensing product lines, which represent two operating segments. The System Protection Group is comprised of our Protection product line, which represents a separate operating segment (see Note 15 on segment information).

Signal Integrity. We design, develop, manufacture and market a portfolio of optical data communications and video transport products used in a wide variety of infrastructure and industrial applications. Our comprehensive portfolio of integrated circuits ("ICs") for data centers, enterprise networks, PON, and wireless base station optical transceivers and high-speed interfaces ranges from 100Mbps to 400Gbps and supports key industry standards such as Fibre Channel, Infiniband, Ethernet, PON and synchronous optical networks. Our video products offer advanced solutions for next generation high-definition broadcast applications, as well as highly differentiated video-over-IP technology for professional audio video ("Pro AV") applications.

Wireless and Sensing. We design, develop, manufacture and market a portfolio of specialized radio frequency products used in a wide variety of industrial, medical and communications applications, and specialized sensing products used in industrial and consumer applications. Our wireless products, which include our LoRa® devices and wireless radio frequency technology ("LoRa Technology"), feature industry leading and longest range industrial, scientific and medical radio, enabling a lower total cost of ownership and increased reliability in all environments. These features make these products particularly suitable for machine-to-machine and IoT applications. Our unique sensing technology enables proximity sensing and advanced user interface solutions for our mobile and consumer products. Our wireless and sensing products can be found in a broad range of applications in the industrial, medical, and consumer markets. We also design, develop, and market power product devices that control, alter, regulate, and condition the power within electronic systems focused on the LoRa and IoT infrastructure segment. The highest volume product types within this category are switching voltage regulators, combination switching and linear regulators, smart regulators, isolated switches, and wireless charging.

Protection. We design, develop, manufacture and market high-performance protection devices, which are often referred to as transient voltage suppressors ("TVS"). TVS devices provide protection for electronic systems where voltage spikes (called transients), such as electrostatic discharge, electrical over stress or secondary lightning surge energy, can permanently damage sensitive ICs. Our portfolio of protection solutions include filter and termination devices that are integrated with the TVS device. Our products provide robust protection while preserving signal integrity in high-speed communications, networking and video interfaces. These products also operate at very low voltage. Our protection products can be found in a broad range of applications including smart phones, LCD and organic light-emitting diode TVs and displays, set-top boxes, monitors and displays, tablets, computers, notebooks, base stations, routers, automobile and industrial systems.

Our net sales by product line were as follows:

(in thousands)	Fiscal Years		
	2022	2021	2020
Signal Integrity	\$ 291,114	\$ 255,640	\$ 222,846
Wireless and Sensing	246,174	177,534	167,454
Protection	203,570	161,943	157,212
Total	\$ 740,858	\$ 595,117	\$ 547,512

Semtech End Markets

Our products are sold primarily to customers in the infrastructure, high-end consumer and industrial end markets. Our net sales by major end market as a percentage of total net sales are detailed below:

(percentage of net sales)	Fiscal Years		
	2022	2021	2020
Infrastructure	35 %	42 %	38 %
High-End Consumer	30 %	27 %	29 %
Industrial	35 %	31 %	33 %
Total	100 %	100 %	100 %

We believe that our diversity in end markets provides stability to our business and opportunity for growth.

The following table depicts our main product lines and their end market and product applications:

Product Groups	Typical End Product Applications		
	Infrastructure	High-End Consumer	Industrial
Signal Integrity	Optical module ICs supporting up to 400Gb/s for Ethernet, Fibre Channel protocols in data center and access applications, and 4G/5G/LTE wireless applications		Serial Digital Interconnect interface ICs for Broadcast Video, Video over IP technology for Pro AV applications
Wireless and Sensing		Smartphones, media players, tablets, wearables, hearing aids and high end audio	IoT, Industrial Asset Monitoring, Tracking & Logistics, Smart Metering, Smart Home, Smart Building / City, Smart Agriculture, Power Management and Aviation & Aerospace
Protection	Servers, workstations, desktop PC/notebooks, ultrabooks, optical modules, printers, copiers, 4G/5G/LTE base stations, 1/10 Gb/s Ethernet	Smartphones, tablets, wearables, cameras, TVs, set top boxes	Industrial automation, measurement & instrumentation, automotive, IoT

Seasonality

Seasonality has not historically had a material impact on our business segments or results of operations.

Sales and Marketing

Net sales made directly to customers during fiscal years 2022, 2021 and 2020, were approximately 13%, 18% and 28% of total net sales, respectively. The remaining 87%, 82% and 72% of net sales, respectively, were made through independent distributors. The decline in direct sales is due to customers electing to leverage the value of distribution to better manage their supply chain. We have direct sales personnel located throughout the U.S., Europe, and Asia who manage the sales activities of independent sales representative firms and independent distributors. We expense our advertising costs as they are incurred.

We operate internationally through our foreign subsidiaries. Semtech (International) AG serves the European and Asian markets from its headquarters in Rapperswil, Switzerland, and through its wholly-owned subsidiaries based in the United Kingdom ("U.K.") and Japan. Semtech (International) AG also maintains branch offices, either directly or through one of its wholly-owned subsidiaries, in multiple countries or territories including China, Taiwan and South Korea. Semtech Canada Corporation serves the Canadian market for most of the products from our Signal Integrity Products Group from its headquarters in Burlington, Ontario. Independent representatives and distributors are also used to serve customers throughout the world. Some of our distributors and sales representatives also offer products from our competitors, as is customary in the industry.

Customers, Sales Data and Backlog

As a result of the breadth of our products and markets, we have a broad and balanced range of customers.

Representative Customers by End Markets:

Infrastructure	High-End Consumer	Industrial
Alibaba Group Holding, Ltd.	LG Electronics Inc.	Helium
Alphabet Inc.	Quanta Computer	Honeywell Inc.
Cisco Systems, Inc.	Samsung Electronics Co., Ltd.	Itron, Inc.
Ericsson	Sharp Corporation	Panasonic Corp
Hewlett-Packard	Vivo Technology Co., Ltd.	Raytheon Company
Lumentum Holdings Inc.		Rockwell Automation
Nokia Corporation		Sharp Corporation
Samsung Electronics Co., Ltd.		Sonova International
Sumitomo Electric		Sony Corp
ZTE Corporation		

Our customers include major OEMs and their subcontractors in the infrastructure, high-end consumer and industrial end markets. Our products are typically purchased by these customers for their performance, price and/or technical support, as compared to our competitors.

In fiscal years 2022, 2021 and 2020, sales in the U.S. represented 10%, 10% and 9% of our sales, respectively, while foreign sales represented 90%, 90% and 91% of our sales, respectively. Sales to customers located in China (including Hong Kong) and South Korea comprised 60% and 6% of our sales, respectively, in fiscal year 2022. No other foreign country comprised more than 5% of our sales in fiscal year 2022.

Concentration of Net Sales - Significant Customers

The following table sets forth the concentration of sales among the customers that accounted for more than 10% of our net sales in at least one of the fiscal years 2022, 2021 and 2020:

(percentage of net sales)	Fiscal Years		
	2022	2021	2020
Frontek Technology Corporation (and affiliates)	18 %	16 %	11 %
Trend-tek Technology Ltd. (and affiliates)	17 %	17 %	13 %
CEAC International Ltd. (and affiliates)	11 %	11 %	8 %
Arrow Electronics (and affiliates)	10 %	9 %	9 %
Premier Technical Sales Korea, Inc. (and affiliates) ⁽¹⁾	6 %	6 %	7 %
Samsung Electronics (and affiliates)	2 %	2 %	4 %

⁽¹⁾ Premier is a distributor with a concentration of sales to Samsung Electronics (and affiliates). The above percentages represent our estimate of the sales activity related to Samsung Electronics (and affiliates) that is passing through this distributor.

Concentration of Accounts Receivable - Significant Customers

The following table shows customers that had an outstanding receivable balance that represented at least 10% of our total net receivables as of one or more of the dates indicated:

(percentage of net receivables)	January 30, 2022	January 31, 2021
Frontek Technology Corporation (and affiliates)	17 %	10 %
CEAC International Ltd. (and affiliates)	10 %	14 %
Trend-tek Technology Ltd. (and affiliates)	7 %	14 %

Backlog

Our backlog of orders as of the end of fiscal years 2022, 2021 and 2020 was approximately \$250.1 million, \$161.4 million and \$93.0 million, respectively. The majority of our backlog is typically requested for delivery within six months. In markets where the end system life cycles are relatively short, customers typically request delivery in four to eight weeks. A backlog analysis at any given time gives little indication of our future business except on a short-term basis, principally within the next 45 days. We do not have any significant backlog with deliveries beyond 18 months.

Manufacturing Capabilities

Our strategy is to outsource most of our manufacturing functions to third-party foundries and assembly and test contractors. The third-party foundries fabricate silicon wafers, while the assembly and test contractors package and test our products. We believe this outsourcing permits us to take advantage of the best available technology, leverage the capital investment of others and reduce our operating costs associated with manufacturing assets.

We perform a limited amount of internal probe and final test activities at our facilities in Camarillo, Irvine and San Diego in California, Neuchâtel in Switzerland, and Reynosa in Mexico. These activities accommodate situations in which tight coupling with product design is desirable or where there are unique requirements. A majority of our very small form factor protection devices are packaged at our facilities in Colorado Springs, Colorado. Our packaged discrete rectifier products are packaged and tested in-house in Reynosa, Mexico. Almost all of our other products are packaged and tested by outside subcontractors.

In keeping with our mostly "fabless" business model, we have no wafer fabrication facilities except for our operation in Reynosa, Mexico. In fiscal year 2022, the Reynosa facility provided approximately 14% of the silicon for our packaged discrete rectifier products, which were approximately 2% of our end product net sales in fiscal year 2022. The remaining end products representing 98% of our net sales were supported with finished silicon wafers purchased from third-party wafer foundries primarily located in the U.S., Taiwan and China. We anticipate that substantially all of the silicon wafers we require will come from third-party foundries in fiscal year 2023.

Despite our use of third-party wafer foundries for sourcing a majority of our silicon needs, we do maintain internal process development capabilities. Our process engineers work closely with our third-party foundries on the improvement and development of process capabilities. In fiscal year 2022, we used various manufacturing processes, including Bipolar, CMOS, RF-CMOS and Silicon Germanium ("SiGe") BiCMOS processes.

While we do have some redundancy of fabrication processes by using multiple third-party foundries, any interruption of supply by one or more of these foundries could materially impact us. As a result, we maintain some amount of business interruption insurance in part to help reduce the financial risk associated with a wafer supply interruption, but we are not fully insured against this risk.

Although our products are made from basic materials (principally silicon, metals and plastics), all of which are available from a number of suppliers, capacity at wafer foundries sometimes becomes constrained. The limited availability of certain materials, such as silicon wafer substrates, may impact our suppliers' ability to meet our demand needs or impact the price we are charged. The prices of certain other basic materials, such as metals, gases and chemicals used in the production of ICs, can exhibit price volatility depending on the changes in demand for these basic commodities. In most cases, we do not procure these materials ourselves, but we are nevertheless reliant on these materials for producing our products because our third-party foundry and package and test subcontractors must procure them. To help minimize risks associated with constrained capacity, we use multiple foundries and have taken other steps to prevent supply interruptions at certain foundries and subcontractors.

In addition to our development and production facilities in Colorado Springs, Colorado, which provide assembly services for a majority of our very small form factor protection devices, we use third-party subcontractors to perform almost all of our other assembly and test operations. A majority of our offshore assembly and test activity is conducted by third-party subcontractors based in China, Taiwan and Malaysia. We have operations offices located in the Philippines, Malaysia and China that support and coordinate some of the worldwide shipment of products. We have installed our own test equipment at some of our packaging and testing subcontractors in order to ensure a certain level of capacity, assuming the subcontractor has ample employees to operate the equipment. We are monitoring the impact of the COVID-19 pandemic on our suppliers and third-party subcontractors and cannot determine the extent of the impact it may continue to have on our operations. See "Item 1A. Risk Factors - Risks Relating to Production Operations - We rely on a limited number of suppliers and subcontractors, many of which are foreign-based entities, for many essential components and materials and certain critical manufacturing services and any interruption or loss of supplies or services from these entities could significantly interrupt our business operations and the production of our products."

Our arrangements with both third-party wafer foundries and package and test subcontractors are designed to provide some assurance of capacity but are not expected to assure access to all the manufacturing capacity we may need in the future.

Competition

The analog and mixed-signal semiconductor and advanced algorithms industries are highly competitive, and we expect competitive pressures to continue. Our ability to compete effectively and to expand our business will depend on our ability to continue to recruit and retain key engineering talent, our ability to execute on new product developments, and our ability to persuade customers to design these new products into their applications.

Our industry is characterized by decreasing average unit selling prices over the life of a product as the volumes typically increase. However, price decreases can sometimes be quite rapid and faster than the rate of increase of the associated product volumes. We believe we compete effectively based upon our ability to capitalize on efficiencies and economies of scale in production and sales, and our ability to maintain or improve our productivity and product yields to reduce manufacturing costs. Our industry is also characterized by rapid technological change, and design and other technological obsolescence. We believe we compete effectively based on our success in developing new products that implement new technologies, protection of our trade secrets and know-how and maintaining high product quality and reliability.

We are in direct and active competition, with respect to one or more of our product lines, with numerous manufacturers of varying size, technical capability and financial strength. A number of these competitors are dependent on semiconductor products as their principal source of income, and some are much larger and better resourced than we are. The number of competitors continues to grow due to expansion of the market segments in which we participate. Additionally, there has been a trend toward consolidation in our industry as companies attempt to strengthen or hold their market positions in an evolving industry. Such consolidations may make it more difficult for us to compete effectively, including on the basis of price, sales and marketing programs, channel coverage, technology or product functionality. We also expect that the trend among large OEMs to seek to develop their own semiconductor solutions will continue and expand. As we move into new markets, we may face competition from larger competitors with longer histories in these markets. Certain of our customers and suppliers also have divisions that produce products competitive with ours, and other customers may seek to vertically integrate competitive solutions in the future.

Intellectual Property and Licenses

We have been granted 199 U.S. patents and 239 foreign patents and have numerous patent applications pending with respect to our products and to technologies associated with our business. The expiration dates of issued patents range from 2022 to 2040. Although we consider patents to be helpful in maintaining a competitive advantage, we do not believe they create definitive competitive barriers to entry. There can be no assurance that our patent applications will lead to issued patents, that others will not develop or patent similar or superior products or technologies, or that our patents will not be challenged, invalidated, or circumvented by others. While our various intellectual property ("IP") rights are important to our success, we do not believe any individual patent, group of patents, or the expiration thereof would materially affect our business operations.

We have registered many of our trademarks in the U.S. and in various foreign jurisdictions. Registration generally provides rights in addition to basic trademark protections and is typically renewable upon proof of continued use. We have registered, or are in the process of registering, our SEMTECH trademark in many jurisdictions. In one location use of this trademark is prohibited, but we are permitted to use our Semtech International trade name. This restriction has not had a material impact on our business to date and we do not anticipate it will have a material impact in the future.

We also have registered certain materials in which we have copyright ownership, which provides additional protection for this intellectual property.

Intellectual Capital and Product Development

The development of IP and the resulting proprietary products is a critical success factor for us. Recruiting and retaining key technical talent is the foundation for designing, developing, and marketing our IP in the form of new proprietary products in the global marketplace. Our ability to recruit and retain our engineering talent is one of the keys to maintaining our competitive advantage. Historically, we have been successful in retaining our key engineering staff and recruiting new talent. One of our strategies to recruit talent is the establishment of multiple design center locations. As a result, we have design centers throughout the world.

Circuit design engineers, layout engineers, product and test engineers, application engineers, and field application engineers are our most valuable employees. Together they perform the critical tasks of design and layout of ICs, turning these circuits into silicon devices, and conferring with customers about designing these devices into their applications. The majority of our engineers fit into one of these categories. Most of these engineers have many years of experience in the design, development, and layout of circuits targeted for use in protection, advanced communications and power management, multimedia and data communications, and wireless and sensing applications. We also employ a number of software engineers and systems engineers that specialize in the development of software and systems architecture, who enable us to develop systems oriented products in select markets.

We occasionally enter into agreements with customers that allow us to recover certain costs associated with product design and engineering services. Recovery for these services could potentially lag behind the period in which we recognize the related expense, causing a difference in recognition timing that could potentially create volatility in our reported product development and engineering expenses.

Human Capital

As of January 30, 2022, our year-over-year headcount increased from 1,394 to 1,439 full-time employees worldwide, of whom 1,043 employees were based outside of the U.S. There were 577 employees in research and development, 291 employees in sales, marketing and field services, and 190 employees in general and administrative functions. The remaining employees support operational activities, including product and test engineering, assembly, manufacturing, distribution and quality functions. Our focus on innovation gives us a unique appreciation to the importance of recruitment, retention and the professional development of our employees. In fiscal year 2022, we enhanced our talent acquisition processes and capabilities, recruiting additional talent acquisition specialists to focus on the increasingly complex talent market and building our pipeline for an even more diverse and inclusive workforce. The health and wellbeing of our employees and their families remains our highest priority, and supporting and improving the local communities in which our employees are located is an important part of our culture. We continue to benchmark and enhance our total compensation and benefits packages across the 19 countries in which we are located.

Talent

Our talent strategy involves our efforts to achieve an optimal balance of internal development, supplemented by external hires. This approach contributes to and enhances our employee loyalty and commitment. As of the end of fiscal year 2022, our average employee tenure is 8.6 years, reflecting the strong engagement of our employees. As new employees continue to join Semtech, we expect their contributions to bring fresh ideas to help drive innovation and continuous improvement.

Our recruiting efforts leverage both internal and external resources to recruit and attract highly skilled and talented workers across the globe, and we encourage our employees to provide referrals for open positions. We enhanced our performance management framework, strengthening our goal setting and calibration processes. This framework ensures that feedback provided in these performance discussions supports leadership growth and long-term development. Our development programs include a library suite of professional third party trainings spanning more than 16,000 courses. In addition, Semtech offers a comprehensive annual and new hire compliance training that focuses on diversity, anti-harassment and code of conduct, among others.

Compensation

Our pay-for-performance philosophy incentivizes individual and team performance that directly contributes to the achievement of company objectives. We provide compensation packages that include a competitive base salary, annual incentive bonuses, and long-term equity awards, as appropriate. Our compensation program is designed to attract, reward and retain those highly-talented individuals who possess the critical skills necessary to support our business objectives, contribute to the achievement of our annual strategic goals and create long-term value for our stockholders. We believe that a compensation program that rewards employees both for short-term and long-term performance aligns employees' and our stockholders' interests.

Health and Wellbeing

We provide access to a variety of flexible and convenient health and welfare programs, including benefits that support their physical and mental health through tools and resources to help them maintain and improve their health status. We believe our offerings provide flexible choices to meet the diverse needs of our employees and their families globally. Each year, we review our benefits programs to ensure they are appropriately resourced and deliver value. In fiscal year 2022, we introduced a new financial wellbeing program for our U.S. based employees and in fiscal year 2023 we will seek to expand this and other elements globally.

In light of the protracted timeframes related to the COVID-19 pandemic, we continued to operate our business, while ensuring the safety of our employees and compliance with local or regional governmental regulations, which included having the vast majority of our employees work from home, as well as providing additional safety measures for employees continuing critical, on-site work.

Diversity and Inclusion

We are committed in our efforts to increase diversity and foster an inclusive work environment that supports our global workforce and helps us provide innovative solutions for our customers. In fiscal year 2022, we launched the Semtech Women's Leadership Council that elevates and empowers our female employees through collaboration, education, inspiration and peer support. We continue our focus on improving our hiring, development, advancement and retention of diverse talent and our overall diversity representation.

We continuously promote inclusion through our stated core values and principles. We provide training to all employees to

improve their understanding of behaviors that can be perceived as discriminatory, exclusionary, and/or harassing. Employees are encouraged to report such behaviors to management or via an anonymous hotline.

Community Involvement

As good corporate citizens, we aim to contribute to the communities where we live and work, and believe that this commitment helps in our efforts to attract and retain employees. We offer our employees the opportunity to give back to their local communities, contribute to charities and participate in corporate-sponsored initiatives.

Government Regulations

We are required to comply, and it is our policy to comply, with numerous government regulations that are normal and customary to businesses in our industry and that operate in our markets and operating locations.

Our sales that serve the military and aerospace markets primarily consist of high-reliability products that are offered within our Wireless and Sensing product line that have been qualified to be sold in these markets by the U.S. Department of Defense ("DOD"). In order to maintain these qualifications, we must comply with certain specifications promulgated by the DOD. As part of maintaining these qualifications, we are routinely audited by the DOD. Based on current specifications, we believe we can maintain our qualifications for the foreseeable future. However, these specifications could be modified by the DOD in the future or we could become subject to other government requirements, which could make the manufacturing of these products more difficult and thus could adversely impact our profitability in the Wireless and Sensing operating segment. In fiscal year 2022, our sales that serve military and aerospace markets comprised approximately 2% of our sales. A small number of special assemblies from the Wireless and Sensing product line are subject to the International Traffic in Arms Regulations ("ITAR"). We have a Technical Assistance Agreement in place that permits us to assemble certain of these products in Mexico. International shipments of products subject to ITAR require a State Department license.

As a global company, we are required to comply with various governmental trade law and export restrictions imposed by the U.S. and certain foreign jurisdictions. For example, the U.S. Department of Commerce has placed Huawei Technologies Co., Ltd. ("Huawei") and certain of its affiliates on the "Entity List" for actions contrary to the national security and foreign policy interests of the U.S. On August 17, 2020, the Department of Commerce issued a final rule that amended the Export Administration Regulations ("EAR") to expand the controls on foreign-produced direct products based on certain U.S. software and technology and sold to or for Huawei, which has further impacted our ability to ship to Huawei, as well as to certain other customers who we believe incorporate our products into their products sold to Huawei. To mitigate the adverse impact of these restrictions, we have filed for several export licenses, some of which have already been granted. Sales of our products to Huawei accounted for less than 10% of our net sales during fiscal years 2022, 2021 and 2020.

For discussion related to environmental matters, see Note 13 to the Consolidated Financial Statements.

Available Information

General information about us can be found on our website at www.semtech.com. The information on our website is for informational purposes only and should not be relied on for investment purposes. The information on our website is not incorporated by reference into this Annual Report on Form 10-K and should not be considered part of this or any other report filed with the SEC.

We make available free of charge, either by direct access on our website or a link to the SEC website, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as soon as reasonably practicable after such reports are electronically filed with, or furnished to, the SEC. Our reports filed with, or furnished to, the SEC are also available directly at the SEC's website at www.sec.gov.

Item 1A. Risk Factors

You should carefully consider and evaluate all of the information in this Annual Report on Form 10-K, including the risk factors listed below. If any of these risks actually occur, our business could be materially harmed. If our business is harmed, the trading price of our common stock could decline. See also "Special Note Regarding Forward Looking and Cautionary Statements" at the beginning of this Annual Report on Form 10-K.

Risks Relating to Macroeconomic and Industry Conditions

The COVID-19 pandemic has adversely affected and may in the future adversely affect, our operations, and those of our customers, distributors, suppliers, third-party foundries and subcontractors thereby adversely affecting our business, financial condition and results of operations.

The COVID-19 pandemic negatively impacted our financial results by decreasing sales, driven by supply chain interruptions, which primarily impacted the first half of fiscal year 2021. For example, in the first quarter of fiscal year 2021, some shipments of our products were delayed due to COVID-19 related shutdowns of our plant in Reynosa, Mexico, as well as some subcontractors in Malaysia. In addition, some of our suppliers have experienced temporary reductions or closures, which resulted in limited disruptions in our ability and the ability of our subcontractors to receive certain raw materials, including silicon wafers, which are essential to the manufacturing of our products. In some cases, the disruption resulted, and may in the future result, in reduced production of our products and delays for delivery of our products to our customers. We believe the general supply chain constraints in the industry may be motivating certain customers to increase their inventory to protect against the supply risk. To the extent that this is occurring, we could experience a decrease in future demand as potential excess inventory in the supply chain is worked down.

While we cannot predict the ultimate impact of the COVID-19 virus on our business at this time, the pandemic and related efforts to mitigate the pandemic have impacted and could in the future impact our business in a number of ways, including but not limited to the following: decreasing demand and pricing for our products as a result of any negative economic impact of the pandemic; disrupting our manufacturing processes, as has already occurred with the temporary reductions or closures of our facilities, third-party foundries and contractors, and the delay of supplies being received; disrupting freight infrastructure, thereby delaying shipments from vendors to assembly and test sites and shipments of our final product to customers; disrupting the manufacturing process of our customers that use our components in their products, thereby impacting demand for our products; adversely impacting the business of our suppliers, which have resulted in, among other things, price increases and delays for delivery of raw materials and components needed for the production of our products; impacting our ability to maintain our workforce during this uncertain time; increasing employee absenteeism due to infection or the fear of infection; possible lawsuits or additional regulatory actions due to the spread of COVID-19 in the workplace and potential increases in costs to implement health safety measures; suffering from reputational risk if we experience a COVID-19 outbreak in our workplace; and adversely impacting the productivity of management and our employees that are working remotely. Additionally, there is an increased risk that we may experience cybersecurity-related events such as COVID-19 themed phishing attacks and other security challenges as a result of most of our employees and our service providers working remotely from non-corporate managed networks during the ongoing COVID-19 pandemic and potentially continuing working remotely even after the COVID-19 pandemic has subsided.

Further, any COVID-19 vaccine or testing mandate imposed on our employees, whether due to regulations enacted by the U.S. Department of Labor's Occupational Safety and Health Administration or otherwise, could result in increased costs, labor disruptions or employee attrition. If we lose employees, it may be difficult in the current competitive labor market to find replacement employees, which could have an adverse effect on future revenues and costs.

In addition, the pandemic has impacted the operations of our distributors and direct customers. Because a significant majority of our net sales is through authorized distributors, the financial health of our distributors is critical to our success. Some of our distributors are small organizations with limited working capital. Our distributors have experienced, and may continue to experience from time to time, disruptions to their operations due to the pandemic, including temporary reductions or closures during which they have diminished ability or are unable to sell our products. If our distributors suffer material economic harm during the pandemic, the distributors may no longer be able to continue in business or may continue in a reduced capacity. Our direct customers have also experienced, and may continue to or again experience, reductions or closures of their manufacturing facilities or an inability to obtain other components, either of which could negatively impact demand for our products that are incorporated into our customers' devices and solutions.

The ultimate magnitude of the COVID-19 pandemic, including the extent of its impact on our financial condition and results of operations, which could be material, will depend on all of the factors noted above, including other factors that we may not be able to foresee at this time.

Our future results may fluctuate, fail to match past performance or fail to meet expectations as a result of conditions beyond our control, such as general economic conditions in the markets we compete, cyclical and other conditions unique to our industry and the financial health and viability of our suppliers and customers.

Our results may fluctuate in the future, may fail to match our past performance or fail to meet our expectations and the expectations of analysts and investors as a result of conditions beyond our control. Our results and related ratios, such as gross margin, operating income percentage and effective tax rate may fluctuate for a variety of reasons beyond our control, including: general economic conditions in the countries where we sell our products, including recessions or inflationary pressures; geopolitical turmoil, such as the conflict between Russia and Ukraine and any sanctions, export controls or other retaliatory actions against, or restrictions on doing business with Russia, as well as any resulting disruption, instability or volatility in the global markets and industries resulting from such conflict; the availability of adequate supply commitments from our outside suppliers; the timing of new product introductions by us, our customers and our competitors; seasonality and variability in the computer market and our other end markets; product obsolescence; the scheduling, rescheduling or cancellation of orders by our customers; the cyclical nature of demand for our customers' products; our ability to predict and meet evolving industry standards and consumer preferences; our ability to develop new process technologies and achieve volume production; changes in manufacturing yields; capacity utilization; product mix and pricing; movements in exchange rates, interest rates or tax rates; our ability to integrate and realize synergies from acquisitions; the manufacturing and delivery capabilities of our subcontractors and litigation and regulatory matters.

Uncertainty about global economic conditions can pose a risk to the overall economy by causing fluctuations to and reductions in consumer and commercial spending. Demand for our products could be different from our expectations due to many factors including: changes in business and economic conditions; conditions in the credit market that affect consumer confidence; customer acceptance of our products; changes in customer order patterns; including order cancellations; and changes in the level of inventory held by vendors.

The semiconductor industry is also highly cyclical and has experienced significant downturns, which are characterized by reduced product demand, production overcapacity, increased levels of inventory, industry-wide fluctuations in the demand for semiconductors and the significant erosion of average selling prices. The cyclical nature of the semiconductor industry may cause us to experience substantial period-to-period fluctuations in our operating results.

The average selling prices of products in our markets have historically decreased rapidly and will likely do so in the future, which could harm our revenue and gross margins.

As is typical in the semiconductor industry, the average selling price of a particular product has historically declined significantly over the life of the product. 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 our competitors and other factors. We expect that we will have to similarly reduce prices in the future for older generations of products. Reductions in our average selling prices to one customer could also impact our average selling prices to all customers. A decline in average selling prices would harm our gross margins for a particular product. If not offset by sales of other products with higher gross margins, our overall gross margins may be adversely affected. Our business, results of operations, financial condition and prospects will suffer if we are unable to offset any reductions in our average selling prices by increasing our sales volumes, reducing our costs and/or developing new or enhanced products with higher selling prices or gross margins on a timely basis.

Risks Relating to Production Operations

We rely on a limited number of suppliers and subcontractors, many of which are foreign-based entities, for many essential components and materials and certain critical manufacturing services and any interruption or loss of supplies or services from these entities could significantly interrupt our business operations and the production of our products.

Our reliance on a limited number of subcontractors and suppliers for wafers, packaging, testing and certain other processes involves several risks, including potential inability to obtain an adequate supply of required components and reduced control over the price, timely delivery, reliability and quality of components. These risks are attributable to several factors, including limitations on resources, labor problems, equipment failures or the occurrence of natural disasters. The good working relationships we have established with our suppliers and subcontractors could be disrupted, and our supply chain could suffer, if a supplier or subcontractor were to experience a change in control. There can be no assurance that problems will not occur in the future with suppliers or subcontractors. Disruption or termination of our supply sources or subcontractors could significantly delay our shipments to customers, which could damage relationships with current and prospective customers and harm our business. Any prolonged inability to obtain timely deliveries or quality manufacturing or any other circumstances that would require us to seek alternative sources of supply or to manufacture or package certain components internally could limit our growth and harm our business.

Many of our third-party subcontractors and suppliers, including third-party foundries that supply silicon wafers, are located in foreign countries or territories including Taiwan and China. While our utilization of multiple third-party foundries does create

some redundancy of fabrication processes, any interruption of supply by one or more of these foundries could materially impact us.

A majority of our package and test operations are performed by third-party contractors based in the U.S., Taiwan and China. Our international business activities, in general, are subject to a variety of potential risks resulting from political and economic uncertainties. Any political turmoil or trade restrictions in these countries, particularly China, could limit our ability to obtain goods and services from these suppliers and subcontractors. The effect of an economic crisis or political turmoil impacting our suppliers located in these countries may impact our ability to meet the demands of our customers. For example, the COVID-19 pandemic resulted in extended shutdowns of certain of our businesses. This public health crisis or any further political developments or health concerns in markets in which our third-party contractors and suppliers are based could result in social, economic and labor instability, adversely affecting the supply of our products and, in turn, our business, financial condition and results of operations. If we find it necessary to transition the goods and services received from our existing suppliers or subcontractors to other firms, we would likely experience an increase in production costs and a delay in production associated with such a transition, both of which could have a significant negative effect on our operating results, as these risks are substantially uninsured.

Our ability to increase product sales and revenue may be constrained by the manufacturing capacity of our suppliers.

Although we provide our suppliers with rolling forecasts of our production requirements, their ability to provide wafers to us is limited by their available capacity. For example, we believe the strong increase in industry-wide demand for electronic equipment for remote work arrangements as a result of the COVID-19 pandemic has resulted, and will continue to result, in capacity shortages of our suppliers. This lack of capacity has at times constrained our product sales and revenue growth and may do so again in the future. In addition, an increased need for capacity to meet internal demands or demands of other customers could cause our suppliers to reduce capacity available to us. Our suppliers may also require us to pay amounts in excess of contracted or anticipated amounts for wafer deliveries or require us to make other concessions in order to acquire the wafer supply necessary to meet our customer requirements. If our suppliers extend lead times, limit supplies or the manufacturing capacity we require, or increase prices due to capacity constraints or other factors, we may, in turn, have to increase the prices of our products in order to remain profitable, and our customers may reduce their purchase levels with us and/or seek alternative solutions to meet their demand. If any of the foregoing occurs, our revenue and gross margin may materially decline, which could materially and adversely impact our business and results of operations. Delays in increasing third-party manufacturing capacity may also limit our ability to meet customer demand.

Our products may be found to be defective, product liability claims may be asserted against us and we may not have sufficient liability insurance.

Manufacturing semiconductors is a highly complex and precise process, requiring production in a tightly controlled, clean environment. Minute impurities in our manufacturing materials, contaminants in the manufacturing environment, manufacturing equipment failures, and other defects can cause our products to be non-compliant with customer requirements or otherwise nonfunctional. We face an inherent business risk of exposure to warranty and product liability claims in the event that our products fail to perform as expected or such failure of our products results, or is alleged to result, in bodily injury or property damage (or both). Since a defect or failure in our product could give rise to failures in the goods that incorporate them (and consequential claims for damages against our customers from their customers), we may face claims for damages that are disproportionate to the revenues and profits we receive from the products involved.

Our general warranty policy provides for repair or replacement of defective parts. In some cases, a refund of the purchase price is offered. In certain instances, we have agreed to other warranty terms, including some indemnification provisions, which could prove to be significantly more costly than repair, replacement or refund. We attempt to limit our liability through our standard terms and conditions and negotiation of sale and other customer contracts, but there is no assurance that such limitations will be accepted or effective. While we maintain some insurance for such events, a successful warranty or product liability claim against us in excess of our available insurance coverage, if any, and established reserves, or a requirement that we participate in a product recall, would have adverse effects (that could be material) on our business, operating results and financial condition. Additionally, in the event that our products fail to perform as expected, our reputation may be damaged, which could make it more difficult for us to sell our products to existing and prospective customers and could adversely affect our business, operating results and financial condition.

Obsolete inventories as a result of changes in demand for our products and changes in the life cycles of our products could adversely affect our business, operating results and financial condition.

The life cycles of some of our products depend heavily upon the life cycles of the end-products into which our products are designed. End-market products with short life cycles require us to manage closely our production and inventory levels. Inventory may also become obsolete because of adverse changes in end-market demand. We may in the future be adversely affected by obsolete or excess inventories, which may result from unanticipated changes in the estimated total demand for our products or the estimated life cycles of the end-products into which our products are designed. In addition, some customers

restrict how far back the date of manufacture for our products can be, which can render our products obsolete. In addition, certain customers may stop ordering products from us and go out of business due to adverse economic conditions or otherwise, thereby causing some of our product inventory to become obsolete. As a result, our inventory may become obsolete for reasons beyond our control, which may adversely affect our business, operating results and financial condition.

Business interruptions, such as natural disasters, acts of violence and the outbreak of contagious diseases, could harm our business and have a material adverse effect on our operations.

Earthquakes and other natural disasters, terrorist attacks, armed conflicts, wars and other acts of violence, and other national or international crisis, calamity or emergency, including the outbreak of pandemic or contagious disease, such as COVID-19, may result in interruption to the business activities of us, our suppliers and our customers and overall disruption of the economy at many levels. These events may directly impact our physical facilities or those of our customers and suppliers. Additionally, these events, which are generally unforeseeable and difficult to predict, may cause some of our customers or potential customers to reduce their level of expenditures on certain services and products, which could ultimately reduce our revenue.

Our corporate headquarters, a portion of our assembly and research and development activities, and certain other critical business operations are located near major earthquake fault lines. We do not maintain earthquake insurance and our business could be harmed in the event of a major earthquake. We generally do not maintain flood coverage, including for our Asian locations where certain of our operations support and sales offices are located. Such flood coverage has become very expensive; as a result we have elected not to purchase this coverage. If one of these locations were to experience a major flood, our business may be harmed.

We operate a manufacturing facility in Reynosa, Mexico. Historically, certain regions in Mexico have experienced high levels of violence. Any significant disruption of our operations at this facility could materially affect our ability to generate revenues for certain products within our Wireless and Sensing operating segment. Some of the products that we produce at this facility require certification by the Defense Contract Audit Agency ("DCAA"). Failure to secure or maintain the required certification, either directly through the DCAA or through a qualifying third party would materially affect our authorization to manufacture applicable products at this facility, and our revenue for certain products within our Wireless and Sensing products line could materially decline.

Our business could also be harmed if natural disasters, acts of violence, national or international crises or other calamities or emergencies interrupt the production of wafers by our suppliers, the assembly and testing of products by our subcontractors, or the operations of our distributors and direct customers. We rely on third-party freight firms for nearly all of our shipments from vendors to assembly and test sites, primarily in Asia, and for shipments of our final product to customers. This includes ground and air transportation. Any significant disruption of such freight business globally or in certain parts of the world, particularly where our operations are concentrated, whether due to COVID-19 or otherwise, could materially and adversely affect our ability to generate revenues.

The ultimate impact of business interruption events, both in terms of direct impact on us and our supply chain, as well as on our end customers (to include their own supply chain issues as well as end-market issues), may not be known for a considerable period of time following the event. We maintain some business interruption insurance to help reduce the effect of business interruptions, but we are not fully insured against such risks. Also as a result of these events, insurance premiums for businesses may increase and the scope of coverage may be decreased. Consequently, we may not be able to obtain adequate insurance coverage for our business and properties. Further, any loss of revenue due to a slowdown or cessation of end customer demand is uninsured. Accordingly, any of these disruptions could significantly harm our business.

Risks Relating to Research and Development, Engineering, Intellectual Property and New Technologies

We may be unsuccessful in developing and selling new products, which is central to our objective of maintaining and expanding our business.

We operate in a dynamic environment characterized by price erosion, rapid technological change, and design and other technological obsolescence. Our competitiveness and future success depend on our ability to predict and adapt to these changes in a timely and cost-effective manner by designing, developing, manufacturing, marketing and providing support for our own new products and technologies. A failure to achieve design wins, to introduce these new products in a timely manner, or to achieve market acceptance for these products on commercially reasonable terms could harm our business.

The introduction of new products presents significant business challenges because product development commitments and expenditures must be made well in advance of product sales. The success of a new product depends on accurate forecasts of long-term market demand and future technological developments, as well as on a variety of specific implementation factors, including: timely and efficient completion of technology, product and process design and development; timely and efficient implementation of manufacturing, assembly, and test processes; the ability to secure and effectively utilize fabrication capacity in different geometries; product performance; product quality and reliability; and effective marketing, sales and service.

The efforts to achieve design wins typically are lengthy and can require us to both incur design and development costs and dedicate scarce engineering resources in pursuit of a single customer opportunity. We may not prevail in the competitive selection process. If a customer initially chooses a competitor's product during the selection process, it becomes significantly more difficult for us to sell our products for use in that customer's system because changing suppliers can involve significant cost, time, effort and risk for our customers. Thus, our failure to win a competitive bid can result in our foregoing revenues from a given customer's product line for the life of that product. Even if we are able to develop products and achieve design wins, the design wins may never generate revenues if end-customer projects are unsuccessful in the marketplace or the end-customer terminates the project, which may occur for a variety of reasons. In addition, mergers and consolidations among customers may lead to termination of certain projects before the associated design win generates revenue. If design wins do generate revenue, the time lag between the design win and meaningful revenue can be uncertain and could be significant. If we fail to develop products with required features or performance standards or experience even a short delay in bringing a new product to market, or if our customers fail to achieve market acceptance of their products, our business, financial condition and operating results could be materially and adversely impacted.

Our customers require our products to undergo a lengthy and expensive qualification process without any assurance of product sales.

Prior to purchasing our products, many of our customers require that our products undergo an extensive qualification process, which involves testing of the products in the customer's system as well as rigorous reliability testing. This qualification process may continue for six months or longer. However, qualification of a product by a customer does not ensure any sales of the product to that customer. Even after successful qualification and sales of a product to a customer, a subsequent revision to the product or software, changes in the manufacturing process or the selection of a new supplier by us may require a new qualification process, which may result in delays and in us holding excess or obsolete inventory. After our products are qualified, it can take an additional six months or more before the customer commences volume production of components or devices that incorporate our products. Despite these uncertainties, we devote substantial resources, including design, engineering, sales, marketing and management efforts, toward qualifying our products with customers in anticipation of sales. If we are unsuccessful or delayed in qualifying any of our products with a customer, such failure or delay would preclude or delay sales of such product to the customer, which may impede our growth and cause our business to suffer.

Our products may fail to meet new industry standards or requirements and the efforts to meet such industry standards or requirements could be costly.

Many of our products are based on industry standards that are continually evolving. Our ability to compete in the future will depend in part on our ability to anticipate, identify and ensure compatibility or compliance with these evolving industry standards. The emergence of new industry standards could render our products incompatible with products developed by our customers and potential customers. As a result, we could be required to invest significant time and effort and to incur significant expense to redesign our products to ensure compliance with relevant standards. If our products are not in compliance with prevailing industry standards or requirements, we could miss opportunities to achieve crucial design wins which in turn could have a material adverse effect on our business, operating results and financial conditions.

Unfavorable or uncertain conditions in the 5G infrastructure market may cause fluctuations in our rate of revenue growth or financial results.

Markets for 5G infrastructure may not develop in the manner or in the time periods we anticipate. If domestic and global economic conditions worsen, particularly in light of the impacts of the COVID-19 pandemic and potential global recession resulting therefrom, overall spending on 5G infrastructure may be reduced, which would adversely impact demand for our products in these markets. In addition, unfavorable developments with evolving laws and regulations worldwide related to 5G or 5G suppliers may limit global adoption, impede our strategy, and negatively impact our long-term expectations in this area. Even if the 5G infrastructure market develops in the manner or in the time periods we anticipate, if we do not have timely, competitively priced, market-accepted products available to meet our customers' planned roll-out of 5G wireless communication systems, we may miss a significant opportunity and our business, financial condition, results of operations and cash flows could be materially and adversely affected. In addition, as a result of the fact that the markets for 5G are not yet fully developed, demand for these products may be unpredictable and may vary significantly from one period to another.

We may be unable to adequately protect our intellectual property rights.

We pursue patents for some of our new products and unique technologies, but we rely primarily on trade secret protections through a combination of nondisclosure agreements and other contractual provisions, as well as our employees' commitment to confidentiality and loyalty, to protect our know-how and processes. We intend to continue protecting our proprietary technology, including through trademark and copyright registrations and patents. Despite this intention, we may not be successful in achieving adequate protection. Our failure to adequately protect our material know-how and processes could harm our business. There can be no assurance that the steps we take will be adequate to protect our proprietary rights, that our patent applications will lead to issued patents, that others will not develop or patent similar or superior products or technologies, or

that our patents will not be challenged, invalidated, or circumvented by others. Furthermore, the laws of the countries in which our products are or may be developed, manufactured or sold may not protect our products and intellectual property rights to the same extent as laws in the U.S.

We may suffer losses and business interruption if our products infringe the intellectual property rights of others.

The semiconductor industry is characterized by frequent claims of infringement and litigation regarding patent and other intellectual property rights. Due to the number of competitors, intellectual property infringement is an ongoing risk since other companies in our industry could have intellectual property rights that may not be identifiable when we initiate development efforts. Litigation may be necessary to enforce our intellectual property rights and we may have to defend ourselves against infringement claims. Any such litigation could be very costly and may divert our management's resources. If one of our products is found to infringe on a third party's rights, we may have liability for past infringement and may need to seek a license to use such intellectual property going forward. If a license is not available or if we are unable to obtain a license on terms acceptable to us, we would either have to change our product so that it does not infringe or stop making the product.

We must commit resources to product production prior to receipt of purchase commitments and could lose some or all of the associated investment.

Sales are made primarily on a current delivery basis pursuant to purchase orders that may be revised or cancelled by our customers without penalty, rather than pursuant to long-term contracts. Some contracts require that we maintain inventories of certain products at levels above the anticipated needs of our customers. As a result, we must commit resources to the production of products without binding purchase commitments from customers. Our inability to sell products after we devote significant resources to them could harm our business.

While we intend to continue to invest in research and development, we may be unable to make the substantial investments that are required to remain competitive in our business.

The semiconductor industry requires substantial investment in research and development in order to bring to market new and enhanced solutions. Our research and development expense was \$147.9 million, \$117.5 million and \$107.4 million, which represent 20%, 20% and 20% of net sales, respectively, in fiscal years 2022, 2021 and 2020, respectively. We expect to strategically increase our research and development expenditures as compared to prior periods. We are unable to predict whether we will have sufficient resources to maintain the level of investment in research and development required to remain competitive. The added costs could prevent us from being able to maintain a technology advantage over larger competitors that have significantly more resources to invest in research and development. In addition, we cannot assure you that the technologies which are the focus of our research and development expenditures will become commercially successful or generate any revenue.

Certain software we use is from open source code sources, which, under certain circumstances, may lead to unintended consequences and, therefore, could materially adversely affect our business, financial condition, operating results and cash flow.

We use open source software in connection with certain of our products and services, and we intend to continue to use open source software in the future. From time to time, there have been claims challenging the ownership of open source software against companies that incorporate open source software into their products or services or alleging that these companies have violated the terms of an open source license. As a result, we could be subject to lawsuits by parties claiming ownership of what we believe to be open source software or alleging that we have violated the terms of an open source license. Litigation could be costly for us to defend, have a negative effect on our operating results and financial condition or require us to devote additional research and development resources to change our solutions. In addition, if we were to combine our proprietary software solutions with open source software in certain manners, we could, under certain open source licenses, be required to publicly release the source code of our proprietary software solutions. If we inappropriately use open source software, we may be required to re-engineer our solutions, discontinue the sale of our solutions, release the source code of our proprietary software to the public at no cost or take other remedial actions. There is a risk that open source licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to commercialize our solutions, which could adversely affect our business, operating results and financial condition.

We may need to transition to smaller geometry process technologies and achieve higher levels of design integration to remain competitive and may experience delays in this transition or fail to efficiently implement this transition.

In order to remain competitive, we have transitioned and expect to continue to transition our products to increasingly smaller geometries. This transition requires us to modify the manufacturing processes for our products, to design new products to more stringent standards and to redesign some existing products. In some instances, we depend on our relationship with our third-party foundries to transition to smaller geometry processes successfully. Our foundries may not be able to effectively manage the transition or we may not be able to maintain our foundry relationships. If our foundries or we experience significant delays in this transition or fail to efficiently implement this transition, we could experience reduced manufacturing yields, delays in

product deliveries and increased expenses, all of which could materially and adversely affect our business, financial condition and results of operations. As smaller geometry processes become more prevalent, we expect to continue to integrate greater levels of functionality into our products. However, we may not be able to achieve higher levels of design integration or deliver new integrated products on a timely basis or at all.

Risks Relating to International Operations

We are subject to export restrictions and laws affecting trade and investments, which may limit our ability to sell to certain customers.

As a global company headquartered in the U.S., we are subject to U.S. laws and regulations that limit and restrict the export of some of our products and services and may restrict our transactions with certain customers, business partners and other persons, including, in certain cases, dealings with or between our U.S. employees and subsidiaries. In certain circumstances, export control and economic sanctions regulations may prohibit the export of certain products, services and technologies, and in other circumstances we may be required to obtain an export license or other authorization before entering into a transaction or transferring a controlled item. We maintain an economics sanction and export compliance program but there are risks that the compliance controls could be circumvented, exposing us to legal liabilities. These restrictions and laws have significantly restricted our operations in the recent past and may continue to do so in the future. We must also comply with export restrictions and laws imposed by other countries affecting trade and investments.

For example, in 2019, the U.S. Department of Commerce placed Huawei and certain of its affiliates to the "Entity List" for actions contrary to the national security and foreign policy interests of the U.S. In 2020, the U.S. Department of Commerce amended the EAR to expand the controls on foreign-produced direct products based on certain U.S. software and technology and sold to or for Huawei, which further impacted our ability to ship to Huawei, as well as to certain other customers who we believe incorporate our products into their products sold to Huawei. Sales of our products to Huawei accounted for less than 10% of our net sales during fiscal year 2022.

These actions by the U.S. Department of Commerce or future regulatory activity may materially interfere with our ability to make sales to Huawei or other foreign customers. Huawei and other foreign customers affected by future U.S. government export control measures or sanctions or threats of export control measures or sanctions may respond by developing their own solutions to replace our products or by adopting our foreign competitors' solutions. In addition, our association with customers that are or become subject to U.S. regulatory scrutiny or export restrictions could subject us to actual or perceived reputational harm among current or prospective investors, suppliers or customers, customers of our customers, other parties doing business with us, or the general public. Any such reputational harm could result in the loss of investors, suppliers or customers, which could harm our business, financial condition, operating results or prospects.

We sell and trade with foreign customers, which subjects our business to increased risks.

Sales to foreign customers accounted for approximately 90% of net sales for fiscal year 2022. Sales to our customers located in China (including Hong Kong) and South Korea constituted 60% and 6%, respectively, of net sales for fiscal year 2022. Sales to customers located in Russia accounted for less than 1% of net sales for fiscal year 2022. International sales are subject to certain risks, including unexpected changes in regulatory requirements, tariffs and other barriers, political and economic instability, difficulties in accounts receivable collection, difficulties in managing distributors and representatives, difficulties in staffing and managing foreign subsidiary and branch operations and potentially adverse tax consequences. Other risks include local business and cultural factors that may differ from our domestic standards and practices, including business practices from which we are prohibited from engaging by the Foreign Corrupt Practices Act and other anti-corruption laws and regulations, laws of certain foreign countries that may not protect our products, assets or intellectual property rights to the same extent as do U.S. laws, and difficulties enforcing contracts in such foreign countries generally. These factors may harm our business. Our use of the Semtech name may be prohibited or restricted in some countries, which may negatively impact our sales efforts.

A substantial portion of our sales is derived from China and adverse changes to general economic conditions in China could have a material and adverse impact on our sales and financial results.

In fiscal year 2022, sales to customers in China comprised 60% of our net sales. The economic slowdown in China could adversely affect our sales to customers in China and consequently, our business, operating results and financial condition. In addition, there are risks that the Chinese government may, among other things, require the use of local suppliers, compel companies that do business in China to partner with local companies to conduct business, or provide incentives to government-backed local customers to buy from local suppliers rather than companies like ours, all of which could adversely impact our business, operating results and financial condition. Further, changes in U.S. and global social, political, regulatory and economic conditions or in laws and policies governing trade with China could adversely affect our business.

We and our manufacturing partners are or will be subject to extensive Chinese government regulation, and the benefit of various incentives from Chinese governments that we and our manufacturing partners receive may be reduced or eliminated, which could increase our costs or limit our ability to sell products and conduct activities in China.

Many of our manufacturing partners are located in China. The Chinese government has broad discretion and authority to regulate the technology industry in China. Additionally, China's government has implemented policies from time to time to regulate economic expansion in China. The Chinese government exercises significant control over China's economic growth through the allocation of resources, controlling payment of foreign currency-denominated obligations, setting monetary policy and providing preferential treatment to particular industries or companies.

Any additional new regulations or the amendment or modification of previously implemented regulations could require us and our manufacturing partners to change our business plans, increase our costs, or limit our ability to sell products and conduct activities in China, which could adversely affect our business and operating results.

The Chinese government and provincial and local governments have provided, and continue to provide, various incentives to encourage the development of the semiconductor industry in China. Such incentives include tax rebates, reduced tax rates, favorable lending policies and other measures, some or all of which may be available to our manufacturing partners and to us with respect to our facilities in China. Any of these incentives could be reduced or eliminated by governmental authorities at any time. Any such reduction or elimination of incentives currently provided to us and our manufacturing partners could adversely affect our business and operating results.

Our foreign currency exposures may change over time as the level of activity in foreign markets grows and could have an adverse impact upon financial results.

As a global enterprise, we face exposure to adverse movements in foreign currency exchange rates. Certain of our assets, including certain bank accounts, exist in non-U.S. Dollar-denominated currencies, which are sensitive to foreign currency exchange rate fluctuations. The non-U.S. Dollar-denominated currencies are principally the Swiss Franc, Euro, Canadian Dollar, Mexican Peso, Japanese Yen and Great British Pound. We also have a significant number of employees that are paid in foreign currency, the largest groups being United Kingdom-based employees who are paid in Great British Pound, Switzerland-based employees who are paid in Swiss Francs, Canada-based employees who are paid in Canadian Dollars, China-based employees who are paid in Chinese Renminbi and Mexican nationals who are paid in Mexican Pesos.

If the value of the U.S. Dollar weakens relative to these specific currencies, as it has done in recent years, the cost of doing business in terms of U.S. Dollars rises. Whereas if the value of the U.S. Dollar strengthens relative to these specific currencies, it could make the pricing of our products less competitive and affect demand for our products. With the growth of our international business, our foreign currency exposures may grow and, under certain circumstances, could harm our business. As a means of managing our foreign exchange exposure, we routinely convert U.S. Dollars into foreign currency in advance of the expected payment. We regularly assess whether or not to hedge foreign exchange exposure.

We may be subject to increased tax liabilities and an increased effective tax rate if we need to remit funds held by our foreign subsidiaries.

With the enactment of the Tax Cuts and Jobs Act ("Tax Act"), all post-1986 previously unremitted earnings for which no U.S. deferred tax liability had been accrued were subject to U.S. tax. Notwithstanding the U.S. taxation of these amounts, we have determined that \$50.0 million of our current foreign earnings will not be permanently reinvested. As a result, we have established a deferred income tax liability for the Swiss withholding tax that will be due upon distribution of these earnings. If we needed to remit all or a portion of our historical undistributed earnings to the U.S. for investment in our domestic operations, any such remittance could result in increased tax liabilities and a higher effective tax rate. Determination of the amount of the unrecognized deferred tax liability on these unremitted earnings is not practicable.

Risks Relating to Sales, Marketing and Competition

We receive a significant portion of our revenues from a small number of customers and the loss of any one of these customers or failure to collect a receivable from them could adversely affect our business.

Our largest customers have varied from year to year. Historically, we have had significant customers that individually accounted for 10% or more of consolidated revenues in certain quarters or years or represented 10% or more of net accounts receivables at any given date. Sales to our customers are generally made on open account, subject to credit limits we may impose, and the receivables are subject to the risk of being uncollectible.

We believe that our operating results for the foreseeable future will continue to depend on sales to a relatively small number of customers and end customers. We may not be able to maintain or increase sales to some of our top customers for a variety of reasons, including that our agreements with our customers do not require them to purchase a minimum quantity of our products; some of our customers can stop incorporating our products into their own products with limited notice to us and suffer little or no penalty; and many of our customers have pre-existing or concurrent relationships with our current or potential competitors that may affect the customers' decisions to purchase our products. The loss of a major customer, a reduction in sales to any

major customer or our inability to attract new significant customers could seriously impact our revenue and materially and adversely affect our business, financial condition and results of operations.

The volatility of customer demand limits our ability to predict future levels of sales and profitability.

We primarily conduct our sales on a purchase order basis, rather than pursuant to long-term contracts. The loss of any significant customer, any material reduction in orders by any of our significant customers, the cancellation of a significant customer order or the cancellation or delay of a customer's significant program or product could harm our business.

Semiconductor suppliers can rapidly increase production output in response to slight increases in demand, leading to a sudden oversupply situation and a subsequent reduction in order rates and revenues as customers adjust their inventories to account for shorter lead times. Conversely, when circumstances create longer lead times customers may order in excess of what they need to ensure availability, then cancel orders if lead times are reduced. A rapid and sudden decline in customer demand for products or cancellation of orders can result in excess quantities of certain products relative to demand. Should this occur, our operating results may be adversely affected as a result of charges to reduce the carrying value of our inventory to the estimated demand level or market price. Our quarterly revenues are highly dependent upon turns fill orders (orders booked and shipped in the same quarter). The short-term and volatile nature of customer demand makes it extremely difficult to accurately predict near term revenues and profits.

Most of our authorized distributors, which collectively represent more than half of our net sales, can terminate their contract with us with little or no notice. The termination of a distributor could negatively impact our business, including net sales and accounts receivable.

In fiscal year 2022, authorized distributors accounted for approximately 87% of our net sales. We generally do not have long-term contracts with our distributors and most can terminate their agreement with us with little or no notice. For fiscal year 2022, our largest distributors were based in Asia. The termination of any of our distributor relationships could impact our net sales and limit our access to certain end-customers. It could also result in the return of excess inventory of our product held by that distributor. Since many distributors simply resell finished products, they generally operate on very thin profit margins. If a distributor were to terminate an agreement with us or go out of business, our accounts receivable from the particular distributor would be subject to significant collection risk. Our reliance on distributors also subjects us to a number of additional risks, including: write-downs in inventories associated with stock rotation rights and increases in provisions for price adjustments granted to certain distributors; potential reduction or discontinuation of sales of our products by distributors; failure to devote resources necessary to sell our products at the prices, in the volumes and within the time frames that we expect; dependence upon the continued viability and financial resources of these distributors, some of which are small organizations with limited working capital and all of which depend on general economic conditions and conditions within the semiconductor industry; dependence on the timeliness and accuracy of shipment forecasts and resale reports from our distributors; and management of relationships with distributors, which can deteriorate as a result of conflicts with efforts to sell directly to our end customers. If any significant distributor becomes unable or unwilling to promote and sell our products, or if we are not able to renew our contracts with the distributors on acceptable terms, we may not be able to find a replacement distributor on reasonable terms or at all and our business could be harmed.

Our inability to effectively control the sales of our products on the gray market could have a material adverse effect on us.

We market and sell our products directly to OEMs and through authorized third-party distributors. From time to time, it is possible our products could be diverted from our authorized distribution channels and customers may purchase products from the unauthorized "gray market." Gray market products result in shadow inventory that is not visible to us, thus making it difficult to forecast demand accurately. Also, when gray market products enter the market, we and our distribution channels compete with these discounted gray market products, which adversely affects demand for our products and negatively impacts our margins. In addition, our inability to control gray market activities could result in customer satisfaction issues because when products are purchased outside of our authorized distribution channels there is a risk that our customers are buying products that may have been altered, mishandled or damaged, or are used products represented as new.

Risks Relating to Governmental Regulations

Changes in government trade policies could have an adverse impact on our business or the business of our customers, which may materially adversely affect our business operations, sales or gross margins.

The U.S. government has made statements and taken certain actions that have led to, and may lead to, further changes to U.S. and international trade policies, including tariffs affecting certain products exported by a number of U.S. trading partners, including China. In response, many U.S. trading partners, including China, have imposed or proposed new or higher tariffs on U.S. products. The tariffs imposed by the U.S. on products imported from China include parts and materials used in semiconductor manufacturing and could have the effect of increasing the cost of materials we use to manufacture certain products, which could result in lower margins. The U.S. government has also taken actions targeting exports of certain

technologies to China which could lead to additional restrictions on the export of products that include or enable certain technologies, including products we provide to China-based customers. In addition, the geopolitical headwinds driven by export restrictions and tariffs imposed by the U.S. government may weaken demand for our products.

We cannot predict what further actions may ultimately be taken with respect to tariffs or trade relations between the U.S. and other countries, what products may be subject to such actions, or what actions may be taken by the other countries in retaliation. Accordingly, it is difficult to predict exactly how, and to what extent, such actions may impact our business, or the business of our customers, partners or vendors. Any unfavorable government policies on international trade, such as capital controls or tariffs, may further affect the demand for our products, increase the cost of components, delay production, impact the competitive position of our products or prevent us from being able to sell products in certain countries, and may have a material adverse effect on our business, operating results and financial condition. Any resulting trade wars could have a significant adverse effect on world trade and global economic conditions and could adversely impact our revenues, gross margins and business operations.

We are subject to government regulations and other standards that impose operational and reporting requirements.

We, our suppliers, and our customers are subject to a variety of U.S. federal, foreign, state and local governmental laws, rules and regulations, including laws, rules and regulations governing data privacy protections for personal information, and corrupt practices/anti-bribery prohibitions, that impact our business in terms of ongoing monitoring of compliance. Legislation and related regulations in the U.K. under that country's Bribery Act could have extra-territorial application of compliance standards that may be inconsistent with comparable U.S. law, requiring us to re-evaluate and amend our compliance programs, policies and initiatives. The General Data Protection Regulation ("GDPR") is a comprehensive update to the data protection regime in the European Economic Area that became effective as of May 25, 2018. In addition, the California Consumer Privacy Act ("CCPA"), which enhances privacy rights and consumer protection for residents of California, became effective as of January 1, 2020. Furthermore, the China's Personal Information Protection Law (the "PIPL") went into effect on November 1, 2021. The cost of compliance with the GDPR, the CCPA and the PIPL and the potential for fines and penalties in the event of a breach may have an adverse effect on our operations.

The SEC and The Nasdaq Stock Market LLC ("Nasdaq") have revised, and continue to revise, their regulations and listing standards. These developments have increased, and may continue to increase, our legal compliance and financial reporting costs. These developments also may make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. This, in turn, could make it more difficult for us to attract and retain qualified members of our Board of Directors, or qualified executive officers.

Failure to comply with present or future laws, rules and regulations of any kind that govern our business could result in suspension of all or a portion of production, cessation of all or a portion of operations, or the imposition of significant regulatory, administrative, civil, or criminal penalties or sanctions, any of which could harm our business.

Our failure to comply with any applicable environmental regulations could result in a range of consequences, including fines, suspension of production, excess inventory, sales limitations, and criminal and civil liabilities.

We are subject to various state, federal and international laws and regulations governing the environment, including those restricting the presence of certain substances in electronic products and making producers of those products financially responsible for the collection, treatment, recycling and disposal of those products and those related to the use, storage, handling, discharge or disposal of certain toxic, volatile or otherwise hazardous chemicals and the incorporation of such substances into products available for sale. If we or our suppliers were to incur substantial additional expenses to acquire equipment or otherwise comply with environmental regulations, product costs could significantly increase, thus harming our business. If we violate or fail to comply with any of them, a range of consequences could result, including fines, import/export restrictions, sales limitations, criminal and civil liabilities or other sanctions. We could also be held liable for any and all consequences arising out of exposure to hazardous materials used, stored, released, disposed of by us or located at, under or emanating from our facilities or other environmental or natural resource damage. We have incurred, and may continue to incur, liabilities under various statutes for the cleanup of pollutants at locations we have operated and at third-party disposal and recycling sites we have used.

Environmental laws are complex, change frequently and have tended to become more stringent over time. For example, the E.U. and China are two among a growing number of jurisdictions that have enacted in recent years restrictions on the use of lead, among other chemicals, in electronic products. These regulations affect semiconductor packaging. There is a risk that the cost, quality and manufacturing yields of lead-free products may be less favorable compared to lead-based products or that the transition to lead-free products may produce sudden changes in demand, which may result in excess inventory. Future environmental legal requirements may become more stringent or costly and our compliance costs and potential liabilities arising from past and future releases of, or exposure to, hazardous substances may harm our business and our reputation.

Certain of our customers and suppliers require us to comply with their codes of conduct, which may include certain restrictions that may substantially increase our cost of doing business as well as have an adverse effect on our operating efficiencies, operating results and financial condition.

Certain of our customers and suppliers require us to agree to comply with their codes of conduct, which may include detailed provisions on labor, human rights, health and safety, environment, corporate ethics and management systems. Certain of these provisions are not requirements under the laws of the countries in which we operate and may be burdensome to comply with on a regular basis. Moreover, new provisions may be added or material changes may be made to any these codes of conduct, and we may have to promptly implement such new provisions or changes, which may substantially further increase the cost of our business, be burdensome to implement and/or adversely affect our operational efficiencies and operating results. If we violate any such codes of conduct, we may lose further business with the customer or supplier and, in addition, we may be subject to fines from the customer or supplier. While we believe that we are currently in compliance with our customers and suppliers' codes of conduct, there can be no assurance that, from time to time, if any one of our customers and suppliers audits our compliance with such code of conduct, we would be found to be in full compliance. A loss of business from these customers or suppliers could have a material adverse effect on our business, operating results and financial condition.

Our operating results could be adversely affected as a result of changes in our effective tax rates, the adoption of new U.S. or foreign tax legislation or exposure to additional tax liabilities, or by material differences between our forecasted annual effective tax rates and actual tax rates.

Our future effective tax rates could be affected by changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities, or changes in applicable tax laws or their interpretation. We are also subject to the examination of our tax returns and other tax matters by the Internal Revenue Service of the U.S. ("IRS") and other tax authorities and governmental bodies. We regularly assess the likelihood of an adverse outcome resulting from these examinations to determine the adequacy of our provision for taxes. There can be no assurance as to the outcome of these examinations. If our effective tax rates were to increase, particularly in the U.S., Canada or Switzerland, or if the ultimate determination of taxes owed is for an amount in excess of amounts previously accrued, our operating results, cash flows, and financial condition could be adversely affected. See the risk factor captioned "We may be subject to increased tax liabilities and an increased effective tax rate if we need to remit funds held by our foreign subsidiaries" above.

In October 2015, the Organization for Economic Co-operation and Development, an international association of 34 countries, including the U.S., released the final reports from its Base Erosion and Profit Shifting ("BEPS") Action Plans. The BEPS recommendations covered a number of issues, including country-by-country reporting, permanent establishment rules, transfer pricing rules and tax treaties. Although the BEPS recommendations are not themselves changes in tax law, this guidance has resulted in unilateral action by several member countries and is also prompting possible amendment of other countries' tax laws and regulations on a prospective and potentially retroactive basis. In October 2015, the European Commission concluded that certain member countries had granted unlawful rulings that artificially reduced tax burdens and has ordered the recovery of the unpaid taxes. Future tax law changes resulting from these developments may result in changes to long-standing tax principles, which could adversely affect our effective tax rate or result in higher cash tax liabilities.

Significant judgment is required in the calculation of our tax provision and the resulting tax liabilities as well as determination of our ability to realize our deferred tax assets. Our estimates of future taxable income and the regional mix of this income can change as new information becomes available. Any such changes in our estimates or assumptions can significantly impact our tax provision in a given period by, for example, requiring us to impair existing deferred tax assets. Such required changes could result in us having to restate our consolidated financial statements. Restatements are generally costly and could adversely impact our operating results or have a negative impact on the trading price of our common stock.

We may be subject to taxation and review of our compliance with income, value-added and other sales-type tax regulations in other jurisdictions which could negatively affect our operations.

As a global organization, we may be subject to a variety of transfer pricing or permanent establishment challenges by taxing authorities in various jurisdictions. If certain of our non-U.S. activities were treated as carrying on business as a permanent establishment and therefore, subject to income tax in such jurisdiction, our operating results could be materially adversely affected.

We are required to comply with rules regarding value-added taxes and other sales-type taxes in various jurisdictions. If these taxes are not properly collected and paid, our operating results could be materially adversely affected.

We have limited experience with government contracting, which entails differentiated business risks.

Although such contracts have not constituted a material portion of our revenue in the past, we may from time-to-time derive revenue from contracts and subcontracts with agencies of, or prime or secondary contractors to, the U.S. government, including U.S. military agencies. Consequently, we are subject to certain business risks that are particular to companies that contract with U.S. government agencies. These risks include the ability of the U.S. government or related contractors to unilaterally:

terminate contracts at its convenience; terminate, modify or reduce the value of existing contracts, if there are budgetary constraints or needed changes; cancel multi-year contracts and related orders, if funds become unavailable; adjust contract costs and fees on the basis of audits performed by U.S. government agencies; control and potentially prohibit the export of our products; require that we continue to supply products despite the expiration of a contract under certain circumstances; require that we fill certain types of rated orders for the U.S. government prior to filling any orders for other customers; and suspend us from receiving new contracts pending resolution of any alleged violations of procurement laws or regulations. In addition, because we may enter into defense industry contracts with respect to products that are sold both within and outside of the U.S., we are subject to the following additional risks in connection with government contracts: the need to bid on programs prior to completing the necessary design, which may result in unforeseen technological difficulties, delays and/or cost overruns; the difficulty in forecasting long-term costs and schedules and the potential obsolescence of products related to long-term fixed price contracts; and the need to transfer and obtain security clearances and export licenses, as appropriate.

Corporate responsibility, specifically related to environmental, social and governance (“ESG”) matters, may impose additional costs and expose us to new risks.

Public ESG and sustainability reporting is becoming more broadly expected by investors, shareholders and other third parties. Certain organizations that provide corporate governance and other corporate risk information to investors and shareholders have developed, and others may in the future develop, scores and ratings to evaluate companies and investment funds based upon ESG or “sustainability” metrics. Many investment funds focus on positive ESG business practices and sustainability scores when making investments and may consider a company’s ESG or sustainability scores as a reputational or other factor in making an investment decision. In addition, investors, particularly institutional investors, use these scores to benchmark companies against their peers and if a company is perceived as lagging, these investors may engage with such company to improve ESG disclosure or performance and may also make voting decisions, or take other actions, to hold these companies and their boards of directors accountable. We may face reputational damage in the event our corporate responsibility initiatives or objectives, including with respect to board diversity, do not meet the standards set by our investors, shareholders, lawmakers, listing exchanges or other constituencies, or if we are unable to achieve an acceptable ESG or sustainability rating from third party rating services. A low ESG or sustainability rating by a third-party rating service could also result in the exclusion of our common stock from consideration by certain investors who may elect to invest with our competition instead. Ongoing focus on corporate responsibility matters by investors and other parties as described above may impose additional costs or expose us to new risks.

In addition, one or more of our customers have also requested, and other customers may in the future request, that we achieve net zero carbon emissions. We may incur costs to achieve our carbon and other environmental sustainability goals and the goals of our customers. Such activity may require us to modify our supply chain practices, make capital investments to modify certain aspects of our operations or increase our operating costs. There can be no assurance of the extent to which any of our climate goals or the goals of our customers will be achieved or that any future investments that we make in furtherance of achieving our climate goals or the goals of our customers will produce the expected results or meet increasing stakeholder environmental, social and governance expectations. If we do not meet these goals, we could incur adverse publicity and reaction or the loss of business from certain of our customers, which could adversely impact our reputation, and in turn adversely impact our results of operations.

Furthermore, new climate change laws and regulations could require us to change our manufacturing processes or procure substitute raw materials that may cost more or be more difficult to procure. Various jurisdictions in which we do business have implemented, or in the future could implement or amend, restrictions on emissions of carbon dioxide or other greenhouse gases, limitations or restrictions on water use, regulations on energy management and waste management, and other climate change-based rules and regulations, which may increase our expenses and adversely affect our operating results. We expect increased worldwide regulatory activity relating to climate change in the future. Future compliance with these laws and regulations may adversely affect our business and results of operations.

Risks Relating to our Business Strategies, Personnel and Other Operations

The loss of any of our key personnel or the failure to attract or retain specialized technical and management personnel could impair our ability to grow our business.

Our future success depends upon our ability to attract and retain highly qualified technical, marketing and managerial personnel. We are dependent on a relatively small group of key technical personnel with analog and mixed-signal expertise. Personnel with highly skilled managerial capabilities, and analog and mixed-signal design expertise, are scarce and competition for personnel with these skills is intense. In addition, work from home, quarantines, self-isolations, home schooling, continuing macroeconomic related uncertainty or caring for family members due to the current COVID-19 pandemic may result in significant psychological, emotional or financial burdens for some of our employees, which may impact their productivity and morale and may lead to higher employee absences and higher attrition rates. There can be no assurance that we will be able to retain key employees or that we will be successful in attracting, integrating or retaining other highly qualified personnel in the

future. If we are unable to retain the services of key employees or are unsuccessful in attracting new highly qualified employees, our business could be harmed.

We face risks associated with companies we have acquired in the past and may acquire in the future.

We have expanded our operations through strategic acquisitions, and we may continue to expand and diversify our operations with additional acquisitions. Acquisitions may divert management attention and resources from other business objectives. Acquisitions have used and could use in the future a significant portion of our available liquid assets or we could incur debt or issue equity securities to fund acquisitions. Any issuance of equity securities could be dilutive to existing stockholders. Debt financing could subject us to restrictive covenants that could have an adverse effect on our business. Although we undertake detailed reviews of proposed acquisition candidates and attempt to negotiate acquisition terms favorable to us, we may encounter difficulties or incur liabilities for which we have no recourse. We cannot provide any assurance that any acquisition will have a positive impact on our future performance.

If we are unsuccessful in integrating acquired companies into our operations or if integration is more difficult than anticipated, then we may not achieve anticipated cost savings or synergies and may experience disruptions that could harm our business. Acquisitions could have a negative impact on our future earnings by way of poor performance by the acquired company or, if we later conclude we are unable to use or sell an acquired product or technology, we could be required to write down the related intangible assets and goodwill.

We may be required to recognize additional impairment charges in the future which could have an adverse effect on our financial condition and operating results.

We assess our goodwill, other intangible assets and our long-lived assets on an annual basis and whenever events or changes in circumstances indicate the carrying value of our assets may not be recoverable, and as and when required by accounting principles generally accepted in the U.S. ("GAAP") to determine whether they are impaired. During fiscal years 2022, 2021 and 2020, we recorded \$1.3 million, \$6.8 million and \$1.2 million of non-cash impairment charges and credit loss reserves on certain of our investments. Future restructuring or appraisal of our business impacting fair value of our assets or changes in estimates of our future cash flows could affect our impairment analysis in future periods and cause us to record either an additional expense for impairment of assets previously determined to be partially impaired or record an expense for impairment of other assets. Depending on future circumstances, we may never realize the full value of intangible assets. Any future determination or impairment of a significant portion of our goodwill and other intangibles could have an adverse effect on our financial condition and operating results.

Restrictive covenants in the Credit Agreement governing the Credit Facility may restrict our ability to pursue our business strategies.

The amended and restated credit agreement (the "Credit Agreement") governing our secured first lien credit facility (the "Credit Facility") contains a number of restrictive covenants that impose significant operating and financial restrictions on us and may limit our ability to engage in acts that may be in our long-term best interests. The Credit Agreement includes covenants restricting, among other things, our and our subsidiaries' ability to: incur or guarantee additional debt or issue certain preferred stock; pay dividends or make distributions on our capital stock or redeem, repurchase or retire our capital stock; make certain investments and acquisitions; create liens on our or our subsidiaries' assets; enter into transactions with affiliates; merge or consolidate with another person or sell or otherwise dispose of substantially all of our assets; make certain payments in respect of other material indebtedness; alter the business that we conduct; and make certain capital expenditures.

Under the Credit Agreement, we are required to maintain a consolidated leverage ratio and an interest expense coverage ratio. Our ability to meet such financial ratios can be affected by events beyond our control, and we cannot assure you that we will be able to meet such ratios. The Credit Agreement also contains various covenants and restrictions and a breach of any covenant or restriction could result in a default under our Credit Agreement. If any such default occurs, the lenders may elect (after the expiration of any applicable notice or grace periods) to declare all outstanding borrowings, together with accrued and unpaid interest and other amounts payable thereunder, to be immediately due and payable. Further, following an event of default under the Credit Facility, the lenders will have the right to proceed against the collateral granted to them to secure that debt. If the debt under the Credit Facility were to be accelerated, our assets may not be sufficient to repay in full that debt that may become due as a result of that acceleration.

We rely on certain critical information systems for the operation of our business and a disruption in our information systems, including those related to cybersecurity, could adversely affect our business operations.

We maintain and rely upon certain critical information systems for the effective operation of our business. These information systems include telecommunications, the Internet, our corporate intranet, various computer hardware and software applications, network communications, and e-mail. These information systems may be owned by us or by our outsource providers or even third parties such as vendors and contractors and may be maintained by us or by such providers or third parties. These information systems are subject to attacks, failures, and access denials from a number of potential sources including viruses,

destructive or inadequate code, insider threats, power failures, and physical damage to computers, hard drives, communication lines and networking equipment. To the extent that these information systems are under our control, we have implemented security procedures, such as virus protection software, security procedures and emergency recovery processes, to address the outlined risks; however, these measures may not prevent all incidents and our inability to use or access these information systems at critical points in time could unfavorably impact the timely and efficient operation of our business. Additionally, any compromise of our information security could result in the unauthorized access to or disclosure of our confidential business or proprietary information, including potential theft of our intellectual property or trade secrets (including our proprietary technology) or the unauthorized release of customer, supplier or employee data and result in a violation of privacy or other laws, thus exposing us to litigation, regulatory enforcement or damage to our reputation. While none of the security incidents that we have experienced to date have had a material adverse impact on our business, financial condition or operations, we cannot provide assurance that future incidents will not materially and adversely impact us. To the extent that our business is interrupted or data or proprietary technology is lost, destroyed or inappropriately used or disclosed, such disruption could adversely affect our competitive position, relationship with customers, suppliers or employees or our business, financial condition and operating results. In addition, we may be required to incur significant costs to protect against or repair the damage caused by these disruptions or security breaches in the future.

The costs associated with our indemnification of certain customers, distributors, and other parties could be higher in future periods.

In the normal course of our business, we indemnify other parties, including customers, distributors, and lessors, with respect to certain matters. These obligations typically arise pursuant to contracts under which we agree to hold the other party harmless against losses arising from a breach of representations and covenants related to certain matters, such as acts or omissions of our employees, infringement of third-party intellectual property rights, and certain environmental matters. We have not incurred any significant expense as a result of agreements of this type in at least a decade, but there can be no assurances that we will not incur expense under these indemnification provisions in the future.

We have also entered into agreements with our current and former directors and certain of our current and former executives indemnifying them against certain liabilities incurred in connection with their duties. Our Certificate of Incorporation and Bylaws contain similar indemnification obligations with respect to our current and former directors and employees, as does the California Labor Code. We cannot estimate the amount of potential future payments, if any, that we might be required to make as a result of these agreements.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate headquarters is located in Camarillo, California where we own an approximately 88,000 square foot facility. The parcel on which our headquarters is located can accommodate substantial expansion. As of January 30, 2022, we owned or leased multiple properties. The locations and primary functions of significant properties are summarized in the following table:

<u>Locations</u>	<u>Square Feet</u>	Administration	Research and/or development	Manufacturing support	Sales and marketing	Application engineering	Test and assembly	Reliability testing	<u>Leased</u>
Camarillo, California	88,000	•	•	•	•	•	•	•	
Colorado Springs, Colorado	25,967	•	•	•	•	•	•	•	•
Colorado Springs, Colorado	51,588	•	•	•	•	•	•	•	
Irvine, California	20,072	•	•	•	•	•	•	•	•
San Jose, California	17,016	•	•	•	•	•	•	•	•
San Diego, California	18,189	•	•	•	•	•	•	•	•
Burlington, Ontario, Canada	68,000	•	•	•	•	•	•	•	
Neuchatel, Switzerland	37,275	•	•	•	•	•	•	•	•
Reynosa, Mexico	30,000	•	•	•	•	•	•	•	
Kanata, Ontario, Canada	29,221	•	•	•	•	•	•	•	•
Rapperswil, Switzerland	17,760	•	•	•	•	•	•	•	•
Shenzhen, China	15,678	•	•	•	•	•	•	•	•
Bristol, United Kingdom	17,430	•	•	•	•	•	•	•	•
Bhubaneshwar, India	12,316	•	•	•	•	•	•	•	•

In addition to the properties listed in the above table, we also lease Sales and Marketing, Research and Development, and Administrative offices at various locations in the U.S. and internationally under operating leases, none of which are material to our future cash flows. Our leases expire at various dates through 2030.

We believe that our existing leased and owned space is more than adequate for our current operations, and that suitable replacement and additional space will be available in the future on commercially reasonable terms as circumstances warrant.

Item 3. Legal Proceedings

A description of our material legal proceedings in [Note 13 to the Consolidated Financial Statements](#) is incorporated by reference into this Item 3.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

Market Information

Our common stock is traded on The Nasdaq Global Select Market under the symbol "SMTC."

Holdings

As of March 11, 2022, we had 165 holders of record of our common stock. The actual number of holders of our common stock is greater than this number of record holders and includes stockholders who are beneficial owners, but whose shares are held in street name by brokers or held by other nominees.

Dividends

The payment of dividends on our common stock is within the discretion of our Board of Directors. Currently, we intend to retain earnings to finance the growth of our business. We did not pay cash dividends on our common stock during fiscal years 2022, 2021 or 2020, and our Board of Directors has not indicated an intent to declare a cash dividend on our common stock in the foreseeable future.

Issuer Purchases of Equity Securities

We maintain a stock repurchase program that was initially approved by our Board of Directors and announced by us in March 2008. The stock repurchase program does not have an expiration date and our Board of Directors has authorized expansion of the program over the years. On March 11, 2021, our Board of Directors approved the expansion of the stock repurchase program by an additional \$350.0 million. During fiscal year 2022, we repurchased \$129.7 million of our common stock. As of January 30, 2022, we have repurchased \$539.0 million of our common stock under the program since its inception and the remaining authorization under our stock repurchase program was \$259.4 million. Under the program, we may repurchase our common stock at any time or from time to time, without prior notice, subject to market conditions and other considerations. Our repurchases may be made through Rule 10b5-1 and/or Rule 10b-18 or other trading plans, open market purchases, privately negotiated transactions, block purchases or other transactions. We intend to fund repurchases under the program from cash on hand and borrowings on our Credit Facility. We have no obligation to repurchase any shares under the program and may suspend or discontinue it at any time.

Purchases by the Company of our common stock during the fourth quarter of fiscal year 2022 were as follows:

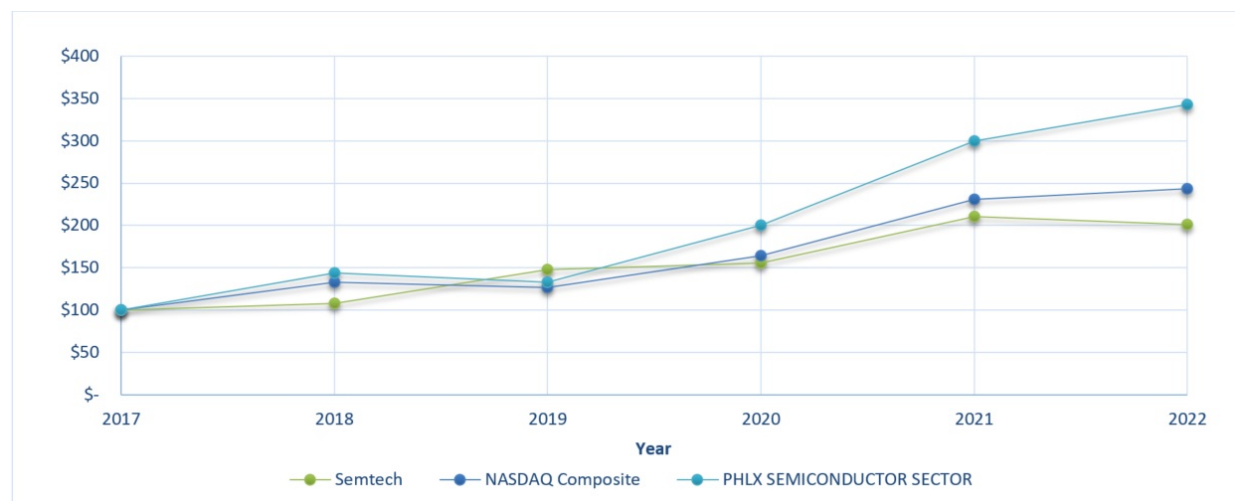
Fiscal Month/Year	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Program	Approximate Dollar Value of Shares That May Yet Be Purchased Under The Program
November 2021 (11/1/21-11/28/21)	—	\$ —	—	\$ 292.2 million
December 2021 (11/29/21-12/26/21)	200,167	\$ 87.42	200,167	\$ 274.7 million
January 2022 (12/27/21-01/30/22)	180,981	\$ 84.25	180,981	\$ 259.4 million
Total fourth quarter activity	<u>381,148</u>	<u>\$ 85.92</u>	<u>381,148</u>	

Sales of Unregistered Securities

We did not make any sales of unregistered securities during fiscal year 2022 that have not been previously reported.

Performance Graph

This chart and graph show the value of a \$100 cash investment on the last day of fiscal year 2017 in (i) the Company's common stock, (ii) the Nasdaq Composite Index, and (iii) the Philadelphia ("PHLX") Semiconductor Index. Note that historic stock price performance is not necessarily indicative of future stock price performance.



Fiscal Year	2017	2018	2019	2020	2021	2022
Semtech	\$100	\$108	\$148	\$156	\$211	\$201
Nasdaq Composite	\$100	\$133	\$127	\$165	\$231	\$243

PHLX SEMICONDUCTOR SECTOR	\$100	\$144	\$133	\$200	\$300	\$343
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The information contained in this Item 5 under the heading "Performance Graph" (i) is being furnished and shall not be deemed "filed" for the purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities of that section, and (ii) shall not be incorporated by reference into any registration statement or other document pursuant to the Exchange Act, or the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such filing to this Item 5 Performance Graph information.

Item 6. [Reserved]

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

The following discussion and analysis of our financial condition and operating results should be read in conjunction with our Consolidated Financial Statements and related Notes included in Item 8 of this Annual Report on Form 10-K. See also "Special Note Regarding Forward Looking and Cautionary Statements" at the beginning of this Annual Report on Form 10-K.

Overview

We are a leading global supplier of high-performance analog and mixed-signal semiconductors and advanced algorithms and were incorporated in Delaware in 1960. We design, develop, manufacture and market a broad range of products that are sold principally into applications within the infrastructure, high-end consumer and industrial end markets. Infrastructure end market includes data centers, PON, base stations, optical networks, servers, carrier networks, switches and routers, cable modems, wireless LAN and other communication infrastructure equipment. High-end consumer end market includes smartphones, tablets, wearables, desktops, notebooks, and other handheld products, wireless charging, set-top boxes, digital televisions, monitors and displays, digital video recorders and other consumer equipment. Industrial end market includes IoT applications, analog and digital video broadcast equipment, video-over-IP solutions, automated meter reading, smart grid, wireless charging, military and aerospace, medical, security systems, automotive, industrial and home automation and other industrial equipment. Our end customers are primarily OEMs that produce and sell electronics.

We report results on the basis of 52 and 53 week periods and our fiscal year ends on the last Sunday in January. Fiscal years 2022, 2021 and 2020 consisted of 52 weeks, 53 weeks and 52 weeks, respectively. We have three operating segments—Signal Integrity, Wireless and Sensing and Protection—that historically have been aggregated into one reportable segment identified as the "Semiconductor Products Group." In the fourth quarter of fiscal year 2022, we updated our forecasts and assessed the economic performance of the three operating segments and concluded that Protection is no longer expected to be economically similar to the other operating segments. This is primarily because our projections indicate that the gross margin of products within Protection will not be economically similar to products within the other operating segments. Accordingly, we concluded that Protection should be separately reported as its own reportable segment. This decision resulted in the formation of two reportable segments, including the High-Performance Analog Group, which is comprised of the Signal Integrity and Wireless and Sensing operating segments, and the System Protection Group, which is comprised of the Protection operating segment. All prior year information in the tables below has been revised retrospectively to reflect the change to our reportable segments. See Note 15 to the Consolidated Financial Statements for segment information.

Despite the challenges of the pandemic, we remained focused on furthering our role as a leading provider of disruptive platforms that enable our customers to deliver solutions to create a smarter planet. We continued to invest in secular trends that enable a smarter, more sustainable planet; enable higher bandwidth; and enable greater mobility. As a result, we expect these markets and our associated products' sales to grow rapidly over the next several years. The increasing adoption of our LoRa® technology for low power wide-area networks is providing connectivity solutions that enable IoT networks to make a smarter, more connected planet. Additionally, our portfolio of optical connectivity solutions continue to address the demand for greater bandwidth and higher performance, while using less power by our global hyper-scale data center customers. Additionally, the unexpected pivot to online learning and work from home during the pandemic exposed the fragile nature of many global networks that struggled under the spike in demand. This has driven infrastructure suppliers around the world to accelerate their investments in high speed connectivity using 5G wireless and PON technology where we are an industry leader. The trend towards adoption of finer silicon geometries has accelerated across all categories of end systems, making them increasingly vulnerable to electrical and electromagnetic threats. Our Protection Solutions, which enable the highest levels of system performance, have found increased adoption across the board, driven by the need to maintain product functionality despite the challenging threat environment (electrical and electromagnetic), and increased system sensitivity to threats due to adoption of finer silicon geometries for implementation of system functions. Finally, the increasing demand for smaller, lower-powered higher performance mobile platforms with more enjoyable organic light-emitting diode displays has benefited our protection and proximity sensing solutions that protect these mobile devices and their users from dangerous radio frequency signals.

During the fiscal year ended January 30, 2022, we also maintained our strategy of smaller, targeted investments focused mainly on minority positions in support of the developing LoRa ecosystem and the many new IoT solutions we are introducing. In addition to these strategic investments, we took further actions to help ensure the supply of products from our vendors and suppliers. After the initial onset of the pandemic, the semiconductor industry experienced and is continuing to experience a significant increase in demand that led to tighter capacity. We believe our investments in fiscal year 2022 position us well to support our expectations of future growth.

Impact of COVID-19

The COVID-19 pandemic has significantly affected health and economic conditions throughout the U.S. and the rest of the world including Asia, where a significant percentage of our customers, suppliers, third party foundries and subcontractors are located. As a result of the pandemic, certain of our facilities and the third-party foundries and assembly and test contractors to which we outsource our manufacturing functions, have had to periodically reduce or suspend operations. The disruption

experienced during such closures has resulted in reduced production of our products, delays for delivery of our products to our customers, and reduced ability to receive supplies, which have had and may continue to have, individually and in the aggregate, an adverse effect on our results.

Currently, customer demand remains strong and supply tight, with many of our suppliers running at or near capacity and our customers competing for limited inventory. While we have increased our inventory levels to prepare for our strong backlog of orders, we cannot provide assurance that we will have sufficient inventory if this high level of demand is sustained over the longer term. In addition, the prices to obtain raw materials and convert them into the necessary inventory have increased in certain cases, and may continue to increase, including due to current inflationary pressures. While we have been largely successful with passing on selective price increases to our customers, we cannot provide assurance that all future potential price increases can be absorbed through increased pricing to our customers.

We believe we have good visibility going into fiscal year 2023; however, it is unknown how much of the increased demand reflects real end market strength. We believe the general supply chain constraints in the industry may be motivating certain customers to increase their orders and inventory levels to protect against supply risk. To the extent that this cautionary purchasing is occurring, we could experience a decrease in future demand as potential excess inventory is worked down.

Factors Affecting Our Performance

Most of our sales to customers are made on the basis of individual customer purchase orders. Many customers include cancellation provisions in their purchase orders. As a result of current macro conditions where demand is exceeding supply and we are seeing global shortages, lead times may continue to expand, resulting in fewer orders being shipped and received in the same quarter. Sales made directly to customers during fiscal years 2022, 2021 and 2020 were approximately 13%, 18% and 28% of net sales, respectively. The remaining 87%, 82% and 72% of net sales, respectively, were made through independent distributors. The decline in direct sales is due to customers electing to leverage the value of distribution to better manage their supply chain.

Our business relies on foreign-based entities. Many of our third-party subcontractors and suppliers, including third-party foundries that supply silicon wafers, are located in foreign countries or territories including Taiwan and China. Foreign sales for fiscal years 2022, 2021 and 2020 constituted approximately 90%, 90% and 91%, respectively, of our net sales. Approximately 79%, 80% and 77% of net sales in fiscal years 2022, 2021 and 2020, respectively, were to customers located in the Asia-Pacific region. The remaining foreign sales were primarily to customers in Europe, Canada and Mexico. Doing business in foreign locations also subjects us to export restrictions and trade laws, which may limit our ability to sell to certain customers.

We use several metrics as indicators of future potential growth. The indicators that we believe best correlate to potential future sales growth are design wins and new product releases. There are many factors that may cause a design win or new product release to not result in sales, including a customer decision not to go to system production, a change in a customer's perspective regarding a product's value or a customer's product failing in the end market. As a result, although a design win or new product introduction is an important step towards generating future sales, it does not inevitably result in us being awarded business or receiving a purchase commitment.

Inflationary factors have not had a significant effect on our performance over the past several years. A significant increase in inflation would affect our future performance if we were unable to pass these higher costs on to our customers.

Revenue

We derive our revenue primarily from the sale of semiconductor products into various end markets. Revenue is recognized when control of these products is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for these products. Control is generally transferred when products are shipped and, to a lesser extent, when the products are delivered. Recovery of costs associated with product design and engineering services are recognized during the period in which services are performed and are reported as a reduction to product development and engineering expense. Historically, these recoveries have not exceeded the cost of the related development efforts. We include revenue related to granted technology licenses as part of "Net sales" in the Statements of Income. Historically, revenue from these arrangements has not been significant though it is part of our recurring ordinary business.

We determine revenue recognition through the following five steps:

- Identification of the contract, or contracts, with a customer
- Identification of the performance obligations in the contract
- Determination of the transaction price
- Allocation of the transaction price to the performance obligations in the contract
- Recognition of revenue when, or as, performance obligations are satisfied

We account for a contract when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of consideration is probable.

Our revenue contracts generally represent a single performance obligation to sell our products to trade customers. Net sales reflect the transaction prices for contracts, which include units shipped at selling prices reduced by variable consideration. Determination of variable consideration requires judgment by us. Variable consideration includes expected sales returns and other price adjustments. Variable consideration is estimated using the expected value method considering all reasonably available information, including our historical experience and our current expectations, and is reflected in the transaction price when sales are recorded. Sales returns are generally accepted at our discretion or from distributors with such rights. Our contracts with trade customers do not have significant financing components or non-cash consideration. We record net sales excluding taxes collected on our sales to our trade customers.

We provide an assurance type warranty, which is typically not sold separately and does not represent a separate performance obligation. Our payment terms are generally aligned with shipping terms.

Gross Profit

Gross profit is equal to our net sales less our cost of sales. Our cost of sales includes materials, depreciation on fixed assets used in the manufacturing process, shipping costs, direct labor and overhead. The majority of the Company's manufacturing is outsourced, resulting in relatively low fixed manufacturing costs and variable costs that highly correlate with volume. We determine the cost of inventory by the first-in, first-out method.

Operating Costs

Our operating costs and expenses generally consist of selling, general and administrative, product development and engineering costs, costs associated with acquisitions, restructuring charges, and other operating related charges.

Results of Operations

A discussion of our results of operations for the fiscal years ended January 30, 2022 and January 31, 2021 and year-over-year comparisons between these fiscal years appears below. In the fourth quarter of fiscal year 2022, we made certain changes in our reportable segments based on the economic performance of our operating segments (see Note 15 on segment information). With the exception of net sales and gross profit, which are discussed below to reflect the changes to our reportable segments, a discussion of our results of operations for the fiscal year ended January 26, 2020 and year-over-year comparisons between fiscal years 2021 and 2020 have been omitted from this Annual Report on Form 10-K, but may be found in "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" of our [Annual Report on Form 10-K for the fiscal year ended January 31, 2021](#), filed with the SEC on March 24, 2021 and is incorporated herein by reference.

Net Sales

Fiscal Year 2022 Compared with Fiscal Year 2021

The following table summarizes our net sales by major end market:

(in thousands, except percentages)	Fiscal Years				Change
	2022		2021		
	Net Sales	% Net Sales	Net Sales	% Net Sales	
Infrastructure	\$ 264,464	35 %	\$ 245,549	42 %	8 %
High-End Consumer	220,380	30 %	162,342	27 %	36 %
Industrial	256,014	35 %	187,226	31 %	37 %
Total	\$ 740,858	100 %	\$ 595,117	100 %	24 %

Net sales for fiscal year 2022 were \$740.9 million, an increase of 24% compared to \$595.1 million for fiscal year 2021, which had benefited from an additional week. We experienced strong demand across all three of our end markets compared to the prior year when our net sales were adversely impacted by delays in certain shipments of our products due to COVID-19 related shutdowns, including certain subcontractors in Malaysia. Net sales from our industrial end market increased \$68.8 million versus the prior year primarily due to an approximately \$46 million increase in LoRa-enabled product sales led by an increase in pico gateways and an approximately \$19 million increase in industrial automation and automotive sales. Net sales from our high-end consumer end market increased \$58.0 million primarily driven by an approximately \$23 million increase in Protection product sales, including wearables, mobile computers and smartphones, and an approximately \$22 million increase in our proximity sensing product sales, including smartphones. Net sales from our infrastructure end market increased \$18.9 million driven by an approximately \$30 million increase in 10G PON sales, partially offset by an approximately \$17 million decline in data center demand.

Entering fiscal year 2023, customer demand remains strong and supply tight, with many of our suppliers running at or near capacity and our customers competing for the limited supply. While we believe we have good visibility going into the first quarter of fiscal year 2023, it is unknown how much of this demand strength reflects real end market consumption or just our customers' efforts to increase their inventory levels over fear of the global supply chain constraints. To the extent that the increase in demand is driven by the latter, we, and the industry as a whole, could experience a period of slower future demand as the potential excess inventories are worked down. Based on booking trends and backlog entering the quarter, we estimate net sales for the first quarter of fiscal year 2023 to be between \$195.0 million and \$205.0 million.

The following table summarizes our net sales by reportable segment:

(in thousands, except percentages)	Fiscal Years				Change
	2022		2021		
	Net Sales	% Net Sales	Net Sales	% Net Sales	
High-Performance Analog Group	\$ 537,288	73 %	\$ 433,174	73 %	24 %
System Protection Group	203,570	27 %	161,943	27 %	26 %
Total	\$ 740,858	100 %	\$ 595,117	100 %	24 %

Net sales from our High-Performance Analog Group increased \$104.1 million in fiscal year 2022 versus fiscal year 2021 primarily due to an approximately \$46 million increase in LoRa-enabled product sales led by an increase in pico gateways, an approximately \$30 million increase in 10G PON sales, an approximately \$22 million increase in our proximity sensing product sales, including smartphones, and an approximately \$15 million increase in broadcast product sales, partially offset by an approximately \$17 million decline in data center demand. Net sales from our System Protection Group increased \$41.6 million in fiscal year 2022 versus fiscal year 2021 primarily driven by an approximately \$23 million increase in consumer product sales, including wearables, mobile computers and smartphones, and an approximately \$19 million increase in industrial automation and automotive sales.

Fiscal Year 2021 Compared with Fiscal Year 2020

(in thousands, except percentages)	Fiscal Years				Change
	2021		2020		
	Net Sales	% Net Sales	Net Sales	% Net Sales	
Infrastructure	\$ 245,549	42 %	\$ 209,936	38 %	17 %
High-End Consumer	162,342	27 %	158,394	29 %	2 %
Industrial	187,226	31 %	179,182	33 %	4 %
Total	\$ 595,117	100 %	\$ 547,512	100 %	9 %

Net sales for fiscal year 2021 were \$595.1 million, an increase of 9% compared to \$547.5 million for fiscal year 2020. During fiscal year 2021, the infrastructure end market increased by \$35.6 million driven by an approximately \$20 million increase in PON sales and an approximately \$17 million increase in data center demand. The industrial end market increased by \$8.0 million due to an approximately \$14 million increase in LoRa-enabled product sales, partially offset by an approximately \$6 million decrease in broadcast product sales due to the adverse impact of COVID-19 on large venue events. The high-end consumer end market increased by \$3.9 million driven by strength in proximity sensing product sales. Net sales also benefited from an extra week in fiscal year 2021.

The following table summarizes our net sales by reportable segment:

(in thousands, except percentages)	Fiscal Years				Change
	2021		2020		
	Net Sales	% Net Sales	Net Sales	% Net Sales	
High-Performance Analog Group	\$ 433,174	73 %	\$ 390,300	71 %	11 %
System Protection Group	161,943	27 %	157,212	29 %	3 %
Total	\$ 595,117	100 %	\$ 547,512	100 %	9 %

Net sales from our High-Performance Analog Group increased \$42.9 million in fiscal year 2021 versus fiscal year 2020 primarily driven by an approximately \$20 million increase in PON sales, an approximately \$17 million increase in data center demand and an approximately \$14 million increase in LoRa-enabled product sales, partially offset by an approximately \$6 million decrease in broadcast product sales due to the adverse impact of COVID-19 on large venue events. Net sales from our System Protection Group increased \$4.7 million in fiscal year 2021 versus fiscal year 2020 primarily driven by an approximately \$7 million increase in industrial automation and automotive sales, partially offset by weaker demand for consumer products, including smartphones.

Gross Profit

Fiscal Year 2022 Compared with Fiscal Year 2021

The following table summarizes our gross profit and gross margin by reportable segment:

(in thousands, except percentages)	Fiscal Years			
	2022		2021	
	Gross Profit	Gross Margin	Gross Profit	Gross Margin
High-Performance Analog Group	\$ 364,594	67.9 %	\$ 283,668	65.5 %
System Protection Group	105,605	51.9 %	81,631	50.4 %
Unallocated costs, including share-based compensation	(4,118)		(1,750)	
Total	<u>\$ 466,081</u>	62.9 %	<u>\$ 363,549</u>	61.1 %

In fiscal year 2022, gross profit increased to \$466.1 million from \$363.5 million in fiscal year 2021 as a result of higher sales. This increase included an \$80.9 million increase from our High-Performance Analog Group and a \$24.0 million increase from our System Protection Group, both of which experienced higher demand and implemented price increases to offset higher manufacturing costs during fiscal year 2022. Our gross margin was 62.9% in fiscal year 2022, compared to 61.1% in fiscal year 2021. Gross margin in our High-Performance Analog Group was 67.9% in fiscal year 2022, compared to 65.5% in fiscal year 2021 and gross margin in our System Protection Group was 51.9% in fiscal year 2022, compared to 50.4% in fiscal year 2021, reflecting a more favorable product mix in both of our reportable segments. The majority of the Company's manufacturing is outsourced, resulting in relatively low fixed manufacturing costs and variable costs that highly correlate with volume.

Despite the capacity constraints within the industry, we expect overall gross profit for fiscal year 2023 to benefit from continued revenue growth. We have increased our inventory levels to try to meet the strong backlog of orders and higher demand, as well as to minimize the impact of potential supply shortages.

Fiscal Year 2021 Compared with Fiscal Year 2020

The following table summarizes our gross profit and gross margin by reportable segment:

(in thousands, except percentages)	Fiscal Years			
	2021		2020	
	Gross Profit	Gross Margin	Gross Profit	Gross Margin
High-Performance Analog Group	\$ 283,668	65.5 %	\$ 259,172	66.4 %
System Protection Group	81,631	50.4 %	78,809	50.1 %
Unallocated costs, including share-based compensation	(1,750)		(1,297)	
Total	<u>\$ 363,549</u>	61.1 %	<u>\$ 336,684</u>	61.5 %

In fiscal year 2021, gross profit increased to \$363.5 million from \$336.7 million in fiscal year 2020. This increase included a \$24.5 million increase from our High-Performance Analog Group and a \$2.8 million increase from our System Protection Group as a result of higher sales. Our gross margin was 61.1% in fiscal year 2021, compared to 61.5% in fiscal year 2020. Gross margin in our High-Performance Analog Group was 65.5% in fiscal year 2021, compared to 66.4% in fiscal year 2020, reflecting a less favorable product mix and higher charges for inventory reserves. Gross margin in our System Protection Group was 50.4% in fiscal year 2021, compared to 50.1% in fiscal year 2020, reflecting a more favorable product mix.

Operating Costs and Expenses

(in thousands, except percentages)	Fiscal Years				
	2022		2021		Change
	Cost/Exp.	% Net Sales	Cost/Exp.	% Net Sales	
Selling, general and administrative	\$ 168,210	23 %	\$ 162,832	27 %	3 %
Product development and engineering	147,925	20 %	117,529	20 %	26 %
Intangible amortization	4,942	1 %	8,265	1 %	(40)%
Changes in the fair value of contingent earn-out obligations	(13)	— %	(33)	— %	(61)%
Total operating costs and expenses	<u>\$ 321,064</u>	44 %	<u>\$ 288,593</u>	48 %	11 %

Selling, General & Administrative Expenses

SG&A expenses for fiscal year 2022 increased by \$5.4 million primarily driven by an increase of approximately \$3 million in staffing-related costs, including performance-based compensation.

Product Development and Engineering Expenses

Product development and engineering expenses for fiscal years 2022 and 2021 were \$147.9 million and \$117.5 million, respectively, or an increase of 26%. This increase reflects an approximately \$12 million increase in staffing-related costs, including performance-based compensation, and an approximately \$13 million increase in operating supplies and contracted research, as well as fluctuations in the timing of development activities. The levels of product development and engineering expenses reported in a fiscal period can be significantly impacted, and therefore experience period-over-period volatility, by the number of new product tape-outs and by the timing of recoveries from non-recurring engineering services, which are typically recorded as a reduction to product development and engineering expense.

Intangible Amortization

Intangible amortization was \$4.9 million and \$8.3 million in fiscal years 2022 and 2021, respectively. This decrease was primarily due to certain finite-lived intangible assets associated with the acquisitions of Gennum Corporation, Triune Systems, LLC, and AptoVision Technologies, Inc., which became fully amortized during fiscal year 2021 and certain finite-lived intangible assets associated with the acquisition of Trackio International AG, which became fully amortized during fiscal year 2022.

Changes in the Fair Value of Contingent Earn-out Obligations

The change in the fair value of contingent earn-out obligations in fiscal year 2022 compared to fiscal year 2021 reflects the difference between the final earn-out targets achieved for Cycleo SAS and the final earn-out payments made.

Interest Expense

Interest expense was \$5.1 million and \$5.3 million for fiscal years 2022 and 2021, respectively. The \$0.2 million decrease was primarily related to lower overall debt levels.

Investment Impairments and Credit Loss Reserves

In fiscal year 2022, investment impairments and credit loss reserves totaled a loss of \$1.3 million as we increased our credit loss reserves by \$1.1 million for our available-for-sale ("AFS") debt securities consisting of our convertible debt investments in privately-held companies and recorded a \$0.2 million impairment on one of our non-marketable equity investments. In fiscal year 2021, investment impairments and credit loss reserves totaled a loss of \$6.8 million as we increased our credit loss reserves by \$2.9 million for our AFS debt securities, in part, due to the adverse impact of COVID-19 on these early-stage companies, and recorded impairments on five of our non-marketable equity investments totaling \$3.9 million.

Provision for Income Taxes

We recorded income tax expense of \$15.5 million for fiscal year 2022 compared to income tax expense of \$3.4 million for fiscal year 2021. The effective tax rates for fiscal years 2022 and 2021 were provision rates of 11.0% and 5.4%, respectively. Our effective tax rate for fiscal year 2022 differs from the statutory federal income tax rate of 21% primarily due to our regional mix of income, the impact of tax credits generated, and the recognition of excess tax benefits related to share-based compensation.

We receive a tax benefit from a tax holiday that was granted in Switzerland. The tax holiday commenced on January 30, 2017, and was effective for five years (the "Initial Term"). Since we met certain staffing targets, the holiday has been extended for an additional five years. The maximum benefit under this tax holiday is CHF 500.0 million of cumulative after tax profit, which equates to a maximum potential tax savings of CHF 44.0 million. Once the extended term of the tax holiday expires or we achieve the maximum benefit, our effective tax rate could be negatively impacted if we are unable to negotiate an extension or expansion of the tax holiday. The Swiss Tax Reform that was enacted during fiscal year 2020 reduces the Swiss Cantonal tax rate, which further increases the benefit of our Tax Holiday.

As a global organization, we are subject to audit by taxing authorities in various jurisdictions. To the extent that an audit, or the closure of a statute of limitations results in adjusting our reserves for uncertain tax positions, our effective tax rate could experience extreme volatility since any adjustment would be recorded as a discrete item in the period of adjustment.

For further information on the effective tax rate and Tax Act's impact, see Note 11 to the Consolidated Financial Statements.

Liquidity and Capital Resources

Our capital requirements depend on a variety of factors including, but not limited to, the rate of increase or decrease in our existing business base; the success, timing and amount of investment required to bring new products to market; sales growth or decline; potential acquisitions; the general economic environment in which we operate; and our ability to generate cash flow from operations, which are more uncertain as a result of the COVID-19 pandemic and its impact on the general economy. Our liquidity needs during this uncertain time will depend on multiple factors, including our ability to continue operations and production of our products, given the global supply constraints, the COVID-19 pandemic's effects on our customers, the availability of sufficient amounts of financing and our operating performance.

We believe that our cash on hand, cash available from future operations and available borrowing capacity under our Credit Facility (as defined below) are sufficient to meet liquidity requirements for at least the next 12 months, including funds needed for our material cash requirements as described below. As of January 30, 2022, we had \$279.6 million in cash and cash equivalents and \$427.0 million of undrawn capacity on our Credit Facility (as defined below). Over the longer-term, we believe our strong cash generating business model will continue to provide adequate liquidity to fund our normal operations, which have minimal capital intensity. To the extent that we enter into acquisitions or strategic partnerships, we may be required to raise additional capital through debt issuances or equity offerings. In addition, we expect to refinance our Credit Facility ahead of its maturity in November 2024. While we have not had issues securing favorable financing historically, there is no assurance that we will be able to refinance or secure additional capital at favorable terms, or at all in the future.

A meaningful portion of our capital resources, and the liquidity they represent, are held by our foreign subsidiaries. As of January 30, 2022, our foreign subsidiaries held approximately \$221.9 million of cash and cash equivalents, compared to \$182.9 million at January 31, 2021. In connection with the enactment of the Tax Cuts and Jobs Act ("Tax Act"), all historic and current foreign earnings are taxed in the U.S. Depending on the jurisdiction, these foreign earnings are potentially subject to a withholding tax, if repatriated. As of January 30, 2022, our historical undistributed earnings of the Company's foreign subsidiaries are intended to be permanently reinvested outside of the U.S. With the enactment of the Tax Act, all post-1986 previously unremitted earnings for which no U.S. deferred tax liability had been accrued were subject to U.S. tax. Notwithstanding the U.S. taxation of these amounts, we have determined that \$50.0 million of our current foreign earnings will not be permanently reinvested. As a result, we have established a deferred income tax liability for the Swiss withholding tax that will be due upon distribution of these earnings. If we needed to remit all or a portion of our historical undistributed earnings to the U.S. for investment in our domestic operations, any such remittance could result in increased tax liabilities and a higher effective tax rate. Determination of the amount of the unrecognized deferred tax liability on these unremitted earnings is not practicable.

We expect our future cash uses will be for capital expenditures, repurchases of our common stock, debt repayment and potentially, acquisitions and other investments that support achievement of our business strategies. We expect to fund those cash requirements through our cash from operations and borrowings against our Credit Facility.

Sources of Liquidity

Operating Cash Flows

Operating cash flows were \$203.1 million or 27.4% of net sales in fiscal year 2022 and \$118.9 million or 20.0% of net sales in fiscal year 2021. Our consistently solid profitability and operating cash flow are driven by our ability to value price for the differentiated technology that we provide, as well as our fabless business model, which is highly flexible to changes in customer demand.

Credit Facility

On November 7, 2019, we, with certain of our domestic subsidiaries as guarantors, entered into an amended and restated credit agreement (the "Credit Agreement") with the lenders party thereto and HSBC Bank USA, National Association, as administrative agent, swing line lender and letter of credit issuer in order to provide a more flexible borrowing structure by expanding the borrowing capacity of the revolving loans under the secured first lien credit facility ("the Credit Facility") to \$600.0 million, eliminating the term loans and extending the maturity to November 7, 2024.

In fiscal year 2022, we received \$20.0 million in proceeds from our Credit Facility and made payments on our Credit Facility that totaled \$28.0 million. In fiscal year 2021, we made payments on our Credit Facility that totaled \$16.0 million. As of January 30, 2022, we had \$173.0 million of outstanding borrowings against our Credit Facility, which had \$427.0 million of undrawn borrowing capacity.

The Credit Agreement provides that, subject to certain customary conditions, including obtaining commitments with respect thereto, we may request the establishment of one or more term loan facilities and/or increases to the revolving loans in a principal amount not to exceed (a) \$300.0 million, plus (b) an unlimited amount, so long as our consolidated leverage ratio, determined on a pro forma basis, does not exceed 3.00 to 1.00. However, the lenders are not required to provide such increase upon our request.

Interest on loans made under the Credit Facility in U.S. Dollars accrues, at our option, at a rate per annum equal to (1) the Base Rate (as defined below) plus a margin ranging from 0.25% to 1.25% depending upon our consolidated leverage ratio or (2) LIBOR (determined with respect to deposits in U.S. Dollars) for an interest period to be selected by us plus a margin ranging from 1.25% to 2.25% depending upon our consolidated leverage ratio (such margin, the "Applicable Margin"). The "Base Rate" is equal to a fluctuating rate equal to the highest of (a) the prime rate of the Administrative Agent, (b) 0.50% above the federal funds effective rate published by the Federal Reserve Bank of New York and (c) one-month LIBOR (determined with respect to deposits in U.S. Dollars), plus 1.00%. Interest on loans made under the Credit Facility in Alternative Currencies accrues at a rate per annum equal to LIBOR (determined with respect to deposits in the applicable Alternative Currency) (other than loans made in Canadian Dollars, for which a special reference rate for Canadian Dollars applies) for an interest period to be selected

by us plus the Applicable Margin. See "Interest Rate and Credit Risk" under Item 7A of this Annual Report on 10-K for a discussion of the potential impact of the discontinuation of LIBOR to our outstanding debt and financial results.

During fiscal year 2021, we entered into an interest rate swap agreement to hedge the variability of interest payments on the first \$150.0 million of debt outstanding under our Credit Facility. The swap has a three-year term and based on our current leverage ratio as of January 30, 2022, interest payments on the first \$150.0 million of debt outstanding under our Credit Facility are fixed at 1.9775%.

All of our obligations under the Credit Agreement are unconditionally guaranteed by all of our direct and indirect domestic subsidiaries, other than certain excluded subsidiaries, including, but not limited to, any domestic subsidiary the primary assets of which consist of equity or debt of non-U.S. subsidiaries, certain immaterial non-wholly-owned domestic subsidiaries and subsidiaries that are prohibited from providing a guarantee under applicable law or that would require governmental approval to provide such guarantee. The Company and the guarantors have also pledged substantially all of their assets to secure their obligations under the Credit Agreement.

No amortization is required with respect to the revolving loans and we may voluntarily prepay borrowings at any time and from time to time, without premium or penalty, other than customary "breakage costs" and fees for LIBOR-based loans.

The Credit Agreement contains customary covenants, including limitations on our ability to, among other things, incur indebtedness, create liens on assets, engage in certain fundamental corporate changes, make investments, repurchase stock, pay dividends or make similar distributions, engage in certain affiliate transactions, or enter into agreements that restrict our ability to create liens, pay dividends or make loan repayments. In addition, we must comply with financial covenants, including maintaining a maximum consolidated leverage ratio, determined as of the last day of each fiscal quarter, of 3.50 to 1.00 or less, provided that, such maximum consolidated leverage ratio may be increased to 4.00 to 1.00 for the four consecutive fiscal quarters ending on or after the date of consummation of a permitted acquisition that constitutes a "Material Acquisition" under the Credit Agreement, subject to the satisfaction of certain conditions. As of January 30, 2022, we were in compliance with the covenants in our Credit Agreement.

The Credit Agreement also contains customary provisions pertaining to events of default. If any event of default occurs, the obligations under the Credit Agreement may be declared due and payable, terminated upon written notice to us and existing letters of credit may be required to be cash collateralized.

On August 11, 2021, we entered into an amendment to the Credit Agreement in order to, among other things, (i) provide for contractual fallback language for LIBOR replacement to reflect the Alternative Reference Rates Committee hardwired approach and (ii) incorporate certain provisions that clarify the rights of the administrative agent to recover from lenders or other secured parties erroneous payments made to such lenders or secured parties.

Expected Uses of Liquidity

Capital Expenditures and Research and Development

We incur significant expenditures in order to fund the development, design and manufacture of new products. We intend to continue to focus on those areas that have shown potential for viable and profitable market opportunities, which may require additional investment in equipment and the hiring of additional design and application engineers aimed at developing new products. Certain of these expenditures, particularly the addition of design engineers, do not generate significant payback in the short-term. We plan to finance these expenditures with cash generated by our operations and our existing cash balances.

Purchases under our Stock Repurchase Program

We currently have in effect a stock repurchase program that was initially approved by our Board of Directors in March 2008. On March 11, 2021, our Board of Directors approved the expansion of the stock repurchase program by an additional \$350.0 million. This program represents one of our principal efforts to return value to our stockholders. During fiscal years 2022 and 2021, we repurchased shares of common stock under this program for \$129.7 million and \$71.4 million, respectively. As of January 30, 2022, we had repurchased \$539.0 million in shares of our common stock under the program since inception and the remaining authorization under the program was \$259.4 million. We intend to fund repurchases under the program from cash on hand and borrowings on our Credit Facility. We have no obligation to repurchase any shares under the program and may suspend or discontinue it at any time.

Operating Leases

We have operating leases for real estate, vehicles, and office equipment with remaining lease terms of up to eight years, some of which include options to extend the leases for up to three years, and some of which include options to terminate the leases within one year. Our operating lease liabilities totaled \$20.6 million and \$17.1 million as of January 30, 2022 and January 31, 2021, respectively.

Purchase Commitments

Capital purchase commitments and other open purchase commitments are for the purchase of plant, equipment, raw materials, supplies and services. They are not recorded liabilities in our Consolidated Balance Sheets as of January 30, 2022, as we have not yet received the related goods or taken title to the goods or received services. As of January 30, 2022, we had \$3.7 million in open capital purchase commitments and \$97.9 million in other open purchase commitments.

Compensation and Defined Benefit Plans

We maintain a deferred compensation plan for certain officers and key executives that allow participants to defer a portion of their compensation for future distribution at various times permitted by the plan. Our liability for deferred compensation under this plan was \$45.2 million and \$41.0 million as of January 30, 2022 and January 31, 2021, respectively, and is included in accrued liabilities and other long-term liabilities in the Consolidated Balance Sheets. The plan provides for a discretionary Company match up to a defined portion of the employee's deferral, with any match subject to defined conditions.

We have purchased whole life insurance on the lives of certain of our current and former deferred compensation plan participants. This corporate-owned life insurance is held in a grantor trust and is intended to cover a majority of the costs of our deferred compensation plan. The cash surrender value of our corporate-owned life insurance was \$35.2 million and \$27.6 million as of January 30, 2022 and January 31, 2021, respectively, and is included in other assets in the Consolidated Balance Sheets. The increase in the cash surrender value of the corporate-owned life insurance as of January 30, 2022 compared to January 31, 2021 was related to an overall increase in market value and \$6.0 million of premiums paid in order to provide substantive coverage for the Company's deferred compensation liability.

We maintain defined benefit pension plans for the employees of our Swiss subsidiaries and French subsidiary. Expected future payments under these plans totaled \$23.3 million as of January 30, 2022.

The liability associated with vested, but unsettled restricted stock awards that are to be settled in cash totaled \$11.5 million and \$14.0 million as of January 30, 2022 and January 31, 2021, respectively, and was included in "Other long-term liabilities" in the Balance Sheets.

Working Capital

Working capital, defined as total current assets less total current liabilities, fluctuates depending on end-market demand and our effective management of certain items such as receivables, inventory and payables. In times of escalating demand, our working capital requirements may increase as we purchase additional manufacturing materials and increase production. In addition, our working capital may be affected by potential acquisitions and transactions involving our debt instruments. Although investments made to fund working capital will reduce our cash balances, these investments are necessary to support business and operating initiatives. Our working capital, excluding cash and cash equivalents, was \$94.3 million and \$96.3 million as of January 30, 2022 and January 31, 2021, respectively. Our working capital, including cash and cash equivalents and the current portion of long-term debt, was \$373.9 million and \$365.2 million as of January 30, 2022 and January 31, 2021, respectively.

Cash Flows

One of our primary goals is to improve the cash flows from our existing business activities. Additionally, we will continue to seek to maintain or improve our existing business performance and deploy our accumulated cash balances in the most effective manner through alternatives such as capital expenditures, and potentially, acquisitions and other investments that support achievement of our business strategies. Acquisitions may be made for either cash or stock consideration, or a combination of both.

In summary, our cash flows for each period were as follows:

(in thousands)	Fiscal Years	
	2022	2021
Net cash provided by operating activities	\$ 203,123	\$ 118,930
Net cash used in investing activities	(40,316)	(42,909)
Net cash used in financing activities	(152,097)	(100,454)
Net increase (decrease) in cash and cash equivalents	\$ 10,710	\$ (24,433)

Operating Activities

Net cash provided by operating activities is driven by net income, adjusted for non-cash items and fluctuations in operating assets and liabilities.

Operating cash flows for fiscal year 2022 compared to fiscal year 2021 were favorably impacted by a 24.5% increase in net sales and unfavorably impacted by a \$12.0 million incremental increase in inventory spend, a \$30.4 million increase in product development and engineering expenses due to higher staffing-related costs, increases in operating supplies and contracted

research, and fluctuations in the timing of development activities, and a \$5.4 million increase in SG&A expenses due to higher staffing-related costs.

Investing Activities

Net cash used in investing activities is primarily attributable to capital expenditures, purchases of investments and premiums paid for corporate-owned life insurance, net of proceeds from sales of property, plant and equipment and proceeds from sales of investments. Investing activities are also impacted by acquisitions, net of any cash received, if applicable.

Capital expenditures were \$26.2 million and \$32.7 million in fiscal years 2022 and 2021, respectively, as we made significant investments to update and expand our production capabilities.

In fiscal years 2022 and 2021 we paid \$8.2 million and \$10.9 million, respectively, for strategic investments, including investments in companies that are enabling the LoRa and LoRaWAN®-based ecosystem.

In fiscal year 2022, we paid \$6.0 million for premiums on corporate-owned life insurance in order to provide substantive coverage for our deferred compensation liability.

Financing Activities

Net cash used in financing activities is primarily attributable to repurchases of our common stock, payments related to employee share-based compensation payroll taxes and payments on our Credit Facility, offset by proceeds from our Credit Facility and proceeds from stock option exercises.

In fiscal year 2022, we paid \$19.4 million for employee share-based compensation payroll taxes and received \$5.3 million in proceeds from the exercise of stock options, compared to payments of \$21.5 million for employee share-based compensation payroll taxes and proceeds of \$8.5 million from the exercise of stock options in fiscal year 2021. We do not directly control the timing of the exercise of stock options. Such exercises are independent decisions made by grantees and are influenced most directly by the stock price and the expiration dates of stock option awards. Such proceeds are difficult to forecast, resulting from several factors which are outside our control. We believe that such proceeds will remain a nominal source of cash in the future.

Critical Accounting Estimates

We prepare our consolidated financial statements in accordance with GAAP. In doing so, we have to make estimates and assumptions that affect our reported amounts of assets, liabilities, revenues, and expenses, as well as related disclosure of contingent assets and liabilities. Accordingly, actual results could differ materially from our estimates. We consider an accounting policy to be a "critical accounting policy and estimate" if: (1) we must make assumptions that were uncertain when the judgment was made, and (2) changes in the estimate assumptions or selection of a different estimate methodology could have a significant impact on our financial position and the results that we report in our consolidated financial statements. While we believe that our estimates, assumptions, and judgments are reasonable, they are based on information available when the estimate was made. We believe the following represent our most significant accounting estimates:

- *Inventories* - We value our inventory at the lower of cost or net realizable value, which requires us to make estimates regarding potential obsolescence or lack of marketability. We reduce the basis of our inventory due to changes in demand or change in product life cycles. The estimation of customer demand requires management to evaluate and make assumptions of the impact of changes in demand or changes in product life cycles on current sales levels. Our write-down to net realizable value at the end of fiscal year 2022 and 2021 represented 27.5% and 26.3% of gross inventory, respectively. Based on fiscal year 2022 ending inventory, an increase in the write-down by one percent of gross inventory would decrease net inventory and increase cost of goods sold by \$1.6 million.
- *Revenue recognition* - Net sales reflect the transaction prices for contracts, which include units shipped at selling prices reduced by variable consideration. Determination of variable consideration requires judgment by us and includes expected sales returns and other price adjustments. Variable consideration is estimated using the expected value method considering all reasonably available information, including our historical experience and our current expectations, and is reflected in the transaction price when sales are recorded. In fiscal year 2022, net sales were reduced by \$21.0 million in estimated variable consideration, or 2.8% of gross revenue. In fiscal year 2021, net sales were reduced by \$18.1 million in estimated variable consideration, or 3.0% of gross revenue. If variable consideration were estimated to be one percent higher, fiscal year 2022 revenue would have decreased by \$7.6 million.
- *Income taxes* - The identification and measurement of deferred tax assets and liabilities and the provisional estimates associated with applicable tax laws require a high degree of judgment and interpretation of tax laws in the U.S. and several other foreign jurisdictions. We use judgment in estimating whether or not our deferred tax assets will ultimately be realized, expected outcomes of audits and likelihood of our tax positions being sustained, forecasted earnings and available tax planning strategies.

- *Goodwill* - We perform a goodwill impairment assessment on an annual basis, during the fourth quarter of each fiscal year, or more frequently if indicators of impairment exist. The analysis may include both qualitative factors, such as the industry and macro-economic environment, and quantitative assessments, both of which typically require a significant amount of judgment. Other significant estimates include market segment growth rates, assumed market share, estimated costs and discount rates based on the reporting unit's weighted average cost of capital. No impairment of goodwill has been recorded over the past three fiscal years.

New Accounting Standards

New accounting standards are discussed in Note 2 to the Consolidated Financial Statements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are subject to a variety of market risks, including commodity risk and the risks related to foreign currency, interest rates and market performance that are detailed below. Many of the factors that can have an impact on our market risk are external to us, and so we are unable to fully predict them.

Market Conditions

A deterioration of global economic conditions can impact demand for our products which could result in changes in customer order patterns, including order cancellations, and changes in the level of inventory held by vendors.

Commodity Risk

We are subject to risk from fluctuating market prices of certain commodity raw materials, particularly gold, that are incorporated into our end products or used by our suppliers to process our end products. Increased commodity prices are passed on to us in the form of higher prices from our suppliers, either in the form of general price increases or a commodity surcharge. Although we generally deal with our suppliers on a purchase order basis rather than on a long-term contract basis, we generally attempt to obtain firm pricing for volumes consistent with planned production. Our gross margins may decline if we are not able to increase selling prices of our products or obtain manufacturing efficiencies to offset the increased cost. We do not enter into formal hedging arrangements to mitigate against commodity risk.

Foreign Currency Risk

Our foreign operations expose us to the risk of fluctuations in foreign currency exchange rates against our functional currency (the U.S. Dollar) and we may economically hedge this risk with foreign currency contracts (such as currency forward contracts). Gains or losses on these non-U.S.-currency balances are generally offset by corresponding losses or gains on the related hedging instruments. As of January 30, 2022, our largest foreign currency exposures were from the Canadian Dollar, Swiss Franc, and Great British Pound.

We considered the historical trends in foreign currency exchange rates and determined that it is reasonably possible that adverse changes in foreign exchange rates of 10% for all currencies could be experienced in the near-term. These reasonably possible adverse changes were applied to our total monetary assets and liabilities denominated in currencies other than our functional currency as of January 30, 2022, to compute the adverse impact these changes would have had (after taking into account balance sheet hedges only) on our income before taxes, to show an impact of \$1.7 million.

Interest Rate and Credit Risk

We are subject to interest rate risk in connection with the portion of the outstanding debt under our Credit Facility that bears interest at a variable rate as of January 30, 2022. During fiscal year 2021, we entered into an interest rate swap agreement with a three-year term to hedge the variability of interest payments on the first \$150.0 million of debt outstanding under our Credit Facility. Based on our current leverage ratio as of January 30, 2022, interest payments on the first \$150.0 million of our debt outstanding under our Credit Facility are fixed at 1.9775%. See above under "Liquidity and Capital Resources - Credit Facility" for the interest rates applicable to U.S. and Alternative Currencies borrowings under our Credit Facility in excess of \$150.0 million. Based upon the amount of our outstanding indebtedness as of January 30, 2022, a one percentage point increase in LIBOR would not have a material impact on our annual interest expense as only \$23.0 million of our outstanding debt balance remains subject to a floating rate.

The Chief Executive of the U.K. Financial Conduct Authority (the "FCA"), which regulates LIBOR, announced that the FCA will no longer persuade or compel banks to submit rates for the calculation of LIBOR after 2021. For U.S. dollar LIBOR, publication of the one-week and two-month LIBOR settings ceased on December 31, 2021, and publication of the overnight and 12-month LIBOR settings will cease after June 30, 2023. Immediately after June 30, 2023, the one-month, three-month and six-month U.S. dollar LIBOR settings will no longer be representative. Given these changes, the LIBOR administrator has advised that no new contracts using U.S. dollar LIBOR should be entered into after December 31, 2021. It is also possible that U.S. LIBOR will be discontinued or modified prior to June 30, 2023.

Our Credit Facility provides that, if it is publicly announced that the administrator of LIBOR has ceased or will cease to provide LIBOR, if it is publicly announced by the applicable regulatory supervisor that LIBOR is no longer representative, or if either the administrative agent or lenders holding 50% of the aggregate principal amount of our revolving commitments and term loans elect, we and the administrative agent may amend our Credit Agreement to replace LIBOR with an alternate benchmark rate. This alternative benchmark rate may include a forward-looking term rate that is based on the secured overnight financing rate, also known as SOFR, published by the Federal Reserve Bank of New York.

Interest rates also affect our return on excess cash and investments. As of January 30, 2022, we had \$279.6 million of cash and cash equivalents. A majority of our cash and cash equivalents generate interest income based on prevailing interest rates. Investments and cash and cash equivalents generated interest income, net of reserves, of \$1.5 million in fiscal year 2022. A significant change in interest rates would impact the amount of interest income generated from our cash and investments. It would also impact the market value of our investments.

Our investments are primarily subject to credit risk. Our investment guidelines prescribe credit quality, permissible investments, diversification, and duration restrictions. These restrictions are intended to limit risk by restricting our investments to high quality debt instruments with relatively short-term durations. Our investment strategy limits investment of new funds and maturing securities to U.S. Treasury, Federal agency securities, high quality money market funds and time deposits with our principal commercial banks. Outside of these investment guidelines, we also invest in a limited amount of debt securities in privately held companies that we view as strategic to our business. For example, many of these investments are in companies that are enabling the LoRa- and LoRaWAN®-based ecosystem. We evaluate the credit risk of these investments on a quarterly basis and increased our credit loss reserves by \$1.1 million in fiscal year 2022, related to the credit risk on our debt securities investments, resulting in a credit loss reserve balance on our AFS debt securities and held-to-maturity debt securities of \$4.5 million as of January 30, 2022.

Item 8. Financial Statements and Supplementary Data

The information required by Item 8 is presented in the following order:

<u>Management’s Report on Internal Control Over Financial Reporting</u>	<u>42</u>
<u>Reports of Independent Registered Public Accounting Firm: (PCAOB ID No. 34)</u>	
<u>Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting</u>	<u>42</u>
<u>Report of Independent Registered Public Accounting Firm on the Consolidated Financial Statements</u>	<u>43</u>
<u>Consolidated Statements of Income</u>	<u>45</u>
<u>Consolidated Statements of Comprehensive Income</u>	<u>46</u>
<u>Consolidated Balance Sheets</u>	<u>47</u>
<u>Consolidated Statements of Stockholders’ Equity</u>	<u>48</u>
<u>Consolidated Statements of Cash Flows</u>	<u>49</u>
<u>Notes to Consolidated Financial Statements</u>	<u>51</u>
<u>Schedule II — Valuation and Qualifying Accounts</u>	<u>90</u>

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The report called for by Item 308(a) of Regulation S-K is incorporated herein by reference to the *Report of Management on Internal Control Over Financial Reporting* that is included in Part II, Item 9A of this Annual Report on Form 10-K.

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM
ON INTERNAL CONTROL OVER FINANCIAL REPORTING**

The report called for by Item 308(b) of Regulation S-K is incorporated herein by reference to the *Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting* that is included in Part II, Item 9A of this Annual Report on Form 10-K.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Semtech Corporation
Camarillo, California

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Semtech Corporation and subsidiaries (the "Company") as of January 30, 2022 and January 31, 2021, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the three years in the period ended January 30, 2022, and the related notes and the schedule listed in the Index at Item 15(a) (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of January 30, 2022 and January 31, 2021, and the results of its operations and its cash flows for each of the three years in the period ended January 30, 2022, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of January 30, 2022, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 16, 2022, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

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

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

Critical Audit Matter

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

Inventories – Excess Quantities and Obsolescence – Refer to Notes 2 and 5 to the financial statements.

Critical Audit Matter Description

The Company maintains an inventory excess and obsolescence ("E&O") reserve to reduce the basis of its inventory due to changes in demand or change in product life cycles. The inventory reserve serves to reduce the Company's recorded inventory balance to the lower of its cost or net realizable value. In order to determine the reserve, management utilizes projections of demand. The estimation of customer demand requires management to evaluate and make assumptions of the impact of changes in demand or changes in product life cycles on current sales levels.

Given the subjectivity of estimating projections of future demand and the recording of inventory E&O reserves, performing audit procedures to evaluate the projections of future demand and to determine that the inventory E&O reserve was appropriately recorded required a high degree of auditor judgment and an increased extent of effort.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the projections of future demand and the inventory E&O reserve included the following, among others:

- We tested the effectiveness of controls over the inventory E&O reserve review and approval process, including controls designed to review and approve the related projections of future demand.

- We selected a sample of reserved parts and performed the following for each selection:
 - To understand the assumptions behind the E&O reserve, including the related projection of future demand, we made inquiries of business unit managers as well as sales, operations, and marketing personnel about the estimated demand and historical consumption of each part selected.
 - We tested the projection of future demand by comparing internal and external information (e.g. historical sales, contracts, communications with customers, market trends, and macroeconomic conditions) with the Company's projection of future demand.
 - Performed a retrospective review by comparing management's prior-year projection of future demand by product with actual product sales in the current year to identify potential bias in the inventory reserve.
- We recalculated the net realizable value of inventory and compared our recalculation with the recorded balance.

/s/ Deloitte & Touche LLP

Los Angeles, California

March 16, 2022

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

SEMTECH CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME
(in thousands, except per share data)

	Fiscal Year Ended		
	January 30, 2022	January 31, 2021	January 26, 2020
Net sales	\$ 740,858	\$ 595,117	\$ 547,512
Cost of sales	274,777	231,568	210,828
Gross profit	466,081	363,549	336,684
Operating costs and expenses:			
Selling, general and administrative	168,210	162,832	163,106
Product development and engineering	147,925	117,529	107,368
Intangible amortization	4,942	8,265	16,546
Changes in the fair value of contingent earn-out obligations	(13)	(33)	(2,345)
Total operating costs and expenses	321,064	288,593	284,675
Operating income	145,017	74,956	52,009
Interest expense	(5,091)	(5,336)	(9,106)
Non-operating income, net	480	124	2,893
Investment impairments and credit loss reserves	(1,337)	(6,769)	(1,211)
Income before taxes and equity in net gains of equity method investments	139,069	62,975	44,585
Provision for income taxes	15,539	3,437	12,828
Net income before equity in net gains of equity method investments	123,530	59,538	31,757
Equity in net gains of equity method investments	2,115	329	109
Net income	125,645	59,867	31,866
Net loss attributable to noncontrolling interest	(19)	(36)	(5)
Net income attributable to common stockholders	\$ 125,664	\$ 59,903	\$ 31,871
Earnings per share:			
Basic	\$ 1.94	\$ 0.92	\$ 0.48
Diluted	\$ 1.92	\$ 0.91	\$ 0.47
Weighted average number of shares used in computing earnings per share:			
Basic	64,662	65,208	66,263
Diluted	65,565	66,059	67,418

The accompanying notes are an integral part of these consolidated financial statements.

SEMTECH CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands)

	Fiscal Year Ended		
	January 30, 2022	January 31, 2021	January 26, 2020
Net income	\$ 125,645	\$ 59,867	\$ 31,866
Other comprehensive income (loss), net:			
Unrealized gain on foreign currency cash flow hedges, net	—	602	59
Reclassifications of realized gain on foreign currency cash flow hedges, net to net income	—	(602)	(133)
Unrealized gain (loss) on interest rate cash flow hedges, net	835	(1,817)	—
Reclassifications of realized loss on interest rate cash flow hedges, net to net income	744	418	—
Unrealized gain on available-for-sale securities	638	140	2,506
Reclassification of realized gain on available-for-sale securities, net to net income	—	(757)	—
Change in defined benefit plans, net	3,876	14	(4,991)
Other comprehensive income (loss), net	6,093	(2,002)	(2,559)
Comprehensive income	131,738	57,865	29,307
Comprehensive loss attributable to noncontrolling interest	(19)	(36)	(5)
Comprehensive income attributable to common stockholders	\$ 131,757	\$ 57,901	\$ 29,312

The accompanying notes are an integral part of these consolidated financial statements.

SEMTECH CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in thousands, except share data)

	January 30, 2022	January 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	\$ 279,601	\$ 268,891
Accounts receivable, less allowances of \$747 and \$721, respectively	71,507	70,433
Inventories	114,003	87,494
Prepaid taxes	5,983	22,083
Other current assets	31,201	25,827
Total current assets	502,295	474,728
Non-current assets:		
Property, plant and equipment, net of accumulated depreciation of \$254,764 and \$233,779, respectively	134,940	130,934
Deferred tax assets	27,803	25,483
Goodwill	351,141	351,141
Other intangible assets, net	6,804	11,746
Other assets	107,928	88,070
TOTAL ASSETS	\$ 1,130,911	\$ 1,082,102
Liabilities		
Current liabilities:		
Accounts payable	\$ 50,695	\$ 50,189
Accrued liabilities	77,704	59,384
Total current liabilities	128,399	109,573
Non-current liabilities:		
Deferred tax liabilities	1,132	976
Long term debt, less current portion	171,676	179,195
Other long-term liabilities	91,929	93,405
Commitments and contingencies (Note 13)		
Stockholders' Equity:		
Common stock, \$0.01 par value, 250,000,000 shares authorized, 78,136,144 issued and 64,098,565 outstanding and 78,136,144 issued and 65,098,379 outstanding, respectively	785	785
Treasury stock, at cost, 14,037,579 shares and 13,037,765 shares, respectively	(549,942)	(438,798)
Additional paid-in capital	491,956	473,728
Retained earnings	796,860	671,196
Accumulated other comprehensive loss	(2,075)	(8,168)
Total stockholders' equity	737,584	698,743
Noncontrolling interest	191	210
Total equity	737,775	698,953
TOTAL LIABILITIES AND EQUITY	\$ 1,130,911	\$ 1,082,102

The accompanying notes are an integral part of these consolidated financial statements.

SEMTECH CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands, except share data)

	Common Stock		Treasury Stock, at Cost	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Stockholders' Equity	Noncontrolling Interest	Total Equity
	Number of Shares Outstanding	Amount							
Balance at January 27, 2019	65,238,255	\$ 785	\$ (346,218)	\$ 451,884	\$ 579,736	\$ (3,607)	\$ 682,580	\$ —	\$ 682,580
Net income	—	—	—	—	31,871	—	31,871	(5)	31,866
Other comprehensive loss	—	—	—	—	—	(2,559)	(2,559)	—	(2,559)
Capital contribution from outside party to a consolidated subsidiary	—	—	—	—	—	—	—	251	251
Share-based compensation	—	—	—	50,786	—	—	50,786	—	50,786
Repurchase of common stock	(1,471,703)	—	(70,219)	—	—	—	(70,219)	—	(70,219)
Treasury stock reissued	1,991,563	—	28,586	(44,091)	—	—	(15,505)	—	(15,505)
Balance at January 26, 2020	65,758,115	\$ 785	\$ (387,851)	\$ 458,579	\$ 611,607	\$ (6,166)	\$ 676,954	\$ 246	\$ 677,200
Cumulative-effect adjustment to beginning balance from adoption of ASU 2016-13	—	—	—	—	(314)	—	(314)	—	(314)
Net income	—	—	—	—	59,903	—	59,903	(36)	59,867
Other comprehensive loss	—	—	—	—	—	(2,002)	(2,002)	—	(2,002)
Share-based compensation	—	—	—	48,626	—	—	48,626	—	48,626
Repurchase of common stock	(1,597,104)	—	(71,433)	—	—	—	(71,433)	—	(71,433)
Treasury stock reissued	937,368	—	20,486	(33,477)	—	—	(12,991)	—	(12,991)
Balance at January 31, 2021	65,098,379	\$ 785	\$ (438,798)	\$ 473,728	\$ 671,196	\$ (8,168)	\$ 698,743	\$ 210	\$ 698,953
Net income	—	—	—	—	125,664	—	125,664	(19)	125,645
Other comprehensive income	—	—	—	—	—	6,093	6,093	—	6,093
Share-based compensation	—	—	—	50,966	—	—	50,966	—	50,966
Repurchase of common stock	(1,768,772)	—	(129,746)	—	—	—	(129,746)	—	(129,746)
Treasury stock reissued	768,958	—	18,602	(32,738)	—	—	(14,136)	—	(14,136)
Balance at January 30, 2022	64,098,565	\$ 785	\$ (549,942)	\$ 491,956	\$ 796,860	\$ (2,075)	\$ 737,584	\$ 191	\$ 737,775

The accompanying notes are an integral part of these consolidated financial statements.

SEMTECH CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Fiscal Year Ended		
	January 30, 2022	January 31, 2021	January 26, 2020
Cash flows from operating activities:			
Net income	\$ 125,645	\$ 59,867	\$ 31,866
<i>Adjustments to reconcile net income to net cash provided by operating activities:</i>			
Depreciation and amortization	30,892	31,867	39,951
Amortization of right-of-use assets	4,410	3,991	4,015
Investment impairments and credit loss reserves	1,337	6,769	1,211
Accretion of deferred financing costs and debt discount	481	482	484
Write-off of deferred financing costs and debt discount	—	—	514
Deferred income taxes	(3,782)	(7,396)	(5,596)
Share-based compensation	51,189	52,986	52,049
(Gain) loss on disposition of assets	(54)	61	378
Changes in the fair value of contingent earn-out obligations	(13)	(33)	(2,345)
Equity in net gains of equity method investments	(2,115)	(329)	(109)
Corporate-owned life insurance, net	4,766	6,508	5,613
<i>Changes in assets and liabilities:</i>			
Accounts receivable, net	(1,074)	(8,506)	17,296
Inventories	(26,509)	(14,484)	(9,331)
Other assets	11,176	(15,069)	2,415
Accounts payable	(2,145)	3,565	2,603
Accrued liabilities	17,829	2,309	(20,563)
Income taxes payable	—	—	(2,105)
Other liabilities	(8,910)	(3,658)	270
Net cash provided by operating activities	<u>203,123</u>	<u>118,930</u>	<u>118,616</u>
Cash flows from investing activities:			
Proceeds from sales of property, plant and equipment	110	385	352
Purchases of property, plant and equipment	(26,181)	(32,734)	(23,056)
Proceeds from sale of investments	—	378	—
Purchases of investments	(8,245)	(10,938)	(11,630)
Premiums paid for corporate-owned life insurance	(6,000)	—	—
Net cash used in investing activities	<u>(40,316)</u>	<u>(42,909)</u>	<u>(34,334)</u>
Cash flows from financing activities:			
Payments of term loans	—	—	(115,312)
Proceeds from revolving line of credit	20,000	—	201,000
Payments of revolving line of credit	(28,000)	(16,000)	(101,000)
Deferred financing costs	—	(30)	(2,056)
Payments of earn-out	(215)	—	(237)
Payments for employee share-based compensation payroll taxes	(19,413)	(21,490)	(21,507)
Proceeds from exercise of stock options	5,277	8,499	6,002
Repurchase of common stock	(129,746)	(71,433)	(70,219)
Contributions from noncontrolling interest	—	—	251
Net cash used in financing activities	<u>(152,097)</u>	<u>(100,454)</u>	<u>(103,078)</u>
Net increase (decrease) in cash and cash equivalents	10,710	(24,433)	(18,796)
Cash and cash equivalents at beginning of period	268,891	293,324	312,120
Cash and cash equivalents at end of period	<u>\$ 279,601</u>	<u>\$ 268,891</u>	<u>\$ 293,324</u>

SEMTECH CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)
(in thousands)

Supplemental disclosure of cash flow information:

Interest paid	\$	4,295	\$	4,880	\$	7,906
Income taxes paid	\$	3,333	\$	8,406	\$	11,157

Non-cash investing and financing activities:

Accounts payable related to capital expenditures	\$	5,513	\$	2,862	\$	4,247
Conversion of notes into equity	\$	626	\$	—	\$	—

The accompanying notes are an integral part of these consolidated financial statements.

SEMTECH CORPORATION AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1: Organization and Basis of Presentation

Semtech Corporation (together with its consolidated subsidiaries, the "Company" or "Semtech") is a leading global supplier of high-performance analog and mixed-signal semiconductors and advanced algorithms. The end customers for the Company's products are primarily original equipment manufacturers ("OEMs") that produce and sell electronics.

The Company designs, develops and markets a wide range of products for commercial applications, the majority of which are sold into the infrastructure, high-end consumer and industrial end markets.

Basis of Presentation

The Company reports results on the basis of 52 and 53-week periods and ends its fiscal year on the last Sunday in January. Fiscal years 2022, 2021 and 2020 consisted of 52 weeks, 53 weeks and 52 weeks, respectively.

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its majority-owned subsidiaries and have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP"). The Company's Consolidated Statements of Income are referred to herein as the "Statements of Income," the Company's Consolidated Balance Sheets are referred to herein as the "Balance Sheets" and the Company's Consolidated Statements of Cash Flows are referred to herein as the "Statements of Cash Flows." In the opinion of the Company, all adjustments of a normal and recurring nature necessary for a fair presentation, in all material respects, of the consolidated financial statements have been made. All intercompany balances have been eliminated. The Company consolidates entities that are not variable interest entities ("VIEs") when it owns, directly or indirectly, a majority interest in the entity or is otherwise able to control the entity. The Company consolidates VIEs in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 810, "Consolidation." Entities for which the Company owns an interest, but does not consolidate, are accounted for under the equity method or cost method of accounting as minority investments and are included in "Other Assets" within the Balance Sheets. The ownership interest in a consolidated subsidiary of the Company held by outside parties is included in "Noncontrolling Interest" within the Balance Sheets.

Use of Estimates

The preparation of the consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Note 2: Significant Accounting Policies

Cash and Cash Equivalents

The Company considers all highly-liquid investments with an original maturity of 90 days or less and money market mutual funds to be cash equivalents. The Company maintains cash balances and cash equivalents in highly-qualified financial institutions. At various times, such amounts are in excess of insured limits. Cash equivalents can consist of money market mutual funds, government and corporate obligations, and bank time deposits.

Investments

The Company's investment policy restricts investments to high credit quality investments with limits on the length to maturity and requires diversification of investment portfolio. These investments, especially corporate obligations, are subject to default risk. The Company classifies its convertible debt investments as available-for-sale ("AFS") securities and reports these investments at fair value with current and long-term AFS investments included in "Other current assets" and "Other assets," respectively, in the Balance Sheets. Unrealized gains or losses, net of tax, are recorded in "Accumulated other comprehensive income (loss)" in the Balance Sheets, and realized gains or losses, as well as current expected credit loss reserves are recorded in "Non-operating income, net" in the Statements of Income.

The Company has minority equity investments in privately-held companies that are classified in "Other assets" in the Balance Sheets. Substantially all of these investments are carried at cost because the Company does not have the ability to exercise significant influence over the companies. These minority equity investments do not have readily determinable fair values and the Company has determined that it is not practicable to estimate the fair values of these investments. As of January 30, 2022 and January 31, 2021, the Company had aggregate net investments carried at cost of \$31.5 million and \$24.1 million, respectively. As of January 30, 2022 and January 31, 2021, aggregate net investments accounted for under the equity method of accounting totaled \$6.0 million and \$3.1 million, respectively. The Company monitors whether there have been any events or changes in circumstances that would have a significant adverse effect on the fair values of these investments and recognizes losses in the Statements of Income when it determines that declines in the fair values of its investments below their cost are other than temporary. The Company recorded investment impairments and credit loss reserves of \$1.3 million, \$6.8 million and \$1.2 million during fiscal years 2022, 2021 and 2020, respectively.

Accounts Receivable Allowances

Accounts receivable are recorded at net realizable value or the amount that the Company expects to collect on gross customer trade receivables. The Company evaluates the collectability of its accounts receivable based on a combination of factors. The Company generally does not require collateral on accounts receivable as the majority of the Company's customers are large, well-established companies. Historically, bad debt provisions have been consistent with management's expectations. If the Company becomes aware of a customer's inability to meet its financial obligations after a sale has occurred, it records an allowance to reduce the net receivable to the amount it reasonably believes it will be able to collect from the customer. For all other customers, the Company recognizes allowances for doubtful accounts based on the length of time the receivables are past due, the current business environment and historical experience. If the financial condition of the Company's customers were to deteriorate or if economic conditions worsen, additional allowances may be required in the future. All of the Company's accounts receivables are trade-related receivables.

Inventories

Inventories are stated at lower of cost or net realizable value and consist of materials, labor, and overhead. The Company determines the cost of inventory by the first-in, first-out method. The Company evaluates inventories for excess quantities and obsolescence. This evaluation includes analysis of sales levels by product and projections of future demand. If future demand or market conditions are less favorable than the Company's projections, a write-down of inventory may be required, and would be reflected in cost of goods sold in the period the revision is made. In order to state the inventory at lower of cost or net realizable value, the Company maintains reserves against inventory to write down its inventory on a part-by-part basis, if required.

Business Combinations

The Company accounts for business combinations in accordance with ASC 805, "Business Combinations." The Company allocates the purchase price paid for assets acquired and liabilities assumed in connection with acquisitions based on their estimated fair values at the time of acquisition. This allocation involves a number of assumptions, estimates and judgments that could materially affect the timing or amounts recognized in its financial statements. The most subjective areas include determining the fair values of the following:

- intangible assets, including the valuation methodology, estimations of future cash flows, discount rates, market segment growth rates and the Company's assumed market segment share, as well as the estimated useful life of intangible assets;

- deferred tax assets and liabilities, uncertain tax positions and tax-related valuation allowances, which are initially estimated as of the acquisition date;
- inventory; property, plant and equipment; pre-existing liabilities or legal claims; deferred revenue; and contingent consideration, each as may be applicable; and
- goodwill as measured as the excess of consideration transferred over the net of the acquisition date fair values of the assets acquired and the liabilities assumed.

The Company's assumptions and estimates are based upon comparable market data and information obtained from management and the management of the acquired companies. The Company allocates goodwill to the reporting units of the business that are expected to benefit from the business combination.

Variable Interest Entities

The Company consolidates VIEs in accordance with ASC 810, "Consolidation," if it is the primary beneficiary of the VIE, which is determined if it has a controlling financial interest in the VIE. A controlling financial interest will have both of the following characteristics: (i) the power to direct the VIE's activities that most significantly impact the VIE's economic performance and (ii) the obligation to absorb the VIE's losses that could potentially be significant to the VIE or the right to receive the VIE's benefits that could potentially be significant to the VIE.

The Company's variable interests in VIEs may be in the form of equity ownership, contracts to purchase assets, management services, and development agreements between the Company and a VIE, loans provided by the Company to a VIE or other member, and/or guarantees provided by members to banks and other parties.

The Company analyzes its investments or other interests to determine whether it represents a variable interest in a VIE. If so, the Company evaluates the facts to determine whether it is the primary beneficiary, based on if it has a controlling financial interest in the VIE. The Company concluded that some of its equity interests represent a variable interest, but it is not the primary beneficiary as prescribed in ASC 810. Specifically, in reaching this conclusion, the Company considered the activities that most significantly drive profitability for these private entities and determined that the activities that most significantly drive profitability are related to the technology and related product road maps. In some cases, the Company has a board observer role, however, it concluded that in these cases it was not in a position of decision-making or other authority to influence the activities of the private entities that could be considered significant with respect to their operations, including research and development plans and changes to their product road maps.

Derivatives and Hedging Activities

The Company records all derivatives on the Balance Sheets at fair value in accordance with ASC 815, "Derivatives and Hedging." The accounting for changes in the fair value of derivatives depends on the intended use of the derivative, whether the Company has elected to designate a derivative in a hedging relationship and apply hedge accounting, and whether the hedging relationship has satisfied the criteria necessary to apply hedge accounting. Derivatives designated and qualifying as a hedge of the exposure to variability in expected future cash flows, or other types of forecasted transactions, are considered cash flow hedges. Hedge accounting generally provides for the matching of the timing of gain or loss recognition on the hedging instrument with the recognition of the changes in the fair value of the hedged asset or liability that are attributable to the hedged risk in a fair value hedge or the earnings effect of the hedged forecasted transactions in a cash flow hedge. The Company may enter into derivative contracts that are intended to economically hedge certain of its risks, even though hedge accounting does not apply or the Company elects not to apply hedge accounting.

In accordance with the FASB's fair value measurement guidance, the Company made an accounting policy election to measure the credit risk of its derivative financial instruments that are subject to master netting agreements on a net basis by counterparty portfolio.

Property, Plant and Equipment

Property, plant and equipment are stated at cost or at fair market value at the time of acquisition. Depreciation is computed over the estimated useful lives of the related asset type or term of the operating lease using the straight-line method for financial statement purposes. Maintenance and repairs are charged to expense as incurred and the costs of additions and betterments that increase the useful lives of the assets are capitalized.

Goodwill

The Company performs an annual impairment assessment of goodwill at the reporting unit level in the fourth quarter of each fiscal year, or more frequently if indicators of potential impairment exist. The analysis may include both qualitative and quantitative factors to assess the likelihood of an impairment. The reporting unit's carrying value used in an impairment test represents the assignment of various assets and liabilities, excluding certain corporate assets and liabilities, such as cash, investments and debt.

Qualitative factors include industry and market considerations, overall financial performance and other relevant events and factors affecting the reporting unit. Additionally, as part of this assessment, the Company may perform a quantitative analysis to support the qualitative factors above by applying sensitivities to assumptions and inputs used in measuring a reporting unit's fair value.

The Company's quantitative impairment test considers both the income approach and the market approach to estimate a reporting unit's fair value. Significant estimates include market segment growth rates, assumed market segment share, estimated costs and discount rates based on a reporting unit's weighted average cost of capital.

The Company tests the reasonableness of the inputs and outcomes of its discounted cash flow analysis against available market data. As the fair values of all of the Company's reporting units exceeded their carrying values, no impairment of goodwill was recorded during fiscal years 2022, 2021 or 2020.

Other Intangibles and Long-lived Assets

Finite-lived intangible assets resulting from business acquisitions or technology licenses purchased are amortized on a straight-line basis over their estimated useful lives. The useful lives of acquisition-related intangible assets represent the point where over 90% of realizable undiscounted cash flows for each intangible asset are recognized. The assigned useful lives are based upon the Company's historical experience with similar technology and other intangible assets owned by the Company. The useful life of technology licenses is usually based on the term of the agreement.

Acquired in-process research and development ("IPR&D") projects, which represent projects that had not reached technological feasibility as of the date of acquisition, are recorded at fair value. Initially, these are classified as an indefinite-lived intangible asset until the completion or abandonment of the associated research and development efforts. Upon completion of development, acquired IPR&D asset balances are transferred to finite-lived intangible assets and amortized over their useful lives. The asset balances relating to projects that are abandoned after acquisition are impaired and recorded in "Product development and engineering" ("R&D") expense in the Statements of Income.

The Company reviews indefinite-lived intangible assets for impairment on an annual basis in conjunction with goodwill or whenever events or changes in circumstances indicate that the carrying value may exceed its fair value. Impairment of indefinite-lived intangible assets is measured by comparing the carrying amount of the asset to its fair value.

The Company assesses finite-lived intangibles and long-lived assets for impairment when indicators of impairment, such as reductions in demand or significant industry and economic slowdowns in the semiconductor industry, are present. Reviews are performed to determine whether the carrying value of an asset is impaired, based on comparisons to undiscounted expected future cash flows. If this comparison indicates that there is impairment, the impaired asset is written down to fair value, which is typically calculated using: (i) quoted market price trends and internal factors such as changes in the Company's business strategy and/or (ii) discounted expected future cash flows utilizing a discount rate. Impairment is based on the excess of the carrying amount over the fair value of those assets the Company forecasts for specific product lines. Also, the Company reassesses the estimated remaining useful lives of any impaired assets and adjusts accordingly estimates of future amortization expense related to these assets.

For intangible long-lived assets, which consist of core technology and customer relationships, the Company uses the multi-period excess earnings method (an income approach) or the replacement cost method (a cost approach) to determine fair value. The multi-period excess earnings method estimates the value of the asset based on the present value of the after-tax cash flows attributable to the intangible asset, which includes the Company's estimates of forecasted revenue, operating margins, taxes, and discount rate. The replacement cost method incorporates a market participant's assumption that an in-use premise is the highest and best use of customer relationships and core technology. The Company estimates the cost it would incur to rebuild or re-establish the intangible asset and the associated effort required to develop it.

The fair values of individual tangible long-lived assets are determined using the cost to reproduce the long-lived asset and taking into account the age, condition, inflation using the U.S. Bureau of Labor Statistics and Marshall Valuation Services, and cost to ready the long-lived asset for its intended use. Additionally, the Company considers the potential existence of functional and economic obsolescence and quantifies these elements in its cost approach as appropriate.

Functional Currency

The Company has concluded that the functional currency of all of its subsidiaries is the United States ("U.S.") Dollar.

Fair Value Measurements

When determining the fair value measurements for assets and liabilities required or permitted to be recorded at fair value, the Company considers the principal or most advantageous market in which it would transact and considers assumptions that market participants would use when pricing the asset or liability, such as inherent risk, transfer restrictions, and risk of nonperformance. The Company uses the following three levels of inputs in determining the fair value of the Company's assets and liabilities, focusing on the most observable inputs when available:

Level 1—Quoted prices in active markets for identical assets or liabilities.

Level 2—Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities in active markets or other inputs that are observable for the assets or liabilities, either directly or indirectly.

Level 3—Unobservable inputs based on the Company's own assumptions, requiring significant management judgment or estimation.

To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, for disclosure purposes, the level in the fair value hierarchy within which the fair value measurement is disclosed is determined based on the lowest level input that is significant to the fair value measurement.

Revenue Recognition

The Company derives its revenue primarily from the sale of semiconductor products into various end markets. Revenue is recognized in accordance with ASC 606, "Revenue from Contracts with Customers," when control of these products is transferred to the Company's customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for these products. Control is generally transferred when products are shipped and, to a lesser extent, when the products are delivered. Recovery of costs associated with product design and engineering services are recognized during the period in which services are performed and are reported as a reduction to product development and engineering expense. Historically, these recoveries have not exceeded the cost of the related development efforts. The Company includes revenue related to granted technology licenses as part of "Net sales" in the Statements of Income. Historically, revenue from these arrangements has not been significant though they are part of its recurring ordinary business.

The Company determines revenue recognition through the following five steps:

- Identification of the contract, or contracts, with a customer;
- Identification of the performance obligations in the contract;
- Determination of the transaction price;
- Allocation of the transaction price to the performance obligations in the contract; and
- Recognition of revenue when, or as, performance obligations are satisfied.

The Company accounts for a contract when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance, and collectability of consideration is probable.

The Company's revenue contracts generally represent a single performance obligation to sell its products to trade customers. Net sales reflect the transaction prices for contracts, which include units shipped at selling prices reduced by variable consideration. Determination of variable consideration requires judgment by the Company. Variable consideration includes expected sales returns and other price adjustments. Variable consideration is estimated using the expected value method considering all reasonably available information, including the Company's historical experience and its current expectations, and is reflected in the transaction price when sales are recorded. Sales returns are generally accepted at the Company's discretion or from distributors with such rights. The Company's contracts with trade customers do not have significant financing components or non-cash consideration.

The Company provides an assurance type warranty, which is typically not sold separately and does not represent a separate performance obligation.

Contract Modifications: If a contract is modified, which does not normally occur, changes in contract specifications and requirements must be accounted for. The Company considers contract modifications to exist when the modification creates new, or changes existing, enforceable rights and obligations. Most of the Company's contract modifications are to distributor agreements for adding new goods or services that are considered distinct from the existing contract and the change in contract price reflects the standalone selling price of the distinct service.

Disaggregated Revenue: The Company disaggregates revenue from contracts with customers by types of products and geography, as it believes it best depicts how the nature, amount, timing, and uncertainty of revenue and cash flows are affected by economic factors. See Note 15 for further information on revenues by product line and geographic region.

Contract Balances: Accounts receivable represents the Company's unconditional right to receive consideration from its customers. Contract assets consist of the Company's right to consideration in exchange for goods or services that the Company has transferred to a customer when that right is conditioned on something other than the passage of time. ASC 606 also requires an entity to present a revenue contract as a contract liability in instances when a customer pays consideration, or an entity has a right to an amount of consideration that is unconditional (i.e., receivable), before the entity transfers a good or service to the customer. The Company's contract asset and contract liability balances were not material as of January 30, 2022

and January 31, 2021. There were no impairment losses recognized on the Company's accounts receivable or contract assets during the fiscal year ended January 30, 2022.

Contract Costs: All incremental customer contract acquisition costs are expensed as they are incurred as the amortization period of the asset that the Company otherwise would have recognized is one year or less in duration.

Significant Financing Component: The Company does not adjust the promised amount of consideration for the effects of a significant financing component as the Company expects, at contract inception, that the period between when the Company transfers a promised good or service to a customer and when the customer pays for that good or service will be one year or less.

Sales Tax Exclusion from the Transaction Price: The Company excludes from the measurement of the transaction price all taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction and collected by the Company from the customer.

Shipping and Handling Activities: The Company accounts for shipping and handling activities performed after a customer obtains control of the good as activities to fulfill the promise to transfer the good.

Cost of Sales

Cost of sales includes materials, depreciation on fixed assets used in the manufacturing process, shipping costs, direct labor and overhead.

Sales and Marketing

The Company expenses sales and marketing costs, which include advertising costs, as they are incurred. Advertising costs were \$1.8 million, \$1.0 million and \$0.9 million for fiscal years 2022, 2021 and 2020, respectively.

Product Development and Engineering

Product development and engineering costs are charged to expense as incurred. Recoveries from nonrecurring engineering services are recorded as an offset to product development expense incurred in support of this effort since these activities do not represent an earnings process core to the Company's business and serve as a mechanism to partially recover development expenditures. The Company received approximately \$7.5 million, \$9.6 million and \$8.4 million of recoveries for nonrecurring engineering services in fiscal years 2022, 2021 and 2020, respectively.

Income Taxes

The Company accounts for income taxes using the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts and their respective tax bases. Current and long-term prepaid taxes are included in "Prepaid taxes" and "Other assets," respectively, and current and long-term liabilities for uncertain tax positions are included in "Accrued liabilities" and "Other long-term liabilities," respectively, in the Balance Sheets.

As part of the process of preparing the Company's consolidated financial statements, the Company estimates income taxes in each of the jurisdictions in which it operates. This process involves estimating the current tax liability together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities. The Company must assess the likelihood that its deferred tax assets will be recovered from future taxable income and, to the extent the Company believes that recovery is not likely, it must establish a valuation allowance. To the extent the Company changes its valuation allowance in a period, the change is generally recorded through the tax provision in the Statements of Income.

The Company continually reviews its position on undistributed earnings from its foreign subsidiaries to determine whether those earnings are indefinitely reinvested offshore. Domestic and foreign operating cash flow forecasts are reviewed to determine the sources and uses of cash. Based on these forecasts, the Company determines the need to accrue deferred tax liabilities associated with its undistributed offshore earnings.

Other Comprehensive Income (Loss)

Other comprehensive income or loss includes unrealized gains or losses on AFS investments, foreign currency and interest rate hedging activities, and changes in defined benefit plans, which are presented in the Statements of Comprehensive Income.

The following table summarizes the changes in other comprehensive income (loss) by component:

(in thousands)	Fiscal Year Ended								
	January 30, 2022			January 31, 2021			January 26, 2020		
	Pre-tax Amount	Tax Benefit (Expense)	Net Amount	Pre-tax Amount	Tax (Expense) Benefit	Net Amount	Pre-tax Amount	Tax Benefit (Expense)	Net Amount
Defined benefit plans:									
Other comprehensive income (loss) before reclassifications	\$ 1,792	\$ (217)	\$ 1,575	\$ (2,879)	\$ (469)	\$ (3,348)	\$ (9,237)	\$ 1,276	\$ (7,961)
Amounts reclassified to earnings included in "Selling, general and administrative"	2,722	(421)	2,301	2,901	461	3,362	3,446	(476)	2,970
Foreign currency hedge:									
Other comprehensive income (loss) before reclassifications	—	—	—	780	(178)	602	66	(7)	59
Amounts reclassified to earnings included in "Selling, general and administrative"	—	—	—	(780)	178	(602)	(149)	16	(133)
Interest rate hedge:									
Other comprehensive income (loss) before reclassifications	1,064	(229)	835	(2,320)	499	(1,821)	—	—	—
Amounts reclassified to earnings included in "Interest expense"	948	(204)	744	538	(116)	422	—	—	—
Available-for-sale securities:									
Other comprehensive income before reclassifications	813	(175)	638	165	(25)	140	3,156	(650)	2,506
Amounts reclassified to earnings included in "Non-operating income, net"	—	—	—	(939)	182	(757)	—	—	—
Other comprehensive income (loss)	<u>\$ 7,339</u>	<u>\$ (1,246)</u>	<u>\$ 6,093</u>	<u>\$ (2,534)</u>	<u>\$ 532</u>	<u>\$ (2,002)</u>	<u>\$ (2,718)</u>	<u>\$ 159</u>	<u>\$ (2,559)</u>

Accumulated Other Comprehensive Loss

The following table summarizes the changes in accumulated other comprehensive loss by component:

(in thousands)	Defined Benefit Plans	Foreign Currency Hedge	Interest Rate Hedge	Available-for-Sale Securities	Cumulative Translation Adjustment	Accumulated Other Comprehensive Loss
Balance as of January 27, 2019	\$ (4,511)	\$ 74	\$ —	\$ —	\$ 830	\$ (3,607)
Other comprehensive (loss) income	(4,991)	(74)	—	2,506	—	(2,559)
Balance as of January 26, 2020	(9,502)	—	—	2,506	830	(6,166)
Other comprehensive income (loss)	14	—	(1,399)	(617)	—	(2,002)
Balance as of January 31, 2021	(9,488)	—	(1,399)	1,889	830	(8,168)
Other comprehensive income (loss)	3,876	—	1,579	638	—	6,093
Balance as of January 30, 2022	<u>\$ (5,612)</u>	<u>\$ —</u>	<u>\$ 180</u>	<u>\$ 2,527</u>	<u>\$ 830</u>	<u>\$ (2,075)</u>

Share-Based Compensation

The Company has various equity award plans ("Plans") that provide for granting share-based awards to employees and non-employee directors of the Company. The Plans provide for the granting of several available forms of stock compensation such as non-qualified stock option awards ("NQSOs"), restricted stock unit awards ("RSUs") and equity awards with certain market conditions.

The Company measures compensation cost for all share-based payments at fair value on the measurement date, which is typically the grant date. RSUs are valued based on the stock price on the measurement date, while NQSOs are valued using the Black-Scholes pricing model, which considers, among other things, estimates and assumptions on the expected life of options, stock price volatility and market value of the Company's common stock. Additionally, for awards with a market condition, the Company uses a Monte Carlo simulation model to estimate grant date fair value, which takes into consideration the range of possible stock price or total stockholder return outcomes. In accordance with ASC 718, "Compensation—Stock Compensation," the Company recognizes forfeitures as they occur.

Earnings per Share

The computation of basic and diluted earnings per share was as follows:

(in thousands, except per share data)	Fiscal Year Ended		
	January 30, 2022	January 31, 2021	January 26, 2020
Net income attributable to common stockholders	\$ 125,664	\$ 59,903	\$ 31,871
Weighted-average shares outstanding—basic	64,662	65,208	66,263
Dilutive effect of share-based compensation	903	851	1,155
Weighted-average shares outstanding—diluted	65,565	66,059	67,418
Earnings per share:			
Basic	\$ 1.94	\$ 0.92	\$ 0.48
Diluted	\$ 1.92	\$ 0.91	\$ 0.47
Anti-dilutive shares not included in the above calculations	35	406	120

Basic earnings per share is computed by dividing income available to common stockholders by the weighted-average number of shares of common stock outstanding during the reporting period. Diluted earnings per share incorporates the incremental shares issuable, calculated using the treasury stock method, upon the assumed exercise of NQSOs and the vesting of RSUs and performance unit awards if certain conditions have been met, but excludes such incremental shares that would have an anti-dilutive effect.

Contingencies

From time to time, the Company is a defendant or plaintiff in various legal actions that arise in the normal course of business. The Company is also subject to income tax, indirect tax or other tax claims by tax agencies in jurisdictions in which it conducts business. In addition, the Company is a party to environmental matters including local, regional, state, and federal government clean-up activities at or near locations where the Company currently or has in the past conducted business. The Company is required to assess the likelihood of any adverse judgments or outcomes to these matters as well as potential ranges of reasonably possible losses. A determination of the amount of reserves required for these commitments and contingencies that would be charged to earnings, if any, includes assessing the probability of adverse outcomes and estimating the amount of potential losses. The required reserves, if any, may change due to new developments in each matter or changes in circumstances such as a change in settlement strategy.

From time to time, the Company may record contingent earn-out liabilities, which represent the Company's requirement to make additional payments related to acquisitions based on certain performance targets achieved during the earn-out periods. The Company measures contingent earn-out liabilities at fair value on a recurring basis using significant unobservable inputs classified within Level 3 of the fair value hierarchy. The significant unobservable inputs used in the fair value measurements are revenue projections over the earn-out period (or other specified performance targets) and the probability outcome percentages assigned to each scenario. Significant increases or decreases to either of these inputs in isolation would result in a significantly higher or lower liability, with a higher liability capped by the contractual maximum of the contingent earn-out obligation.

Recently Adopted Accounting Guidance

In December 2019, the FASB issued Accounting Standards Update ("ASU") No. 2019-12, "Simplifying the Accounting for Income Taxes," which modifies ASC 740 to simplify the accounting for income taxes. This guidance impacts the accounting for hybrid tax regimes, the tax basis step-up in goodwill obtained in a transaction that is not a business combination, separate financial statements of legal entities not subject to tax, the intraperiod tax allocation exception to the incremental approach, ownership changes in investments from a subsidiary to an equity method investment and vice versa, interim period accounting for enacted changes in tax law and the year-to-date loss limitation in interim period tax accounting. This guidance is effective for fiscal years beginning after December 15, 2020, and interim periods within this those fiscal years, with early adoption permitted. The Company adopted this guidance in the first quarter of fiscal year 2022. Adoption of this guidance did not have a material impact on the Company's consolidated financial statements.

Accounting Guidance Issued, but not yet Adopted as of January 30, 2022

In October 2021, the FASB issued ASU No. 2021-08, "Business Combinations (Topic 805)—Accounting for Contract Assets and Contract Liabilities from Contracts with Customers," which improves the accounting for acquired revenue contracts with customers in a business combination by addressing diversity in practice and inconsistencies related to recognition of an acquired contract liability, and to payment terms and their effect on subsequent revenue recognized by the acquirer. Among other changes, this ASU requires that an acquirer account for acquired revenue contracts in accordance with ASC 606, "Revenue from Contracts with Customers," as if it had originated the contracts. If the acquirer is unable to assess or rely on how the acquiree applied ASC 606, the acquirer should consider the terms of the acquired contracts as of the contract inception or contract modification date in applying ASC 606 to determine what should be recorded at the acquisition date. The amendments also provide certain practical expedients for acquirers when recognizing and measuring acquired contract assets and contract liabilities from revenue contracts in a business combination. The guidance is effective for fiscal years beginning after December 15, 2022, with early adoption permitted. The Company does not expect the adoption of this guidance to have a material impact on its consolidated financial statements.

Note 3: Available-for-sale securities

The following table summarizes the values of the Company's AFS securities:

(in thousands)	January 30, 2022			January 31, 2021		
	Fair Value	Amortized Cost	Gross Unrealized Gain/(Loss)	Fair Value	Amortized Cost	Gross Unrealized Gain/(Loss)
Convertible debt	\$ 12,872	\$ 14,401	\$ (1,529)	\$ 11,989	\$ 13,244	\$ (1,255)
Total available-for-sale securities	\$ 12,872	\$ 14,401	\$ (1,529)	\$ 11,989	\$ 13,244	\$ (1,255)

The following table summarizes the maturities of the Company's AFS securities:

(in thousands)	January 30, 2022	
	Fair Value	Amortized Cost
Within 1 year	\$ 10,582	\$ 10,856
After 1 year through 5 years	2,290	3,545
Total available-for-sale securities	\$ 12,872	\$ 14,401

The Company's AFS securities consist of investments in convertible debt instruments issued by privately-held companies. The AFS investments with maturities within one year were included in "Other current assets" and with maturities greater than one year were included in "Other assets" in the Balance Sheets.

Note 4: Fair Value Measurements

Instruments Measured at Fair Value on a Recurring Basis

The fair values of financial assets and liabilities measured and recorded at fair value on a recurring basis were presented in the Balance Sheets as follows:

(in thousands)	January 30, 2022				January 31, 2021			
	Total	(Level 1)	(Level 2)	(Level 3)	Total	(Level 1)	(Level 2)	(Level 3)
Financial assets:								
Interest rate swap agreement	\$ 229	\$ —	\$ 229	\$ —	\$ —	\$ —	\$ —	\$ —
Convertible debt	12,872	—	—	12,872	11,989	—	—	11,989
Total financial assets	<u>\$ 13,101</u>	<u>\$ —</u>	<u>\$ 229</u>	<u>\$ 12,872</u>	<u>\$ 11,989</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 11,989</u>
Financial liabilities:								
Interest rate swap agreement	\$ —	\$ —	\$ —	\$ —	\$ 1,782	\$ —	\$ 1,782	\$ —
Total return swap contracts	257	—	257	—	167	—	167	—
Total financial liabilities	<u>\$ 257</u>	<u>\$ —</u>	<u>\$ 257</u>	<u>\$ —</u>	<u>\$ 1,949</u>	<u>\$ —</u>	<u>\$ 1,949</u>	<u>\$ —</u>

During the fiscal year ended January 30, 2022, the Company had no transfers of financial assets or liabilities between Level 1 or Level 2. As of January 30, 2022 and January 31, 2021, the Company had not elected the fair value option for any financial assets and liabilities for which such an election would have been permitted.

The convertible debt investments are valued utilizing a combination of estimates that are based on the estimated discounted cash flows associated with the debt and the fair value of the equity into which the debt may be converted, all of which are Level 3 inputs.

The following table presents a reconciliation of the changes in convertible debt investments in the fiscal year ended January 30, 2022:

(in thousands)	
Balance at January 31, 2021	\$ 11,989
Additions	722
Fair market value adjustment to OCI	813
Increase in credit loss reserve	(1,087)
Interest accrued	1,061
Conversion to equity	(626)
Balance at January 30, 2022	<u>\$ 12,872</u>

The interest rate swap agreement is measured at fair value using readily available interest rate curves (Level 2 inputs). The fair value of the agreement is determined by comparing, for each settlement, the contract rate to the forward rate and discounting to the present value. Contracts in a gain position are recorded in "Other current assets" and "Other assets" in the Balance Sheets and the value of contracts in a loss position are recorded in "Accrued liabilities" and "Other long term liabilities" in the Balance Sheets. See Note 18 for further discussion of the Company's derivative instruments.

The total return swap contracts are measured at fair value using quoted prices of the underlying investments (Level 2 inputs). The fair values of the total return swap contracts are recognized in the Balance Sheets in "Accrued Liabilities" if the instruments are in a loss position and in "Other Current Assets" if the instruments are in a gain position. See Note 18 for further discussion of the Company's derivative instruments.

Instruments Not Recorded at Fair Value on a Recurring Basis

Some of the Company's financial instruments are not measured at fair value on a recurring basis, but are recorded at amounts that approximate fair value due to their liquid or short-term nature. Such financial assets and financial liabilities include: cash and cash equivalents including money market deposits, net receivables, certain other assets, accounts payable, accrued expenses, accrued personnel costs, and other current liabilities. The Company's long-term debt is recorded at cost, which approximates fair value as the long-term debt bears interest at a floating rate.

Assets and Liabilities Recorded at Fair Value on a Non-Recurring Basis

The Company reduces the carrying amounts of its goodwill, intangible assets, long-lived assets, and non-marketable equity securities to fair value when held for sale or determined to be impaired.

Investment Impairments and Credit Loss Reserves

The total credit loss reserve for the Company's held-to-maturity debt securities and AFS debt securities was \$4.5 million and \$3.4 million as of January 30, 2022 and January 31, 2021, respectively. During the fiscal year ended January 30, 2022, the Company increased its credit loss reserves by \$1.1 million for its AFS debt securities and recorded a \$0.2 million impairment on its non-marketable equity investments. During the fiscal year ended January 31, 2021, the Company increased its credit loss reserves by \$2.9 million for its AFS debt securities and held-to-maturity debt securities due, in part, to the impact of the COVID-19 pandemic on early-stage development companies. In addition, during the fiscal year ended January 31, 2021, the Company recorded a \$3.9 million impairment on its non-marketable equity investments.

Note 5: Inventories

Inventories, consisting of material, material overhead, labor, and manufacturing overhead, are stated at the lower of cost (first-in, first-out) or net realizable value and consisted of the following:

(in thousands)	January 30, 2022	January 31, 2021
Raw materials	\$ 4,304	\$ 2,936
Work in progress	85,445	59,523
Finished goods	24,254	25,035
Inventories	<u>\$ 114,003</u>	<u>\$ 87,494</u>

Note 6: Property, Plant and Equipment

The following is a summary of property and equipment:

(in thousands)	Estimated Useful Lives	January 30, 2022	January 31, 2021
Land		\$ 13,605	\$ 13,605
Buildings	7 to 39 years	39,448	35,106
Leasehold improvements	2 to 10 years	11,741	9,271
Machinery and equipment	3 to 8 years	228,089	211,671
Computer hardware and software	3 to 13 years	74,815	71,306
Furniture and office equipment	5 to 7 years	6,637	5,692
Construction in progress		15,369	18,062
Property, plant and equipment, gross		389,704	364,713
Less: accumulated depreciation and amortization		(254,764)	(233,779)
Property, plant and equipment, net		\$ 134,940	\$ 130,934

As of January 30, 2022 and January 31, 2021, construction in progress consisted primarily of machinery and equipment awaiting completion of installation and being placed in service.

Depreciation expense was \$26.0 million, \$23.6 million, and \$23.4 million in fiscal years 2022, 2021, and 2020, respectively.

Note 7: Goodwill and Intangible Assets

Goodwill

The carrying amounts of goodwill by applicable reporting unit were as follows:

(in thousands)	Signal Integrity	Wireless and Sensing	Protection	Total
Balance at January 31, 2021	\$ 274,085	\$ 72,128	\$ 4,928	\$ 351,141
Balance at January 30, 2022	\$ 274,085	\$ 72,128	\$ 4,928	\$ 351,141

Goodwill is not amortized, but is tested for impairment at the reporting unit level using either a qualitative or quantitative assessment on an annual basis during the fourth quarter of each fiscal year, and whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Impairment of goodwill is measured at the reporting unit level by comparing the reporting unit's carrying amount, including goodwill, to the fair market value of the reporting unit. The reporting units are the same as the operating segments, which have been aggregated into two reportable segments (see Note 15 on segment information). For fiscal years 2022 and 2021, the Company performed a qualitative assessment and concluded that it was more likely than not that the fair value of each of the three reporting units exceeded its carrying value. For fiscal year 2020, the Company performed a quantitative assessment that demonstrated that the fair value of the reporting units was higher than their respective carrying values. As of January 30, 2022 and January 31, 2021, there were no indications of impairment of the Company's goodwill balances, and no impairment to goodwill was recorded during fiscal years 2022, 2021 or 2020.

Purchased Intangibles

The following table sets forth the Company's finite-lived intangible assets resulting from business acquisitions and technology licenses purchased, which are amortized over their estimated useful lives:

(in thousands)	Estimated Useful Life	January 30, 2022			January 31, 2021		
		Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Core technologies	6-8 years	\$ 26,300	\$ (19,496)	\$ 6,804	\$ 29,300	\$ (17,554)	\$ 11,746
Total finite-lived intangible assets		\$ 26,300	\$ (19,496)	\$ 6,804	\$ 29,300	\$ (17,554)	\$ 11,746

Amortization expense of finite-lived intangible assets, which was recorded in "Intangible Amortization" in the Statements of Income, was as follows:

(in thousands)	January 30, 2022	January 31, 2021	January 26, 2020
Core technologies	\$ 4,942	\$ 7,676	\$ 14,263
Customer relationships	—	589	2,283
Total amortization expense	\$ 4,942	\$ 8,265	\$ 16,546

Future amortization expense of finite-lived intangible assets is expected as follows:

(in thousands)	To be recognized in:	Total
Fiscal year 2023		\$ 4,002
Fiscal year 2024		1,676
Fiscal year 2025		288
Fiscal year 2026		288
Fiscal year 2027		288
Thereafter		262
Total expected amortization expense		\$ 6,804

Note 8: Accrued Liabilities

The following is a summary of accrued liabilities for fiscal years 2022 and 2021:

(in thousands)	January 30, 2022	January 31, 2021
Compensation	\$ 38,619	\$ 29,397
Deferred revenue	13,047	3,923
Refund liabilities	11,036	9,351
Lease liabilities	3,977	3,975
Deferred compensation	1,966	1,709
Professional fees	1,838	2,525
Environmental reserve	640	531
Earn-out liability	—	1,958
Other	6,581	6,015
Total accrued liabilities	<u>\$ 77,704</u>	<u>\$ 59,384</u>

Note 9: Long-Term Debt

Long-term debt and the current period interest rates were as follows:

(in thousands)	January 30, 2022	January 31, 2021
Revolving loans	\$ 173,000	\$ 181,000
Debt issuance costs	(1,324)	(1,805)
Total long-term debt, net of debt issuance costs	\$ 171,676	\$ 179,195
Effective interest rate ⁽¹⁾	1.90 %	1.88 %

⁽¹⁾ The revolving loans bear interest at a variable rate based on LIBOR or a Base Rate, at the Company's option, plus an applicable margin that varies based on the Company's consolidated leverage ratio. In the first quarter of fiscal year 2021, the Company entered into an interest rate swap agreement that fixed the interest on the first \$150.0 million of debt outstanding under the revolving loans at 1.9775%. As of January 30, 2022, the effective interest rate was a weighted-average rate that represented (a) interest on the first \$150.0 million of the debt outstanding at a fixed LIBOR rate of 0.7275% plus a margin of 1.25% (total fixed rate of 1.9775%), and (b) interest on the remainder of the debt outstanding at a variable rate based on the one-month LIBOR rate, which was 0.11% as of January 30, 2022, plus a margin of 1.25% (total variable rate of 1.36%). As of January 31, 2021, the effective interest rate was a weighted average-rate that represented (a) interest on the first \$150.0 million of the debt outstanding at a fixed LIBOR rate of 0.7275% plus a margin of 1.25% (total fixed rate of 1.9775%), and (b) interest on the remainder of the debt outstanding at a variable rate based on the one-month LIBOR rate, which was 0.14% as of January 31, 2021, plus a margin of 1.25% (total variable rate of 1.39%).

On November 7, 2019, the Company, with certain of its domestic subsidiaries as guarantors, entered into an amended and restated credit agreement (the "Credit Agreement") with the lenders party thereto and HSBC Bank USA, National Association, as administrative agent, swing line lender and letter of credit issuer. The borrowing capacity of the revolving loans under the senior secured first lien credit facility (the "Credit Facility") is \$600.0 million and matures on November 7, 2024. Up to \$40.0 million of the revolving loans may be used to obtain letters of credit, up to \$25.0 million of the revolving loans may be used to obtain swing line loans, and up to \$40.0 million of the revolving loans may be used to obtain revolving loans and letters of credit in certain currencies other than U.S. Dollars ("Alternative Currencies"). The proceeds of the Credit Facility may be used by the Company for capital expenditures, permitted acquisitions, permitted dividends, working capital and general corporate purposes. Proceeds of the Credit Facility were used to repay in full all of the obligations outstanding under the Company's then existing senior secured first lien credit facility and to pay transaction costs in connection with such refinancing.

The Credit Agreement provides that, subject to certain customary conditions, including obtaining commitments with respect thereto, the Company may request the establishment of one or more term loan facilities and/or increases to the revolving loans in a principal amount not to exceed (a) \$300.0 million, plus (b) an unlimited amount, so long as the Company's consolidated leverage ratio, determined on a pro forma basis, does not exceed 3.00 to 1.00. However, the lenders are not required to provide such increase upon the Company's request.

On August 11, 2021, the Company entered into an amendment to the Credit Agreement in order to, among other things, (i) provide for contractual fallback language for LIBOR replacement to reflect the Alternative Reference Rates Committee hardwired approach and (ii) incorporate certain provisions that clarify the rights of the administrative agent to recover from lenders or other secured parties erroneous payments made to such lenders or secured parties.

In fiscal year 2021, the Company entered into an interest rate swap agreement with a three-year term to hedge the variability of interest payments on the first \$150.0 million of debt outstanding under the Credit Facility. Interest payments on \$150.0 million of the Company's debt are now fixed at 1.9775% based on the Company's current leverage ratio as of January 30, 2022. The Company's debt in excess of \$150.0 million remains subject to a floating rate.

Interest on loans made under the Credit Agreement in U.S. Dollars accrues, at the Company's option, at a rate per annum equal to (1) the Base Rate (as defined below) plus a margin ranging from 0.25% to 1.25% depending upon the Company's consolidated leverage ratio or (2) LIBOR (determined with respect to deposits in U.S. Dollars) for an interest period to be selected by the Company plus a margin ranging from 1.25% to 2.25% depending upon the Company's consolidated leverage ratio (such margin, the "Applicable Margin"). The "Base Rate" is equal to a fluctuating rate equal to the highest of (a) the prime rate of the Administrative Agent, (b) 0.50% above the federal funds effective rate published by the Federal Reserve Bank of New York and (c) one-month LIBOR (determined with respect to deposits in U.S. Dollars) plus 1.00%. Interest on loans made under the Credit Facility in Alternative Currencies accrues at a rate per annum equal to LIBOR (determined with respect to deposits in the applicable Alternative Currency) (other than loans made in Canadian Dollars, for which a special reference rate for Canadian Dollars applies) for an interest period to be selected by the Company plus the Applicable Margin.

Commitment fees on the unused portion of the revolving loans accrue at a rate per annum ranging from 0.20% to 0.35% depending upon the Company's consolidated leverage ratio. The Company's current commitment fee rate is 0.20% per annum.

With respect to letters of credit, the Company will pay the Administrative Agent, for the account of the Lenders, letter of credit participation fees at a rate per annum equal to the Applicable Margin then in effect with respect to LIBOR-based loans on the face amount of all outstanding letters of credit. The Company will also pay HSBC Bank USA, N.A., as the issuing bank, a

fronting fee for each letter of credit issued under the Credit Agreement at a rate equal to 0.125% per annum based on the maximum amount available to be drawn under each such letter of credit, as well as its customary documentation fees.

All obligations of the Company under the Credit Agreement are unconditionally guaranteed by all of the Company's direct and indirect domestic subsidiaries, other than certain excluded subsidiaries, including, but not limited to, any domestic subsidiary the primary assets of which consist of equity or debt of non-U.S. subsidiaries, certain immaterial non-wholly-owned domestic subsidiaries and subsidiaries that are prohibited from providing a guarantee under applicable law or that would require governmental approval to provide such guarantee. The Company and the guarantors have also pledged substantially all of their assets to secure their obligations under the Credit Agreement.

No amortization is required with respect to the revolving loans and the Company may voluntarily prepay borrowings at any time and from time to time, without premium or penalty, other than customary "breakage costs" and fees for LIBOR-based loans.

The Credit Agreement contains customary covenants, including limitations on the Company's ability to, among other things, incur indebtedness, create liens on assets, engage in certain fundamental corporate changes, make investments, repurchase stock, pay dividends or make similar distributions, engage in certain affiliate transactions, or enter into agreements that restrict the Company's ability to create liens, pay dividends or make loan repayments. In addition, the Company must comply with financial covenants, including maintaining a maximum consolidated leverage ratio, determined as of the last day of each fiscal quarter, of 3.50 to 1.00 or less, provided that, such maximum consolidated leverage ratio may be increased to 4.00 to 1.00 for the four consecutive fiscal quarters ending on or after the date of consummation of a permitted acquisition that constitutes a "Material Acquisition" under the Credit Agreement, subject to the satisfaction of certain conditions. As of January 30, 2022, the Company was in compliance with the covenants required under the Credit Agreement.

The Credit Agreement also contains customary provisions pertaining to events of default. If any event of default occurs, the obligations under the Credit Agreement may be declared due and payable, terminated upon written notice to the Company and existing letters of credit may be required to be cash collateralized.

The amendment of the Credit Agreement in fiscal year 2020 resulted in a loss on early extinguishment of debt totaling \$0.5 million related to the write off of unamortized discounts and loan costs, which was presented in "Non-operating income, net" within the Statements of Income.

As of January 30, 2022, the Company had \$173.0 million outstanding under its Credit Facility and \$427.0 million of undrawn borrowing capacity.

Interest expense was comprised of the following components for the periods presented:

(in thousands)	Fiscal Year Ended		
	January 30, 2022	January 31, 2021	January 26, 2020
Contractual interest ⁽¹⁾	\$ 4,610	\$ 4,854	\$ 8,622
Amortization of debt discount and issuance costs	481	482	484
Total interest expense	\$ 5,091	\$ 5,336	\$ 9,106

⁽¹⁾ Contractual interest represents the interest on the Company's outstanding debt after giving effect to the interest rate swap agreement.

As of January 30, 2022, there were no amounts outstanding under the letters of credit, swing line loans and alternative currency sub-facilities.

Note 10: Share-Based Compensation

Financial Statement Effects and Presentation

Pre-tax share-based compensation was included in the Statements of Income for fiscal years 2022, 2021 and 2020 as follows:

(in thousands)	Fiscal Year Ended		
	January 30, 2022	January 31, 2021	January 26, 2020
Cost of sales	\$ 2,901	\$ 2,501	\$ 1,928
Selling, general and administrative	32,578	37,000	38,556
Product development and engineering	15,710	13,485	11,565
Share-based compensation	<u>\$ 51,189</u>	<u>\$ 52,986</u>	<u>\$ 52,049</u>

Restricted Stock Units, Employees

The Company grants restricted stock units to certain employees, which are expected to be settled with shares of the Company's common stock. The grant date for these awards is equal to the measurement date. These awards are valued as of the measurement date, based on the fair value of the Company's common stock at the grant date, and recognized as share-based compensation expense over the requisite vesting period (typically 4 years).

The following table is a summary of the status of nonvested restricted stock unit awards as of January 30, 2022, and changes during the year.

(in thousands, except per share data)	Restricted Stock Units, Stock Grants and Stock Units	
	Shares	Weighted-Average Grant Date Fair Value (per share)
Nonvested at January 31, 2021	2,059	\$ 50.39
Granted	755	67.91
Vested	(805)	47.30
Forfeited	(107)	53.63
Nonvested at January 30, 2022	<u>1,902</u>	<u>\$ 58.47</u>

The aggregate unrecognized compensation for the non-vested restricted stock units as of January 30, 2022 was \$88.5 million, which will be recognized over a weighted-average period of 2.5 years.

Restricted Stock Units, Non-Employee Directors

The Company maintains a compensation program pursuant to which restricted stock units are granted to the Company's directors that are not employed by the Company or any of its subsidiaries. Under the Company's director compensation program, a portion of the stock units granted under the program would be settled in cash and a portion would be settled in shares of the Company's common stock. Restricted stock units awarded under the program are scheduled to vest on the earlier of (i) one year after the grant date or (ii) the day immediately preceding the annual meeting of stockholders in the year following the grant. The portion of a restricted stock unit award under the program that is to be settled in cash will, subject to vesting, be settled when the director who received the award separates from the board of directors. The portion of a restricted stock unit award under the program that is to be settled in shares of stock will, subject to vesting, be settled promptly following vesting. There were no changes to the terms and conditions of the existing awards.

The restricted stock units that are to be settled in cash are accounted for as liabilities. These awards are not typically settled until a non-employee director's separation from service, so the value of both the unvested and vested but unsettled awards are re-measured at the end of each reporting period until settlement. As of January 30, 2022, the total number of vested, but unsettled awards was 174,414 units, and the \$11.5 million liability associated with these awards was included in "Other long-term liabilities" in the Balance Sheets.

The restricted stock units that are to be settled in shares are accounted for as equity. The grant date for these awards is equal to the measurement date. These awards are valued as of the measurement date, based on the fair value of the Company's common stock at the grant date, and recognized as share-based compensation expense over the requisite vesting period (typically one year).

The following table summarizes the activity for the non-employee directors restricted stock units for the fiscal year ended January 30, 2022:

(in thousands, except per share data)	Total Units	Units Subject to Share Settlement	Units Subject to Cash Settlement	Weighted-Average Grant Date Fair Value (per share)
Nonvested at January 31, 2021	28	13	15	\$ 51.52
Granted	24	12	12	68.06
Vested	(28)	(13)	(15)	51.52
Nonvested at January 30, 2022	24	12	12	\$ 68.06

Total Stockholder Return ("TSR") Market-Condition Restricted Stock Units

The Company grants TSR market-condition restricted stock units (the "TSR Awards") to certain executives of the Company, which are accounted for as equity awards. The TSR Awards have a pre-defined market condition, which determines the number of shares that ultimately vest, as well as a service condition. The TSR Awards are valued as of the grant date using a Monte Carlo simulation which takes into consideration the possible outcomes pertaining to the TSR market condition and expense is recognized on a straight-line basis over the requisite service periods and is adjusted for any actual forfeitures.

In fiscal years 2022, 2021 and 2020, the Company granted, 81,688, 137,224 and 266,000, respectively, of TSR Awards. The market condition is determined based upon the Company's TSR benchmarked against the TSR of the S&P SPDR Semiconductor ETF (NYSE:XSD) over one, two and three year periods (one-third of the awards vesting each performance period). Generally, the TSR Awards recipients must be employed for the entire performance period and be an active employee at the time of vesting of the awards. The grant-date fair values per unit of the TSR Awards granted in fiscal year 2022 for each one, two and three-year performance periods were \$67.41, \$77.99 and \$84.17, respectively.

The following table summarizes the activity for the TSR Awards for fiscal year 2022:

(in thousands, except per share data)	Total Units	Weighted-Average Grant Date Fair Value (per share)
Nonvested at January 31, 2021	203	\$ 49.62
Granted	82	76.52
Vested	(16)	67.41
Cancelled/Forfeited ⁽¹⁾	(131)	51.59
Nonvested at January 30, 2022	138	\$ 61.61

⁽¹⁾ Primarily represents cancellations due to awards not meeting the TSR target, as well as cancellations due to the retirement of an officer.

Amounts in the table above include the stated number of awards granted and outstanding. However, the number of awards that ultimately vest may be higher or lower than the originally granted amounts depending upon the actual TSR achievement level over the performance period. For example, of the 140,416 awards scheduled to vest on January 30, 2022, only 16,011 actually vested due to lower than target TSR achievement levels.

The aggregate unrecognized compensation expense for TSR Awards as of January 30, 2022, was \$3.9 million, which will be recognized over a weighted-average period of 1.2 years.

Market-Condition Restricted Stock Units, Employees

In fiscal year 2022, the Company granted an additional 54,928 restricted stock units to certain executives of the Company, which have a different pre-defined market condition that determines the number of shares that ultimately vest. These additional awards are eligible to vest during the period commencing March 9, 2021, and ending March 5, 2024 (the "Performance Period") as follows: the restricted stock units covered by the award will vest if, during any consecutive 30 trading day period that commences and ends during the Performance Period, the average per-share closing price of the Company's common stock equals or exceeds \$95.00. The award will also vest at a pro-rata percentage of the unvested portion of the total restricted units if a majority change in control of the Company occurs during the Performance Period and, in connection with such event, the Company's stockholders become entitled to receive per-share consideration having a value equal to or greater than \$71.00 but less than \$95.00. If the change in control per-share consideration is equal to or greater than \$95.00 the award will fully vest. These market-condition restricted stock units are valued as of the grant date using a Monte Carlo simulation model and expense is recognized on a straight-line basis over the requisite service period and is adjusted for any actual forfeitures. The grant-date fair value per unit of the awards granted in fiscal year 2022 was \$49.55. The aggregate compensation expense for the market-condition restricted stock units has been fully recognized as of January 30, 2022.

Market-Condition Restricted Stock Units, CEO

In fiscal year 2020, the Company granted its Chief Executive Officer ("CEO") 320,000 restricted stock units with a market condition. The award is eligible to vest during the period commencing March 5, 2019, and ending March 5, 2024 (the "Performance Period") as follows: 30% of the restricted stock units covered by the award will vest if, during any consecutive 30 day trading period that commences and ends during the Performance Period, the average per-share closing price of the Company's common stock equals or exceeds \$71.00 ("Tranche 1") and the award will vest in full if, during any consecutive 30 day trading period that commences and ends during the Performance Period, the average per-share closing price of the Company's common stock equals or exceeds \$95.00 ("Tranche 2"). The award will also vest as to 30% if a majority change in control of the Company occurs during the Performance Period and, in connection with such event, the Company's stockholders become entitled to receive per-share consideration having a value equal to or greater than \$71.00 but less than \$95.00. If the change in control per-share consideration is equal to or greater than \$95.00 the award will fully vest. The fair value of Tranche 1 and Tranche 2 at the grant date was determined to be \$44.32 and \$33.19, respectively, by application of the Monte Carlo simulation model. Expense is recognized on a straight-line basis over the requisite service periods and is adjusted for any actual forfeitures.

On January 8, 2021, the Company's 30 day average-per-share closing price met the threshold for Tranche 1 resulting in the vesting of 30%, or 96,000 units, of the original award. The aggregate compensation expense for the market-condition restricted stock units has been fully recognized as of January 30, 2022.

Non-Qualified Stock Options

In prior years, the Company has granted non-qualified stock options to both employees and non-employee directors. The fair value of these grants were measured on the grant date and recognized as expense over the requisite vesting period (typically 3-4 years). The Company used the Black-Scholes pricing model to value stock options. There were no stock options granted in fiscal years 2022, 2021 or 2020. The number of shares authorized per the equity incentive plan is 17,031,653, and the maximum contractual term of equity share options is generally ten years.

The following table summarizes the activity for stock options for fiscal year 2022:

(in thousands, except per share data)	Number of Shares	Weighted-Average Exercise Price (per share)	Aggregate Intrinsic Value ⁽¹⁾	Number of Shares Exercisable	Weighted-Average Contractual Term (years)
Vested and expected to vest at January 31, 2021	335	\$ 30.28	\$ 13,627	238	
Exercised	(213)	24.73	10,234		
Forfeited	(4)	35.42			
Vested and expected to vest at January 30, 2022	118	\$ 40.17	\$ 3,253	84	2.4
Vested and exercisable at January 30, 2022	84	\$ 37.16	\$ 2,579		2.3

⁽¹⁾ The aggregate intrinsic value of stock options vested and exercisable and vested and expected to vest as of January 30, 2022 is calculated based on the difference between the exercise price and the \$67.83 closing price of the Company's common stock as of January 30, 2022.

The aggregate unrecognized compensation expense for the outstanding stock options as of January 30, 2022 was \$0.2 million, which will be recognized over a weighted-average period of 0.5 years.

The following table summarizes information regarding nonvested stock option awards at January 30, 2022:

(in thousands, except per share data)	Number of Shares	Weighted-Average Exercise Price (per share)	Weighted-Average Grant Date Fair Value (per share)
Nonvested at January 31, 2021	96	\$ 44.80	\$ 13.35
Vested	(61)	43.21	12.76
Forfeited	(1)	45.13	13.36
Nonvested at January 30, 2022	34	\$ 47.73	\$ 14.45

Performance-Based Restricted Stock Units

Prior to fiscal year 2018, the Company granted performance-based restricted stock units to select employees. These awards had a performance condition in addition to a service condition. The performance metrics were based on a pre-defined cumulative three-year performance of the Company's revenue and non-GAAP operating income measured against internal goals. For these awards, the performance was tied to the Company's performance in the grant year and the succeeding two fiscal years. The performance award recipients must be employed for the entire three-year period, which is the explicit service and requisite service period, and be an active employee at the time of vesting of the awards (cliff vesting at the end of the third year). At January 27, 2019, the performance metrics associated with the remaining outstanding awards, which were issued in fiscal year 2017, were met at a level which resulted in a grant that vested at 180.8% of target. Under the terms of these awards, 187,116 shares were settled in shares and 187,116 shares were settled in cash in the amount of \$9.3 million during fiscal year 2020. There are no remaining awards outstanding as of January 30, 2022.

Note 11: Income Taxes

The Company's regional income before income taxes and equity in net gains (losses) of equity method investments was as follows:

(in thousands)	Fiscal Year Ended		
	January 30, 2022	January 31, 2021	January 26, 2020
Domestic	\$ (16,593)	\$ (26,170)	\$ (24,530)
Foreign	155,662	89,145	69,115
Total	\$ 139,069	\$ 62,975	\$ 44,585

The provision for income taxes consisted of the following:

(in thousands)	Fiscal Year Ended		
	January 30, 2022	January 31, 2021	January 26, 2020
Current income tax provision (benefit)			
Federal	\$ 1,078	\$ 6,716	\$ 6,463
State	211	(69)	100
Foreign	16,374	4,801	11,861
Subtotal	17,663	11,448	18,424
Deferred income tax provision (benefit)			
Federal	(1,797)	(7,012)	74
State	—	20	(33)
Foreign	(327)	(1,019)	(5,637)
Subtotal	(2,124)	(8,011)	(5,596)
Provision for income taxes	\$ 15,539	\$ 3,437	\$ 12,828

The provision for income taxes reconciles to the amount computed by applying the statutory federal rate to income before taxes as follows:

(in thousands)	Fiscal Year Ended		
	January 30, 2022	January 31, 2021	January 26, 2020
Federal income tax at statutory rate	\$ 29,194	\$ 13,309	\$ 9,328
State income taxes, net of federal benefit	272	(186)	68
Foreign taxes differential, including withholding taxes	(6,611)	(2,688)	(966)
Tax credits generated	(9,008)	(4,361)	(2,026)
Changes in valuation allowance	1,778	(438)	(2,722)
Gain on intra-entity asset transfer	—	—	6,802
Changes in uncertain tax positions	180	1,841	8,636
Equity compensation	(2,698)	(3,573)	(6,008)
GILTI and Subpart F income	441	270	538
Impact of U.S. tax reform	—	—	—
Other	1,991	(737)	(822)
Provision for income taxes	\$ 15,539	\$ 3,437	\$ 12,828

The Company's tax expense benefited from its operations in lower tax jurisdictions such as Switzerland, research tax credits and the recognition of excess tax benefits related to share-based compensation.

On December 6, 2016, the Company was granted a tax holiday ("Tax Holiday") with an effective date of January 30, 2017. The Tax Holiday provides Semtech (International) AG with a 70% reduction to the Swiss Cantonal tax rate, bringing the statutory Swiss Cantonal tax rate down from 12.56% to 3.77%. The maximum benefit under this Tax Holiday is CHF 500.0 million of cumulative after tax profit, which equates to a maximum potential tax savings of CHF 44.0 million. The Tax Holiday was effective for five years and could be extended for an additional five years if the Company met certain staffing targets by January 30, 2022. Semtech (International) AG has met these staffing guidelines, and therefore, the tax holiday is extended for an additional 5 years ending January 31, 2027.

On May 19, 2019, Switzerland approved the Federal Act on Tax Reform ("Swiss Tax Reform"). One main component of the Swiss Tax Reform included reduction of Cantonal income tax rates. The Swiss Tax Reform dropped the statutory Swiss Cantonal tax rate down from 12.56% to 8.46%. Semtech's Tax Holiday provides Semtech (International) AG with a 70% reduction to this new Swiss Cantonal tax rate, bringing the statutory Swiss Cantonal tax rate down from 8.46% to 2.54%. All other provisions of the existing Tax Holiday discussed above still apply.

The Tax Act imposed a U.S. tax on global intangible low taxed income ("GILTI") that is earned by certain foreign affiliates owned by a U.S. stockholder. In accordance with guidance issued by the FASB, the Company has made a policy election to treat future taxes related to GILTI as a current period expense in the reporting period in which the tax is incurred.

Prior to the enactment of the Tax Act, with few exceptions, U.S. federal income and foreign withholding taxes had not been provided on the excess of the amount for financial reporting over the tax basis of investments in the Company's foreign subsidiaries that were essentially permanent in duration. With the enactment of the Tax Act, all historic and current foreign earnings are taxed in the U.S. Depending on the jurisdiction, these foreign earnings are potentially subject to a withholding tax, if repatriated. As of January 30, 2022, our historical undistributed earnings of the Company's foreign subsidiaries are intended to be permanently reinvested outside of the U.S.

Notwithstanding the U.S. taxation of these amounts, we have determined that \$50.0 million of our current foreign earnings will not be permanently reinvested. As a result, we have established a deferred income tax liability for the Swiss withholding tax that will be due upon distribution of these earnings. If we needed to remit all or a portion of our historical undistributed earnings to the U.S. for investment in our domestic operations, any such remittance could result in increased tax liabilities and a higher effective tax rate. Determination of the amount of the unrecognized deferred tax liability on these unremitted earnings is not practicable.

The components of the net deferred income tax assets and liabilities at January 30, 2022 and January 31, 2021 were as follows:

(in thousands)	January 30, 2022	January 31, 2021
Non-current deferred tax assets:		
Inventory reserve	\$ 5,734	\$ 4,435
Bad debt reserve	26	23
Foreign tax credits	3,304	1,974
Research credit carryforward	13,498	9,700
NOL carryforward	7,839	7,659
Payroll and related accruals	11,743	10,248
Share-based compensation	5,256	5,822
Foreign pension deferred	1,412	2,020
Accrued sales reserves	1,012	464
Research and development charges	7,263	4,005
Goodwill and other intangibles	—	690
Leasing deferred assets	4,311	3,573
Other deferred assets	2,239	3,253
Valuation allowance	(17,506)	(15,751)
Total non-current deferred tax assets	46,131	38,115
Non-current deferred tax liabilities:		
Goodwill and other intangibles	(1,530)	—
Property, plant and equipment	(6,990)	(6,820)
Repatriation of foreign earnings	(4,709)	(2,538)
Leasing deferred liabilities	(4,139)	(3,415)
Other non-current deferred tax liabilities	(2,093)	(835)
Total non-current deferred tax liabilities	(19,461)	(13,608)
Net deferred tax assets	\$ 26,670	\$ 24,507

As of January 30, 2022, the Company had U.S. state net operating loss carryforwards of \$103.5 million, which, subject to certain limitations, are available to offset future taxable income through fiscal year 2042.

As of January 30, 2022, the Company had U.S. gross federal and state research credits available of approximately \$13.3 million and \$15.7 million, respectively, which are available to offset taxable income. These credits will expire between fiscal years 2029 through 2042. The Company also had gross Canadian research credits available of approximately \$6.7 million. These credits will expire by fiscal year 2042.

As of January 30, 2022 and January 31, 2021, the Company had approximately \$44.1 million and \$40.3 million of net deferred tax assets, respectively, the majority of which are in the U.S. and Canada. The Company has recorded valuation allowances of \$17.5 million and \$15.8 million against its deferred tax assets at January 30, 2022 and January 31, 2021, respectively, based on the Company's assessment of its ability to utilize its deferred tax assets. The valuation allowances established relate to certain U.S. deferred tax assets, for which the Company has determined that it is more likely than not that a benefit will not be realized. In considering whether a valuation allowance was required for the Company's U.S. deferred income tax assets, the Company considered all available positive and negative evidence. Positive evidence considered included reversing taxable temporary differences. Negative evidence considered included the cumulative pre-tax losses in the U.S. recorded during the three-year period ended January 30, 2022, on both an annual and cumulative basis.

Changes in the valuation allowance for the three years ended January 30, 2022 are summarized in the table below:

(in thousands)	Fiscal Year Ended		
	January 30, 2022	January 31, 2021	January 26, 2020
Beginning balance	\$ 15,751	\$ 16,189	\$ 18,912
Additions	2,605	1,208	159
Releases	(850)	(1,646)	(2,882)
Ending balance	\$ 17,506	\$ 15,751	\$ 16,189

Uncertain Tax Positions

The Company uses a two-step approach to recognize and measure uncertain tax positions ("UTP"). The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. 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.

A reconciliation of the beginning and ending amount of gross unrecognized tax benefits (before federal impact of state items) is as follows:

(in thousands)	Fiscal Year Ended	
	January 30, 2022	January 31, 2021
Beginning balance	\$ 26,850	\$ 25,466
Net additions based on tax positions related to the current year	925	400
Additions based on tax positions related to prior years	464	2,760
Reductions as a result of lapsed statutes	(991)	(261)
Reductions for settlements with tax authorities	(197)	(1,515)
Ending balance	\$ 27,051	\$ 26,850

Included in the balance of gross unrecognized tax benefits at January 30, 2022 and January 31, 2021, are \$9.3 million and \$9.7 million, respectively, of net tax benefits (after federal impact of state items) that, if recognized, would impact the effective tax rate.

The liability for UTP is reflected on the Balance Sheets as follows:

(in thousands)	Fiscal Year Ended	
	January 30, 2022	January 31, 2021
Deferred tax assets - non-current	\$ 16,346	\$ 15,770
Other long-term liabilities	9,335	9,731
Total accrued taxes	\$ 25,681	\$ 25,501

The Company's policy is to include net interest and penalties related to unrecognized tax benefits within the provision for taxes in the Statements of Income. The Company had approximately \$1.3 million of net interest and penalties accrued at January 30, 2022.

Tax years prior to 2013 (the Company's fiscal year 2014) are generally not subject to examination by the IRS except for items involving tax attributes that have been carried forward to tax years whose statute of limitations remains open. For state returns in the U.S., the Company is generally not subject to income tax examinations for years prior to 2012 (the Company's fiscal year 2013). The Company has a significant tax presence in Switzerland for which Swiss tax filings have been examined through fiscal year 2020. The Company is also subject to routine examinations by various foreign tax jurisdictions in which it operates. The Company believes that adequate provisions have been made for any adjustments that may result from tax examinations. However, the outcome of tax examinations cannot be predicted with certainty. If any issues addressed in the Company's tax examinations are resolved in a manner not consistent with the Company's expectations, the Company could be required to adjust its provision for income taxes in the period such resolution occurs.

Note 12: Leases

The Company has operating leases for real estate, vehicles and office equipment, which are accounted for in accordance with ASC 842, "Leases." Real estate leases are used to secure office space for the Company's administrative, engineering, production support and manufacturing activities. The Company's leases have remaining lease terms of up to eight years, some of which include options to extend the leases for up to three years, and some of which include options to terminate the leases within one year.

The components of lease expense were as follows:

(in thousands)	Fiscal Year Ended	
	January 30, 2022	January 31, 2021
Operating lease cost	\$ 5,704	\$ 4,900
Short-term lease cost	1,070	1,037
Less: sublease income	(141)	(132)
Total lease cost	<u>\$ 6,633</u>	<u>\$ 5,805</u>

Supplemental cash flow information related to leases was as follows:

(in thousands)	Fiscal Year Ended	
	January 30, 2022	January 31, 2021
Cash paid for amounts included in the measurement of lease liabilities	\$ 5,639	\$ 4,909
Right-of-use assets obtained in exchange for new operating lease liabilities	\$ 7,862	\$ 9,209

	As of January 30, 2022
Weighted-average remaining lease term - operating leases (in years)	5.59
Weighted-average discount rate on remaining lease payments - operating leases	6.3 %

Supplemental balance sheet information related to leases was as follows:

(in thousands)	Balance as of	
	January 30, 2022	January 31, 2021
Operating lease right-of-use assets in "Other Assets"	\$ 19,777	\$ 16,337
Operating lease liabilities in "Accrued Liabilities"	\$ 3,977	\$ 3,975
Operating lease liabilities in "Other long-term Liabilities"	16,577	13,172
Total operating lease liabilities	<u>\$ 20,554</u>	<u>\$ 17,147</u>

Maturities of lease liabilities as of January 30, 2022 are as follows:

(in thousands)	
Fiscal Year Ending:	
2023	\$ 5,097
2024	4,602
2025	4,447
2026	3,451
2027	2,234
Thereafter	4,602
Total lease payments	24,433
Less: imputed interest	(3,879)
Total	<u>\$ 20,554</u>

Note 13: Commitments and Contingencies

Unconditional Purchase Commitments

The following table presents the Company's open capital commitments and other open purchase commitments for the purchase of plant, equipment, raw material, supplies and services as of January 30, 2022:

(in thousands)	Less than 1 year	1-3 years	Total
Open capital purchase commitments	\$ 3,706	\$ —	\$ 3,706
Other open purchase commitments	82,758	15,164	97,922
Total purchase commitments	\$ 86,464	\$ 15,164	\$ 101,628

Legal Matters

In accordance with ASC 450-20, "Loss Contingencies," the Company accrues an undiscounted liability for those contingencies where the incurrence of a loss is probable and the amount can be reasonably estimated. The Company also discloses the amount accrued and the amount of a reasonably possible loss in excess of the amount accrued, if material. The Company does not record liabilities when the likelihood that the liability has been incurred is probable but the amount cannot be reasonably estimated, or when the liability is believed to be only reasonably possible or remote. The Company evaluates, at least quarterly, developments in its legal matters that could affect the amount of liability that has been previously accrued, and makes adjustments as appropriate. Significant judgment is required to determine both probability and the estimated amount. The Company may be unable to estimate a possible loss or range of possible loss due to various reasons, including, among others: (i) if the damages sought are indeterminate, (ii) if the proceedings are in early stages, (iii) if there is uncertainty as to the outcome of pending appeals, motions or settlements, (iv) if there are significant factual issues to be determined or resolved, and (v) if there are novel or unsettled legal theories presented. In such instances, there is considerable uncertainty regarding the ultimate resolution of such matters, including a possible eventual loss, if any.

Because the outcomes of litigation and other legal matters are inherently unpredictable, the Company's evaluation of legal matters or proceedings often involves a series of complex assessments by management about future events and can rely heavily on estimates and assumptions. While the consequences of certain unresolved matters and proceedings are not presently determinable, and an estimate of the probable and reasonably possible loss or range of loss in excess of amounts accrued for such proceedings cannot be reasonably made, an adverse outcome from such proceedings could have a material adverse effect on the Company's earnings in any given reporting period. However, in the opinion of management, after consulting with legal counsel, any ultimate liability related to current outstanding claims and lawsuits, individually or in the aggregate, is not expected to have a material adverse effect on the Company's consolidated financial statements, as a whole. However, legal matters are inherently unpredictable and subject to significant uncertainties, some of which are beyond the Company's control.

As such, even though the Company intends to vigorously defend itself with respect to its legal matters, there can be no assurance that the final outcome of these matters will not materially and adversely affect the Company's business, financial condition, operating results, or cash flows.

From time to time, the Company is involved in various claims, litigation, and other legal actions that are normal to the nature of its business, including with respect to IP, contract, product liability, employment, and environmental matters. In the opinion of management, after consulting with legal counsel, any ultimate liability related to current outstanding claims and lawsuits, individually or in the aggregate, is not expected to have a material adverse effect on the Company's consolidated financial statements, as a whole.

Environmental Matters

The Company vacated a former facility in Newbury Park, California in 2002, but continues to address groundwater and soil contamination at the site. The Company's efforts to address site conditions have been at the direction of the Los Angeles Regional Water Quality Control Board ("RWQCB"). In October 2013, an order was issued including a scope of proposed additional site work, monitoring and remediation activities. The Company has been complying with RWQCB orders and direction, and continues to implement an approved remedial action plan addressing the soil, groundwater and soil vapor at the site.

The Company has accrued liabilities where it is probable that a loss will be incurred and the cost or amount of loss can be reasonably estimated. Based on the latest determinations by the RWQCB and the most recent actions taken pursuant to the remedial action plan, the Company estimates the range of probable loss between \$7.4 million and \$8.0 million. To date, the Company has made \$5.7 million in payments towards the remedial action plan and, as of January 30, 2022, has a remaining accrual of \$1.7 million related to this matter. Given the uncertainties associated with environmental assessment and the remediation activities, the Company is unable to determine a best estimate within the range of loss. Therefore, the Company has

recorded the minimum amount of probable loss. These estimates could change as a result of changes in planned remedial actions, further actions from the regulatory agency, remediation technology and other factors.

Indemnification

The Company has entered into agreements with its current and former executives and directors indemnifying them against certain liabilities incurred in connection with the performance of their duties. The Company's Certificate of Incorporation and Bylaws also contain indemnification obligations with respect to the Company's current directors and employees.

Product Warranties

The Company's general warranty policy provides for repair or replacement of defective parts. In some cases, a refund of the purchase price is offered. In certain instances the Company has agreed to other or additional warranty terms, including indemnification provisions.

The product warranty accrual reflects the Company's best estimate of probable liability under its product warranties. The Company accrues for known warranty issues if a loss is probable and can be reasonably estimated, and accrues for estimated incurred but unidentified issues based on historical experience. Historically, warranty expense and the related accrual has been immaterial to the Company's consolidated financial statements.

Retirement Plans

The Company contributed \$1.4 million, \$1.2 million and \$1.2 million in fiscal years 2022, 2021 and 2020, respectively, to the 401(k) retirement plan maintained for its employees based in the U.S.

In addition, the Company also contributed \$0.8 million, \$0.7 million and \$0.8 million in fiscal years 2022, 2021 and 2020, respectively, to a defined contribution plan for its employees in Canada.

The Company has defined benefit pension plans for the employees of its Swiss subsidiaries (the "Swiss Plans"), which it accounts for in accordance with ASC 715-30, "Defined Benefit Plans – Pension." The Swiss Plans provide government-mandated retirement, death and disability benefits. Under the Swiss Plans, the Company and its employees make government-mandated minimum contributions. Minimum contributions are based on the respective employee's age, salary and gender. As of January 30, 2022 and January 31, 2021, the Swiss Plans had an unfunded net pension obligation of approximately \$10.6 million and \$13.9 million, respectively, plan assets of approximately \$42.8 million and \$36.3 million, respectively, and projected benefit obligation of approximately \$53.4 million and \$50.2 million, respectively. For fiscal years 2022 and 2021, net periodic pension expense was \$1.7 million and \$2.4 million, respectively, and contributions made by the Company were \$1.9 million and \$1.6 million, respectively.

The Company records a post-retirement benefit for the employees of its French subsidiary (the "French Plan"), which it accounts for in accordance with ASC 715-30. The French Plan is defined by the collective bargaining agreement of R&D, IT and consulting firms. Minimum contributions are based on the respective years of service for all permanent employees. As of January 30, 2022, the French Plan had an unfunded net pension obligation of approximately \$0.4 million, plan assets of zero and projected benefit obligation of approximately \$0.4 million. As of January 31, 2021, the French Plan had an unfunded net pension obligation of approximately \$0.4 million, plan assets of zero and a projected benefit obligation of approximately \$0.4 million. For fiscal years 2022 and 2021, net periodic pension expense was \$0.4 million and \$0.1 million, respectively, and contributions made by the Company were \$0.5 million and \$0.6 million, respectively.

Deferred Compensation

The Company maintains a deferred compensation plan for certain officers and key executives that allows participants to defer a portion of their compensation for future distribution at various times permitted by the plan. This plan provides for a discretionary Company match up to a defined portion of the employee's deferral, with any match subject to a defined vesting schedule.

Under this plan, the Company incurred expense, net of forfeitures, of \$2.7 million, \$7.0 million and \$6.8 million in fiscal years 2022, 2021 and 2020, respectively. For fiscal years 2022 and 2021, these net expenses include \$1.5 million and \$0.3 million, respectively, of net gains resulting from total return swap contracts used to hedge the market risk associated with the unfunded portion of the deferred compensation liability. See Note 18 for further discussion of the Company's derivative instruments.

The Company's liability for the deferred compensation plan is presented below:

(in thousands)	January 30, 2022	January 31, 2021
Accrued liabilities	\$ 1,966	\$ 1,709
Other long-term liabilities	43,197	39,299
Total deferred compensation liabilities under this plan	<u>\$ 45,163</u>	<u>\$ 41,008</u>

The Company has purchased whole life insurance on the lives of certain current deferred compensation plan participants. This corporate-owned life insurance is held in a grantor trust and is intended to cover a majority of the Company's costs of the deferred compensation plan. The cash surrender value of the corporate-owned life insurance was \$35.2 million and \$27.6 million as of January 30, 2022 and January 31, 2021, respectively, and is included in "Other assets" in the Balance Sheets. The increase in the cash surrender value of the corporate-owned life insurance as of January 30, 2022 compared to January 31, 2021 was related to an overall increase in market value and \$6.0 million of premiums paid in order to provide substantive coverage for the Company's deferred compensation liability. Changes in the cash surrender value of the corporate-owned life insurance resulted in net gains of \$1.6 million, \$3.3 million and \$3.8 million in fiscal years 2022, 2021 and 2020, respectively.

Earn-out Liability

Pursuant to the terms of an amended earn-out arrangement ("Cycleo Earn-out") with the former shareholders of Cycleo SAS ("Cycleo Earn-out Beneficiaries"), which the Company acquired in March 2012, earn-out payments were based on the achievement of a combination of certain sales and operating income milestones over the period of April 27, 2015 to April 26, 2020. For certain of the Cycleo Earn-out Beneficiaries, payment of the earn-out liability was contingent upon continued employment and was accounted for as post-acquisition compensation expense over the service period. The portion of the earn-out liability that was not dependent on continued employment was not considered as compensation expense. During fiscal year 2022, payments made related to the final earn-out milestone totaled \$1.4 million. At January 30, 2022, the Cycleo Earn-out liability balance was zero, compared to a balance at January 31, 2021 of \$2.0 million, which included \$1.7 million of compensation expense and \$0.3 million not contingent upon continued employment.

Note 14: Concentration of Risk

The following significant customers accounted for at least 10% of the Company's net sales in one or more of the periods indicated:

(percentage of net sales)	Fiscal Year Ended		
	January 30, 2022	January 31, 2021	January 26, 2020
Frontek Technology Corporation (and affiliates)	18 %	16 %	11 %
Trend-tek Technology Ltd. (and affiliates)	17 %	17 %	13 %
CEAC International Ltd. (and affiliates)	11 %	11 %	8 %
Arrow Electronics (and affiliates)	10 %	9 %	9 %
Premier Technical Sales Korea, Inc. (and affiliates) ⁽¹⁾	6 %	6 %	7 %
Samsung Electronics (and affiliates)	2 %	2 %	4 %

⁽¹⁾ Premier is a distributor with a concentration of sales to Samsung Electronics (and affiliates). The above percentages represent the Company's estimate of the sales activity related to Samsung Electronics (and affiliates) that is passing through this distributor.

The following table shows the customers that have an outstanding receivable balance that represents at least 10% of the Company's total net receivables as of one or more of the dates indicated:

(percentage of net receivables)	January 30, 2022	January 31, 2021
	Frontek Technology Corporation (and affiliates)	17 %
CEAC International Ltd. (and affiliates)	10 %	14 %
Trend-tek Technology Ltd. (and affiliates)	7 %	14 %

For fiscal years 2022, 2021 and 2020, authorized distributors accounted for approximately 87%, 82% and 72%, respectively, of the Company's net sales. Generally, the Company does not have long-term contracts with its distributors and most can terminate their agreement with little or no notice. For fiscal year 2022, the Company's largest distributors were based in Asia.

Outside Subcontractors and Suppliers

The Company relies on a limited number of third-party subcontractors and suppliers for the production of silicon wafers, packaging and certain other tasks. Disruption or termination of supply sources or subcontractors, including due to the COVID-19 pandemic or natural disasters such as an earthquake or other causes, have delayed and could in the future delay shipments and could have a material adverse effect on the Company. Although there are generally alternate sources for these materials and services, qualification of the alternate sources could cause delays sufficient to have a material adverse effect on the Company. A significant amount of the Company's third-party subcontractors and suppliers, including third-party foundries that supply silicon wafers, are located in the U.S., Taiwan and China. A significant amount of the Company's assembly and test operations are conducted by third-party contractors in China, Taiwan and Malaysia.

Note 15: Segment Information

The Company's CEO functions as the chief operating decision maker ("CODM"). The CODM makes operating decisions and assesses performance based on the Company's major product lines, which represent its operating segments. The Company has three operating segments—Signal Integrity, Wireless and Sensing and Protection—that historically have been aggregated into one reportable segment identified as the "Semiconductor Products Group." In the fourth quarter of fiscal year 2022, the Company updated its forecasts and assessed the economic performance of the three operating segments and concluded that Protection is no longer expected to be economically similar to the other operating segments. This is primarily because our projections indicate that the gross margin of products within Protection will not be economically similar to products within the other operating segments. Accordingly, the Company has concluded that Protection should be separately reported as its own reportable segment. This decision resulted in the formation of two reportable segments, including the High-Performance Analog Group, which is comprised of the Signal Integrity and Wireless and Sensing operating segments, and the System Protection Group, which is comprised of the Protection operating segment. All prior year information in the tables below has been revised retrospectively to reflect the change to the Company's reportable segments.

The Company's assets are commingled among the various operating segments and the CODM does not use asset information in making operating decisions or assessing performance. Therefore, the Company has not included asset information by reportable segment in the segment disclosures below.

Net sales and gross profit by reportable segment were as follows:

(in thousands)	Fiscal Year Ended		
	January 30, 2022	January 31, 2021	January 26, 2020
Net sales:			
High-Performance Analog Group	\$ 537,288	\$ 433,174	\$ 390,300
System Protection Group	203,570	161,943	157,212
Total net sales	<u>\$ 740,858</u>	<u>\$ 595,117</u>	<u>\$ 547,512</u>
Gross profit:			
High-Performance Analog Group	\$ 364,594	\$ 283,668	\$ 259,172
System Protection Group	105,605	81,631	78,809
Unallocated costs, including share-based compensation	(4,118)	(1,750)	(1,297)
Total gross profit	<u>\$ 466,081</u>	<u>\$ 363,549</u>	<u>\$ 336,684</u>

Information by Product Line

The Company operates exclusively in the semiconductor industry and primarily within the analog and mixed-signal sector.

The table below provides net sales activity by product line on a comparative basis:

(in thousands, except percentages)	Fiscal Year Ended					
	January 30, 2022		January 31, 2021		January 26, 2020	
Signal Integrity	\$ 291,114	40 %	\$ 255,640	43 %	\$ 222,846	40 %
Wireless and Sensing	246,174	33 %	177,534	30 %	167,454	31 %
Protection	203,570	27 %	161,943	27 %	157,212	29 %
Total net sales	<u>\$ 740,858</u>	<u>100 %</u>	<u>\$ 595,117</u>	<u>100 %</u>	<u>\$ 547,512</u>	<u>100 %</u>

Information by Sales Channel

(in thousands)	Fiscal Year Ended		
	January 30, 2022	January 31, 2021	January 26, 2020
Distributor	\$ 647,012	\$ 490,009	\$ 392,582
Direct	93,846	105,108	154,930
Total net sales	<u>\$ 740,858</u>	<u>\$ 595,117</u>	<u>\$ 547,512</u>

Generally, the Company does not have long-term contracts with its distributors and most distributor agreements can be terminated by either party with short notice. For fiscal year 2022, the Company's largest distributors were based in Asia.

Geographic Information

Net sales activity by geographic region was as follows:

(in thousands, except percentages)	Fiscal Year Ended					
	January 30, 2022		January 31, 2021		January 26, 2020	
Asia-Pacific	\$ 583,852	79 %	\$ 474,040	80 %	\$ 421,584	77 %
North America	90,796	12 %	71,866	12 %	76,652	14 %
Europe	66,210	9 %	49,211	8 %	49,276	9 %
Total net sales	\$ 740,858	100 %	\$ 595,117	100 %	\$ 547,512	100 %

The Company attributes sales to a country based on the ship-to address. The table below summarizes sales activity to countries that represented greater than 10% of total sales for at least one of the periods presented:

(percentage of total net sales)	Fiscal Year Ended		
	January 30, 2022	January 31, 2021	January 26, 2020
China (including Hong Kong)	60 %	60 %	53 %
United States	10 %	10 %	9 %
Total net sales	70 %	70 %	62 %

Although a large percentage of the Company's products is shipped into the Asia-Pacific region, a significant number of the products produced by these customers and incorporating the Company's semiconductor products are then sold outside this region.

Long-lived Assets

The following table summarizes the Company's long-lived assets, which consist of property, plant and equipment, net of accumulated depreciation, classified by location:

(in thousands)	Balance as of	
	January 30, 2022	January 31, 2021
United States	\$ 64,927	\$ 61,502
Rest of North America	37,155	35,216
Asia and all others	18,216	22,877
Europe	14,642	11,339
Total	\$ 134,940	\$ 130,934

Some of these assets are at locations owned or operated by the Company's suppliers. The Company has consigned certain equipment to a foundry based in China to support its specialized processes run at the foundry. The Company has also installed its own equipment at some of its packaging and testing subcontractors in order to ensure a certain level of capacity, assuming the subcontractor has ample employees to operate the equipment.

The net book value of equipment and machinery that were consigned to multiple foundries in China was \$11.4 million and \$15.0 million as of January 30, 2022 and January 31, 2021, respectively. The net book value of equipment and machinery that were consigned to a foundry in Malaysia was \$3.3 million and \$4.1 million as of January 30, 2022 and January 31, 2021, respectively.

Note 16: Restructuring

From time to time, the Company takes steps to realign the business to focus on high-growth areas, provide customer value and make the Company more efficient. As a result, the Company has occasionally realigned resources and infrastructure. No restructuring expense was recorded in fiscal year 2022. A restructuring recovery of \$0.2 million was recorded in fiscal year 2021 and restructuring expense of \$2.2 million was recorded in fiscal year 2020.

Restructuring-related liabilities are included in "Accrued liabilities" in the Balance Sheets. Restructuring recoveries related to one-time employee termination benefits were presented in R&D expense and restructuring recoveries related to contract commitments were presented in SG&A expense in the Statements of Income in fiscal year 2021. All restructuring charges were presented in SG&A expense in fiscal year 2020.

Activity related to the restructuring plans is summarized as follows:

(in thousands)	One-time employee termination benefits	Contract commitments	Total
Balance at January 27, 2019	\$ 720	\$ 289	\$ 1,009
Charges	1,483	683	2,166
Cash payments	(2,089)	(848)	(2,937)
Balance at January 26, 2020	114	124	238
Recoveries	(114)	(124)	(238)
Balance at January 31, 2021	—	—	—
Balance at January 30, 2022	\$ —	\$ —	\$ —

Note 17: Stock Repurchase Program

The Company maintains a stock repurchase program that was initially approved by its Board of Directors in March 2008. The stock repurchase program does not have an expiration date and the Company's Board of Directors has authorized expansion of the program over the years. The following table summarizes activity under the program for the fiscal years listed below:

(in thousands, except number of shares)	Fiscal Year Ended					
	January 30, 2022		January 31, 2021		January 26, 2020	
	Shares	Price Paid	Shares	Price Paid	Shares	Price Paid
Shares repurchased under the stock repurchase program	1,768,772	\$ 129,746	1,597,104	\$ 71,433	1,471,703	\$ 70,219

On March 11, 2021, the Company's Board of Directors approved the expansion of the stock repurchase program by an additional \$350.0 million. As of January 30, 2022, the Company had repurchased \$539.0 million in shares of its common stock under the program since its inception and the remaining authorization under the program was \$259.4 million. Under the program, the Company may repurchase its common stock at any time or from time to time, without prior notice, subject to market conditions and other considerations. The Company's repurchases may be made through Rule 10b5-1 and/or Rule 10b-18 or other trading plans, open market purchases, privately negotiated transactions, block purchases or other transactions. The Company intends to fund repurchases under the program from cash on hand. The Company has no obligation to repurchase any shares under the program and may suspend or discontinue it at any time.

Note 18: Derivatives and Hedging Activities

The Company is exposed to certain risk arising from both its business operations and economic conditions and principally manages its exposures to a wide variety of business and operational risks through management of its core business activities. The Company, on a routine basis and in the normal course of business, experiences expenses denominated in Swiss Franc ("CHF"), Canadian Dollar ("CAD") and Great British Pound ("GBP"). Such expenses expose the Company to exchange rate fluctuations between these foreign currencies and the U.S. Dollar ("USD"). The Company occasionally uses derivative financial instruments, in the form of forward contracts, to mitigate a portion of the risk associated with adverse movements in these foreign currency exchange rates during a twelve month window. Currency forward contracts involve fixing the exchange rate for delivery of a specified amount of foreign currency on a specified date. The Company's accounting treatment for these instruments is based on whether or not the instruments are designated as a hedging instrument. At January 30, 2022 and January 31, 2021, the Company had no outstanding foreign currency forward contracts.

During the first quarter of fiscal year 2021, the Company entered into an interest rate swap agreement with a three-year term to hedge the variability of interest payments on the first \$150.0 million of debt outstanding under the Company's Credit Facility. Interest payments on the first \$150.0 million of the Company's debt outstanding under the Credit Facility are now fixed at a rate of 1.9775%, based on the Company's current leverage ratio. The interest rate swap agreement has been designated as a cash flow hedge and unrealized gains or losses, net of tax, are recorded as a component of "Accumulated Other Comprehensive Income or Loss" ("AOCI") in the Balance Sheets. As the various settlements are made on a monthly basis, the realized gain or loss on the settlements are recorded in "Interest expense" in the Statements of Income. Realized losses on the interest rate swap agreement totaled \$0.9 million and \$0.5 million for fiscal years 2022 and 2021, respectively.

The fair values of the Company's derivative instruments that qualify as cash flow hedges in the Balance Sheets were as follows:

(in thousands)	Balance as of	
	January 30, 2022	January 31, 2021
Interest rate swap agreement	\$ 62	\$ —
Total other current assets	\$ 62	\$ —
Interest rate swap agreement	\$ 167	\$ —
Total other long-term assets	\$ 167	\$ —
Interest rate swap agreement	\$ —	\$ 849
Total accrued liabilities	\$ —	\$ 849
Interest rate swap agreement	\$ —	\$ 933
Total other long-term liabilities	\$ —	\$ 933

During the fourth quarter of fiscal year 2021, the Company entered into an economic hedge program that uses total return swap contracts to hedge the market risk associated with the unfunded portion of the Company's deferred compensation liability. The total return swap contracts generally have a duration of one month and are rebalanced and re-hedged at the end of each monthly term. While the total returns swap contracts are treated as economic hedges, the Company has not designated them as hedges for accounting purposes. The total return swap contracts are measured at fair value and recognized in the Balance Sheets in "Accrued Liabilities" if the instruments are in a loss position and in "Other Current Assets" if the instruments are in a gain position. Unrealized gains and losses, as well as realized gains and losses for settlements, on the total return swap contracts are recognized in "SG&A expense" in the Statements of Income. As of January 30, 2022, the notional value of the total return swap contracts was \$7.8 million and the fair value resulted in a liability balance of \$0.3 million. As of January 31, 2021, the notional value of the total return swap contracts was \$11.9 million and the fair value resulted in a liability balance of \$0.2 million. Net gains recognized in earnings on the total return swap contracts were \$1.5 million and \$0.3 million for fiscal years 2022 and 2021, respectively.

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

None.

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

We maintain disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act), which are designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), as appropriate to allow timely decisions regarding required disclosure. Our management, with the participation of our CEO and CFO, evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this Annual Report on Form 10-K. Based on that evaluation, our CEO and CFO concluded that our disclosure controls and procedures were effective as of January 30, 2022.

Changes in Internal Controls

There have been no changes to our internal control over financial reporting that occurred during the quarter ended January 30, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report of Management on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework set forth in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework, our management has concluded that as of January 30, 2022, the Company's internal control over financial reporting was effective 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.

Deloitte & Touche LLP, an independent registered public accounting firm, audited the consolidated financial statements included in this report, and has audited our internal control over financial reporting as of January 30, 2022 as stated in their report included below.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of
Semtech Corporation
Camarillo, California

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Semtech Corporation and subsidiaries (the “Company”) as of January 30, 2022, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of January 30, 2022, based on criteria established in Internal Control — Integrated Framework (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended January 30, 2022, of the Company and our report dated March 16, 2022, expressed an unqualified opinion on those financial statements and financial statement schedule.

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

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

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

/s/ Deloitte & Touche LLP

Los Angeles, California

March 16, 2022

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions That Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

We have adopted a written Code of Conduct that applies to everyone in the Company, including our CEO, CFO and Controller. Our Code of Conduct serves as our written code of ethics for those officers, and for persons performing similar functions. Our current Code of Conduct is available at the Corporate Governance section of the Investors page on our website at www.semtech.com. Alternatively, you can request a copy of the Code of Conduct free of charge by sending a written request to the Company's Secretary at 200 Flynn Road, Camarillo, CA 93012. If we make any substantive amendments to the Code of Conduct or grant any waiver, including an implicit waiver, from the Code of Conduct to our CEO, CFO or Controller, to the extent required by the rules adopted by the SEC or Nasdaq, we will within four business days of the event disclose the nature of the amendment or waiver on our website at www.semtech.com.

The remaining information required by this item will be contained in our Proxy Statement relating to our 2022 annual meeting of stockholders to be filed with the SEC pursuant to Regulation 14A of the Exchange Act and is hereby specifically incorporated by reference thereto.

Item 11. Executive Compensation

The information required by this item will appear in our Proxy Statement relating to our 2022 annual meeting of stockholders to be filed by us with the SEC pursuant to Regulation 14A of the Exchange Act, and is hereby specifically incorporated herein by reference thereto.

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

The information required by this item will appear in our Proxy Statement relating to our 2022 annual meeting of stockholders to be filed by us with the SEC pursuant to Regulation 14A of the Exchange Act, and is hereby specifically incorporated herein by reference thereto.

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

The information required by this item will appear in our Proxy Statement relating to our 2022 annual meeting of stockholders to be filed by us with the SEC pursuant to Regulation 14A of the Exchange Act, and is hereby specifically incorporated herein by reference thereto.

Item 14. Principal Accountant Fees and Services

The information required by this item will appear in our Proxy Statement relating to our 2022 annual meeting of stockholders to be filed by us with the SEC pursuant to Regulation 14A of the Exchange Act, and is hereby specifically incorporated herein by reference thereto.

PART IV

Item 15. Exhibits, Financial Statement Schedules

- (a)(1) The financial statements, schedules, and reports included in this Form 10-K are listed in the index under Item 8 in this report.
- (a)(2) Schedules other than those listed in Item 8 are omitted since they are not applicable, not required, or the information required to be set forth herein is included in the consolidated financial statements or notes thereto.

SCHEDULE II

SEMTECH CORPORATION AND SUBSIDIARIES
 SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS
 THREE YEARS ENDED JANUARY 30, 2022
 (in thousands)

<u>Allowance for doubtful accounts</u>	Balance at Beginning of Year	Additions	Deductions	Balance at End of Year
Year ended January 26, 2020	\$ 774	\$ 4	\$ (145)	\$ 633
Year ended January 31, 2021	\$ 633	\$ 88	\$ —	\$ 721
Year ended January 30, 2022	\$ 721	\$ 26	\$ —	\$ 747

- (a)(3) Exhibits. These exhibits are available without charge upon written request directed to the Company's Secretary at 200 Flynn Road, Camarillo, CA 93012. Documents that are not physically filed with this report are incorporated herein by reference to the location indicated.

<u>Exhibit No.</u>	<u>Description</u>	<u>Location</u>
3.1	Restated Certificate of Incorporation of Semtech Corporation	Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended October 26, 2003
3.2	Bylaws of Semtech Corporation	Exhibit 3.2 to the Company's Annual Report on Form 10-K for the fiscal year ended January 27, 2008
4.1	Description of Common Stock	Exhibit 4.1 to the Company's Annual Report on Form 10-K for the fiscal year ended January 26, 2020
10.1 *	Amended and Restated Credit Agreement dated November 7, 2019 entered into among Semtech Corporation, the guarantors party thereto, the lenders party thereto and HSBC Bank USA, National Association, as administrative agent and as swing line lender and L/C issuer.	Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 12, 2019
10.2	First Amendment to Second Amended and Restated Credit Agreement, dated as of August 11, 2021, among Semtech Corporation, as borrower, the guarantors party thereto, the lenders party thereto and HSBC Bank USA, National Association, as administrative agent for the secured parties, swing line lender and L/C issuer.	Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended August 1, 2021
10.3 *	Form of Indemnification Agreement for Directors and Executive Officers	Exhibit 10.1 to the Company's Current Report on Form 8-K filed November 24, 2010
10.4 *	Amended and Restated Employment Offer, dated as of November 20, 2019, by and between the Company and Mohan Maheswaran	Exhibit 10.1 to the Company's Current Report on Form 8-K filed November 22, 2019

<u>10.5</u> *	<u>Employment Offer Letter to Emeka Chukwu, accepted as of November 11, 2006</u>	<u>Exhibit 10.26 to the Company's Annual Report on Form 10-K for the fiscal year ended January 28, 2007</u>
<u>10.6</u> *	<u>Memo to Emeka Chukwu, dated April 5, 2007</u>	<u>Exhibit 10.27 to the Company's Annual Report on Form 10-K for the fiscal year ended January 28, 2007</u>
<u>10.7</u> *	<u>Semtech Corporation Executive Change in Control Retention Plan</u>	<u>Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended October 27, 2019</u>
<u>10.8</u> *	<u>Form of Participation Agreement under the Semtech Corporation Executive Change in Control Retention Plan</u>	<u>Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended October 27, 2019</u>
<u>10.9</u> *	<u>Letter Agreement dated as of August 17, 2015 by and between Semtech Canada Corporation and Gary M. Beauchamp</u>	<u>Exhibit 10.1 to the Company's Current Report on Form 8-K filed August 18, 2015</u>
<u>10.10</u> *	<u>Letter Agreement dated as of August 28, 2018 by and between Semtech Canada Corporation and Gary M. Beauchamp</u>	<u>Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 29, 2018</u>
<u>10.11</u> *	<u>Letter Agreement dated as of May 26, 2021 by and between Semtech Canada Corporation and Gary M. Beauchamp</u>	<u>Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended August 1, 2021</u>
<u>10.12</u> *	<u>Amended Semtech Corporation Executive (non-CEO) Bonus Plan, as amended and restated on November 15, 2017</u>	<u>Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended October 29, 2017</u>
<u>10.13</u> *	<u>Semtech Corporation Chief Executive Officer Bonus Plan, as amended and restated on November 15, 2017</u>	<u>Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended October 29, 2017</u>
<u>10.14</u> *	<u>Form of Long-Term Stock Incentive Plan Restricted Stock Unit Award Certificate</u>	<u>Exhibit 10.1 to the Company's Current Report on Form 8-K filed March 20, 2008</u>
<u>10.15</u> *	<u>Semtech Corporation 2008 Long-Term Equity Incentive Plan</u>	<u>Exhibit 10.40 to the Company's Annual Report on Form 10-K for the fiscal year ended January 27, 2008</u>
<u>10.16</u> *	<u>Form of Semtech Corporation 2008 Long-Term Equity Incentive Plan Option Award Certificate for Non-Employee Directors</u>	<u>Exhibit 10.3 to the Company's Current Report on Form 8-K filed July 1, 2008</u>
<u>10.17</u> *	<u>Form of Semtech Corporation 2008 Long-Term Equity Incentive Plan Stock Unit Award Certificate for Non-Employee Directors</u>	<u>Exhibit 10.4 to the Company's Current Report on Form 8-K filed July 1, 2008</u>
<u>10.18</u> *	<u>Form of Semtech Corporation 2008 Long-Term Equity Incentive Plan Restricted Stock Award Certificate for Non-Employee Directors</u>	<u>Exhibit 10.5 to the Company's Current Report on Form 8-K filed July 1, 2008</u>
<u>10.19</u> *	<u>Form of Semtech Corporation 2008 Long-Term Equity Incentive Plan Employee Option Award Certificate</u>	<u>Exhibit 10.6 to the Company's Current Report on Form 8-K filed July 1, 2008</u>
<u>10.20</u> *	<u>Form of Semtech Corporation 2008 Long-Term Equity Incentive Plan Option Award Agreement for Non-Employee Directors</u>	<u>Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q for the quarter ended May 1, 2011</u>
<u>10.21</u> *	<u>Semtech Corporation 2013 Long-Term Equity Incentive Plan</u>	<u>Exhibit 10.1 to our Current Report on Form 8-K filed on June 24, 2013</u>
<u>10.22</u> *	<u>Form of Semtech Corporation 2013 Long-Term Equity Incentive Plan Restricted Stock Unit Award Agreement for Ownership Grants</u>	<u>Exhibit 10.31 to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2016</u>
<u>10.23</u> *	<u>Form of Semtech Corporation 2013 Long-Term Equity Incentive Plan Performance Stock Unit Award Agreement</u>	<u>Exhibit 10.32 to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2016</u>

<u>10.24</u> *	<u>Form of Semtech Corporation 2013 Long-Term Equity Incentive Plan Stock Option Award Agreement for Employees in Switzerland</u>	<u>Exhibit 10.33 to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2016</u>
<u>10.25</u> *	<u>Form of Semtech Corporation 2013 Long-Term Equity Incentive Plan Stock Option Award Certificate for Non-Employee Directors</u>	<u>Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended May 1, 2016</u>
<u>10.26</u> *	<u>Form of Semtech Corporation 2013 Long-Term Equity Incentive Plan Non-Employee Director Stock Unit Award Certificate (Deferred)</u>	<u>Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended May 1, 2016</u>
<u>10.27</u> *	<u>Form of Semtech Corporation 2013 Long-Term Equity Incentive Plan Stock Option Award Agreement for Employees</u>	<u>Exhibit 10.36 to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2016</u>
<u>10.28</u> *	<u>Form of Semtech Corporation 2013 Long-Term Equity Incentive Plan Restricted Stock Unit Award Agreement for Employees</u>	<u>Exhibit 10.37 to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2016</u>
<u>10.29</u> *	<u>Form of Semtech Corporation 2013 Long-Term Equity Incentive Plan Performance Unit Award Certificate</u>	<u>Exhibit 10.40 to the Company's Annual Report on Form 10-K for the fiscal year ended January 29, 2017</u>
<u>10.30</u> *	<u>Policy Regarding Director Compensation</u>	<u>Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended August 1, 2021</u>
<u>10.31</u> *	<u>Semtech Corporation 2017 Long-Term Equity Incentive Plan</u>	<u>Exhibit 10.1 to the Company's Current Report on Form 8-K filed on June 21, 2017</u>
<u>10.32</u> *	<u>Form of Semtech Corporation 2017 Long-Term Equity Incentive Plan Executive Ownership Restricted Stock Unit Award Certificate</u>	<u>Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 30, 2017</u>
<u>10.33</u> *	<u>Form of Semtech Corporation 2017 Long-Term Equity Incentive Plan Restricted Stock Unit Award Certificate</u>	<u>Exhibit 10.32 to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2021</u>
<u>10.34</u> *	<u>Form of Semtech Corporation 2017 Long-Term Equity Incentive Plan Performance Unit Award Certificate</u>	<u>Exhibit 10.38 to the Company's Annual Report on Form 10-K for the fiscal year ended January 27, 2019</u>
<u>10.35</u> *	<u>Form of Semtech Corporation 2017 Long-Term Equity Incentive Plan Option Award Certificate</u>	<u>Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 30, 2017</u>
<u>10.36</u> *	<u>Form of Semtech Corporation 2017 Long-Term Equity Incentive Plan Option Award Certificate - Switzerland Employees</u>	<u>Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 30, 2017</u>
<u>10.37</u> *	<u>Form of Semtech Corporation 2017 Long-Term Equity Incentive Plan Non-Employee Director Stock Unit Award Certificate (deferred)</u>	<u>Exhibit 10.8 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 30, 2017</u>
<u>10.38</u> *	<u>Form of Semtech Corporation 2017 Long-Term Equity Incentive Plan Non-Employee Director Stock Unit Award Certificate (non-deferred)</u>	<u>Exhibit 10.9 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 30, 2017</u>
<u>10.39</u> *	<u>Form of Semtech Corporation 2017 Long-Term Equity Incentive Plan Option Award Certificate (non-employee director)</u>	<u>Exhibit 10.10 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 30, 2017</u>
<u>10.40</u> *	<u>Form of Semtech Corporation 2017 Long-Term Equity Incentive Plan Restricted Stock Unit Award Certificate (rollover award in accordance with acquisition of AptoVision)</u>	<u>Exhibit 10.11 to the Company's Quarterly Report on Form 10-Q for the quarter ended July 30, 2017</u>
<u>10.41</u> *	<u>Form of Semtech Corporation 2017 Long-Term Equity Incentive Plan Performance Unit Award Certificate - Relative TSR Performance</u>	<u>Exhibit 10.40 to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2021</u>

<u>10.42</u> *	<u>Form of Semtech Corporation 2017 Long-Term Equity Incentive Plan Performance Unit Award Certificate - Stock Price Grants</u>	<u>Exhibit 10.41 to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2021</u>
<u>10.43</u> *	<u>The Executive Nonqualified Excess Plan of Semtech Corporation (Amended and Restated Effective as of March 1, 2019)</u>	<u>Exhibit 10.45 to the Company's Annual Report on Form 10-K for the fiscal year ended January 27, 2019</u>
<u>10.44</u> *	<u>CEO Restricted Stock Unit Award Certificate dated March 5, 2019</u>	<u>Exhibit 10.46 to the Company's Annual Report on Form 10-K for the fiscal year ended January 27, 2019</u>
<u>10.45</u> *	<u>CEO Performance Stock Unit Award Certificate-Relative TSR dated March 5, 2019</u>	<u>Exhibit 10.47 to the Company's Annual Report on Form 10-K for the fiscal year ended January 27, 2019</u>
<u>10.46</u> *	<u>CEO Performance Stock Unit Award Certificate-Absolute Stock Price dated March 5, 2019</u>	<u>Exhibit 10.48 to the Company's Annual Report on Form 10-K for the fiscal year ended January 27, 2019</u>
<u>21.1</u>	<u>Subsidiaries of the Company</u>	<u>Filed herewith</u>
<u>23.1</u>	<u>Consent of Independent Registered Public Accounting Firm Deloitte & Touche LLP</u>	<u>Filed herewith</u>
<u>31.1</u>	<u>Certification of the Chief Executive Officer Pursuant to Rule 13a-14(a) or Rule 15d-14(a) under the Securities Exchange Act of 1934 as amended.</u>	<u>Filed herewith</u>
<u>31.2</u>	<u>Certification of the Chief Financial Officer Pursuant to Rule 13a-14(a) or Rule 15d-14(a) under the Securities Exchange Act of 1934 as amended.</u>	<u>Filed herewith</u>
<u>32.1</u>	<u>Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act Of 2002 (As set forth in Exhibit 32.1 hereof, Exhibit 32.1 is being furnished and shall not be deemed "filed".)</u>	<u>Furnished herewith</u>
<u>32.2</u>	<u>Certification of the Chief Financial Officer Pursuant 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Exhibit 32.2 is being furnished and shall not be deemed "filed").</u>	<u>Furnished herewith</u>
101	The following financial statements from the Company's Annual Report on Form 10-K for the fiscal year ended January 30, 2022, formatted in Inline XBRL: (i) Consolidated Statements of Income, (ii) Consolidated Statements of Comprehensive Income, (iii) Consolidated Balance Sheets (iv) Consolidated Statements of Stockholders' Equity, (v) Consolidated Statements of Cash Flow and (v) Notes to Consolidated Financial Statements, tagged as blocks of text and including detailed tags.	
104	The cover page from the Company's Annual Report on Form 10-K for the fiscal year ended January 30, 2022, formatted in Inline XBRL (included as Exhibit 101).	

* Management contract or compensatory plan or arrangement.

Item 16. Form 10-K Summary

None.

SIGNATURES

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

Date: March 16, 2022

Semtech Corporation

/s/ Mohan R. Maheswaran

Mohan R. Maheswaran

President and Chief Executive Officer

SIGNATURES

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.

Date: March 16, 2022

/s/ Mohan R. Maheswaran

Mohan R. Maheswaran
President and Chief Executive Officer
Director
(Principal Executive Officer)

Date: March 16, 2022

/s/ Emeka N. Chukwu

Emeka N. Chukwu
Executive Vice President and Chief Financial Officer
(Principal Accounting and Financial Officer)

Date: March 16, 2022

/s/ Rockell N. Hankin

Rockell N. Hankin
Chairman of the Board

Date: March 16, 2022

/s/ Martin S.J. Burvill

Martin S.J. Burvill
Director

Date: March 16, 2022

/s/ Rodolpho Cardenuto

Rodolpho Cardenuto
Director

Date: March 16, 2022

/s/ Bruce C. Edwards

Bruce C. Edwards
Director

Date: March 16, 2022

/s/ Saar Gillai

Saar Gillai
Director

Date: March 16, 2022

/s/ Ye Jane Li

Ye Jane Li
Director

Date: March 16, 2022

/s/ James T. Lindstrom

James T. Lindstrom
Director

Date: March 16, 2022

/s/ Paula LuPriore

Paula LuPriore
Director

Date: March 16, 2022

/s/ Sylvia Summers

Sylvia Summers
Director

Subsidiaries of Semtech Corporation

- Semtech EV, Inc. (California)
 - Semtech San Diego Corporation (California)
 - Sierra Monolithics, Inc. (California)
 - Semtech Colorado, Inc. (Delaware)
 - Semtech New York Corporation (Delaware)
 - Semtech Corpus Christi Corporation (Texas)
 - Triune IP, LLC (Texas)
 - Triune Systems, L.L.C. (Texas)
 - Semtech Canada Corporation (Nova Scotia, Canada)
 - Semtech Quebec Inc. (Quebec, Canada)
 - Semtech Semiconductor (Chengdu) Co. Ltd. (China)
 - Semtech Semiconductor (Shanghai) Co. Ltd. (China)
 - Semtech Semiconductor (Shenzhen) Company Limited (China)
 - Semtech France SAS (France)
 - Semtech Germany GmbH (Germany)
 - Semtech Semiconductor Holdings Limited (Hong Kong)
 - Semtech Advanced Systems India Private Limited (India)
 - Semtech Japan GK (Japan)
 - Semtech Semiconductor (Malaysia) Sdn Bhd (Malaysia)
 - Semtech Corpus Christi S.A. de CV (Mexico)
 - Snowbush Mexico S.A.P.I. de C.V. – 99.9% (Mexico)
 - Semtech Netherlands BV (Netherlands)
 - Semtech (International) AG (Switzerland)
 - Semtech Neuchatel SARL (Switzerland)
 - Gennum UK Limited (United Kingdom)
-

- Semtech EMEA Limited (United Kingdom)
- Semtech Limited (United Kingdom)

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-80319, 333-50448, 333-60396, 333-118804, 333-163780, 333-192703, 333-221810 and 333-152939 on Form S-8 of our reports dated March 16, 2022, relating to the consolidated financial statements and financial statement schedule of Semtech Corporation and subsidiaries (the “Company”), and the effectiveness of the Company’s internal control over financial reporting, appearing in this Annual Report on Form 10-K of the Company for the year ended January 30, 2022.

/s/ Deloitte & Touche LLP

Los Angeles, California

March 16, 2022

CERTIFICATION

I, Mohan R. Maheswaran, certify that:

1. I have reviewed this annual report on Form 10-K of Semtech Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 16, 2022

/s/ Mohan R. Maheswaran

Mohan R. Maheswaran

President and Chief Executive Officer

CERTIFICATION

I, Emeka N. Chukwu, certify that:

1. I have reviewed this annual report on Form 10-K of Semtech Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 16, 2022

/s/ Emeka N. Chukwu

Emeka N. Chukwu

Executive Vice President and Chief Financial Officer

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350 AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Semtech Corporation (the "Company") on Form 10-K for the fiscal year ended January 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Mohan R. Maheswaran, Chief Executive Officer of the Company, hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 16, 2022

/s/ Mohan R. Maheswaran

Mohan R. Maheswaran
President and Chief Executive Officer

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Semtech Corporation and will be retained by Semtech Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

The information contained in this Exhibit 32.2 is being furnished and shall not be deemed "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section. The information in this Exhibit 32.2 shall not be incorporated by reference into any registration statement or other document pursuant to the Securities Exchange Act of 1934, as amended, or the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference to this Exhibit 32.2 in such filing.

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350 AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Semtech Corporation (the "Company") on Form 10-K for the fiscal year ended January 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Emeka N. Chukwu, Chief Financial Officer of the Company, hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 16, 2022

/s/ Emeka N. Chukwu

Emeka N. Chukwu

Executive Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Semtech Corporation and will be retained by Semtech Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

The information contained in this Exhibit 32.2 is being furnished and shall not be deemed "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section. The information in this Exhibit 32.2 shall not be incorporated by reference into any registration statement or other document pursuant to the Securities Exchange Act of 1934, as amended, or the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference to this Exhibit 32.2 in such filing.