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

FORM 10-Q

(Mark One)

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

For the quarterly period ended October 31, 2021
or

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

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

SEMTECH CORPORATION
(Exact name of registrant as specified in its charter)

Delaware	**95-2119684**
(State or other jurisdiction of incorporation or organization)	**(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**

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

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

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

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

If an emerging growth company, indicate by 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 is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

Number of shares of common stock, $0.01 par value per share, outstanding at November 26, 2021: 64,436,830

SEMTECH CORPORATION
INDEX TO FORM 10-Q
FOR THE QUARTER ENDED OCTOBER 31, 2021

Unless the context otherwise requires, the use of the terms "Semtech," "the Company," "we," "us" and "our" in this Quarterly Report on Form 10-Q refers to Semtech Corporation and, as applicable, its consolidated subsidiaries. This Quarterly Report on Form 10-Q 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 Quarterly Report on Form 10-Q, 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 Quarterly Report on Form 10-Q 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, results of operations, 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: the uncertainty surrounding the impact and duration of supply chain constraints and any associated disruptions; the uncertainty surrounding the impact and duration of the COVID-19 pandemic on global economic conditions and on the Company's business and results of operations, including as a result of any regulatory vaccine mandate on our workforce, which could result in increased labor attrition and disruption, as well as difficulty securing future labor needs; competitive changes in the marketplace including, but not limited to, the pace of growth or adoption rates of applicable products or technologies; downturns in the business cycle; decreased average selling prices of the Company's products; the Company's reliance on a limited number of suppliers and subcontractors for components and materials; changes in projected or anticipated end-user markets; export restrictions and laws affecting the Company's trade and investments including with respect to Huawei and certain of its affiliates and other entities identified by the U.S. government, and tariffs or the occurrence of trade wars; and the Company's ability to forecast and achieve anticipated net sales and earnings estimates in light of periodic economic uncertainty, including impacts arising from Asian, European, and global economic dynamics.

Additionally, forward-looking statements should be considered in conjunction with the cautionary statements contained in this Quarterly Report on Form 10-Q, including, without limitation, information under the captions "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Risk Factors" and additional factors that accompany the related forward-looking statements in this Quarterly Report on Form 10-Q, in our Annual Report on Form 10-K for the fiscal year ended January 31, 2021 including, without limitation, information under the caption "Risk Factors," and in our other filings with the U.S. 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 - FINANCIAL INFORMATION

ITEM 1. Financial Statements

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

	Three Months Ended		Nine Months Ended	
	October 31, 2021	October 25, 2020	October 31, 2021	October 25, 2020
Net sales	$ 194,932	$ 154,082	$ 550,308	$ 430,444
Cost of sales	71,243	60,021	206,326	167,371
Gross profit	123,689	94,061	343,982	263,073
Operating costs and expenses:				
Selling, general and administrative	47,621	42,891	128,402	115,746
Product development and engineering	37,346	27,890	109,633	84,696
Intangible amortization	1,298	1,798	3,894	6,658
Changes in the fair value of contingent earn-out obligations	—	—	—	(33)
Total operating costs and expenses	86,265	72,579	241,929	207,067
Operating income	37,424	21,482	102,053	56,006
Interest expense	(1,233)	(1,008)	(3,617)	(3,819)
Non-operating income (expense), net	105	(236)	412	11
Investment impairments and credit loss reserves	(216)	(335)	(930)	(5,450)
Income before taxes and equity in net gains of equity method investments	36,080	19,903	97,918	46,748
Provision for income taxes	3,018	1,580	9,179	2,523
Net income before equity in net gains of equity method investments	33,062	18,323	88,739	44,225
Equity in net gains of equity method investments	1,363	159	2,115	11
Net income	34,425	18,482	90,854	44,236
Net loss attributable to noncontrolling interest	(2)	(5)	(6)	(11)
Net income attributable to common stockholders	$ 34,427	$ 18,487	$ 90,860	$ 44,247
Earnings per share:				
Basic	$ 0.53	$ 0.28	$ 1.40	$ 0.68
Diluted	$ 0.53	$ 0.28	$ 1.38	$ 0.67
Weighted-average number of shares used in computing earnings per share:				
Basic	64,546	65,136	64,786	65,270
Diluted	65,299	65,967	65,664	66,050

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

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

	Three Months Ended		Nine Months Ended	
	October 31, 2021	October 25, 2020	October 31, 2021	October 25, 2020
Net income	$ 34,425	$ 18,482	$ 90,854	$ 44,236
Other comprehensive income (loss), net:				
Unrealized gain on foreign currency cash flow hedges, net	—	173	—	531
Reclassifications of realized gain on foreign currency cash flow hedges, net to net income	—	(244)	—	(238)
Unrealized (loss) gain on interest rate cash flow hedges, net	(388)	(82)	341	(1,702)
Reclassifications of realized loss on interest rate cash flow hedges, net to net income	923	173	557	246
Unrealized gain on available-for-sale securities	—	—	—	386
Reclassification of realized gain on available-for-sale securities, net to net income	—	—	—	(757)
Change in defined benefit plans, net	158	202	472	581
Other comprehensive income (loss), net	693	222	1,370	(953)
Comprehensive income	$ 35,118	$ 18,704	$ 92,224	$ 43,283
Comprehensive loss attributable to noncontrolling interest	(2)	(5)	(6)	(11)
Comprehensive income attributable to common stockholders	$ 35,120	$ 18,709	$ 92,230	$ 43,294

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

SEMTECH CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share data)
(unaudited)

	October 31, 2021	January 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	$ 276,599	$ 268,891
Accounts receivable, less allowances of $763 and $721, respectively	74,313	70,433
Inventories	105,159	87,494
Prepaid taxes	11,738	22,083
Other current assets	28,548	25,827
Total current assets	496,357	474,728
Non-current assets:		
Property, plant and equipment, net of accumulated depreciation of $248,988 and $233,779, respectively	130,734	130,934
Deferred tax assets	26,928	25,483
Goodwill	351,141	351,141
Other intangible assets, net	7,852	11,746
Other assets	108,288	88,070
TOTAL ASSETS	**$ 1,121,300**	**$ 1,082,102**
Liabilities and Equity		
Current liabilities:		
Accounts payable	$ 46,426	$ 50,189
Accrued liabilities	77,483	59,384
Total current liabilities	123,909	109,573
Non-current liabilities:		
Deferred tax liabilities	1,127	976
Long term debt	175,556	179,195
Other long-term liabilities	102,310	93,405
Commitments and contingencies (Note 11)		
Stockholders' equity:		
Common stock, $0.01 par value, 250,000,000 shares authorized, 78,136,144 issued and 64,399,241 outstanding and 78,136,144 issued and 65,098,379 outstanding, respectively	785	785
Treasury stock, at cost, 13,736,903 shares and 13,037,765 shares, respectively	(519,610)	(438,798)
Additional paid-in capital	481,761	473,728
Retained earnings	762,056	671,196
Accumulated other comprehensive loss	(6,798)	(8,168)
Total stockholders' equity	718,194	698,743
Noncontrolling interest	204	210
Total equity	718,398	698,953
TOTAL LIABILITIES AND EQUITY	**$ 1,121,300**	**$ 1,082,102**

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

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

	Three Months Ended October 31, 2021								
	Common Stock								
	Number of Shares Outstanding	Amount	Treasury Stock, at Cost	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Stockholders' Equity	Noncontrolling Interest	Total Equity
Balance at August 1, 2021	**64,396,741**	**$ 785**	**$ (499,199)**	**$ 486,693**	**$ 727,629**	**$ (7,491)**	**$ 708,417**	**$ 206**	**$ 708,623**
Net income	—	—	—	—	34,427	—	34,427	(2)	34,425
Other comprehensive income	—	—	—	—	—	693	693	—	693
Share-based compensation	—	—	—	13,289	—	—	13,289	—	13,289
Repurchase of common stock	(387,163)	—	(30,000)	—	—	—	(30,000)	—	(30,000)
Treasury stock reissued	389,663	—	9,589	(18,221)	—	—	(8,632)	—	(8,632)
Balance at October 31, 2021	**64,399,241**	**$ 785**	**$ (519,610)**	**$ 481,761**	**$ 762,056**	**$ (6,798)**	**$ 718,194**	**$ 204**	**$ 718,398**

	Nine Months Ended October 31, 2021								
	Common Stock								
	Number of Shares Outstanding	Amount	Treasury Stock, at Cost	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Stockholders' Equity	Noncontrolling Interest	Total Equity
Balance at January 31, 2021	**65,098,379**	**$ 785**	**$ (438,798)**	**$ 473,728**	**$ 671,196**	**$ (8,168)**	**$ 698,743**	**$ 210**	**$ 698,953**
Net income	—	—	—	—	90,860	—	90,860	(6)	90,854
Other comprehensive income	—	—	—	—	—	1,370	1,370	—	1,370
Share-based compensation	—	—	—	37,819	—	—	37,819	—	37,819
Repurchase of common stock	(1,387,624)	—	(97,000)	—	—	—	(97,000)	—	(97,000)
Treasury stock reissued	688,486	—	16,188	(29,786)	—	—	(13,598)	—	(13,598)
Balance at October 31, 2021	**64,399,241**	**$ 785**	**$ (519,610)**	**$ 481,761**	**$ 762,056**	**$ (6,798)**	**$ 718,194**	**$ 204**	**$ 718,398**

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

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

Three Months Ended October 25, 2020

	Common Stock								
	Number of Shares Outstanding	Amount	Treasury Stock, at Cost	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Stockholders' Equity	Noncontrolling Interest	Total Equity
Balance at July 26, 2020	**65,019,501**	**$ 785**	**$ (424,095)**	**$ 471,091**	**$ 637,053**	**$ (7,341)**	**$ 677,493**	**$ 240**	**$ 677,733**
Net income	—	—	—	—	18,487	—	18,487	(5)	18,482
Other comprehensive income	—	—	—	—	—	222	222	—	222
Share-based compensation	—	—	—	12,333	—	—	12,333	—	12,333
Repurchase of common stock	(439,921)	—	(24,046)	—	—	—	(24,046)	—	(24,046)
Treasury stock reissued	386,713	—	9,895	(17,993)	—	—	(8,098)	—	(8,098)
Balance at October 25, 2020	**64,966,293**	**$ 785**	**$ (438,246)**	**$ 465,431**	**$ 655,540**	**$ (7,119)**	**$ 676,391**	**$ 235**	**$ 676,626**

Nine Months Ended October 25, 2020

	Common Stock								
	Number of Shares Outstanding	Amount	Treasury Stock, at Cost	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Stockholders' Equity	Noncontrolling Interest	Total Equity
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	—	—	—	—	44,247	—	44,247	(11)	44,236
Other comprehensive loss	—	—	—	—	—	(953)	(953)	—	(953)
Share-based compensation	—	—	—	34,757	—	—	34,757	—	34,757
Repurchase of common stock	(1,527,834)	—	(66,433)	—	—	—	(66,433)	—	(66,433)
Treasury stock reissued	736,012	—	16,038	(27,905)	—	—	(11,867)	—	(11,867)
Balance at October 25, 2020	**64,966,293**	**$ 785**	**$ (438,246)**	**$ 465,431**	**$ 655,540**	**$ (7,119)**	**$ 676,391**	**$ 235**	**$ 676,626**

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

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

	Nine Months Ended	
	October 31, 2021	October 25, 2020
Cash flows from operating activities:		
Net income	$ 90,854	$ 44,236
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	22,686	21,283
Amortization of right-of-use assets	3,289	2,924
Investment impairments and credit loss reserves	930	5,450
Accretion of deferred financing costs and debt discount	361	362
Deferred income taxes	(1,540)	(7,121)
Share-based compensation	40,697	36,103
Gain on disposition of assets	(34)	(20)
Changes in the fair value of contingent earn-out obligations	—	(33)
Equity in net gains of equity method investments	(2,115)	(11)
Corporate-owned life insurance, net	4,720	4,197
Changes in assets and liabilities:		
Accounts receivable, net	(3,880)	3,227
Inventories	(17,665)	(5,357)
Other assets	8,130	(15,109)
Accounts payable	(3,325)	157
Accrued liabilities	15,816	1,992
Other liabilities	(6,787)	(604)
Net cash provided by operating activities	152,137	91,676
Cash flows from investing activities:		
Proceeds from sales of property, plant and equipment	82	20
Purchase of property, plant and equipment	(18,081)	(21,808)
Proceeds from sale of investments	—	327
Purchase of investments	(5,832)	(10,938)
Premiums paid for corporate-owned life insurance	(6,000)	—
Net cash used in investing activities	(29,831)	(32,399)
Cash flows from financing activities:		
Proceeds from revolving line of credit	20,000	—
Payments of revolving line of credit	(24,000)	(12,000)
Deferred financing costs	—	(30)
Payment for employee share-based compensation payroll taxes	(17,885)	(16,957)
Proceeds from exercise of stock options	4,287	5,090
Repurchase of common stock	(97,000)	(66,433)
Net cash used in financing activities	(114,598)	(90,330)
Net increase (decrease) in cash and cash equivalents	7,708	(31,053)
Cash and cash equivalents at beginning of period	268,891	293,324
Cash and cash equivalents at end of period	$ 276,599	$ 262,271
Supplemental disclosure of cash flow information:		
Interest paid	$ 3,237	$ 4,976
Income taxes paid	$ 2,989	$ 8,086
Non-cash investing and financing activities:		
Accounts payable related to capital expenditures	$ 2,424	$ 3,419
Conversion of notes into equity	$ 626	$ —

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

Note 1: Organization and Basis of Presentation

Nature of Business

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 that produce and sell electronics.

Fiscal Year

The Company reports results on the basis of 52 and 53-week periods and ends its fiscal year on the last Sunday in January. The other quarters generally end on the last Sunday of April, July and October, although the first and second quarters of fiscal year 2022 end on the first Sunday of May and August, respectively. All quarters consist of 13 weeks except for one 14-week period in the fourth quarter of 53-week years. The third quarters of fiscal years 2022 and 2021 each consisted of 13 weeks.

Principles of Consolidation

The accompanying interim unaudited condensed consolidated financial statements have been prepared by the Company, in accordance with accounting principles generally accepted in the United States ("GAAP") and on the same basis as the audited consolidated financial statements included in the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2021 ("Annual Report"). The Company's interim unaudited condensed consolidated statements of income are referred to herein as the "Statements of Income." The Company's interim unaudited condensed consolidated balance sheets are referred to herein as the "Balance Sheets" and interim unaudited condensed consolidated statements of cash flows as the "Statements of Cash Flows." In the opinion of the Company, these interim unaudited condensed consolidated financial statements contain all adjustments (consisting of normal recurring adjustments) necessary to present fairly, in all material respects, the financial position of the Company for the interim periods presented. All intercompany balances have been eliminated. Because the interim unaudited condensed consolidated financial statements do not include all of the information and notes required by GAAP for a complete set of consolidated financial statements, they should be read in conjunction with the audited consolidated financial statements and notes included in the Company's Annual Report. The results reported in these interim unaudited condensed consolidated financial statements should not be regarded as indicative of results that may be expected for any subsequent period or for the entire year.

Use of Estimates

The preparation of 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 financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Recently Adopted Accounting Guidance

In December 2019, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2019-12, "Simplifying the Accounting for Income Taxes," which modifies Accounting Standards Codification ("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.

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 2: Earnings per Share

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

(in thousands, except per share data)	Three Months Ended October 31, 2021	Three Months Ended October 25, 2020	Nine Months Ended October 31, 2021	Nine Months Ended October 25, 2020
Net income attributable to common stockholders	$ 34,427	$ 18,487	$ 90,860	$ 44,247
Weighted-average shares outstanding–basic	64,546	65,136	64,786	65,270
Dilutive effect of share-based compensation	753	831	878	780
Weighted-average shares outstanding–diluted	65,299	65,967	65,664	66,050
Earnings per share:				
Basic	$ 0.53	$ 0.28	$ 1.40	$ 0.68
Diluted	$ 0.53	$ 0.28	$ 1.38	$ 0.67
Anti-dilutive shares not included in the above calculations	31	523	41	274

Diluted earnings per share incorporates the incremental shares issuable, calculated using the treasury stock method, upon the assumed exercise of non-qualified stock options and the vesting of restricted stock units and market-condition restricted stock unit awards if certain conditions have been met, but excludes such incremental shares that would have an anti-dilutive effect.

Note 3: Share-Based Compensation

Financial Statement Effects and Presentation

Pre-tax share-based compensation was included in the Statements of Income as follows:

	Three Months Ended		Nine Months Ended	
(in thousands)	October 31, 2021	October 25, 2020	October 31, 2021	October 25, 2020
Cost of sales	$ 743	$ 654	$ 2,112	$ 1,734
Selling, general and administrative	12,528	9,404	26,985	24,864
Product development and engineering	4,070	3,480	11,600	9,505
Total share-based compensation	$ 17,341	$ 13,538	$ 40,697	$ 36,103

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). In the nine months ended October 31, 2021, the Company granted 731,563 restricted stock units to employees.

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 restricted stock units granted under the program will be settled in cash and a portion will 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 Company's 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 the Company's common stock will, subject to vesting, be settled promptly following vesting. In the nine months ended October 31, 2021, the Company granted to the non-employee directors 11,898 restricted stock units that settle in cash and 11,898 restricted stock units that settle in shares.

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. 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 vesting periods and is adjusted for any actual forfeitures.

In the nine months ended October 31, 2021, the Company granted 81,688 TSR Awards, which are accounted for as equity 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 fiscal year 2022 TSR Award 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 value per unit of the TSR Awards granted in the nine months ended October 31, 2021 for each one, two and three year performance period was $67.41, $77.99 and $84.17, respectively.

Market-Condition Restricted Stock Units

In the nine months ended October 31, 2021, the Company granted an additional 54,928 restricted stock units with a different market condition. 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 grant-date fair value per unit of the awards granted in the nine months ended October 31, 2021 was $49.55.

Note 4: Available-for-sale securities

The following table summarizes the values of the Company’s available-for-sale securities:

	October 31, 2021			January 31, 2021		
(in thousands)	Fair Value	Amortized Cost	Gross Unrealized Gain/(Loss)	Fair Value	Amortized Cost	Gross Unrealized Gain/(Loss)
Convertible debt	$ 11,677	$ 13,862	$ (2,185)	$ 11,989	$ 13,244	$ (1,255)
Total available-for-sale securities	$ 11,677	$ 13,862	$ (2,185)	$ 11,989	$ 13,244	$ (1,255)

The following table summarizes the maturities of the Company’s available-for-sale securities:

	October 31, 2021	
(in thousands)	Fair Value	Amortized Cost
Within 1 year	$ 10,466	$ 11,960
After 1 year through 5 years	1,211	1,902
Total available-for-sale securities	$ 11,677	$ 13,862

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

Note 5: Fair Value Measurements

The following fair value hierarchy is applied for disclosure of the inputs used to measure fair value and prioritizes the inputs into three levels as follows:

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 and 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.

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:

	October 31, 2021				January 31, 2021			
(in thousands)	Total	(Level 1)	(Level 2)	(Level 3)	Total	(Level 1)	(Level 2)	(Level 3)
Financial assets:								
Interest rate swap agreement	$ 16	$ —	$ 16	$ —	$ —	$ —	$ —	$ —
Total return swap contracts	175	—	175	—	—	—	—	—
Convertible debt	11,677	—	—	11,677	11,989	—	—	11,989
Total financial assets	$ 11,868	$ —	$ 191	$ 11,677	$ 11,989	$ —	$ —	$ 11,989
Financial liabilities:								
Interest rate swap agreement	$ 654	$ —	$ 654	$ —	$ 1,782	$ —	$ 1,782	$ —
Total return swap contracts	—	—	—	—	167	—	167	—
Total financial liabilities	$ 654	$ —	$ 654	$ —	$ 1,949	$ —	$ 1,949	$ —

During the nine months ended October 31, 2021, the Company had no transfers of financial assets or liabilities between Level 1, Level 2 or Level 3. As of October 31, 2021 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 the convertible debt investments in the nine months ended October 31, 2021:

(in thousands)	
Balance at January 31, 2021	$ 11,989
Additions	450
Increase in credit loss reserve	(930)
Interest accrued	794
Conversion to equity	(626)
Balance at October 31, 2021	$ 11,677

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 15 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 15 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 available-for-sale debt securities was $4.3 million and $3.4 million as of October 31, 2021 and January 31, 2021, respectively. During the three and nine months ended October 31, 2021, the Company increased its expected credit loss reserves by $0.2 million and $0.9 million, respectively, for its available-for-sale debt securities and did not record any impairments on its non-marketable equity investments. Upon the adoption of ASU 2016-13 in the first quarter of fiscal year 2021, the Company recorded expected credit loss reserves of $0.4 million related to its held-to-maturity debt securities. During the three and nine months ended October 25, 2020, the Company increased its expected credit loss reserves by $0.3 million and $2.7 million, respectively, for its held-to-maturity debt securities and available-for-sale debt securities in-part, due to the impact of the COVID-19 pandemic on early-stage development companies. Additionally, during the three and nine months ended October 25, 2020, the Company recorded zero and $2.9 million, respectively, of impairments on its non-marketable equity investments.

Note 6: 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)	October 31, 2021	January 31, 2021
Raw materials	$ 4,357	$ 2,936
Work in progress	72,551	59,523
Finished goods	28,251	25,035
Inventories	$ 105,159	$ 87,494

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 October 31, 2021	$ 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. The recoverability 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. As of October 31, 2021, there was no indication of impairment of the Company's goodwill balances.

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:

		October 31, 2021			January 31, 2021		
(in thousands, except estimated useful life)	Estimated Useful Life	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Core technologies	6-8 years	$ 26,300	$ (18,448)	$ 7,852	$ 29,300	$ (17,554)	$ 11,746
Total finite-lived intangible assets		$ 26,300	$ (18,448)	$ 7,852	$ 29,300	$ (17,554)	$ 11,746

Amortization expense of finite-lived intangible assets recorded in the Statements of Income for each period was as follows:

	Three Months Ended		Nine Months Ended	
(in thousands)	October 31, 2021	October 25, 2020	October 31, 2021	October 25, 2020
Core technologies	$ 1,298	$ 1,798	$ 3,894	$ 6,069
Customer relationships	—	—	—	589
Total amortization expense	$ 1,298	$ 1,798	$ 3,894	$ 6,658

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

(in thousands)	
Fiscal Year Ending:	
2022 (remaining three months)	$ 1,048
2023	4,002
2024	1,676
2025	288
2026	288
Thereafter	550
Total expected amortization expense	$ 7,852

Note 8: Long-Term Debt

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

(in thousands, except percentages)	October 31, 2021	January 31, 2021
Revolving loans	$ 177,000	$ 181,000
Debt issuance costs	(1,444)	(1,805)
Total long-term debt, net of debt issuance costs	$ 175,556	$ 179,195
Effective interest rate [1]	1.88 %	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 October 31, 2021, the effective interest rate is a weighted-average rate that represents (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 0.09% as of October 31, 2021, plus a margin of 1.25% (total variable rate of 1.34%). As of January 31, 2021, the effective interest rate is a weighted-average rate that represents (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 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. As of October 31, 2021, the Company had $177.0 million outstanding under its Credit Facility and $423.0 million of undrawn borrowing capacity, and the Company was in compliance with the covenants required under the Credit Facility.

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.

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

	Three Months Ended		Nine Months Ended	
(in thousands)	October 31, 2021	October 25, 2020	October 31, 2021	October 25, 2020
Contractual interest [1]	$ 1,113	$ 888	$ 3,256	$ 3,457
Amortization of debt discount and issuance costs	120	120	361	362
Total interest expense	$ 1,233	$ 1,008	$ 3,617	$ 3,819

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

As of October 31, 2021, there were no amounts outstanding under the letters of credit, swing line loans and alternative currency sub-facilities.

Note 9: Income Taxes

The Company’s effective tax rate differs from the statutory federal income tax rate of 21% primarily due to the regional mix of income, withholding taxes on certain foreign earnings, excess tax benefits from share-based compensation and research and development tax credits.

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 in 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 the federal impact of state items) is as follows:

(in thousands)		
Balance at January 31, 2021	$	26,850
Additions/(decreases) based on tax positions related to the current fiscal year		686
Additions/(decreases) based on tax positions related to the prior fiscal years		(1,160)
Balance at October 31, 2021	$	26,376

Included in the balance of gross unrecognized tax benefits at October 31, 2021 and January 31, 2021 are $8.8 million and $9.7 million, respectively, of net tax benefits (after the federal impact of state items), that, if recognized, would impact the effective tax rate, prior to consideration of any required valuation allowance.

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

(in thousands)		October 31, 2021		January 31, 2021
Deferred tax assets - non-current	$	16,256	$	15,770
Other long-term liabilities		8,754		9,731
Total accrued taxes	$	25,010	$	25,501

The Company’s policy is to include net interest and penalties related to unrecognized tax benefits in the "Provision for income taxes" in the Statements of Income.

Tax years prior to 2013 (the Company’s fiscal year 2014) are generally not subject to examination by the United States ("U.S.") Internal Revenue Service 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 calendar 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.

The Company’s regional income (loss) from continuing operations before taxes and equity in net gains of equity method investments was as follows:

	Three Months Ended				Nine Months Ended			
(in thousands)		October 31, 2021		October 25, 2020		October 31, 2021		October 25, 2020
Domestic	$	(5,358)	$	(2,054)	$	(17,466)	$	(19,065)
Foreign		41,438		21,957		115,384		65,813
Total	$	36,080	$	19,903	$	97,918	$	46,748

Note 10: Leases

The Company has operating leases for real estate, vehicles, and office equipment. 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 approximately 10 years, some of which include options to extend the leases for up to 5 years, and some of which include options to terminate the leases within 1 year.

The components of lease expense were as follows:

	Three Months Ended		Nine Months Ended	
(in thousands)	October 31, 2021	October 25, 2020	October 31, 2021	October 25, 2020
Operating lease cost	$ 1,441	$ 1,178	$ 4,265	$ 3,533
Short-term lease cost	302	—	805	—
Sublease income	(32)	(35)	(107)	(102)
Total lease cost	$ 1,711	$ 1,143	$ 4,963	$ 3,431

Supplemental cash flow information related to leases was as follows:

	Nine Months Ended	
(in thousands)	October 31, 2021	October 25, 2020
Cash paid for amounts included in the measurement of lease liabilities	$ 4,243	$ 3,546
Right-of-use assets obtained in exchange for new operating lease liabilities	$ 7,677	$ 4,119

	October 31, 2021
Weighted-average remaining lease term–operating leases (in years)	5.78
Weighted-average discount rate on remaining lease payments–operating leases	6.4 %

Supplemental balance sheet information related to leases was as follows:

(in thousands)	October 31, 2021	January 31, 2021
Operating lease right-of-use assets in "Other assets"	$ 20,713	$ 16,337
Operating lease liabilities in "Accrued liabilities"	$ 3,933	$ 3,975
Operating lease liabilities in "Other long-term liabilities"	17,748	13,172
Total operating lease liabilities	$ 21,681	$ 17,147

Maturities of lease liabilities as of October 31, 2021 are as follows:

(in thousands)	
Fiscal Year Ending:	
2022 (remaining three months)	$ 1,357
2023	5,011
2024	4,651
2025	4,493
2026	3,488
Thereafter	6,930
Total lease payments	25,930
Less: imputed interest	(4,249)
Total	$ 21,681

Note 11: Commitments and Contingencies

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 such disclosure is necessary for its consolidated financial statements not to be misleading. 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 intellectual property, 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 $5.6 million in payments towards the remedial action plan and, as of October 31, 2021, has a remaining accrual of $1.8 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.

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 vesting period.

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

(in thousands)	October 31, 2021	January 31, 2021
Accrued liabilities	$ 2,333	$ 1,709
Other long-term liabilities	46,488	39,299
Total deferred compensation liabilities under this plan	$ 48,821	$ 41,008

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 $37.9 million and $27.6 million as of October 31, 2021 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 October 31, 2021 compared to January 31, 2021 was related to the 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.

Earn-out Liability

Pursuant to the terms of an amended arrangement with the former shareholders of Cycleo SAS, which the Company acquired in March 2012, earn-out payments are 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. No payments have been made during fiscal years 2022 and 2021 for the remaining earn-out milestone pending the outcome or resolution of a dispute between the Company and the earn-out participants. Any payment that may be made for the remaining portion of the earn-out is not expected to be material.

Note 12: 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)	Three Months Ended October 31, 2021	Three Months Ended October 25, 2020	Nine Months Ended October 31, 2021	Nine Months Ended October 25, 2020
Frontek Technology Corporation (and affiliates)	18 %	16 %	19 %	14 %
Trend-tek Technology Ltd. (and affiliates)	18 %	16 %	17 %	17 %
Arrow Electronics (and affiliates)	11 %	9 %	11 %	9 %
CEAC International Limited	9 %	10 %	10 %	11 %

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

(percentage of net receivables)	October 31, 2021	January 31, 2021
Frontek Technology Corporation (and affiliates)	21 %	10 %
Arrow Electronics (and affiliates)	13 %	9 %
Trend-tek Technology Ltd (and affiliates)	9 %	14 %
CEAC International Limited	9 %	14 %

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 13: Segment Information

The Company’s Chief Executive Officer 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 have similar economic characteristics and have been aggregated into one reportable segment identified as the "Semiconductor Products Group."

The Company’s assets are commingled among the three 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 segment in the segment disclosures below.

Net sales by segment were as follows:

	Three Months Ended		Nine Months Ended	
(in thousands)	October 31, 2021	October 25, 2020	October 31, 2021	October 25, 2020
Semiconductor Products Group	$ 194,932	$ 154,082	$ 550,308	$ 430,444
Total	$ 194,932	$ 154,082	$ 550,308	$ 430,444

The following table presents a reconciliation of operating income by segment to consolidated income before taxes and equity in net gains of equity method investments:

	Three Months Ended		Nine Months Ended	
(in thousands)	October 31, 2021	October 25, 2020	October 31, 2021	October 25, 2020
Semiconductor Products Group	$ 56,957	$ 37,668	$ 148,578	$ 100,584
Operating income by segment	56,957	37,668	148,578	100,584
Items to reconcile segment operating income to consolidated income before taxes and equity in net gains of equity method investments:				
Share-based compensation	17,341	13,538	40,697	36,103
Intangible amortization	1,298	1,798	3,894	6,658
Investment impairments and credit loss reserves	216	335	930	5,450
Changes in the fair value of contingent earn-out obligations	—	—	—	(33)
Restructuring and other reserves	—	—	16	502
Litigation cost, net of recoveries	434	558	1,534	809
Transaction and integration related	460	292	384	539
Interest expense	1,233	1,008	3,617	3,819
Non-operating (income) expense, net	(105)	236	(412)	(11)
Income before taxes and equity in net gains of equity method investments	$ 36,080	$ 19,903	$ 97,918	$ 46,748

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:

	Three Months Ended				Nine Months Ended			
(in thousands, except percentages)	October 31, 2021		October 25, 2020		October 31, 2021		October 25, 2020	
Signal Integrity	$ 75,405	39 %	$ 61,553	40 %	$ 215,187	40 %	$ 193,127	44 %
Wireless and Sensing	63,123	32 %	51,145	33 %	184,223	33 %	122,933	29 %
Protection	56,404	29 %	41,384	27 %	150,898	27 %	114,384	27 %
Total net sales	$ 194,932	100 %	$ 154,082	100 %	$ 550,308	100 %	$ 430,444	100 %

Information by Sales Channel

(in thousands, except percentages)	Three Months Ended				Nine Months Ended			
	October 31, 2021		October 25, 2020		October 31, 2021		October 25, 2020	
Distributor	$ 170,942	88 %	$ 125,610	82 %	$ 478,096	87 %	$ 346,103	80 %
Direct	23,990	12 %	28,472	18 %	72,212	13 %	84,341	20 %
Total net sales	$ 194,932	100 %	$ 154,082	100 %	$ 550,308	100 %	$ 430,444	100 %

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 the third quarter of fiscal year 2022, the Company's largest distributors were based in Asia.

Geographic Information

Net sales activity by geographic region was as follows:

	Three Months Ended		Nine Months Ended	
(percentage of total net sales)	October 31, 2021	October 25, 2020	October 31, 2021	October 25, 2020
Asia-Pacific	78 %	80 %	79 %	80 %
North America	12 %	12 %	12 %	12 %
Europe	10 %	8 %	9 %	8 %
	100 %	100 %	100 %	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 net sales for at least one of the periods presented:

	Three Months Ended		Nine Months Ended	
(percentage of total net sales)	October 31, 2021	October 25, 2020	October 31, 2021	October 25, 2020
China (including Hong Kong)	59 %	58 %	61 %	59 %
United States	10 %	10 %	10 %	10 %

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.

Note 14: 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 presented periods:

	Three Months Ended				Nine Months Ended			
	October 31, 2021		October 25, 2020		October 31, 2021		October 25, 2020	
(in thousands, except number of shares)	Shares	Amount Paid	Shares	Amount Paid	Shares	Amount Paid	Shares	Amount Paid
Shares repurchased under the stock repurchase program	387,163	$ 30,000	439,921	$ 24,046	1,387,624	$ 97,000	1,527,834	$ 66,433

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 October 31, 2021, the Company had repurchased $506.2 million in shares of its common stock under the program since inception and the remaining authorization under the program was $292.2 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 15: Derivatives and Hedging Activities

The Company is exposed to certain risks 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. As of October 31, 2021 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 income tax, are recorded as a component of "Accumulated Other Comprehensive Income or Loss" 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. The realized loss on the interest rate swap agreement was $0.9 million and $0.7 million for the three and nine months ended October 31, 2021, respectively. The realized loss on the interest rate swap agreement was $0.2 million and $0.3 million for the three and nine months ended October 25, 2020, respectively.

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

	Balance as of	
(in thousands)	October 31, 2021	January 31, 2021
Interest rate swap agreement	$ 16	$ —
Total other long-term assets	$ 16	$ —
Interest rate swap agreement	$ 654	$ 849
Total accrued liabilities	$ 654	$ 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 "Selling, general and administrative expenses" in the Statements of Income. As of October 31, 2021, the notional value of the total return swap contracts was $7.6 million and the fair value resulted in an asset balance of $0.2 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. The net gain recognized in earnings on the total return swap contracts was $0.4 million and $2.0 million for the three and nine months ended October 31, 2021, respectively.

ITEM 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following "Management's Discussion and Analysis of Financial Condition and Results of Operations" should be read in conjunction with our interim unaudited condensed consolidated financial statements and the accompanying notes included in Part I, Item 1 of this Quarterly Report on Form 10-Q (this "Quarterly Report"), and the "Special Note Regarding Forward-Looking and Cautionary Statements" in this Quarterly Report.

Overview

Semtech Corporation (together with its consolidated subsidiaries, the "Company", "we", "our", or "us") designs, develops, manufactures and markets high-performance analog and mixed signal semiconductors and advanced algorithms. We operate and account for results in one reportable segment through three operating segments, comprised of our product lines: Signal Integrity, Wireless and Sensing, and Protection.

Signal Integrity. We design, develop 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, passive optical networks ("PON"), and wireless base station optical transceivers and high-speed interfaces ranges from 100Mbps to 800Gbps 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 applications.

Wireless and Sensing. We design, develop 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, 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 Internet-of-Things ("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 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 instruments.

Our interim unaudited condensed consolidated balance sheets are referred to herein as the "Balance Sheets" and interim unaudited condensed consolidated statements of income are referred to herein as the "Statements of Income."

Our net sales by product line were as follows:

	Three Months Ended		Nine Months Ended	
(in thousands)	October 31, 2021	October 25, 2020	October 31, 2021	October 25, 2020
Signal Integrity	$ 75,405	$ 61,553	$ 215,187	$ 193,127
Wireless and Sensing	63,123	51,145	184,223	122,933
Protection	56,404	41,384	150,898	114,384
Total	$ 194,932	$ 154,082	$ 550,308	$ 430,444

We design, develop 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, 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: 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 that produce and sell electronics.

Impact of COVID-19

The COVID-19 pandemic has significantly affected health and economic conditions throughout the United States ("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 the limited supply. 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. While we have been largely successful with passing on selective price increases to our customers, we cannot assure you that all future potential price increases can be absorbed through increased pricing to our customers.

We believe we have good visibility going into the fourth quarter of fiscal year 2022; 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. Trends within the industry toward shorter lead-times and "just-in-time" deliveries have reduced our ability to predict future shipments. As a result, we generally rely on orders received and shipped within the same quarter for a significant portion of our sales. 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. Orders received and shipped in the third quarters of fiscal years 2022 and 2021 represented 3% and 26% of net sales, respectively. Sales made directly to customers during the third quarters of fiscal years 2022 and 2021 were 12% and 18% of net sales, respectively. The remaining sales 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 including Taiwan and China. Foreign sales constituted approximately 90% and 90% of our net sales during the third quarters of fiscal years 2022 and 2021, respectively. Approximately 78% and 80% of our sales during the third quarters of fiscal years 2022 and 2021, 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 not to result in sales, including a customer's 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.

Results of Operations

The following table sets forth, for the periods indicated, our interim unaudited condensed consolidated statements of income expressed as a percentage of net sales.

	Three Months Ended		Nine Months Ended	
	October 31, 2021	October 25, 2020	October 31, 2021	October 25, 2020
Net sales	100.0 %	100.0 %	100.0 %	100.0 %
Cost of sales	36.5 %	39.0 %	37.5 %	38.9 %
Gross profit	63.5 %	61.0 %	62.5 %	61.1 %
Operating costs and expenses:				
Selling, general and administrative	24.4 %	27.8 %	23.3 %	26.9 %
Product development and engineering	19.2 %	18.1 %	19.9 %	19.7 %
Intangible amortization	0.7 %	1.2 %	0.7 %	1.5 %
Total operating costs and expenses	44.3 %	47.1 %	44.0 %	48.1 %
Operating income	19.2 %	13.9 %	18.5 %	13.0 %
Interest expense	(0.6)%	(0.7)%	(0.7)%	(0.9)%
Non-operating income (expense), net	0.1 %	(0.2)%	0.1 %	— %
Investment impairments and credit loss reserves	(0.1)%	(0.2)%	(0.2)%	(1.3)%
Income before taxes and equity in net gains of equity method investments	18.5 %	12.9 %	17.8 %	10.9 %
Provision for income taxes	1.5 %	1.0 %	1.7 %	0.6 %
Net income before equity in net gains of equity method investments	17.0 %	11.9 %	16.1 %	10.3 %
Equity in net gains of equity method investments	0.7 %	0.1 %	0.4 %	— %
Net income	17.7 %	12.0 %	16.5 %	10.3 %
Net loss attributable to noncontrolling interest	— %	— %	— %	— %
Net income attributable to common stockholders	17.7 %	12.0 %	16.5 %	10.3 %

Percentages may not add precisely due to rounding.

Our regional mix of income (loss) from continuing operations before taxes and equity in net gains (losses) of equity method investments was as follows:

	Three Months Ended		Nine Months Ended	
(in thousands)	October 31, 2021	October 25, 2020	October 31, 2021	October 25, 2020
Domestic	$ (5,358)	$ (2,054)	$ (17,466)	$ (19,065)
Foreign	41,438	21,957	115,384	65,813
Total	$ 36,080	$ 19,903	$ 97,918	$ 46,748

Domestic performance from continuing operations includes higher levels of share-based compensation compared to foreign operations.

Comparison of the Three Months Ended October 31, 2021 and October 25, 2020

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

	Three Months Ended			
(in thousands, except percentages)	October 31, 2021		October 25, 2020	
Infrastructure	$ 66,804	34 %	$ 58,916	39 %
High-End Consumer	60,309	31 %	45,321	29 %
Industrial	67,819	35 %	49,845	32 %
Total	$ 194,932	100 %	$ 154,082	100 %

Net Sales

Net sales for the third quarter of fiscal year 2022 were $194.9 million, an increase of 26.5% compared to $154.1 million for the third quarter of fiscal year 2021. Our industrial end market increased $18.0 million versus the prior year primarily due to an approximately $10 million increase in LoRa-enabled product sales, as we gained traction in the expanding range of IoT applications, an approximately $7 million increase in broadcast product sales and an approximately $5 million increase in broad-based industrial sales, partially offset by declining sales from our legacy Power and High Reliability business. Net sales from our high-end consumer end market increased $15.0 million primarily driven by an approximately $6 million increase in our TVS consumer products including smartphones and an approximately $5 million increase in our proximity sensing products. We experienced an increase of $7.9 million in net sales from our infrastructure end market, primarily driven by an approximately $13 million increase in 10G PON sales, partially offset by an approximately $5 million decline in data center demand.

Based on booking trends and our backlog entering the quarter, we estimate net sales for the fourth quarter of fiscal year 2022 to be between $184.0 million and $194.0 million. The range of guidance reflects continued uncertainty regarding macro-related events and those associated with the COVID-19 pandemic discussed above.

Gross Profit

For the third quarter of fiscal year 2022, gross profit increased to $123.7 million from $94.1 million for the third quarter of fiscal year 2021 as a result of higher sales. Gross margins were 63.5% for the third quarter of fiscal year 2022 compared to 61.0% for the third quarter of fiscal year 2021, reflecting a more favorable product mix. For the fourth quarter of fiscal year 2022, we expect our gross margins to be in the range of 63.1% to 64.1%.

Operating Costs and Expenses

	Three Months Ended				
(in thousands, except percentages)	October 31, 2021		October 25, 2020		Change
Selling, general and administrative	$ 47,621	55 %	$ 42,891	59 %	11 %
Product development and engineering	37,346	43 %	27,890	38 %	34 %
Intangible amortization	1,298	2 %	1,798	3 %	(28)%
Total operating costs and expenses	$ 86,265	100 %	$ 72,579	100 %	19 %

Selling, General and Administrative Expenses

Selling, general and administrative ("SG&A") expenses increased $4.7 million in the third quarter of fiscal year 2022 compared to the third quarter of fiscal year 2021 primarily as a result of an approximately $3 million increase in share-based compensation expense driven by remeasurement of the cash-settled awards liability.

Product Development and Engineering Expenses

Product development and engineering expenses increased $9.5 million in the third quarter of fiscal year 2022 compared to the third quarter of fiscal year 2021 as a result of an approximately $5 million increase in staffing-related costs, including performance-based compensation, and an approximately $4 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 $1.3 million and $1.8 million for the third quarters of fiscal years 2022 and 2021, respectively. This decrease was primarily due to certain finite-lived intangible assets associated with the acquisition of Gennum Corporation, which became fully amortized during fiscal year 2021.

Interest Expense

Interest expense, including amortization of debt discounts and issuance costs, was $1.2 million and $1.0 million for the third quarters of fiscal years 2022 and 2021, respectively. This increase was primarily due to a $20.0 million draw on the Credit Facility during the third quarter of 2022, which was repaid during the same quarter.

Investment Impairments and Credit Loss Reserves

During the third quarter of fiscal year 2022, investment impairments and credit loss reserves totaled a loss of $0.2 million due to adjustments to our reserve for current expected credit losses. During the third quarter of fiscal year 2021, investment impairments and credit loss reserves totaled a loss of $0.3 million and primarily reflected adjustments to our reserve for current expected credit losses.

Provision for Income Taxes

The effective tax rates for the third quarters of fiscal years 2022 and 2021 were provision rates of 8.4% and 7.9%, respectively. In the third quarter of fiscal year 2022, we recorded income tax expense of $3.0 million, compared to $1.6 million in the third quarter of fiscal year 2021. The effective tax rates in the third quarters of fiscal years 2022 and 2021 differ from the statutory federal income tax rate of 21% primarily due to a regional mix of income, excess tax benefits from share-based compensation, withholding taxes on certain foreign earnings and research and development tax credits.

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.

Comparison of the Nine Months Ended October 31, 2021 and October 25, 2020

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

	Nine Months Ended			
(in thousands, except percentages)	October 31, 2021		October 25, 2020	
Infrastructure	$ 195,737	36 %	$ 185,083	43 %
High-End Consumer	173,337	31 %	112,507	26 %
Industrial	181,234	33 %	132,854	31 %
Total	$ 550,308	100 %	$ 430,444	100 %

Net Sales

Net sales for the first nine months of fiscal year 2022 were $550.3 million, an increase of 27.8% compared to $430.4 million for the first nine months of fiscal year 2021. During the first nine months of fiscal year 2022, 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 high-end consumer end market increased $60.8 million primarily driven by an approximately $32 million increase in our proximity sensing products and an approximately $23 million increase in our TVS consumer products, including smartphones. Net sales from our industrial end market increased $48.4 million versus the prior year primarily due to an approximately $31 million increase in LoRa-enabled product sales, as we gained traction in the expanding range of IoT applications, and an approximately $12 million increase in broadcast product sales and an approximately $8 million increase in broad-based industrial sales, partially offset by declining sales from our legacy Power and High Reliability business. Net sales from our infrastructure end market increased $10.7 million driven by an approximately $23 million increase in 10G PON sales, and an approximately $6 million increase in broad-based Protection sales, partially offset by an approximately $17 million decline in data center demand.

Gross Profit

For the first nine months of fiscal year 2022, gross profit increased to $344.0 million from $263.1 million for the first nine months of fiscal year 2021 as a result of higher sales. Gross margins were 62.5% for the first nine months of fiscal year 2022 compared to 61.1% for the first nine months of fiscal year 2021, reflecting a more favorable product mix.

Operating Costs and Expenses

	Nine Months Ended				
(in thousands, except percentages)	October 31, 2021		October 25, 2020		Change
Selling, general and administrative	$ 128,402	53 %	$ 115,746	56 %	11 %
Product development and engineering	109,633	45 %	84,696	41 %	29 %
Intangible amortization	3,894	2 %	6,658	3 %	(42)%
Changes in the fair value of contingent earn-out obligations	—	— %	(33)	— %	100 %
Total operating costs and expenses	$ 241,929	100 %	$ 207,067	100 %	17 %

Selling, General and Administrative Expenses

SG&A expenses increased $12.7 million for the first nine months of fiscal year 2022 compared to the first nine months of fiscal year 2021 primarily as a result of an approximately $11 million increase in staffing-related costs, including performance-based compensation.

Product Development and Engineering Expenses

Product development and engineering expenses increased $24.9 million in the first nine months of fiscal year 2022 compared to the first nine months of fiscal year 2021 as a result of an approximately $10 million increase in staffing-related costs, including performance-based compensation, and an approximately $10 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 $3.9 million and $6.7 million for the first nine months of 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.

Changes in the Fair Value of Contingent Earn-out Obligations

The change in the fair value of contingent earn-out obligations for the first nine months of fiscal year 2021 reflects the difference between the final earn-out targets achieved for Cycleo SAS in fiscal year 2021 and the forecasted achievement level at the end of fiscal year 2020.

Interest Expense

Interest expense, including amortization of debt discounts and issuance costs, was $3.6 million and $3.8 million for the first nine months of fiscal years 2022 and 2021, respectively. This decrease was primarily due to lower overall debt levels.

Investment Impairments and Credit Loss Reserves

During the first nine months of fiscal year 2022, investment impairments and credit loss reserves totaled a loss of $0.9 million due to adjustments to our reserve for current expected credit losses. During the first nine months of fiscal year 2021, investment impairments and credit loss reserves totaled a loss of $5.5 million, which reflects $2.7 million of adjustments to our reserve for current expected credit losses, which were, in-part, due to the impact of the COVID-19 pandemic on early-stage development companies. The remaining loss relates to other-than-temporary impairment on three of our equity investments.

Provision for Income Taxes

The effective tax rates for the first nine months of fiscal years 2022 and 2021 were provision rates of 9.4% and 5.4%, respectively. In the first nine months of fiscal year 2022, we recorded income tax expense of $9.2 million, compared to $2.5 million in the first nine months of fiscal year 2021. The effective tax rates in the first nine months of fiscal years 2022 and 2021 differ from the statutory federal income tax rate of 21% primarily due to regional mix of income, excess tax benefits from share-based compensation, return-to-provision adjustments, withholding taxes on certain foreign earnings and research and development tax credits.

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 effect 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 of October 31, 2021, we had $276.6 million in cash and cash equivalents and $423.0 million of undrawn capacity on our Credit Facility. 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 October 31, 2021, our foreign subsidiaries held approximately $227.8 million of cash and cash equivalents, compared to $182.9 million at January 31, 2021.

We expect our future cash uses will be for capital expenditures, repurchases of our common stock 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.

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. The Credit Agreement provides $600.0 million in borrowing capacity of revolving loans under the senior secured first lien credit facility (the "Credit Facility"). The Credit Facility matures on November 7, 2024.

In the first nine months of fiscal year 2022, we borrowed $20.0 million against our Credit Facility and made payments on our Credit Facility that totaled $24.0 million. In the first nine months of fiscal year 2021, we made payments on our Credit Facility that totaled $12.0 million. As of October 31, 2021, we had $177.0 million of outstanding borrowings against our Credit Facility, which had $423.0 million of undrawn 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 (as defined in the Credit Agreement) 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.

In the first quarter of 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 October 31, 2021, interest payments on the first $150.0 million of debt outstanding under our Credit Facility are fixed at 1.9775%.

All 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 October 31, 2021, 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.

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, the Company's 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. We repurchased 1,387,624 shares under this program in the first nine months of fiscal year 2022 for $97.0 million. In the first nine months of fiscal year 2021, we repurchased 1,527,834 shares under this program for $66.4 million. As of October 31, 2021, the remaining authorization under this program was $292.2 million. We intend to fund repurchases under the program from cash on hand. We have no obligation to repurchase any shares under the program and may suspend or discontinue it at any time.

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 $95.8 million and $96.3 million as of October 31, 2021 and January 31, 2021, respectively. Our working capital, including cash and cash equivalents, was $372.4 million and $365.2 million as of October 31, 2021 and January 31, 2021, respectively.

Cash Flows

One of our primary goals is to continually improve the cash flows from our existing operating activities. Additionally, we will continue to seek to maintain and improve our existing business performance with 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:

	Nine Months Ended	
(in thousands)	October 31, 2021	October 25, 2020
Net cash provided by operating activities	$ 152,137	$ 91,676
Net cash used in investing activities	(29,831)	(32,399)
Net cash used in financing activities	(114,598)	(90,330)
Net increase (decrease) in cash and cash equivalents	$ 7,708	$ (31,053)

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 the first nine months of fiscal year 2022 compared to the first nine months of fiscal year 2021 were favorably impacted by a 27.8% increase in net sales and unfavorably impacted by a $12.3 million incremental increase in inventory spend, a $24.9 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 $12.7 million increase in SG&A expenses due to higher staffing-related costs.

Investing Activities

Net cash used in investing activities was primarily attributable to capital expenditures, premiums paid for corporate-owned life insurance and purchases of investments.

Capital expenditures were $18.1 million for the first nine months of fiscal year 2022, compared to $21.8 million for the first nine months of fiscal year 2021. In the first nine months of fiscal years 2022 and 2021, we made significant investments to update and expand our production capabilities.

In the first nine months of fiscal year 2022, we paid $5.8 million for strategic investments, including investments in companies that are enabling the LoRa and LoRaWAN®-based ecosystem, compared to $10.9 million of investments in the first nine months of fiscal year 2021.

In the first nine months of 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 outstanding common stock, payments related to employee share-based compensation payroll taxes and payments on our Credit Facility, offset by proceeds on our Credit Facility and proceeds from stock option exercises.

In the first nine months of fiscal year 2022, we paid $17.9 million for employee share-based compensation payroll taxes and received $4.3 million in proceeds from the exercise of stock options, compared to payments of $17.0 million for employee share-based compensation payroll taxes and proceeds of $5.1 million from the exercise of stock options in the first nine months of 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 that are outside our control. We believe that such proceeds will remain a nominal source of cash in the future.

Critical Accounting Estimates

Our critical accounting estimates are disclosed in "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Item 7 of our Annual Report on Form 10-K. There have been no significant changes to our policies during the nine months ended October 31, 2021. For a discussion of recent accounting pronouncements, see Note 1 to our interim unaudited condensed 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 Quarterly Report 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 by 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"), or 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 3. 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 discussed in Item 7A of our Annual Report. 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.

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 the end of our third quarter of fiscal year 2022. The adverse impact these changes would have had (after taking into account balance sheet hedges only) would not have had a material impact on our income before taxes.

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 October 31, 2021. 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 October 31, 2021, 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 October 31, 2021, a one percentage point increase in LIBOR would not have a material impact on our interest expense as only $27.0 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, has 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 will cease after 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 October 31, 2021, we had $276.6 million of cash and cash equivalents. A majority of our cash and cash equivalents generate interest income based on prevailing interest rates. Interest income, net of reserves, generated by our investments and cash and cash equivalents was not material in the third quarter of 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 current credit loss and reserves by $0.9 million during the nine months ended October 31, 2021, related to the credit risk on our debt securities investments, resulting in a current expected credit loss reserve balance on our available-for-sale and held-to-maturity debt securities of $4.3 million as of October 31, 2021.

ITEM 4. Controls and Procedures

Evaluation of 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 Quarterly Report. Based on that evaluation, our CEO and CFO concluded that, our disclosure controls and procedures were effective as of October 31, 2021.

Changes in Internal Controls

As of October 31, 2021, there were no changes to our internal control over financial reporting that occurred during the fiscal quarter then ended that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

ITEM 1. Legal Proceedings

Information about legal proceedings is set forth in Note 11 to the interim unaudited condensed consolidated financial statements included in Part I, Item 1 of this Quarterly Report and incorporated by reference herein.

ITEM 1A. Risk Factors

Please carefully consider and evaluate all of the information in this Quarterly Report and the risk factors set forth in our Annual Report on Form 10-K for the fiscal year ended January 31, 2021. 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.

The risk factors associated with our business have not materially changed as compared to the risk factors disclosed in our Annual Report on Form 10-K for the fiscal year ended January 31, 2021, other than as set forth below.

Risks Relating to Macroeconomic and Industry Conditions

The COVID-19 pandemic is adversely affecting, and is expected to continue to 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, impacting 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 has resulted 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 could impact our business in a number of ways, including but not limited to decreasing demand and pricing for our products as a result of the 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 shipment 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, impacting demand for our products; adversely impacting the business of our suppliers, which could result 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 COVID-19 spread in the workplace and potential increases in costs to implement health safety measures; suffering from reputational risk if we experience COVID-19 spread 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 disruptions to their operations during 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.

ITEM 2. Unregistered Sales of Equity Securities and Use of Proceeds

Recent Sales of Unregistered Securities

None.

Issuer Purchase of Equity Securities

This table provides information with respect to purchases by us of shares of our common stock during the third quarter of fiscal year 2022.

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 (1)
August 2021 (08/02/21-08/29/21)	—	$ —	—	$ 322.2 million
September 2021 (08/30/21-09/26/21)	160,925	77.11	160,925	$ 309.8 million
October 2021 (09/27/21-10/31/21)	226,238	77.75	226,238	$ 292.2 million
Total activity	387,163	$ 77.49	387,163	

(1) The Company maintains an active stock repurchase program that was initially approved by our Board of Directors 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. As of October 31, 2021, we have repurchased $506.2 million in shares of our common stock under the program since inception and the current remaining authorization under our stock repurchase program is $292.2 million. Under our stock repurchase 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 Rule10b-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. We have no obligation to repurchase any shares under the stock repurchase program and may suspend or discontinue it at any time.

ITEM 3. Defaults Upon Senior Securities

None.

ITEM 4. Mine Safety Disclosures

Not applicable.

ITEM 5. Other Information

None.

ITEM 6. Exhibits

Documents that are not physically filed with this report are incorporated herein by reference to the location indicated.

Exhibit No.	Description	Location
3.1	Restated Certificate of Incorporation of Semtech Corporation	Exhibit 3.1 to our Quarterly Report on Form 10-Q for the quarter ended October 26, 2003
3.2	Bylaws of Semtech Corporation	Exhibit 3.2 to our Annual Report on Form 10-K for the fiscal year ended January 27, 2008
10.1	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 our Quarterly Report on Form 10-Q for the quarter ended August 1, 2021
31.1	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	Filed herewith
31.2	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	Filed herewith
32.1	Certification of the Chief Executive Officer Pursuant to 18 U.S.C. §1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Exhibit 32.1 is being furnished and shall not be deemed "filed")	Furnished herewith
32.2	Certification of the Chief Financial Officer Pursuant 18 U.S.C. §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")	Furnished herewith
101	The following financial statements from the Company's Quarterly Report on Form 10-Q for the quarter ended October 31, 2021, 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 Quarterly Report on Form 10-Q for the quarter ended October 31, 2021, formatted in Inline XBRL (included as Exhibit 101).	

SIGNATURES

Pursuant to the requirements 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.

	SEMTECH CORPORATION Registrant
Date: December 1, 2021	/s/ Mohan R. Maheswaran
	Mohan R. Maheswaran President and Chief Executive Officer (Principal Executive Officer; Duly Authorized Officer)
Date: December 1, 2021	/s/ Emeka N. Chukwu
	Emeka N. Chukwu Executive Vice President and Chief Financial Officer (Principal Financial Officer)