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 July 30, 2023
or

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

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

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 September 8, 2023: 64,174,406

SEMTECH CORPORATION
INDEX TO FORM 10-Q
FOR THE QUARTER ENDED JULY 30, 2023

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 Company's ability to comply with the covenants under the agreements governing its indebtedness; the Company's ability to forecast and achieve anticipated net sales and earnings estimates in light of periodic economic uncertainty; the inherent risks, costs and uncertainties associated with integrating Sierra Wireless, Inc. successfully and risks of not achieving all or any of the anticipated benefits or the risk that the anticipated benefits may not be fully realized or take longer to realize than expected; the uncertainty surrounding the impact and duration of supply chain constraints and any associated disruptions; export restrictions and laws affecting the Company's trade and investments and tariffs or the occurrence of trade wars; worldwide economic and political disruptions, including as a result of inflation and the current conflict between Russia and Ukraine; tightening credit conditions related to the United States banking system concerns; 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; future responses to and effects of public health crises; and those factors set forth under "Risk Factors" in the Company's Annual Report on Form 10-K for the fiscal year ended January 29, 2023 filed with the Securities and Exchange Commission (the "SEC") on March 30, 2023, and under "Risk Factors" in this Quarterly Report on Form 10-Q, as such risk factors may be amended, supplemented or superseded from time to time by other reports we file with 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.

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 OPERATIONS
(in thousands, except per share data)
(unaudited)

	Three Months Ended		Six Months Ended	
	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
Net sales	$ 238,372	$ 209,254	$ 474,911	$ 411,403
Cost of sales	127,071	73,435	249,809	145,331
Amortization of acquired technology	10,573	1,048	21,428	2,096
Total cost of sales	137,644	74,483	271,237	147,427
Gross profit	100,728	134,771	203,674	263,976
Operating costs and expenses, net:				
Selling, general and administrative	65,024	48,119	123,141	91,483
Product development and engineering	51,387	40,601	103,214	79,390
Intangible amortization	4,871	—	9,753	—
Gain on sale of business	—	(17,986)	—	(17,986)
Goodwill impairment	279,555	—	279,555	—
Total operating costs and expenses, net	400,837	70,734	515,663	152,887
Operating (loss) income	(300,109)	64,037	(311,989)	111,089
Interest expense	(24,171)	(1,259)	(44,681)	(2,456)
Interest income	674	555	1,743	919
Non-operating expense, net	(1,566)	(430)	(2,039)	(532)
Investment impairments and credit loss reserves, net	(227)	429	(260)	405
(Loss) income before taxes and equity method (loss) income	(325,399)	63,332	(357,226)	109,425
Provision for income taxes	56,592	12,019	54,175	20,088
Net (loss) income before equity method (loss) income	(381,991)	51,313	(411,401)	89,337
Equity method (loss) income	(12)	283	(19)	307
Net (loss) income	(382,003)	51,596	(411,420)	89,644
Net loss attributable to noncontrolling interest	(1)	(2)	(3)	(3)
Net (loss) income attributable to common stockholders	$ (382,002)	$ 51,598	$ (411,417)	$ 89,647
(Loss) earnings per share:				
Basic	$ (5.97)	$ 0.81	$ (6.43)	$ 1.41
Diluted	$ (5.97)	$ 0.81	$ (6.43)	$ 1.39
Weighted-average number of shares used in computing (loss) earnings per share:				
Basic	64,005	63,500	63,964	63,725
Diluted	64,005	63,977	63,964	64,270

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 AND LOSS
(in thousands)
(unaudited)

	Three Months Ended		Six Months Ended	
	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
Net (loss) income	$ (382,003)	$ 51,596	$ (411,420)	$ 89,644
Other comprehensive income, net:				
Unrealized gain (loss) on foreign currency cash flow hedges, net	96	546	(27)	546
Reclassifications of realized gain on foreign currency cash flow hedges, net, to net (loss) income	(164)	(142)	(276)	(142)
Unrealized gain on interest rate cash flow hedges, net	13,769	307	14,187	1,564
Reclassifications of realized gain on interest rate cash flow hedges, net, to net (loss) income	(1,836)	(174)	(3,592)	(54)
Cumulative translation adjustment	(6,697)	(48)	(7,698)	(48)
Change in defined benefit plans, net	(52)	23	(102)	46
Other comprehensive income, net	5,116	512	2,492	1,912
Comprehensive (loss) income	(376,887)	52,108	(408,928)	91,556
Comprehensive loss attributable to noncontrolling interest	(1)	(2)	(3)	(3)
Comprehensive (loss) income attributable to common stockholders	$ (376,886)	$ 52,110	$ (408,925)	$ 91,559

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)

	July 30, 2023	January 29, 2023
Assets		
Current assets:		
Cash and cash equivalents	$ 147,912	$ 235,510
Accounts receivable, less allowances of $4,418 and $3,881, respectively	159,097	161,695
Inventories	180,231	207,704
Prepaid taxes	7,669	6,243
Other current assets	135,029	111,634
Total current assets	629,938	722,786
Non-current assets:		
Property, plant and equipment, net of accumulated depreciation of $272,632 and $257,978, respectively	161,329	169,293
Deferred tax assets	14,075	63,783
Goodwill	1,017,444	1,281,703
Other intangible assets, net	183,401	215,102
Other assets	112,413	116,961
TOTAL ASSETS	**$ 2,118,600**	**$ 2,569,628**
Liabilities and Equity		
Current liabilities:		
Accounts payable	$ 52,473	$ 100,676
Accrued liabilities	215,694	253,075
Current portion of long-term debt	52,890	43,104
Total current liabilities	321,057	396,855
Non-current liabilities:		
Deferred tax liabilities	4,755	5,065
Long-term debt	1,330,614	1,296,966
Other long-term liabilities	95,159	114,707
Commitments and contingencies (Note 12)		
Stockholders' equity:		
Common stock, $0.01 par value, 250,000,000 shares authorized, 78,136,144 issued and 64,030,212 outstanding and 78,136,144 issued and 63,870,581 outstanding, respectively	785	785
Treasury stock, at cost, 14,105,932 shares and 14,265,563 shares, respectively	(572,990)	(577,907)
Additional paid-in capital	486,365	471,374
Retained earnings	446,823	858,240
Accumulated other comprehensive income	5,852	3,360
Total stockholders' equity	366,835	755,852
Noncontrolling interest	180	183
Total equity	367,015	756,035
TOTAL LIABILITIES AND EQUITY	**$ 2,118,600**	**$ 2,569,628**

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 July 30, 2023								
	Common Stock								
	Number of Shares Outstanding	Amount	Treasury Stock, at Cost	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income	Stockholders' Equity	Noncontrolling Interest	Total Equity
Balance at April 30, 2023	**63,957,748**	**$ 785**	**$ (575,317)**	**$ 477,999**	**$ 828,825**	**$ 736**	**$ 733,028**	**$ 181**	**$ 733,209**
Net loss	—	—	—	—	(382,002)	—	(382,002)	(1)	(382,003)
Other comprehensive income	—	—	—	—	—	5,116	5,116	—	5,116
Share-based compensation	—	—	—	11,503	—	—	11,503	—	11,503
Treasury stock reissued to settle share-based awards	72,464	—	2,327	(3,137)	—	—	(810)	—	(810)
Balance at July 30, 2023	**64,030,212**	**$ 785**	**$ (572,990)**	**$ 486,365**	**$ 446,823**	**$ 5,852**	**$ 366,835**	**$ 180**	**$ 367,015**

	Six Months Ended July 30, 2023								
	Common Stock								
	Number of Shares Outstanding	Amount	Treasury Stock, at Cost	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income	Stockholders' Equity	Noncontrolling Interest	Total Equity
Balance at January 29, 2023	**63,870,581**	**$ 785**	**$ (577,907)**	**$ 471,374**	**$ 858,240**	**$ 3,360**	**$ 755,852**	**$ 183**	**$ 756,035**
Net loss	—	—	—	—	(411,417)	—	(411,417)	(3)	(411,420)
Other comprehensive income	—	—	—	—	—	2,492	2,492	—	2,492
Share-based compensation	—	—	—	22,323	—	—	22,323	—	22,323
Treasury stock reissued to settle share-based awards	159,631	—	4,917	(7,332)	—	—	(2,415)	—	(2,415)
Balance at July 30, 2023	**64,030,212**	**$ 785**	**$ (572,990)**	**$ 486,365**	**$ 446,823**	**$ 5,852**	**$ 366,835**	**$ 180**	**$ 367,015**

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 July 31, 2022

	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 May 1, 2022	**63,466,933**	**$ 785**	**$ (596,187)**	**$ 496,151**	**$ 834,909**	**$ (675)**	**$ 734,983**	**$ 190**	**$ 735,173**
Net income	—	—	—	—	51,598	—	51,598	(2)	51,596
Other comprehensive income	—	—	—	—	—	512	512	—	512
Share-based compensation	—	—	—	12,608	—	—	12,608	—	12,608
Treasury stock reissued to settle share-based awards	49,408	—	1,738	(2,581)	—	—	(843)	—	(843)
Balance at July 31, 2022	**63,516,341**	**$ 785**	**$ (594,449)**	**$ 506,178**	**$ 886,507**	**$ (163)**	**$ 798,858**	**$ 188**	**$ 799,046**

Six Months Ended July 31, 2022

	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 30, 2022	**64,098,565**	**$ 785**	**$ (549,942)**	**$ 491,956**	**$ 796,860**	**$ (2,075)**	**$ 737,584**	**$ 191**	**$ 737,775**
Net income	—	—	—	—	89,647	—	89,647	(3)	89,644
Other comprehensive income	—	—	—	—	—	1,912	1,912	—	1,912
Share-based compensation	—	—	—	24,711	—	—	24,711	—	24,711
Repurchase of common stock	(762,093)	—	(50,000)	—	—	—	(50,000)	—	(50,000)
Treasury stock reissued to settle share-based awards	179,869	—	5,493	(10,489)	—	—	(4,996)	—	(4,996)
Balance at July 31, 2022	**63,516,341**	**$ 785**	**$ (594,449)**	**$ 506,178**	**$ 886,507**	**$ (163)**	**$ 798,858**	**$ 188**	**$ 799,046**

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)

	Six Months Ended	
	July 30, 2023	**July 31, 2022**
Cash flows from operating activities:		
Net (loss) income	$ (411,420)	$ 89,644
Adjustments to reconcile net (loss) income to net cash (used in) provided by operating activities:		
Depreciation and amortization	46,565	14,998
Amortization of right-of-use assets	3,282	2,302
Investment impairments and credit loss reserves, net	260	(405)
Accretion of deferred financing costs and debt discount	3,103	241
Write-off of deferred financing costs and debt discount	771	—
Deferred income taxes	50,542	261
Share-based compensation	21,803	24,143
Gain on disposition of business operations and assets	(17)	(17,978)
Equity method loss (income)	19	(307)
Corporate-owned life insurance, net	3,212	831
Goodwill impairment	279,555	—
Amortization of inventory step-up	3,314	—
Changes in assets and liabilities:		
Accounts receivable, net	2,725	402
Inventories	22,094	(15)
Other assets	(11,179)	2,836
Accounts payable	(37,730)	5,676
Accrued liabilities	(71,211)	7,230
Other liabilities	(7,680)	(2,530)
Net cash (used in) provided by operating activities	(101,992)	127,329
Cash flows from investing activities:		
Proceeds from sales of property, plant and equipment	42	—
Purchase of property, plant and equipment	(20,897)	(15,583)
Proceeds from sale of investments	—	2,275
Purchase of investments	(930)	(3,288)
Purchase of intangibles	(292)	—
Proceeds from sale of business, net of cash disposed	—	26,812
Proceeds from corporate-owned life insurance	2,500	2,676
Premiums paid for corporate-owned life insurance	—	(2,676)
Net cash (used in) provided by investing activities	(19,577)	10,216
Cash flows from financing activities:		
Proceeds from revolving line of credit	60,000	10,000
Payments of revolving line of credit	—	(10,000)
Payments of term loans	(11,187)	—
Deferred financing costs	(11,671)	—
Payments for employee share-based compensation payroll taxes	(2,415)	(5,616)
Proceeds from exercise of stock options	—	620
Repurchase of common stock	—	(50,000)
Net cash provided by (used in) financing activities	34,727	(54,996)
Effect of foreign exchange rate changes on cash and cash equivalents	(756)	—
Net (decrease) increase in cash and cash equivalents	(87,598)	82,549
Cash and cash equivalents at beginning of period	235,510	279,601
Cash and cash equivalents at end of period	$ 147,912	$ 362,150
Supplemental disclosure of cash flow information:		
Interest paid	$ 40,912	$ 1,931
Income taxes paid	$ 15,612	$ 5,375
Non-cash investing and financing activities:		
Accounts payable related to capital expenditures	$ 1,640	$ 3,384

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 high-performance semiconductor, IoT systems and cloud connectivity service provider. The end customers for the Company's silicon solutions are primarily original equipment manufacturers that produce and sell technology solutions. The Company's IoT module, router, gateway and managed connectivity solutions ship to IoT device makers and enterprises to provide IoT connectivity to end devices.

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

Basis of Presentation

The Company reports results on the basis of 52 and 53-week periods and ends its fiscal year on the last Sunday in January. The other quarters generally end on the last Sunday of April, July and October. All quarters consist of 13 weeks except for one 14-week period in the fourth quarter of 53-week years. The second quarters of fiscal years 2024 and 2023 each consisted of 13 weeks.

Principles of Consolidation

The accompanying interim unaudited condensed consolidated financial statements include the accounts of the Company and its majority-owned subsidiaries and have been prepared in accordance with generally accepted accounting principles 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 29, 2023 ("Annual Report"). The Company's interim unaudited condensed consolidated statements of operations are referred to herein as the "Statements of Operations," the Company's interim unaudited condensed consolidated balance sheets are referred to herein as the "Balance Sheets," and the Company's interim unaudited condensed consolidated statements of cash flows are referred to herein 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 and results of operations 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.

Reclassification

In fiscal year 2023, the Company reclassified amounts recorded for amortization of acquired technology intangible assets as a component of cost of sales. This was applied retrospectively and resulted in the reclassification of $1.0 million and $2.1 million of amortization of acquired technology intangible assets for the three and six months ended July 31, 2022, respectively, from "Intangible amortization" within "Total operating costs and expenses, net" to "Amortization of acquired technology" within "Total cost of sales" in the Statements of Operations, which also had the impact of reducing gross profit by the same amount. This reclassification did not impact the Company's operating income, net income or earnings per share for any historical periods and also did not impact the Company's Balance Sheets or Statements of Cash Flows.

Liquidity

The accompanying interim unaudited condensed consolidated financial statements have been prepared assuming that the Company will continue as a going concern, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. Management evaluated whether there are any conditions and events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern over the next twelve months from the issuance of the accompanying interim unaudited condensed consolidated financial statements. Compliance with the Company's leverage and interest expense coverage financial covenants is measured quarterly based upon the Company's performance over the most recent four quarters, and compliance with the liquidity covenant is measured as of the last day of each monthly accounting period.

As of July 30, 2023, the Company was in compliance with the financial covenants in the Credit Agreement (as defined in Note 9, Long-Term Debt). In response to adverse market demand conditions, the Company has taken actions to reduce expenses to preserve cash and maintain compliance with its financial covenants. In the absence of additional actions, the Company may not maintain compliance with the financial covenants over the next twelve months from the issuance of the accompanying interim unaudited condensed consolidated financial statements, which noncompliance would raise substantial doubt about the Company's ability to continue as a going concern. Failure to meet the covenant requirements in the Credit Agreement would constitute an event of default under the Credit Agreement and there is no certainty the Company would be able to obtain waivers or amendments with the requisite lenders party thereto in order to maintain compliance.

If an event of default occurs and the Company is unable to obtain necessary waivers or amendments, the requisite lenders may elect to declare all outstanding borrowings, together with accrued and unpaid interest and other amounts payable thereunder, to be immediately due and payable. Further, if an event of default occurs, the lenders will have the right to proceed against the collateral granted to them to secure that debt. If the debt under the Credit Agreement were to be accelerated, the Company's assets may not be sufficient to repay in full the debt that may become due as a result of that acceleration. The Company could seek replacement financing at prevailing market rates or raise additional capital by issuing equity or debt securities; however, this may not be on terms favorable to the Company, or available at all.

Based on the Company's current projections and management's plan to further manage controllable expenditures through cost-saving initiatives that are planned and probable to be implemented, management believes the Company is expected to maintain compliance with its financial covenants and the Company's existing cash, projected operating cash flows and available borrowing capacity under its Revolving Credit Facility (as defined in Note 9, Long-Term Debt) are adequate to meet its operating needs, liabilities and commitments over the next twelve months from the issuance of the accompanying interim unaudited condensed consolidated financial statements.

Note 2: Acquisition and Divestiture

Acquisition of Sierra Wireless, Inc.

On January 12, 2023 (the "Acquisition Date"), the Company completed the acquisition of all of the issued and outstanding common shares of Sierra Wireless, Inc. ("Sierra Wireless") in an all-cash transaction representing a total purchase consideration of approximately $1.3 billion (the "Sierra Wireless Acquisition"). The results of operations of Sierra Wireless have been included in the Statements of Operations since the Acquisition Date.

The transaction was accounted for as a business combination in accordance with Accounting Standards Codification ("ASC") 805, "Business Combinations." The purchase price allocation for the Sierra Wireless Acquisition is preliminary. The Company made an initial allocation of the purchase price at the Acquisition Date based upon its understanding of the fair value of the acquired assets and assumed liabilities based on the information that was currently available. The fair values of acquired intangibles are determined based on estimates and assumptions that are deemed reasonable by the Company. In the fourth quarter of fiscal year 2023, a preliminary goodwill balance of $931.4 million was recognized for the excess of the consideration transferred over the net assets acquired and represented the expected revenue and cost synergies of the combined company and assembled workforce. In the six months ended July 30, 2023, the Company finalized measurement period adjustments related to identifiable intangible assets, inventories, property, plant, and equipment and other assets and liabilities, which have been recorded to reflect facts and circumstances that existed as of the Acquisition Date. These adjustments increased the preliminary goodwill balance by $21.7 million to $953.1 million. The amounts assigned to certain legal matters and income and non-income based taxes remain preliminary, are subject to adjustment and will be finalized within the measurement period (not to exceed one year from the Acquisition Date). In the six months ended July 30, 2023, the Company also finalized its determination of the reporting units related to the Sierra Wireless Acquisition and completed a preliminary allocation of the goodwill balance to these reporting units. See Note 8, Goodwill and Intangible Assets, for additional information.

The following table presents the preliminary estimated fair values of assets and liabilities assumed on the Acquisition Date based on valuations and management's estimates:

(in thousands)	Amounts recognized as of Acquisition Date (as initially reported)	Measurement period adjustment	Amounts recognized as of Acquisition Date (as adjusted)
Total purchase price consideration, net of cash acquired $68,794	$ 1,240,757		$ 1,240,757
Assets:			—
Accounts receivable, net	92,633	—	92,633
Inventories	96,339	(1,899)	94,440
Other current assets	72,724	5,003	77,727
Property, plant and equipment	29,086	(2,628)	26,458
Intangible assets	214,780	—	214,780
Prepaid taxes	3,001	—	3,001
Deferred tax assets	22,595	677	23,272
Other assets	14,878	—	14,878
Liabilities:			—
Accounts payable	50,413	210	50,623
Accrued liabilities	148,654	24,644	173,298
Deferred tax liabilities	4,824	64	4,888
Other long-term liabilities	32,785	(2,106)	30,679
Net assets acquired, excluding goodwill	$ 309,360	$ (21,659)	$ 287,701
Goodwill	$ 931,397	$ 21,659	$ 953,056

See Note 8, Goodwill and Intangible Assets, for additional information about goodwill impairments recorded in the three and six months ended July 30, 2023 related to the Sierra Wireless Acquisition.

The following table provides a summary of the pro forma unaudited consolidated results of operations as if the Sierra Wireless Acquisition had been completed on February 1, 2021 (the first day of fiscal year 2022):

(in thousands)	Three Months Ended July 31, 2022 (unaudited)	Six Months Ended July 31, 2022 (unaudited)
Total revenues	$ 397,205	$ 772,311
Net loss	$ 38,444	39,404

The unaudited pro forma information presented does not purport to be indicative of the results that would have been achieved had the acquisition been consummated at the beginning of the period presented nor of the results which may occur in the future.

The pro forma adjustments are based upon available information and certain assumptions that the Company believes are reasonable. The unaudited pro forma information does not include any adjustments for any restructuring activities, operating efficiencies or cost savings. The Company ends its fiscal year on the last Sunday in January. Prior to the transaction, Sierra Wireless's fiscal year ended on December 31. To comply with SEC rules and regulations for companies with different fiscal year ends, the pro forma combined financial information has been prepared utilizing periods that differ by up to a month.

Divestiture

On May 3, 2022, the Company completed the divestiture of its high reliability discrete diodes and assemblies business (the “Disposal Group”) to Micross Components, Inc. for $26.8 million, net of cash disposed, in an all-cash transaction. The divestiture resulted in a gain of $18.0 million for both the three and six months ended July 31, 2022, which was recorded in "Gain on sale of business" in the Statements of Operations. As a result of the transaction, the Company disposed of $0.8 million of goodwill based on the relative fair value of the Disposal Group and the portion of the applicable reporting unit that was retained. The estimated fair value of the Disposal Group less estimated costs to sell exceeded its carrying amount as of the transaction date. As the sale of the Disposal Group was not considered a strategic shift that would have a major effect on the Company’s operations or financial results, it was not reported as discontinued operations.

Note 3: (Loss) Earnings per Share

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

	Three Months Ended		Six Months Ended	
(in thousands, except per share data)	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
Net (loss) income attributable to common stockholders	$ (382,002)	$ 51,598	$ (411,417)	$ 89,647
Weighted-average shares outstanding–basic	64,005	63,500	63,964	63,725
Dilutive effect of share-based compensation	—	477	—	545
Weighted-average shares outstanding–diluted	64,005	63,977	63,964	64,270
(Loss) earnings per share:				
Basic	$ (5.97)	$ 0.81	$ (6.43)	$ 1.41
Diluted	$ (5.97)	$ 0.81	$ (6.43)	$ 1.39
Anti-dilutive shares not included in the above calculations:				
Share-based compensation	2,593	210	2,462	83
Warrants	8,573	—	8,573	—
Total anti-dilutive shares	11,166	210	11,035	83

Basic earnings or loss per share is computed by dividing income or loss available to common stockholders by the weighted-average number of shares of common stock outstanding during the reporting period. Diluted earnings or loss 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, market-condition restricted stock units and financial metric-based restricted stock units if certain conditions have been met, but excludes such incremental shares that would have an anti-dilutive effect. Due to the Company's net loss for the three and six months ended July 30, 2023, all shares underlying stock options and restricted stock units are considered anti-dilutive.

Any dilutive effect of the Warrants (see Note 9, Long-Term Debt) is calculated using the treasury-stock method. During the three and six months ended July 30, 2023, the Warrants were excluded from diluted shares outstanding because the exercise price exceeded the average market price of the Company's common stock for the reporting period and due to net loss.

Note 4: Share-Based Compensation

Financial Statement Effects and Presentation

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

	Three Months Ended		Six Months Ended	
(in thousands)	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
Cost of sales	$ 525	$ 610	$ 888	$ 1,385
Selling, general and administrative	9,409	8,588	13,911	14,720
Product development and engineering	3,465	4,052	7,004	8,038
Total share-based compensation	$ 13,399	$ 13,250	$ 21,803	$ 24,143

Restricted Stock Units, Employees

The Company grants restricted stock units to certain employees of which a portion are expected to be settled with shares of the Company's common stock and a portion are expected to be settled in cash. The restricted stock units that are to be settled with shares are accounted for as equity. The grant date for these awards is equal to the measurement date and they 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 3 or 4 years). The restricted stock units that are to be settled in cash are accounted for as liabilities and the value of the awards is re-measured at the end of each reporting period until settlement at the end of the requisite vesting period (typically 3 years). In the six months ended July 30, 2023, the Company granted to certain employees 904,752 restricted stock units that settle in shares with a weighted-average grant date fair value of $27.45, including 123,652 restricted stock units granted to the current Chief Executive Officer ("CEO") that vest quarterly over a 3-year period and 232,635 restricted stock units granted to the former CEO ("Former CEO") prior to his retirement that vest quarterly over an 18-month period. In the six months ended July 30, 2023, the Company granted to certain employees 9,432 restricted stock units that settle in cash.

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 would be settled in cash and a portion would be settled in shares of the Company's common stock. Restricted stock units awarded under the program are generally scheduled to vest on the earlier of (i) one year after the grant date or (ii) the day immediately preceding the first annual meeting of the Company's stockholders 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 service. The portion of a restricted stock unit award under the program that is to be settled in shares of stock will, subject to vesting, be settled promptly following vesting. In the six months ended July 30, 2023, the Company granted to certain non-employee directors 37,116 restricted stock units that settle in cash and 37,116 restricted stock units that settle in shares with a weighted-average grant date fair value of $25.28.

The restricted stock units that are to be settled in cash are accounted for as liabilities. These awards are not typically settled until a non-employee director's separation from service. The value of both the unvested and vested but unsettled awards are re-measured at the end of each reporting period until settlement. As of July 30, 2023, the total number of vested, but unsettled awards was 227,109 units and the liability associated with these awards was $5.5 million, of which $2.5 million was included in "Accrued liabilities" in the Balance Sheets relating to two previous non-employee directors currently serving short-term non-employee consultancies for the Company. The remaining $3.0 million was included in "Other long-term liabilities" in the Balance Sheets.

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

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

In the six months ended July 30, 2023, the Company granted 170,934 TSR Awards, including 61,827 TSR Awards granted to the CEO and 109,107 TSR Awards granted to certain other executives. The market condition is determined based upon the Company's TSR benchmarked against the TSR of the Russell 3000 Index over one, two and three year performance periods (one-third of the awards vesting each performance period). Generally, the 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 values per unit of the TSR Awards granted to the CEO in the six months ended July 30, 2023 for each one, two and three year performance period were $23.65, $32.78 and $38.65, respectively. The grant-date fair values per unit of the TSR Awards granted to certain other executives in the six months ended July 30, 2023 for each one, two and three year performance period were $39.47, $45.36 and $49.79, respectively. Under the terms of these awards, assuming the highest performance level of 200% with no cancellations due to forfeitures, the maximum potential number of shares that can be earned in aggregate for the cumulative fiscal years 2024, 2025 and 2026 performance periods would be 341,868 shares.

Financial Metric-Based Restricted Stock Units

The Company grants financial metric-based restricted stock units to certain executives of the Company, which are settled in shares and accounted for as equity awards. These awards have a performance condition in addition to a service condition. The number of vested shares for each performance period is determined based on the Company's attainment of pre-established revenue and non-GAAP operating income targets for the respective performance period. The vesting for tranches after the initial performance period is dependent on revenue and non-GAAP operating income for the preceding performance period. The financial metric-based restricted stock units are valued as of the measurement date and compensation cost is recognized using the accelerated attribution method over the requisite service period based on the number of shares that are probable of attainment for each fiscal year.

In the six months ended July 30, 2023, the Company granted 109,107 financial metric-based restricted stock units with a weighted-average grant date fair value of $30.21 that vest over one, two and three year performance periods (one-third of the awards vesting each performance period). Generally, the award recipients must be employed for the entire performance period and be an active employee at the time of vesting of the awards. Under the terms of these awards, assuming the highest performance level of 200% with no cancellations due to forfeitures, the maximum potential number of shares that can be earned in aggregate for the cumulative fiscal years 2024, 2025 and 2026 performance periods would be 218,214 shares.

Note 5: Available-for-sale securities

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

	July 30, 2023			January 29, 2023		
(in thousands)	Fair Value	Amortized Cost	Gross Unrealized Gain/(Loss)	Fair Value	Amortized Cost	Gross Unrealized Gain/(Loss)
Convertible debt investments	$ 14,249	$ 16,149	$ (1,900)	$ 13,995	$ 15,635	$ (1,640)
Total available-for-sale securities	$ 14,249	$ 16,149	$ (1,900)	$ 13,995	$ 15,635	$ (1,640)

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

	July 30, 2023	
(in thousands)	Fair Value	Amortized Cost
Within 1 year	$ 12,870	$ 14,055
After 1 year through 5 years	1,379	2,094
Total available-for-sale securities	$ 14,249	$ 16,149

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 with maturities greater than one year were included in "Other assets" in the Balance Sheets.

Note 6: 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:

	July 30, 2023				January 29, 2023			
(in thousands)	Total	(Level 1)	(Level 2)	(Level 3)	Total	(Level 1)	(Level 2)	(Level 3)
Financial assets:								
Interest rate swap agreement	$ 13,396	$ —	$ 13,396	$ —	$ 6,067	$ —	$ 6,067	$ —
Total return swap contracts	43	—	43	—	91	—	91	—
Convertible debt investments	14,249	—	—	14,249	13,995	—	—	13,995
Foreign currency forward contracts	309	—	309	—	717	—	717	—
Total financial assets	$ 27,997	$ —	$ 13,748	$ 14,249	$ 20,870	$ —	$ 6,875	$ 13,995
Financial liabilities:								
Interest rate swap agreement	—	—	—	—	6,432	—	6,432	—
Total financial liabilities	$ —	$ —	$ —	$ —	$ 6,432	$ —	$ 6,432	$ —

During the six months ended July 30, 2023, the Company had no transfers of financial assets or liabilities between Level 1, Level 2 or Level 3. As of July 30, 2023 and January 29, 2023, the Company had not elected the fair value option for any financial assets and liabilities for which such an election would have been permitted.

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

The following table presents a reconciliation of the changes in convertible debt investments in the six months ended July 30, 2023:

(in thousands)	
Balance at January 29, 2023	$ 13,995
Increase in credit loss reserve	(260)
Interest accrued	514
Balance at July 30, 2023	$ 14,249

The interest rate swap agreements are measured at fair value using readily available interest rate curves (Level 2 inputs). The fair value of each 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 17, Derivatives and Hedging Activities, for further discussion of the Company's derivative instruments.

The foreign currency forward contracts are measured at fair value using readily available foreign currency forward and interest rate curves (Level 2 inputs). The fair value of each contract is determined by comparing the contract rate to the forward rate and discounting to the present value. Contracts in a gain position are recorded in "Other current assets" in the Balance Sheets and the value of contracts in a loss position are recorded in "Accrued liabilities" in the Balance Sheets. See Note 17, Derivatives and Hedging Activities, 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 "Other Current Assets" if the instruments are in a gain position and in "Accrued Liabilities" if the instruments are in a loss position. See Note 17, Derivatives and Hedging Activities, for further discussion of the Company's derivative instruments.

Instruments Not Recorded at Fair Value

Some of the Company's financial instruments are not measured at fair value, 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 revolving loans and Term Loans (as defined in Note 9, Long-Term Debt) are recorded at cost, which approximates fair value as the debt instruments bear interest at a floating rate. The Notes (as defined in Note 9, Long-Term Debt) are carried at face value less unamortized debt issuance costs, with interest expense reflecting the cash coupon plus the amortization of the capitalized issuance costs. The estimated fair values are determined based on the actual bid price of the Notes as of the last business day of the period.

The following table displays the carrying values and fair values of the Notes:

		July 30, 2023		January 29, 2023	
(in thousands)	Fair Value Hierarchy	Carrying Value	Fair Value	Carrying Value	Fair Value
1.625% convertible senior notes due 2027, net [1]	Level 2	309,358	304,371	308,150	345,075

[1] The 1.625% convertible senior notes due 2027, net are reflected net of $10.1 million and $11.4 million of unamortized debt issuance costs as of July 30, 2023 and January 29, 2023, respectively.

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 it determines they are 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 $4.4 million and $4.2 million as of July 30, 2023 and January 29, 2023, respectively. During each of the three and six months ended July 30, 2023, the Company increased its expected credit loss reserves by $0.2 million primarily due to its available-for-sale debt securities. During each of the three and six months ended July 31, 2022, the Company decreased its expected credit loss reserves by $0.4 million primarily due to a recovery on one of its held-to-maturity debt securities. Credit loss reserves related to the Company's available-for-sale debt securities and held-to-maturity debt securities with maturities within one year were included in "Other current assets" and with maturities greater than one year were included in "Other assets" in the Balance Sheets.

Note 7: 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)	July 30, 2023	January 29, 2023
Raw materials and electronic components	$ 63,536	$ 76,919
Work in progress	78,642	88,764
Finished goods	38,053	42,021
Total inventories	$ 180,231	$ 207,704

In the six months ended July 30, 2023, the Company recorded $3.3 million of amortization of inventory step-up related to the Sierra Wireless Acquisition in Cost of Sales in the Statements of Operations.

Note 8: Goodwill and Intangible Assets

Goodwill

The carrying amounts of goodwill by applicable operating segment were as follows:

(in thousands)	Signal Integrity	Advanced Protection and Sensing	IoT System	IoT Connected Services	Unallocated	Total
Balance at January 29, 2023	$ 274,085	$ 14,639	$ 61,582	$ —	$ 931,397	$1,281,703
Measurement period adjustment	—	—	—	—	21,659	$ 21,659
Reallocation	—	—	654,831	298,225	(953,056)	—
Cumulative translation adjustment	—	—	(1,757)	(4,606)	—	(6,363)
Impairment	—	—	(210,516)	(69,039)	—	(279,555)
Balance at July 30, 2023	$ 274,085	$ 14,639	$ 504,140	$ 224,580	$ —	$1,017,444

On January 12, 2023, in connection with the Sierra Wireless Acquisition, the Company acquired all of the outstanding equity interests in Sierra Wireless and a preliminary goodwill balance of $931.4 million was recorded for the excess of the consideration transferred over the net assets acquired and represented the expected revenue and cost synergies of the combined company and assembled workforce. In the six months ended July 30, 2023, the Company recorded measurement period adjustments that increased goodwill by $21.7 million. See Note 2, Acquisition and Divestiture, for further discussion of the Sierra Wireless Acquisition and impact of the measurement period adjustments. In the fourth quarter of fiscal year 2023, in conjunction with the Sierra Wireless Acquisition, the Company formed two additional operating segments: the IoT System operating segment, which also absorbed portions of the Company's previous Wireless and Sensing operating segment, and the IoT Connected Services operating segment. In the six months ended July 30, 2023, the Company finalized the determination of the reporting units related to the previously-identified operating segments. IoT System-Modules and IoT System-Routers were identified as reporting units, which together with IoT System-Wireless (f.k.a. Wireless and Sensing) reporting unit, aggregate into the IoT System operating segment. IoT Connected Services comprises one reporting unit and, accordingly, is both a reporting unit and an operating segment. During the six months ended July 30, 2023, the Company also completed a preliminary allocation of the goodwill balance resulting from the Sierra Wireless Acquisition to each of these reporting units.

Goodwill is not amortized, but is tested for impairment at the reporting unit level using either a qualitative or quantitative assessment on an annual basis during the fourth quarter of each fiscal year, and whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Impairment of goodwill is measured at the reporting unit level by comparing the reporting unit's carrying amount, including goodwill, to the fair market value of the reporting unit.

During the second quarter of fiscal year 2024, as a result of reduced earnings forecasts associated with the business acquired from Sierra Wireless and current macroeconomic conditions, including a rising interest rate environment, the Company performed an interim impairment test using a quantitative assessment of the reporting units related to the Sierra Wireless Acquisition (specifically, the IoT Connected Services, IoT System–Modules and IoT System–Routers reporting units). The interim impairment test resulted in $279.6 million of total pre-tax non-cash goodwill impairment charges recorded in the Statements of Operations, consisting of $69.0 million of goodwill impairment for the IoT Connected Services reporting unit, $109.9 million of goodwill impairment for the IoT System–Modules reporting unit and $100.7 million goodwill impairment for the IoT System–Routers reporting unit. The fair values of these reporting units were determined based on a discounted cash flow model (an income approach) and earnings multiples (a market approach). Significant inputs to the reporting unit fair value measurements included forecasted cash flows, discount rates, terminal growth rates and earnings multiples, which were determined by management estimates and assumptions. The reporting unit fair value measurements are classified as Level 3 in the fair value hierarchy because they involve significant unobservable inputs.

Purchased and Other Intangibles

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

		July 30, 2023			January 29, 2023		
(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	1-8 years	$ 154,926	$ (22,576)	$ 132,350	$ 175,080	$ (21,156)	$ 153,924
Customer relationships	1-10 years	52,330	(8,856)	43,474	53,000	(690)	52,310
Trade name	2-10 years	9,000	(1,715)	7,285	9,000	(132)	8,868
Total finite-lived intangible assets		$ 216,256	$ (33,147)	$ 183,109	$ 237,080	$ (21,978)	$ 215,102

Amortization expense of finite-lived intangible assets was as follows:

	Three Months Ended		Six Months Ended	
(in thousands)	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
Core technologies	$ 10,573	$ 1,048	$ 21,428	$ 2,096
Customer relationships	4,080	—	8,170	—
Trade name	791	—	1,583	—
Total amortization expense	$ 15,444	$ 1,048	$ 31,181	$ 2,096

Amortization expense of finite-lived intangible assets related to core technologies was recorded in "Amortization of acquired technology" within "Total cost of sales" in the Statements of Operations and amortization expense of finite-lived intangible assets related to customer relationships and trade name was recorded in "Intangible amortization" within "Total operating costs and expenses, net" in the Statements of Operations. As of the Acquisition Date, the weighted-average amortization period for the finite-lived intangible assets acquired in the Sierra Wireless Acquisition was 5.3 years, which reflects weighted-average amortization periods of 4.4 years, 7.9 years and 6.2 years for core technologies, customer relationships and trade name, respectively.

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

(in thousands)	Core Technologies	Customer Relationships	Trade name	Total
2024 (remaining six months)	$ 20,024	$ 7,656	$ 1,583	$ 29,263
2025	39,510	3,999	1,722	45,231
2026	32,402	3,999	500	36,901
2027	17,541	3,999	500	22,040
2028	13,530	3,999	500	18,029
Thereafter	9,343	19,822	2,480	31,645
Total expected amortization expense	$ 132,350	$ 43,474	$ 7,285	$ 183,109

Also presented in "Other intangible assets, net" in the Balance Sheets, are finite-lived intangible assets under construction to be amortized upon placement in service. The following table sets forth the Company's finite-lived intangible assets under construction:

(in thousands)	Net Carrying Amount
Value at January 29, 2023	$ —
Capitalized development costs	292
Value at July 30, 2023	$ 292

Note 9: Long-Term Debt

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

(in thousands, except percentages)	July 30, 2023	January 29, 2023
Revolving loans	$ 210,000	$ 150,000
Terms loans	883,813	895,000
1.625% convertible senior notes due 2027	319,500	319,500
Total debt	$ 1,413,313	$ 1,364,500
Current portion, net	$ (52,890)	$ (43,104)
Debt issuance costs	(29,809)	(24,430)
Total long-term debt, net of debt issuance costs	$ 1,330,614	$ 1,296,966
Weighted-average effective interest rate [1]	6.37 %	4.84 %

[1] The revolving loans and Term Loans (as defined below) bear interest at variable rates based on Adjusted Term SOFR or a Base Rate (as defined herein), 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 2024, the Company entered into an interest rate swap agreement with a 2.75 year term to hedge the variability of interest payments on $150.0 million of debt outstanding on the Term Loans at a fixed Term SOFR rate of 3.58%, plus a variable margin and spread based on the Company's consolidated leverage ratio. In the fourth quarter of fiscal year 2023, the Company entered into an interest rate swap agreement with a 5 year term to hedge the variability of interest payments on $450.0 million of debt outstanding on the Term Loans at a fixed Term SOFR rate of 3.44%, plus a variable margin and spread based on the Company's consolidated leverage ratio. As of July 30, 2023, the effective interest rate was a weighted-average rate that represented (a) interest on the revolving loans at a floating SOFR rate of 5.22% plus a margin and spread of 3.36% (total floating rate of 8.59%), (b) interest on $450.0 million of the debt outstanding on the Term Loans at a fixed SOFR rate of 3.44% plus a margin and spread of 3.35% (total fixed rate of 6.79%), (c) interest on $150.0 million of the debt outstanding on the Terms Loans at a fixed SOFR rate of 3.58% plus a margin and spread of 3.35% (total fixed rate of 6.93%), (d) interest on the remaining debt outstanding on the Term Loans at a floating SOFR rate of 5.22% plus a margin and spread of 3.35% (total floating rate of 8.57%) and (e) interest on the Notes outstanding at a fixed rate of 1.625%. As of January 29, 2023, the effective interest rate was a weighted average-rate that represented (a) interest on the revolving loans at a fixed LIBOR rate of 0.73% plus a margin and spread of 2.36% (total fixed rate of 3.09%) (b) interest on $450.0 million of the debt outstanding on the Term Loans at a fixed SOFR rate of 3.44% plus a margin and spread of 2.35% (total fixed rate of 5.79%), (c) interest on the remaining debt outstanding on the Term Loans at a floating SOFR rate of 4.43% plus a margin and spread of 2.35% (total floating rate of 6.78%) and (d) interest on the Notes outstanding at a fixed rate of 1.625%.

Credit Agreement

On November 7, 2019, the Company, with certain of its domestic subsidiaries as guarantors, entered into an amended and restated credit agreement (as amended, restated or otherwise modified from time to time, the "Credit Agreement") with the lenders party thereto and HSBC Bank USA, National Association, as administrative agent, swing line lender and letter of credit issuer. In connection with the Sierra Wireless Acquisition, on September 26, 2022, the Company entered into a third amendment and restatement agreement (the "Restatement Agreement"), which became effective at the time of closing of the Sierra Wireless Acquisition, to among other things provide for the partial extension of the revolving commitments under the Credit Agreement and to incur term loans to finance the Sierra Wireless Acquisition and related costs and expenses.

After effectiveness of the Restatement Agreement, the First Amendment and the Second Amendment described below, the borrowing capacity on the revolving credit facility thereunder (the "Revolving Credit Facility") is $500.0 million, of which $162.5 million is scheduled to mature on November 7, 2024 and $337.5 million is scheduled to mature on January 12, 2028, and the term loans thereunder (the "Term Loans") for an aggregate principal amount of $895.0 million are scheduled to mature on January 12, 2028.

As of July 30, 2023, the Company had $883.8 million outstanding under the Term Loans and $210.0 million outstanding under the Revolving Credit Facility, which had undrawn borrowing capacity of $290.0 million, subject to customary conditions precedent, including the accuracy of representations and warranties and the absence of defaults.

Up to $40.0 million of the Revolving Credit Facility may be used to obtain letters of credit, up to $25.0 million of the Revolving Credit Facility may be used to obtain swing line loans, and up to $75.0 million of the Revolving Credit Facility may be used to obtain revolving loans and letters of credit in certain currencies other than U.S. Dollars ("Alternative Currencies"). The proceeds of the Revolving Credit Facility may be used by the Company for capital expenditures, permitted acquisitions, permitted dividends, working capital and general corporate purposes.

No amortization is required with respect to the revolving loans. After effectiveness of the Second Amendment described below, the Term Loans amortize in equal quarterly installments of 1.25% of the original principal amount thereof during fiscal year 2024 and will amortize in equal quarterly installments of 1.875% of the original principal amount thereof beginning in fiscal year 2025 and continuing during the period that financial covenant relief pursuant to the Second Amendment is in effect with the balance due at maturity. The Company may voluntarily prepay borrowings at any time and from time to time, without premium or penalty, other than customary "breakage costs" in certain circumstances.

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

On February 24, 2023, the Company entered into the first amendment (the "First Amendment") to the Credit Agreement, in order to, among other things, (i) increase the maximum consolidated leverage ratio covenant for certain test periods as set forth therein, (ii) reduce the minimum consolidated interest coverage ratio covenant for certain test periods as set forth therein, (iii) provide that, during the period that financial covenant relief pursuant to the First Amendment is in effect, the interest rate margin for (1) Term SOFR loans is deemed to be 2.50% and (2) Base Rate loans is deemed to be 1.50% per annum and (iv) make certain other changes as set forth therein.

On June 6, 2023, the Company entered into the second amendment (the "Second Amendment") to the Credit Agreement, in order to, among other things, (i) increase the maximum consolidated leverage ratio covenant for certain test periods as set forth therein and described below, (ii) reduce the minimum consolidated interest coverage ratio covenant for certain test periods as set forth therein and described below, (iii) modify the pricing grid applicable to loans under the Credit Agreement during the covenant relief period as set forth therein and described below, (iv) impose a minimum liquidity covenant for certain periods during the covenant relief period as set forth therein and described below, (v) increase the annual amortization in respect of the term loans thereunder to 7.5% per annum for certain periods as set forth therein, (vi) impose an "anti-cash hoarding" condition to the borrowing of revolving loans as set forth therein, (vii) provide that the maturity date for the Term Loans and revolving loans shall be the day that is 91 days prior to the stated maturity date of the Notes if the Notes have not otherwise been refinanced or extended to at least 91 days after the stated maturity date of the Term Loans and revolving loans, the aggregate principal amount of non-extended outstanding Notes and certain replacement debt exceeds $50 million and a minimum liquidity condition is not satisfied, (viii) provide for the reduction of the aggregate revolving commitments thereunder by $100 million, (ix) require that the Company appoint a financial advisor and (x) make certain other modifications to the mandatory prepayments (including the imposition of an excess cash flow mandatory prepayment), collateral provisions and covenants (including additional limitations on debt, liens, investments and restricted payments such as dividends) as set forth therein.

After effectiveness of the Second Amendment, interest on loans made under the Credit Agreement in U.S. Dollars accrues, at the Company's option, at a rate per annum equal to (1) the Base Rate (as defined below) plus a margin ranging from 0.25% to 2.75% depending upon the Company's consolidated leverage ratio (except that, during the period that financial covenant relief pursuant to the Second Amendment is in effect, the margin will not be less than 2.25% per annum) or (2) Adjusted Term SOFR (as defined in the Credit Agreement, including certain credit spread adjustments) for an interest period to be selected by the Company plus a margin ranging from 1.25% to 3.75% depending upon the Company's consolidated leverage ratio (except that, during the period that financial covenant relief pursuant to the Second Amendment is in effect, the margin will not be less than 3.25% per annum) (such margin, the "Applicable Margin"). The "Base Rate" is equal to a fluctuating rate equal to the highest of (a) the Prime Rate (as defined in the Credit Agreement), (b) 0.50% above the NYFRB Rate (as defined in the Credit Agreement) and (c) one-month Adjusted Term SOFR (as defined in the Credit Agreement) plus 1.00%. Interest on loans made under the Revolving Credit Facility in Alternative Currencies accrues at a rate per annum equal to a customary benchmark rate (including, in certain cases, credit spread adjustments) plus the Applicable Margin.

The Credit Agreement contains customary covenants, including limitations on the Company's ability to, among other things, incur indebtedness, create liens on assets, engage in certain fundamental corporate changes, make investments, repurchase stock, pay dividends or make similar distributions, engage in certain affiliate transactions, or enter into agreements that restrict the Company's ability to create liens, pay dividends or make loan repayments. In addition, the Company must comply with financial covenants which, after effectiveness of the Second Amendment are as follows (unless the covenant relief period under the Second Amendment is earlier terminated by the Company):

- maintaining a maximum consolidated leverage ratio, determined as of the last day of each fiscal quarter, of (i) 4.75 to 1.00, for the fiscal quarter ending on or around April 30, 2023, (ii) 6.80 to 1.00 for the fiscal quarter ending on or around July 31, 2023, (iii) 8.17 to 1.00 for the fiscal quarter ending on or around October 31, 2023, (iv) 8.58 to 1.00 for the fiscal quarter ending on or around January 31, 2024, (v) 7.26 to 1.00 for the fiscal quarter ending on or around April 30, 2024, (vi) 6.36 to 1.00 for the fiscal quarter ending on or around July 31, 2024, (vii) 5.85 to 1.00 for the fiscal quarter ending on or around October 31, 2024, (viii) 5.77 to 1.00 for the fiscal quarter ending on or around January 31, 2025, and (ix) 3.75 to 1.00 for the fiscal quarter ending on or around April 30, 2025 and each fiscal quarter thereafter subject to increase to 4.25 to 1.00 for the four full 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;

- maintaining a minimum consolidated interest expense coverage ratio, determined as of the last day of each fiscal quarter, of (i) 2.50 to 1.00 for the fiscal quarter ending on or around April 30, 2023, (ii) 2.04 to 1.00 for the fiscal quarter ending on or around July 31, 2023, (iii) 1.66 to 1.00 for the fiscal quarter ending on or around October 31, 2023, (iv) 1.61 to 1.00 for the fiscal quarter ending on or around January 31, 2024, (v) 1.81 to 1.00 for the fiscal quarter ending on or around April 30, 2024, (vi) 2.07 to 1.00 for the fiscal quarter ending on or around July 31, 2024, (vii) 2.27 to 1.00 for the fiscal quarter ending on or around October 31, 2024, (viii) 2.41 to 1.00 for the fiscal quarter ending on or around January 31, 2025, and (ix) 3.50 to 1.00 for the fiscal quarter ending April 30, 2025 and each fiscal quarter thereafter; and
- until January 31, 2025, maintaining a minimum consolidated liquidity (as further defined in the Credit Agreement but excluding revolving credit commitments scheduled to expire in 2024) of $150 million as of the last day of each monthly accounting period of the Company.

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

Compliance with the leverage and interest expense coverage financial covenants is measured quarterly based upon the Company’s performance over the most recent four quarters, and compliance with the liquidity covenant is measured as of the last day of each monthly accounting period. As of July 30, 2023, the Company was in compliance with the financial covenants in the Credit Agreement. See “Liquidity” in Note 1, Organization and Basis of Presentation, for additional information about compliance with the financial covenants.

The $100 million reduction in borrowing capacity of the Revolving Credit Facility in connection with the Second Amendment resulted in a write-off of deferred financing costs and debt discount totaling $0.8 million in the second quarter of fiscal year 2024, which was included in "Interest expense" in the Statements of Operations.

In the first quarter of fiscal year 2024, the Company entered into an interest rate swap agreement with a 2.75 year term to hedge the variability of interest payments on $150.0 million of debt outstanding on the Term Loans at a Term SOFR rate of 3.58%, plus a variable margin and spread based on the Company’s consolidated leverage ratio.

In the fourth quarter of fiscal year 2023, the Company entered into an interest rate swap agreement with a 5 year term to hedge the variability of interest payments on $450.0 million of debt outstanding on the Term Loans at a Term SOFR rate of 3.44%, plus a variable margin and spread 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 with a 3 year term to hedge the variability of interest payments on the first $150.0 million of debt outstanding under the Company's Revolving Credit Facility at a LIBOR-referenced rate of 0.73%, plus a variable margin and spread based on the Company's consolidated leverage ratio. This interest rate swap agreement matured during the first quarter of 2024.

<u>Convertible Senior Notes</u>

On October 12, 2022 and October 21, 2022, the Company issued and sold $300.0 million and $19.5 million, respectively, in aggregate principal amount of 1.625% Convertible Senior Notes due 2027 (the "Notes") in a private placement. The Notes were issued pursuant to an indenture, dated October 12, 2022, by and among the Company, the Subsidiary Guarantors (as defined below) party thereto and U.S. Bank Trust Company, National Association, as trustee (the "Indenture"). The Notes are jointly and severally and fully and unconditionally guaranteed by each of the Company’s current and future direct and indirect wholly-owned domestic subsidiaries (the “Subsidiary Guarantors”) that guarantee its borrowings under its Credit Agreement. The Notes bear interest at a rate of 1.625% per year, payable semi-annually in arrears on May 1 and November 1 of each year, beginning on May 1, 2023. The Notes will mature on November 1, 2027, unless earlier converted, redeemed or repurchased.

The initial conversion rate of the Notes is 26.8325 shares of the Company's common stock per $1,000 principal amount of Notes (which is equivalent to an initial conversion price of approximately $37.27 per share). The conversion rate is subject to adjustment upon the occurrence of certain events specified in the Indenture but will not be adjusted for accrued and unpaid interest. In addition, upon the occurrence of a Make-Whole Fundamental Change (as defined in the Indenture) or if the Company delivers a Notice of Sale Price Redemption (as defined in the Indenture), the Company will, in certain circumstances, increase the conversion rate by a number of additional shares of common stock as described in the Indenture for a holder who elects to convert its Notes in connection with such Make-Whole Fundamental Change or to convert its Notes called (or deemed called as provided in the Indenture) for redemption in connection with such Notice of Sale Price Redemption, as the case may be.

Prior to the close of business on the business day immediately preceding July 1, 2027, the Notes are convertible at the option of the holders thereof only under the following circumstances: (1) during any fiscal quarter commencing after the fiscal quarter ending on January 29, 2023 (and only during such fiscal quarter), if the last reported sale price of the Company's common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding fiscal quarter is greater than or equal to 130% of the conversion price on each applicable trading day; (2) during the five business day period after any ten consecutive trading day period in which, for each trading day of that period, the Trading Price (as defined in the Indenture), as determined following a request by a holder of Notes in accordance with the procedures described in the Indenture, per $1,000 principal amount of Notes for such trading day was less than 98% of the product of the last reported sale price of the Company's common stock and the conversion rate on each such trading day; (3) if the Company calls such Notes for redemption, at any time prior to the close of business on the scheduled trading day immediately preceding the redemption date, but only with respect to the Notes called (or deemed called as provided in the Indenture) for redemption; or (4) upon the occurrence of specified corporate events described in the Indenture. As of July 30, 2023, none of the conditions allowing holders of the Notes to convert had been met. On or after July 1, 2027 until the close of business on the second scheduled trading day immediately preceding the maturity date of the Notes, holders of the Notes may convert all or a portion of their Notes, regardless of the foregoing conditions. Upon conversion, the Notes will be settled in cash up to the aggregate principal amount of the Notes to be converted, and in cash, shares of the Company's common stock or any combination thereof, at the Company's option, in respect of the remainder, if any, of the Company's conversion obligation in excess of the aggregate principal amount of the Notes being converted.

The Company may not redeem the Notes prior to November 5, 2025. The Company may redeem for cash all or any portion of the Notes (subject to the limitation described below), at the Company's option, on or after November 5, 2025 and before the 61st scheduled trading day immediately preceding the maturity date if the last reported sale price of the Company's common stock has been at least 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading day period (including the last trading day of such period) ending on, and including, the trading day immediately preceding the date on which the Company provides the related notice of sale price redemption, at a redemption price equal to 100% of the principal amount of the Notes to be redeemed, plus accrued and unpaid interest to, but excluding, the redemption date. If the Company redeems less than all the outstanding Notes, at least $75.0 million aggregate principal amount of Notes must be outstanding and not subject to redemption as of the relevant redemption notice date. No sinking fund is provided for the Notes.

Upon the occurrence of a Fundamental Change (as defined in the Indenture) prior to the maturity date of the Notes, holders of the Notes may require the Company to repurchase all or a portion of the Notes for cash at a price equal to 100% of the principal amount of the Notes to be repurchased, plus any accrued and unpaid interest to, but excluding, the Fundamental Change Repurchase Date (as defined in the Indenture).

Convertible Note Hedge Transactions

On October 6, 2022 and October 19, 2022, the Company entered into privately negotiated convertible note hedge transactions (the "Convertible Note Hedge Transactions") with an affiliate of one of the initial purchasers of the Notes and another financial institution (collectively, the "Counterparties") whereby the Company has the option to purchase the same number of shares of the Company's common stock initially underlying the Notes in the aggregate for approximately $37.27 per share, which is subject to anti-dilution adjustments substantially similar to those in the Notes. The Convertible Note Hedge Transactions will expire upon the maturity of the Notes, if not earlier exercised. The Convertible Note Hedge Transactions are expected to reduce the potential dilution to the common stock upon the conversion of the Notes and/or offset any cash payments the Company is required to make in excess of the principal amount of converted Notes, as the case may be, in the event that the market price per share of common stock, as measured under the terms of the Convertible Note Hedge Transactions, is greater than the strike price of the Convertible Note Hedge Transactions, which initially corresponds to the initial conversion price of the Notes, or approximately $37.27 per share of the common stock. The Convertible Note Hedge Transactions are separate transactions, entered into by the Company with each of the Counterparties, and are not part of the terms of the Notes. Holders of the Notes do not have any rights with respect to the Convertible Note Hedge Transactions. The Company used approximately $72.6 million of the net proceeds from the offering of the Notes to pay the cost of the Convertible Note Hedge Transactions. The Convertible Note Hedge Transactions are recorded in additional paid-in capital in the Balance Sheets as they do not require classification outside of equity pursuant to ASC 480 and qualify for equity classification pursuant to ASC 815.

Warrant Transactions

On October 6, 2022 and on October 19, 2022, the Company separately entered into privately negotiated warrant transactions (the "Warrants") with the Counterparties whereby the holders of the Warrants have the option to acquire, collectively, subject to anti-dilution adjustments, approximately 8.6 million shares of the Company's common stock at an initial strike price of approximately $51.15 per share. The Warrants were sold in private placements to the Counterparties pursuant to an exemption from the registration requirements of the Securities Act of 1933, as amended (the "Securities Act"), afforded by Section 4(a)(2) of the Securities Act. If the market price per share of the common stock, as measured under the terms of the Warrants, exceeds the strike price of the Warrants, the Warrants could have a dilutive effect on the common stock, unless the Company elects, subject to certain conditions, to settle the Warrants in cash. The Warrants will expire over a period beginning in February 2028.

The Warrants are separate transactions, entered into by the Company with each of the Counterparties, and are not part of the terms of the Notes. Holders of the Notes do not have any rights with respect to the Warrants. The Company received aggregate proceeds of approximately $42.9 million from the sale of the Warrants to the Counterparties. The Warrants are recorded in additional paid-in capital in the Balance Sheets as they do not require classification outside of equity pursuant to ASC 480 and qualify for equity classification pursuant to ASC 815.

In combination, the Convertible Note Hedge Transactions and the Warrants synthetically increase the strike price of the conversion option of the Notes from approximately $37.27 to $51.15, reducing the dilutive effect of the Notes in exchange for a net cash premium of $29.7 million.

Interest Expense

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

	Three Months Ended		Six Months Ended	
(in thousands)	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
Contractual interest	$ 24,156	$ 1,309	$ 45,397	$ 2,216
Interest swap agreement	(2,445)	(170)	(4,590)	(1)
Amortization of debt discount and issuance costs	1,689	120	3,103	241
Write-off of deferred financing costs and debt discount	771	—	771	—
Total interest expense	$ 24,171	$ 1,259	$ 44,681	$ 2,456

As of July 30, 2023, there were no amounts outstanding under the letters of credit, swing line loans and alternative currency sub-facilities.

Note 10: 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, changes in valuation allowance, the non-deductibility of goodwill impairment charges, and research and development ("R&D") tax credits. The Tax Cuts and Jobs Act requires R&D costs incurred for tax years beginning after December 31, 2021 to be capitalized and amortized ratably over five or fifteen years for tax purposes, depending on where the research activities are conducted. The Company has elected to treat global intangible low-taxed income ("GILTI") as a period cost and the additional capitalization of R&D costs within GILTI increases the Company's provision for income taxes.

During the second quarter of fiscal year 2024, the Company determined utilization of its net deferred tax assets ("DTAs") in the United States ("U.S.") was limited, and accordingly recorded an increase to its valuation allowance reserve of $52.8 million. This determination was made after evaluating both the positive and negative evidence regarding the recoverability of the Company’s net U.S. DTAs. Significant negative evidence that led to this conclusion included substantial cumulative GAAP financial losses, goodwill impairment (as discussed in Note 8, Goodwill and Intangible Assets), and in the absence of additional actions, the Company's inability to maintain compliance with the financial covenants over the next twelve months from the issuance of the accompanying interim unaudited condensed consolidated financial statements (as discussed in Note 1, Organization and Basis of Presentation). The amount of the DTA considered realizable, however, could be adjusted if estimates of future taxable income during the carryforward period are increased, or if objective negative evidence in the form of cumulative losses in no longer present and additional weight is given to subjective evidence such as the Company’s projections for future growth.

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 29, 2023	$ 31,471
Additions based on tax positions related to the current fiscal year	365
Decreases based on tax positions related to prior fiscal years	(793)
Balance at July 30, 2023	$ 31,043

Included in the balance of gross unrecognized tax benefits at July 30, 2023 and January 29, 2023 are $12.1 million and $12.6 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)	July 30, 2023	January 29, 2023
Deferred tax assets - non-current	$ 17,524	$ 17,446
Other long-term liabilities	12,127	12,641
Total accrued taxes	$ 29,651	$ 30,087

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 Operations.

Tax years prior to 2013 (the Company’s fiscal year 2014) are generally not subject to examination by the 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 (loss) income from continuing operations before taxes and equity method (loss) income was as follows:

	Three Months Ended		Six Months Ended	
(in thousands)	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
Domestic	$ (73,470)	$ 17,786	$ (92,311)	$ 13,004
Foreign	(251,929)	45,546	(264,915)	96,421
Total	$ (325,399)	$ 63,332	$ (357,226)	$ 109,425

Note 11: Leases

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

The components of lease expense were as follows:

	Three Months Ended		Six Months Ended	
(in thousands)	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
Operating lease cost	$ 2,167	$ 1,454	$ 4,316	$ 2,900
Short-term lease cost	484	477	1,093	748
Sublease income	(162)	(34)	(320)	(69)
Total lease cost	$ 2,489	$ 1,897	$ 5,089	$ 3,579

Supplemental cash flow information related to leases was as follows:

	Six Months Ended	
(in thousands)	July 30, 2023	July 31, 2022
Cash paid for amounts included in the measurement of lease liabilities	$ 4,280	$ 2,703
Right-of-use assets obtained in exchange for new operating lease liabilities	$ 2,696	$ 1,960

	July 30, 2023
Weighted-average remaining lease term–operating leases (in years)	5.68
Weighted-average discount rate on remaining lease payments–operating leases	6.9 %

Supplemental balance sheet information related to leases was as follows:

(in thousands)	July 30, 2023	January 29, 2023
Operating lease right-of-use assets in "Other assets"	$ 30,885	$ 31,807
Operating lease liabilities in "Accrued liabilities"	$ 6,416	$ 6,209
Operating lease liabilities in "Other long-term liabilities"	25,635	26,484
Total operating lease liabilities	$ 32,051	$ 32,693

Maturities of lease liabilities as of July 30, 2023 are as follows:

(in thousands)	
Fiscal Year Ending:	
2024 (remaining six months)	$ 4,234
2025	8,470
2026	7,076
2027	5,235
2028	4,606
Thereafter	9,679
Total lease payments	39,300
Less: imputed interest	(7,249)
Total	$ 32,051

Note 12: Commitments and Contingencies

Legal Matters

In accordance with ASC 450-20, "Loss Contingencies," the Company accrues an undiscounted liability for those contingencies where the incurrence of a loss is probable and the amount can be reasonably estimated. The Company also discloses the amount accrued and the amount of a reasonably possible loss in excess of the amount accrued, if material and if the amount can be reasonably estimated. 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. However, for liabilities that are reasonably possible but not probable, the Company discloses the amount of reasonably possible loss or range of reasonably possible loss, if material and if the amount can be reasonably estimated. 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 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.

On June 14, 2022, Denso Corporation, and several of its affiliates (collectively "Denso"), filed a complaint against Sierra Wireless and several of its affiliates ("Sierra Entities") in the Superior Court of California, County of San Diego. Denso asserts eight causes of action, including claims for breach of express and implied warranties, equitable indemnification, negligent and intentional misrepresentation, unjust enrichment, promissory estoppel, and declaratory judgment, based on an alleged defect related to the GPS week number rollover date. Denso alleges that it incurred in excess of $84 million in damages and costs to implement a firmware update provided by Sierra Entities' supplier in late 2018, before Sierra Wireless disposed of the automotive business, to address the alleged product defect. Denso filed an amended complaint on September 23, 2022, asserting essentially the same eight causes of action. After briefing on a demurrer and initial discovery, the parties' reached a settlement in principle and are working to finalize a settlement agreement.

On March 25, 2022, Harman Becker Automotive Systems GmbH, and several of its affiliates (collectively "Harman"), filed a complaint against certain Sierra Entities in the District Court of Munich, Germany. Harman asserts claims that the Sierra Entities, in connection with the delivery of certain modules by the Sierra Entities, violated a frame supply agreement, a quality assurance agreement and the United Nations Convention on Contracts for the International Sales of Goods. Harman alleges that it incurred approximately $16 million in damages and costs, the bulk of which amount related to settling with a customer that had to implement a firmware update provided by Sierra Entities' supplier in late 2018, before Sierra Wireless disposed of the automotive business, to address the alleged product defect. Since the case is at an early stage, at this time, the Company is unable to form a conclusion as to the likelihood of an unfavorable outcome or the amount or range of any possible loss resulting from the alleged claims. The Company intends to defend the claims vigorously.

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 total range of probable loss between $7.9 million and $9.4 million. To date, the Company has made $6.3 million in payments towards the remedial action plan. As of July 30, 2023, the estimated range of probable loss remaining was between $1.6 million and $3.1 million. 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 and as of July 30, 2023, has a remaining accrual of $1.6 million related to this matter. 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.

The Company is a party to a variety of agreements in the ordinary course of business under which the Company may be obligated to indemnify a third party with respect to certain matters. The impact on the Company's future financial results is not subject to reasonable estimation because considerable uncertainty exists as to the final outcome of any claims and whether claims will be made.

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.

Licenses

Under certain license agreements, the Company is committed to make royalty payments based on the sales of products using certain technologies. The Company recognizes royalty obligations as determinable in accordance with agreement terms.

Deferred Compensation

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

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

(in thousands)	July 30, 2023	January 29, 2023
Accrued liabilities	$ 9,458	$ 4,714
Other long-term liabilities	34,925	37,563
Total deferred compensation liabilities under this plan	$ 44,383	$ 42,277

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 Company's corporate owned life insurance is presented below:

(in thousands)	July 30, 2023	January 29, 2023
Other current assets	$ 6,212	$ —
Other assets	27,910	33,676
Total cash surrender value of corporate-owned life insurance	$ 34,122	$ 33,676

Note 13: Restructuring

The Company has undertaken structural reorganization actions to reduce its workforce as a result of cost-saving measures and internal resource alignment including from the realization of synergies of the Sierra Wireless Acquisition. The Company also implemented a separate reduction in workforce plan that commenced during the second quarter of fiscal year 2024 and this reduction in workforce plan is expected to be largely complete by the third quarter of fiscal year 2024. These reorganization actions resulted in total restructuring charges of $9.8 million and $11.8 million in the three and six months ended July 30, 2023, respectively. The Company did not have any restructuring charges during the three and six months ended July 31, 2022. Restructuring related liabilities are included in "Accrued liabilities" in the Balance Sheets.

Restructuring activity is summarized as follows:

(in thousands)	One-time employee termination benefits	Other restructuring	Total
Balance at January 29, 2023	$ 4,027	$ 12	$ 4,039
Charges [(1)]	10,065	1,756	11,821
Cash payments	(5,744)	(1,287)	(7,031)
Balance at July 30, 2023	$ 8,348	$ 481	$ 8,829

[(1)] Restructuring charges include $5.8 million during the six months ended July 30, 2023 related to the reduction in workforce plan that commenced during the second quarter of fiscal year 2024.

Restructuring charges were included in the Statements of Operations as follows:

	Three Months Ended		Six Months Ended	
(in thousands)	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
Cost of sales	$ 362	$ —	$ 859	$ —
Selling, general and administrative	5,445	—	5,782	—
Product development and engineering	3,954	—	5,180	—
Total restructuring charges [(1)]	$ 9,761	$ —	$ 11,821	$ —

[(1)] Restructuring charges include $5.8 million during each of the three and six months ended July 30, 2023 related to the reduction in workforce plan that commenced during the second quarter of fiscal year 2024.

Note 14: Concentration of Risk

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

	Three Months Ended		Six Months Ended	
(percentage of net sales)	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
Trend-tek Technology Ltd. (and affiliates)	6 %	15 %	6 %	16 %
CEAC International Limited	6 %	14 %	6 %	13 %
Frontek Technology Corporation (and affiliates)	9 %	12 %	7 %	13 %
Arrow Electronics (and affiliates)	3 %	10 %	3 %	8 %

Outside Subcontractors and Suppliers

The Company relies on a limited number of third-party subcontractors and suppliers for the supply of silicon wafers, chipsets and other electronic components, and for product manufacturing, packaging, testing and certain other tasks. Disruption or termination of supply sources or subcontractors 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 Vietnam, China, Taiwan, Malaysia and Mexico.

Note 15: 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 currently has four operating segments—Signal Integrity, Advanced Protection and Sensing, IoT System, and IoT Connected Services—that represent four separate reportable segments.

Historically, the Company had three operating segments—Signal Integrity, Wireless and Sensing, and Protection—that had been aggregated into two reportable segments identified as the High-Performance Analog Group, which was comprised of the Signal Integrity and Wireless and Sensing operating segments, and the System Protection Group, which was comprised of the Protection operating segment. In the fourth quarter of fiscal year 2023, as a result of organizational restructuring, the proximity sensing business and the power business were moved from the previous Wireless and Sensing operating segment into the newly formed Advanced Protection and Sensing operating segment, which also includes the Protection business. Following that organizational restructuring, the Company determined that Signal Integrity and the revised Wireless and Sensing operating segments were no longer economically similar and as a result the Company has concluded that Signal Integrity should be separately reported as its own reportable segment. Also in the fourth quarter of fiscal year 2023, in conjunction with the Sierra Wireless Acquisition, the Company formed two additional operating segments including the IoT System operating segment, which absorbed the Company's revised Wireless and Sensing operating segment, and the IoT Connected Services operating segment. As a result of the reorganization and the Sierra Wireless Acquisition, the Company has four reportable segments. All prior year information in the tables below has been revised retrospectively to reflect the change to the Company's reportable segments.

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

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

	Three Months Ended				Six Months Ended			
(in thousands)	July 30, 2023		July 31, 2022		July 30, 2023		July 31, 2022	
Net sales:								
Signal Integrity Products Group	$46,507	20 %	$87,355	42 %	$88,153	19 %	$166,657	41 %
Advanced Protection and Sensing Products Group	48,521	20 %	65,275	31 %	84,578	18 %	137,697	33 %
IoT System Products Group	119,455	50 %	56,624	27 %	254,031	53 %	107,049	26 %
IoT Connected Services Group	23,889	10 %	—	— %	48,149	10 %	—	— %
Total net sales	$238,372	100 %	$209,254	100 %	$474,911	100 %	$411,403	100 %
Gross profit:								
Signal Integrity Products Group	$27,850		$60,226		$52,934		$116,091	
Advanced Protection and Sensing Products Group	27,116		36,165		46,515		73,294	
IoT System Products Group	51,209		40,237		110,332		78,490	
IoT Connected Services Group	11,903		—		23,066		—	
Unallocated costs, including share-based compensation and amortization of acquired technology	(17,350)		(1,857)		(29,173)		(3,899)	
Total gross profit	$100,728		$134,771		$203,674		$263,976	

Information by Sales Channel

(in thousands, except percentages)	Three Months Ended				Six Months Ended			
	July 30, 2023		July 31, 2022		July 30, 2023		July 31, 2022	
Distributor	$ 151,995	64 %	$ 184,983	88 %	$ 296,269	62 %	$ 364,016	88 %
Direct	86,377	36 %	24,271	12 %	178,642	38 %	47,387	12 %
Total net sales	$ 238,372	100 %	$ 209,254	100 %	$ 474,911	100 %	$ 411,403	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.

Geographic Information

Net sales activity by geographic region was as follows:

	Three Months Ended		Six Months Ended	
(percentage of total net sales)	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
Asia-Pacific	62 %	72 %	57 %	73 %
North America	24 %	16 %	28 %	15 %
Europe	14 %	12 %	15 %	12 %
	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 sales for at least one of the periods presented:

	Three Months Ended		Six Months Ended	
(percentage of total net sales)	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
China (including Hong Kong)	29 %	54 %	27 %	55 %
United States	23 %	15 %	25 %	13 %

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 16: 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. 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 July 30, 2023, the remaining authorization under the program was $209.4 million. Under the program, the Company may repurchase its common stock at any time or from time to time, without prior notice, subject to market conditions and other considerations. The Company's repurchases may be made through Rule 10b5-1 and/or Rule 10b-18 or other trading plans, open market purchases, privately negotiated transactions, block purchases or other transactions. To the extent the Company repurchases any shares of its common stock under the program in the future, the Company expects to fund such repurchases from cash on hand and borrowings on its Revolving Credit Facility. The Company has no obligation to repurchase any shares under the program and may suspend or discontinue it at any time.

The following table summarizes activity under the program for the presented periods:

	Three Months Ended				Six Months Ended			
	July 30, 2023		July 31, 2022		July 30, 2023		July 31, 2022	
(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	—	$ —	—	$ —	—	$ —	762,093	$ 50,000

Note 17: 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. The Company is applying hedge accounting to all foreign currency derivatives and has designated these hedges as cash flow hedges.

The Company's foreign currency forward contracts had the following outstanding balances:

	July 30, 2023			January 29, 2023		
(in thousands, except number of instruments)	Number of Instruments	Sell Notional Value	Buy Notional Value	Number of Instruments	Sell Notional Value	Buy Notional Value
Sell USD/Buy CAD Forward Contract	3	$ 3,400	$ 4,648	9	$ 9,965	$ 13,643
Sell USD/Buy GBP Forward Contract	6	$ 1,274	£ 1,144	18	$ 3,801	£ 3,406
Total	9			27		

These contracts have been designated as cash flows hedges and the unrealized gains or losses, net of tax, are recorded as a component of "Accumulated other comprehensive income or loss" ("AOCI") in the Balance Sheets. The effective portions of the cash flow hedges are recorded in AOCI until the hedged item is recognized in either "Selling, general and administrative expense" or "Product development and engineering expense" in the Statements of Operations once the foreign exchange contract matures, offsetting the underlying hedged expenses. Any ineffective portions of the cash flow hedges are recorded in "Non-operating income, net" in the Statements of Operations. The Company presents its derivative assets and liabilities at their gross fair values in the Balance Sheets.

In the first quarter of fiscal year 2024, the Company entered into an interest rate swap agreement with a 2.75 year term to hedge the variability of interest payments on $150.0 million of debt outstanding on the Term Loans at a Term SOFR rate of 3.58%, plus a variable margin and spread based on the Company’s consolidated leverage ratio.

In the fourth quarter of fiscal year 2023, the Company entered into an interest rate swap agreement with a 5 year term to hedge the variability of interest payments on $450.0 million of debt outstanding on the Term Loans at a Term SOFR rate of 3.44%, plus a variable margin and spread 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 with a 3 year term to hedge the variability of interest payments on the first $150.0 million of debt outstanding under the Company's Revolving Credit Facility at a LIBOR-referenced rate of 0.73%, plus a variable margin and spread based on the Company's consolidated leverage ratio. This interest rate swap agreement matured during the first quarter of 2024.

The interest rate swap agreements have been designated as cash flow hedges and unrealized gains or losses, net of income tax, are recorded as a component of AOCI in the Balance Sheets. As the various settlements are made on a monthly basis, the realized gain or loss on the settlements are recorded in "Interest expense" in the Statements of Operations. The interest rate swap agreements resulted in a realized gain of $2.4 million for the three months ended July 30, 2023, compared to a realized gain of $0.2 million for the three months ended July 31, 2022. The interest rate swap agreements resulted in a realized gain of $4.6 million for the six months ended July 30, 2023, compared to an immaterial realized gain for the six months ended July 31, 2022.

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

(in thousands)	July 30, 2023	January 29, 2023
Interest rate swap agreement	$ 10,052	$ 6,067
Foreign currency forward contracts	309	717
Total other current assets	$ 10,361	$ 6,784
Interest rate swap agreement	$ 3,344	$ —
Total other long-term assets	$ 3,344	$ —
Interest rate swap agreement	—	6,432
Total other long-term liabilities	$ —	$ 6,432

During 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 Operations. As of July 30, 2023, the notional value of the total return swap contracts was $7.6 million and the fair value resulted in an asset of $0.04 million. As of January 29, 2023, the notional value of the total return swap contracts was $5.2 million and the fair value resulted in an asset of $0.1 million. The total return swap contracts resulted in a net gain recognized in earnings of $0.3 million for the three months ended July 30, 2023, compared to a net gain recognized in earnings of $0.1 million for the three months ended July 31, 2022. The total return swap contracts resulted in a net gain recognized in earnings of $0.2 million for the six months ended July 30, 2023, compared to a net loss recognized in earnings of $0.4 million for the six months ended July 31, 2022.

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"),"Risk Factors" and "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") is a high-performance, IoT systems and cloud connectivity service provider. We account for results in four reportable segments—Signal Integrity, Advanced Protection and Sensing, IoT System and IoT Connected Services. Historically, we had three operating segments—Signal Integrity, Wireless and Sensing, and Protection—that had been aggregated into two reportable segments identified as the High-Performance Analog Group, which was comprised of the Signal Integrity and Wireless and Sensing operating segments, and the System Protection Group, which was comprised of the Protection operating segment. In the fourth quarter of fiscal year 2023, as a result of organizational restructuring, the proximity sensing business and the power business were moved from the previous Wireless and Sensing operating segment into the newly formed Advanced Protection and Sensing operating segment, which also includes the Protection business. Following this organizational restructuring, we determined that Signal Integrity and the revised Wireless and Sensing operating segments were no longer economically similar and as a result we concluded that Signal Integrity should be separately reported as its own reportable segment. Also in the fourth quarter of fiscal year 2023, in conjunction with the acquisition of Sierra Wireless, Inc. ("Sierra Wireless") we formed two additional operating segments including the IoT System operating segment, which absorbed our revised Wireless and Sensing operating segment, and the IoT Connected Services operating segment. As a result of the reorganization and the Sierra Wireless Acquisition (as defined below), we have four reportable segments. All prior year information in the tables below has been revised retrospectively to reflect the change to our reportable segments. See Note 15, Segment Information, to our interim unaudited condensed consolidated financial statements for segment information.

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

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

IoT System. We design, develop, manufacture and market a portfolio of specialized radio frequency products used in a wide variety of industrial, medical and communications 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. These features make these products particularly suitable for machine-to-machine and IoT applications. We also offer a comprehensive product portfolio of IoT solutions that enable businesses to connect and manage their devices, collect and analyze data, and improve decision-making. The portfolio includes a wide range of modules, gateways, routers, and connected services that are designed to meet the specific needs of different industries and applications. Sierra Wireless' modules are available in a variety of form factors and connectivity options, including LTE-M, NB-IoT and 5G, and can be integrated into an array of devices and systems. Our gateways and routers are designed to provide reliable and secure connectivity for IoT devices, while our connected services enable businesses to manage devices and connectivity so businesses can navigate the complex IoT landscape and realize the full potential of connected devices.

IoT Connected Services. We design, develop, operate and market a portfolio of connected services used in a wide variety of industrial, medical and communications applications. Our connected services include wireless connectivity and cloud-based services for customers to deploy, connect, and operate their end applications. Our services have been purpose-built for IoT applications and include features such as SIM and subscription management, device and data management, geolocation support, as well as reporting and alerting that can be configured or tailored to a variety of IoT use cases.

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

Our net sales by reportable segment were as follows:

	Three Months Ended		Six Months Ended	
(in thousands)	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
Signal Integrity	$ 46,507	$ 87,355	$ 88,153	$ 166,657
Advanced Protection and Sensing	48,521	65,275	84,578	137,697
IoT System	119,455	56,624	254,031	107,049
IoT Connected Services	23,889	—	48,149	—
Total	$ 238,372	$ 209,254	$ 474,911	$ 411,403

We design, develop, manufacture and market a wide range of products for commercial applications, the majority of which are sold into the infrastructure, high-end consumer and industrial end markets.

Infrastructure: data centers, PON, base stations, optical networks, servers, carrier networks, switches and routers, cable modems, wireless local area network 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, medical, security systems, automotive, industrial and home automation and other industrial equipment.

Our end customers for our silicon solutions are primarily original equipment manufacturers that produce and sell technology solutions. Our IoT module, router, gateways and managed connectivity solutions ship to IoT device makers and enterprises to provide IoT connectivity to end devices.

Recent Developments

On May 24, 2023, our board of directors (the “Board” or “Board of Directors”) appointed Paul H. Pickle to serve as our President and Chief Executive Officer, effective as of June 30, 2023 (the “Transition Date”).

On May 24, 2023, the Board also appointed Mr. Pickle as a member of the Board to serve until our calendar year 2024 annual meeting of stockholders and until his successor is elected or qualified, or until his earlier death, resignation or removal. This appointment became effective on the Transition Date.

Pursuant to the Cooperation Agreement entered into by and among us and Lion Point Capital, LP and certain of its affiliates on March 17, 2023, the Board appointed Hong Q. Hou as a member of the Board, effective July 1, 2023, to serve until our calendar year 2024 annual meeting of stockholders and until his successor is elected or qualified, or until his earlier death, resignation or removal.

On September 5, 2023, the Board appointed Mark Lin to serve as our Executive Vice President and Chief Financial Officer effective as of a date, not later than October 4, 2023, to be mutually agreed upon by Mr. Lin and our Chief Executive Officer.

On June 6, 2023, we entered into the Second Amendment to the Credit Agreement (as such terms are defined in "—Liquidity and Capital Resources—Credit Agreement" below) to provide certain financial covenant relief as further described under "—Liquidity and Capital Resources—Credit Agreement" below.

During the second quarter of fiscal year 2024, we commenced a reduction in workforce plan. Additionally, during the six months ended July 30, 2023, we have undertaken structural reorganization actions to reduce our workforce as a result of cost-saving measures and internal resource alignment including from the realization of synergies of the Sierra Wireless Acquisition. Total restructuring charges in the three and six months ended July 30, 2023 were $9.8 million and $11.8 million, respectively, of which $5.8 million related to the reduction in workforce plan commenced during the second quarter of fiscal year 2024. For additional information, see Part II, Item 5, Other Information and Note 13, Restructuring, to our interim unaudited condensed consolidated financial statements.

Impact of Macroeconomic Conditions

We expect to see supply constraints ease for some products in the remainder of fiscal year 2024 due to macroeconomic conditions that have led to softer demand. We will continue to take appropriate actions to align inventory levels with current macroeconomic conditions and customer demand profiles. In addition, the prices to obtain raw materials and convert them into the necessary inventory have continued to increase in certain cases due to inflationary pressures and prices may continue to increase.

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. We rely on orders received and shipped within the same quarter for a portion of our sales. Orders received and shipped in the second quarters of fiscal years 2024 and 2023 were 37% and 5% of net sales, respectively. In the prior year period, as a result of macro conditions where demand was exceeding supply and we were seeing global shortages, lead times expanded, resulting in fewer orders being shipped and received in the same quarter. Sales made directly to customers during the second quarters of fiscal years 2024 and 2023 were 36% and 12% of net sales, respectively. The remaining 64% and 88% of net sales were made through independent distributors. The lower direct sales in the prior year period was due to customers electing to leverage the value of distribution to better manage their supply chain.

Our business relies on foreign-based entities. A significant amount of our third-party subcontractors and suppliers, including third-party foundries that supply silicon wafers, are located in foreign countries or territories including Taiwan and China. A significant amount of our assembly and test operations are conducted by third-party contractors located in foreign countries or territories including Vietnam, China, Taiwan, Malaysia and Mexico. Foreign sales constituted approximately 77% and 85% of our net sales during the second quarters of fiscal years 2024 and 2023, respectively. Approximately 62% and 72% of our sales during the second quarters of fiscal years 2024 and 2023, respectively, were to customers located in the Asia-Pacific region. The remaining foreign sales were primarily to customers in Europe and North America. Doing business in foreign locations also subjects us to export restrictions and trade laws, which may limit our ability to sell to certain customers.

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

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

Results of Operations

The following table sets forth, for the periods indicated, our Statements of Operations expressed as a percentage of net sales.

	Three Months Ended		Six Months Ended	
	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
Net sales	100.0 %	100.0 %	100.0 %	100.0 %
Cost of sales	53.3 %	35.1 %	52.6 %	35.3 %
Amortization of acquired technology	4.4 %	0.5 %	4.5 %	0.5 %
Total cost of sales	57.7 %	35.6 %	57.1 %	35.8 %
Gross profit	42.3 %	64.4 %	42.9 %	64.2 %
Operating costs and expenses, net:				
Selling, general and administrative	27.3 %	23.0 %	25.9 %	22.2 %
Product development and engineering	21.6 %	19.4 %	21.7 %	19.3 %
Intangible amortization	2.0 %	— %	2.1 %	— %
Gain on sale of business	— %	(8.6)%	— %	(4.4)%
Goodwill impairment	117.3 %	— %	58.9 %	— %
Total operating costs and expenses, net	168.2 %	33.8 %	108.6 %	37.2 %
Operating (loss) income	(125.9)%	30.6 %	(65.7)%	27.0 %
Interest expense	(10.1)%	(0.6)%	(9.4)%	(0.6)%
Interest income	0.3 %	0.3 %	0.4 %	0.2 %
Non-operating expense, net	(0.7)%	(0.2)%	(0.4)%	(0.1)%
Investment impairments and credit loss reserves, net	(0.1)%	0.2 %	(0.1)%	0.1 %
(Loss) income before taxes and equity method (loss) income	(136.5)%	30.3 %	(75.2)%	26.6 %
Provision for income taxes	23.7 %	5.7 %	11.4 %	4.9 %
Net (loss) income before equity method (loss) income	(160.2)%	24.5 %	(86.6)%	21.7 %
Equity method (loss) income	— %	0.1 %	— %	0.1 %
Net (loss) income	(160.3)%	24.7 %	(86.6)%	21.8 %
Net loss attributable to noncontrolling interest	— %	— %	— %	— %
Net (loss) income attributable to common stockholders	(160.3)%	24.7 %	(86.6)%	21.8 %
Percentages may not add precisely due to rounding.				

Our regional mix of income or loss before taxes and equity method income or loss was as follows:

	Three Months Ended		Six Months Ended	
(in thousands)	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
Domestic	$ (73,470)	$ 17,786	$ (92,311)	$ 13,004
Foreign	(251,929)	45,546	(264,915)	96,421
Total	$ (325,399)	$ 63,332	$ (357,226)	$ 109,425

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

Comparison of the Three Months Ended July 30, 2023 and July 31, 2022

Net Sales

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

(in thousands, except percentages)	Three Months Ended July 30, 2023		Three Months Ended July 31, 2022		
	Net Sales	% Net Sales	Net Sales	% Net Sales	Change
Infrastructure	$ 42,369	18 %	$ 84,533	40 %	(50)%
High-End Consumer	34,016	14 %	41,009	20 %	(17)%
Industrial	161,987	68 %	83,712	40 %	94 %
Total	$ 238,372	100 %	$ 209,254	100 %	14 %

Net sales for the second quarter of fiscal year 2024 were $238.4 million, an increase of 13.9% compared to $209.3 million for the second quarter of fiscal year 2023 driven by the Sierra Wireless Acquisition, which contributed $122.3 million of net sales to our Industrial end market, partially offset by softer demand impacting all end markets. We experienced a decrease of $42.2 million in net sales from our infrastructure end market for the second quarter of fiscal year 2024 compared to the second quarter of fiscal year 2023, primarily driven by an approximately $25 million decrease in PON sales, an approximately $6 million decrease in wireless infrastructure sales, an approximately $5 million decrease in data center sales and an approximately $2 million decrease in infrastructure automation and automotive sales. Net sales from our high-end consumer end market decreased $7.0 million for the second quarter of fiscal year 2024 compared to the second quarter of fiscal year 2023 primarily driven by an approximately $13 million decrease in TVS consumer product sales, partially offset by an approximately $3 million increase in our proximity sensing product sales. Net sales from our industrial end market increased $78.3 million during the second quarter of fiscal year 2024 versus the same period in the prior year primarily due to the Sierra Wireless Acquisition driven by approximately $77 million in module sales, approximately $23 million in managed connectivity sales and approximately $22 million in router sales, partially offset by an approximately $35 million decrease in LoRa-enabled product sales and an approximately $5 million decrease in industrial automation and automotive sales.

The following table summarizes our net sales by reportable segment:

(in thousands, except percentages)	Three Months Ended July 30, 2023		Three Months Ended July 31, 2022		
	Net Sales	% Net Sales	Net Sales	% Net Sales	Change
Signal Integrity Products Group	$ 46,507	20 %	$ 87,355	42 %	(47)%
Advanced Protection and Sensing Products Group	48,521	20 %	65,275	31 %	(26)%
IoT System Products Group	119,455	50 %	56,624	27 %	111 %
IoT Connected Services Group	23,889	10 %	—	— %	100 %
Total	$ 238,372	100 %	$ 209,254	100 %	14 %

Net sales were impacted by softer demand across all reportable segments. Net sales from our Signal Integrity Products Group decreased $40.8 million in the second quarter of fiscal year 2024 compared to the second quarter of fiscal year 2023 primarily driven by an approximately $25 million decrease in PON sales, an approximately $6 million decrease in wireless infrastructure sales and an approximately $5 million decrease in data center sales. Net sales from our Advanced Protection and Sensing Products Group decreased $16.8 million in the second quarter of fiscal year 2024 compared to the second quarter of fiscal year 2023 primarily driven by an approximately $13 million decrease in TVS consumer product sales and an approximately $7 million decrease in industrial automation and automotive sales, partially offset by an approximately $3 million increase in our proximity sensing product sales. Net sales from our IoT System Products Group increased $62.8 million primarily due to the Sierra Wireless Acquisition driven by approximately $77 million in module sales and approximately $22 million in router sales, partially offset by an approximately $35 million decrease in LoRa-enabled product sales. Net sales from our IoT Connected Services Group increased $23.9 million in the second quarter of fiscal year 2024 compared to the second quarter of fiscal year 2023 due to the Sierra Wireless Acquisition, which contributed approximately $23 million of managed connectivity sales and approximately $1 million of IoT application sales.

Gross Profit

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

(in thousands, except percentages)	Three Months Ended			
	July 30, 2023		July 31, 2022	
	Gross Profit	Gross Margin	Gross Profit	Gross Margin
Signal Integrity Products Group	$ 27,850	59.9 %	$ 60,226	68.9 %
Advanced Protection and Sensing Products Group	27,116	55.9 %	36,165	55.4 %
IoT System Products Group	51,209	42.9 %	40,237	71.1 %
IoT Connected Services Group	11,903	49.8 %	—	— %
Unallocated costs, including share-based compensation and amortization of acquired technology	(17,350)		(1,857)	
Total	$ 100,728	42.3 %	$ 134,771	64.4 %

In the second quarter of fiscal year 2024, gross profit decreased $34.0 million to $100.7 million from $134.8 million in the second quarter of fiscal year 2023. This decrease was primarily the result of an approximately $10 million increase in amortization of acquired technology related to the Sierra Wireless Acquisition, approximately $3 million of inventory step-up related to the Sierra Wireless Acquisition, a $32.4 million decrease from our Signal Integrity Products Group, which experienced lower sales due to softer demand, and a $9.0 million decrease from our Advanced Protection and Sensing Products Group, which experienced lower sales due to softer demand, partially offset by an $11.0 million increase from our IoT System Products Group due to the Sierra Wireless Acquisition, partially offset by softer demand, and $11.9 million from our IoT Connected Services Group due to the Sierra Wireless Acquisition.

Our gross margin was 42.3% in the second quarter of fiscal year 2024, compared to 64.4% in the second quarter of fiscal year 2023. Gross margin in our Signal Integrity Products Group was 59.9% in the second quarter of fiscal year 2024, compared to 68.9% in the second quarter of fiscal year 2023, primarily due to an unfavorable product mix driven by lower PON sales. Gross margin in our Advanced Protection and Sensing Products Group was 55.9% in the second quarter of fiscal year 2024, compared to 55.4% in the second quarter of fiscal year 2023, reflecting a favorable product mix driven by lower consumer sales. Gross margin in our IoT System Products Group was 42.9% in the second quarter of fiscal year 2024, compared to 71.1% in the second quarter of fiscal year 2023, reflecting an unfavorable product mix driven by lower LoRa-enabled product sales. Gross margin in our IoT Connected Services Group was 49.8% in the second quarter of fiscal year 2024.

The majority of our manufacturing is outsourced, resulting in relatively low fixed manufacturing costs and variable costs that highly correlate with volume.

Operating Costs and Expenses, net

(in thousands, except percentages)	Three Months Ended				
	July 30, 2023		July 31, 2022		Change
Selling, general and administrative	$ 65,024	16 %	$ 48,119	68 %	35 %
Product development and engineering	51,387	13 %	40,601	57 %	27 %
Intangible amortization	4,871	1 %	—	— %	100 %
Gain on sale of business	—	— %	(17,986)	(25)%	100 %
Goodwill impairment	279,555	70 %	—	— %	100 %
Total operating costs and expenses, net	$ 400,837	100 %	$ 70,734	100 %	467 %

<u>Selling, General and Administrative Expenses</u>

Selling, general and administrative ("SG&A") expenses increased $16.9 million in the second quarter of fiscal year 2024 compared to the second quarter of fiscal year 2023 primarily as a result of a $7.3 million net increase in staffing-related costs due to higher headcount resulting from the Sierra Wireless Acquisition, a $5.4 million increase in restructuring expenses and a $3.1 million increase in transaction and integration expenses primarily related to the Sierra Wireless Acquisition.

<u>Product Development and Engineering Expenses</u>

Product development and engineering expenses increased $10.8 million in the second quarter of fiscal year 2024 compared to the second quarter of fiscal year 2023 primarily as a result of a $6.7 million net increase in staffing-related costs due to higher headcount resulting from the Sierra Wireless Acquisition, and a $4.0 million increase in restructuring expenses. 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 increased by $4.9 million in the second quarter of fiscal year 2024 compared to the second quarter of fiscal year 2023 primarily due to intangibles acquired in the Sierra Wireless Acquisition related to customer relationships and trade name. Amortization of acquired technology intangibles is reflected in cost of sales.

Gain on Sale of Business

Gain on sale of business decreased by $18.0 million in the second quarter of fiscal year 2024 compared to the second quarter of fiscal year 2023 due to the divestiture of our high reliability discrete diodes and assemblies business(the "Disposal Group") in May 2022.

Goodwill Impairment

Goodwill impairment was $279.6 million for the second quarter of fiscal year 2024 primarily due to valuation adjustments of goodwill related to the Sierra Wireless Acquisition. See Note 8, Goodwill and Intangible Assets, to our interim unaudited condensed consolidated financial statements for additional information.

Interest Expense

Interest expense, including amortization of debt discounts and issuance costs, was $24.2 million and $1.3 million for the second quarters of fiscal years 2024 and 2023. The increase in the second quarter of fiscal year 2024 compared to the second quarter of fiscal year 2023 was primarily due to additional debt instruments entered into during fiscal year 2023 related to financings for the Sierra Wireless Acquisition, as well as higher interest rates on the portion of our outstanding floating-rate debt that was unhedged during the period.

Investment Impairments and Credit Loss Reserves, net

During the second quarter of fiscal year 2024, investment impairments and credit loss reserves, net totaled a loss of $0.2 million primarily due to adjustments to our credit loss reserve for our available-for-sale debt securities, and we did not record any impairments on our non-marketable equity investments. During the second quarter of fiscal year 2023, investment impairments and credit loss reserves, net totaled a gain of $0.4 million due to adjustments to our credit loss reserve for our available-for-sale debt securities.

Provision for Income Taxes

We recorded an income tax expense of $56.6 million in the second quarter of fiscal year 2024, compared to income tax expense of $12.0 million in the second quarter of fiscal year 2023. The effective tax rates for the second quarters of fiscal years 2024 and 2023 were a provision rate of (17.4)% and a provision rate of 19.0%, respectively. The effective tax rates in the second quarters of fiscal years 2024 and 2023 differ from the statutory federal income tax rate of 21% primarily due to a regional mix of income, changes in valuation allowance, non-deductibility of goodwill impairment, impact of global intangible low-taxed income ("GILTI") and research and development ("R&D") credits. The Tax Cuts and Jobs Act ("Tax Act") requires R&D costs incurred for tax years beginning after December 31, 2021 to be capitalized and amortized ratably over five or fifteen years for tax purposes, depending on where the research activities are conducted. We have elected to treat GILTI as a period cost and the additional capitalization of R&D costs within GILTI increases our provision for income taxes.

During the second quarter of fiscal year 2024, we recorded a valuation allowance against our U.S. deferred tax assets of approximately $52.8 million. We are required to assess whether a valuation allowance should be recorded against our deferred tax assets (“DTAs”) based on the consideration of all available evidence, using a “more likely than not” realization standard. The four sources of taxable income that must be considered in determining whether DTAs will be realized are, (1) future reversals of existing taxable temporary differences (i.e. offset of gross deferred tax assets against gross deferred tax liabilities); (2) taxable income in prior carryback years, if carryback is permitted under the tax law; (3) tax planning strategies and (4) future taxable income exclusive of reversing temporary differences and carryforwards.

After a review of the four sources of taxable income described above and in view of our three-year cumulative loss, we were not able to conclude that it is more likely than not that our DTAs will be realized. As a result, we recorded an additional valuation allowance on our DTAs, with a corresponding charge to our income tax provision, of approximately $52.8 million during the second quarter of fiscal year 2024.

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

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

For further information on the effective tax rate and the Tax Act's impact, see Note 10, Income Taxes, to our interim unaudited condensed consolidated financial statements.

Comparison of the Six Months Ended July 30, 2023 and July 31, 2022

Net Sales

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

	Six Months Ended				
(in thousands, except percentages)	July 30, 2023		July 31, 2022		
	Net Sales	% Net Sales	Net Sales	% Net Sales	Change
Infrastructure	$ 81,369	17 %	$ 160,727	39 %	(49)%
High-End Consumer	55,610	12 %	88,835	22 %	(37)%
Industrial	337,932	71 %	161,841	39 %	109 %
Total	$ 474,911	100 %	$ 411,403	100 %	15 %

Net sales for the first six months of fiscal year 2024 were $474.9 million, an increase of 15.4% compared to $411.4 million for the first six months of fiscal year 2023 driven by the Sierra Wireless Acquisition, which contributed $258.3 million of net sales to our Industrial end market, partially offset by softer demand impacting all end markets. Net sales from our industrial end market increased $176.1 million for the first six months of fiscal year 2024 versus the same period in the prior year primarily due to the Sierra Wireless Acquisition driven by approximately $156 million in module sales, approximately $54 million in router sales and approximately $46 million in managed connectivity sales, partially offset by an approximately $62 million decrease in LoRa-enabled product sales and an approximately $12 million decrease in industrial automation and automotive sales. We experienced a decrease of $79.4 million in net sales from our infrastructure end market during the first six months of fiscal year 2024 compared to the first six months of fiscal year 2023, primarily driven by an approximately $44 million decrease in PON sales, an approximately $15 million decrease in data center sales, an approximately $12 million decrease in wireless infrastructure sales and an approximately $4 million decrease in infrastructure automation and automotive sales. Net sales from our high-end consumer end market decreased $33.2 million during the first six months of fiscal year 2024 compared to the first six months of fiscal year 2023 primarily driven by an approximately $34 million decrease in TVS consumer product sales.

The following table summarizes our net sales by reportable segment:

	Six Months Ended				
(in thousands, except percentages)	July 30, 2023		July 31, 2022		
	Net Sales	% Net Sales	Net Sales	% Net Sales	Change
Signal Integrity Products Group	$ 88,153	19 %	$ 166,657	41 %	(47)%
Advanced Protection and Sensing Products Group	84,578	18 %	137,697	33 %	(39)%
IoT System Products Group	254,031	53 %	107,049	26 %	137 %
IoT Connected Services Group	48,149	10 %	—	— %	100 %
Total	$ 474,911	100 %	$ 411,403	100 %	15 %

Net sales were impacted by softer demand across all reportable segments. Net sales from our Signal Integrity Products Group decreased $78.5 million in the first six months of fiscal year 2024 compared to the first six months of fiscal year 2023 primarily driven by approximately $44 million decrease in PON sales, an approximately $15 million decrease in data center sales, an approximately $12 million decrease in wireless infrastructure sales and an approximately $4 million decrease in broadcast sales. Net sales from our Advanced Protection and Sensing Products Group decreased $53.1 million in the first six months of fiscal year 2024 compared to the first six months of fiscal year 2023 primarily driven by an approximately $34 million decrease in TVS consumer products and an approximately $15 million decrease in industrial automation and automotive sales. Net sales from our IoT System Products Group increased $147.0 million in the first six months of fiscal year 2024 compared to the first six months of fiscal year 2023 primarily due to the Sierra Wireless Acquisition driven by approximately $156 million in module sales and approximately $54 million in router sales, partially offset by an approximately $62 million decrease in LoRa-enabled product sales. Net sales from our IoT Connected Services Group increased $48.1 million in the first six months of fiscal year

2024 compared to the first six months of fiscal year 2023 due to the Sierra Wireless Acquisition, which contributed approximately $46 million of managed connectivity sales and approximately $2 million of IoT application sales.

Gross Profit

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

	Six Months Ended			
(in thousands, except percentages)	July 30, 2023		July 31, 2022	
	Gross Profit	Gross Margin	Gross Profit	Gross Margin
Signal Integrity Products Group	$ 52,934	60.0 %	$ 116,091	69.7 %
Advanced Protection and Sensing Products Group	46,515	55.0 %	73,294	53.2 %
IoT System Products Group	110,332	43.4 %	78,490	73.3 %
IoT Connected Services Group	23,066	47.9 %	—	— %
Unallocated costs, including share-based compensation	(29,173)		(3,899)	
Total	$ 203,674	42.9 %	$ 263,976	64.2 %

In the first six months of fiscal year 2024, gross profit decreased $60.3 million to $203.7 million from $264.0 million in the first six months of fiscal year 2023. This decrease was primarily the result of an approximately $19 million increase in amortization of acquired technology related to the Sierra Wireless Acquisition, approximately $3 million of inventory step-up related to the Sierra Wireless Acquisition, a $63.2 million decrease from our Signal Integrity Products Group, which experienced lower sales due to softer demand, and a $26.8 million decrease from our Advanced Protection and Sensing Products Group, which experienced lower sales due to softer demand, partially offset by a $31.8 million increase from our IoT System Products Group and $23.1 million from our IoT Connected Services Group due to the Sierra Wireless Acquisition.

Our gross margin was 42.9% in the first six months of fiscal year 2024, compared to 64.2% in the first six months of fiscal year 2023. Gross margin in our Signal Integrity Products Group was 60.0% in the first six months of fiscal year 2024, compared to 69.7% in the first six months of fiscal year 2023, primarily due to an unfavorable product mix driven by lower PON sales. Gross margin in our Advanced Protection and Sensing Products Group was 55.0% in the first six months of fiscal year 2024, compared to 53.2% in the first six months of fiscal year 2023, reflecting a favorable product mix driven by lower consumer sales. Gross margin in our IoT System Products Group was 43.4% the first six months of fiscal year 2024, compared to 73.3% in the first six months of fiscal year 2023, reflecting an unfavorable product mix driven by lower LoRa-enabled product sales. Gross margin in our IoT Connected Services Group was 47.9% in the first six months of fiscal year 2024.

Operating Costs and Expenses, net

	Six Months Ended				
(in thousands, except percentages)	July 30, 2023		July 31, 2022		Change
Selling, general and administrative	$ 123,141	24 %	$ 91,483	60 %	35 %
Product development and engineering	103,214	20 %	79,390	52 %	30 %
Intangible amortization	9,753	2 %	—	— %	100 %
Gain on sale of business	—	— %	(17,986)	(12)%	100 %
Goodwill impairment	279,555	54 %	—	— %	100 %
Total operating costs and expenses, net	$ 515,663	100 %	$ 152,887	100 %	237 %

<u>Selling, General and Administrative Expenses</u>

SG&A expenses increased $31.7 million in the first six months of fiscal year 2024 compared to the first six months of fiscal year 2023 primarily as a result of a $13.5 million net increase in staffing-related costs due to higher headcount resulting from the Sierra Wireless Acquisition, a $9.7 million increase in transaction and integration expenses primarily related to the Sierra Wireless Acquisition, a $5.8 million increase in restructuring expenses and a $1.7 million increase in facility-related expenses.

<u>Product Development and Engineering Expenses</u>

Product development and engineering expenses increased $23.8 million in the first six months of fiscal year 2024 compared to the first six months of fiscal year 2023 primarily as a result of a $15.3 million net increase in staffing-related costs due to higher headcount resulting from the Sierra Wireless Acquisition, a $5.2 million increase in restructuring expenses and a $2.3 million increase in depreciation expense.

Intangible Amortization

Intangible amortization increased by $9.8 million for the first six months of fiscal year 2024 compared to the same period in fiscal year 2023 due to intangibles acquired in the Sierra Wireless Acquisition related to customer relationships and trade name. Amortization of acquired technology intangibles is reflected in cost of sales.

Gain on Sale of Business

Gain on sale of business decreased by $18.0 million for the first six months of fiscal year 2024 compared to the same period in fiscal year 2023 due to the divestiture of the Disposal Group in May 2022.

Goodwill Impairment

Goodwill impairment was $279.6 million for the first six months of fiscal year 2024 primarily due to valuation adjustments of goodwill related to the Sierra Wireless Acquisition. See Note 8, Goodwill and Intangible Assets, to our interim unaudited condensed consolidated financial statements for additional information.

Interest Expense

Interest expense, including amortization of debt discounts and issuance costs, was $44.7 million and $2.5 million for the first six months of fiscal years 2024 and 2023, respectively. This increase was primarily due to additional debt instruments entered into during fiscal year 2023 related to financings for the Sierra Wireless Acquisition, as well as higher interest rates on the portion of our outstanding floating-rate debt that was unhedged during the period.

Investment Impairments and Credit Loss Reserves, net

During the first six months of fiscal year 2024, investment impairments and credit loss reserves, net totaled a loss of $0.3 million primarily due to adjustments to our credit loss reserve for our available-for-sale debt securities, and we did not record any impairments on our non-marketable equity investments. During the first six months of 2023, investment impairments and credit loss reserves, net totaled a gain of $0.4 million due to adjustments to our credit loss reserve for our available-for-sale debt securities.

Provision for Income Taxes

In the first six months of fiscal year 2024, we recorded income tax expense of $54.2 million, compared to income tax expense of $20.1 million in the first six months of fiscal year 2023. The effective tax rates for the first six months of fiscal years 2024 and 2023 were a provision rate of (15.2)% and a provision rate of 18.4%, respectively. The decrease to our effective tax rate for the first six months of fiscal year 2024 compared to the first six months of fiscal year 2023 was primarily due to a regional mix of income, changes in valuation allowance, non-deductibility of goodwill impairment, impact of GILTI and R&D credits. The effective tax rates in the first six months of fiscal years 2024 and 2023 differ from the statutory federal income tax rate of 21% primarily due to a regional mix of income, changes in valuation allowance, non-deductibility of goodwill impairment, impact of GILTI and R&D 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.

We believe that our cash on hand, cash available from future operations and available borrowing capacity under our Revolving 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 July 30, 2023, we had $147.9 million in cash and cash equivalents and $290.0 million of undrawn borrowing capacity on our Revolving Credit Facility, subject to customary conditions precedent, including the accuracy of representations and warranties and the absence of defaults. Over the longer-term, we believe our strong cash generating business model will provide adequate liquidity to fund our normal operations, which have minimal capital intensity.

Under the Credit Agreement, we are required to maintain a maximum consolidated leverage ratio, a minimum interest expense coverage ratio and minimum liquidity. Due to the impact of macroeconomic conditions and a softer demand environment on our business and results of operations, we entered into a First Amendment and Second Amendment to the Credit Agreement in February 2023 and June 2023, respectively, to provide additional financial flexibility with respect to the financial covenants in the Credit Agreement. These amendments resulted in, among other things, an increase in the maximum leverage ratio, a decrease in the minimum interest ratio and also introduced the minimum liquidity covenant that applies through January 31, 2025. We were in compliance with these covenants as of July 30, 2023.

In response to adverse market demand conditions, management has taken actions to reduce expenses to preserve cash and maintain compliance with the financial covenants. In the absence of additional actions, we may not maintain compliance with the financial covenants over the next twelve months from the issuance of the financial statements, which noncompliance would raise substantial doubt about our ability to continue as a going concern. Failure to meet the covenant requirements in the Credit Agreement would constitute an event of default under the Credit Agreement and there is no certainty we would be able to obtain waivers or amendments with the requisite lenders party thereto in order to maintain compliance. For additional information regarding risks related to our compliance with covenants in the Credit Agreement, see Part II, Item 1A – Risk Factors.

Based on our current projections and our ability to further manage controllable expenditures through our planned cost-saving initiatives, we believe over the next twelve months from the issuance of the financial statements, our plans are probable to be implemented for us to maintain compliance with our financial covenants and that our existing cash, projected operating cash flows and available borrowing capacity under our Revolving Credit Facility, are adequate to meet our operating needs, liabilities and commitments.

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. 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 July 30, 2023, our foreign subsidiaries held approximately $114.3 million of cash and cash equivalents, compared to $151.4 million at January 29, 2023. Our liquidity may be impacted by fluctuating exchange rates. For additional information on exchange rates, see Item 3 - Quantitative and Qualitative Disclosures About Market Risk.

In connection with the enactment of the Tax Act, all historic and current foreign earnings are taxed in the U.S. Depending on the jurisdiction, these foreign earnings are potentially subject to a withholding tax, if repatriated. As of July 30, 2023, our historical undistributed earnings of our foreign subsidiaries are intended to be permanently reinvested outside of the U.S. With the enactment of the Tax Act, all post-1986 previously unremitted earnings for which no U.S. deferred tax liability had been accrued were subject to U.S. tax. Notwithstanding the U.S. taxation of these amounts, we have determined that none of our current foreign earnings will be permanently reinvested. If we needed to remit all or a portion of our historical undistributed earnings to the U.S. for investment in our domestic operations, any such remittance could result in increased tax liabilities and a higher effective tax rate. Determination of the amount of the unrecognized potential deferred tax liability on these unremitted earnings is not practicable.

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

Credit Agreement

On November 7, 2019, we, with certain of our domestic subsidiaries as guarantors, entered into an amended and restated credit agreement (as amended, restated or otherwise modified from time to time, the "Credit Agreement") with the lenders party thereto and HSBC Bank USA, National Association, as administrative agent, swing line lender and letter of credit issuer. In connection with the acquisition of Sierra Wireless ("Sierra Wireless Acquisition"), on September 26,2022, we entered into a third amendment and restatement agreement (the "Restatement Agreement"), which became effective at the time of closing of the Sierra Wireless Acquisition, to among other things provide for the partial extension of the revolving commitments under the Credit Agreement and to incur term loans to finance the Sierra Wireless Acquisition and related costs and expenses.

After effectiveness of the Restatement Agreement, the First Amendment and the Second Amendment described below, the borrowing capacity on the revolving credit facility thereunder (the "Revolving Credit Facility") is $500.0 million, of which $162.5 million is scheduled to mature on November 7, 2024 and $337.5 million is scheduled to mature on January 12, 2028, and the term loans thereunder (the "Term Loans") for an aggregate principal amount of $895.0 million are scheduled to mature on January 12, 2028.

In the first six months of fiscal year 2024, we borrowed $60.0 million on our Revolving Credit Facility. In the first six months of fiscal year 2023, we both borrowed and repaid $10.0 million on our Revolving Credit Facility. As of July 30, 2023, we had $883.8 million outstanding under the Term Loans and $210.0 million outstanding under the Revolving Credit Facility, which had undrawn borrowing capacity of $290.0 million, subject to customary conditions precedent, including the accuracy of representations and warranties and the absence of defaults.

Up to $40.0 million of the Revolving Credit Facility may be used to obtain letters of credit, up to $25.0 million of the Revolving Credit Facility may be used to obtain swing line loans, and up to $75.0 million of the Revolving Credit Facility may be used to obtain revolving loans and letters of credit in certain currencies other than U.S. Dollars ("Alternative Currencies"). The proceeds of the Revolving Credit Facility may be used by us for capital expenditures, permitted acquisitions, permitted dividends, working capital and general corporate purposes.

No amortization is required with respect to the revolving loans. After effectiveness of the Second Amendment described below, the Term Loans amortize in equal quarterly installments of 1.25% of the original principal amount thereof during fiscal year

2024 and will amortize in equal quarterly installments of 1.875% of the original principal amount thereof beginning in fiscal year 2025 and continuing during the period that financial covenant relief pursuant to the Second Amendment is in effect with the balance due at maturity. We may voluntarily prepay borrowings at any time and from time to time, without premium or penalty, other than customary "breakage costs" in certain circumstances.

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

On February 24, 2023, we entered into the first amendment (the “First Amendment”) to the Credit Agreement, in order to, among other things, (i) increase the maximum consolidated leverage ratio covenant for certain test periods as set forth therein, (ii) reduce the minimum consolidated interest coverage ratio covenant for certain test periods as set forth therein, (iii) provide that, during the period that financial covenant relief pursuant to the First Amendment is in effect, the interest rate margin for (1) Term SOFR loans is deemed to be 2.50% and (2) Base Rate (as defined below) loans is deemed to be 1.50% per annum and (iv) make certain other changes as set forth therein.

On June 6, 2023, we entered into the second amendment (the "Second Amendment") to the Credit Agreement, in order to, among other things, (i) increase the maximum consolidated leverage ratio covenant for certain test periods as set forth therein and described below, (ii) reduce the minimum consolidated interest coverage ratio covenant for certain test periods as set forth therein and described below, (iii) modify the pricing grid applicable to loans under the Credit Agreement during the covenant relief period as set forth therein and described below, (iv) impose a minimum liquidity covenant for certain periods during the covenant relief period as set forth therein and described below, (v) increase the annual amortization in respect of the term loans thereunder to 7.5% per annum for certain periods as set forth therein, (vi) impose an “anti-cash hoarding” condition to the borrowing of revolving loans as set forth therein, (vii) provide that the maturity date for the Term Loans and revolving loans shall be the day that is 91 days prior to the stated maturity date of the Notes if the Notes have not otherwise been refinanced or extended to at least 91 days after the stated maturity date of the Term Loans and revolving loans, the aggregate principal amount of non-extended outstanding Notes and certain replacement debt exceeds $50 million and a minimum liquidity condition is not satisfied, (viii) provide for the reduction of the aggregate revolving commitments thereunder by $100 million, (ix) require that we appoint a financial advisor and (x) make certain other modifications to the mandatory prepayments (including the imposition of an excess cash flow mandatory prepayment), collateral provisions and covenants (including additional limitations on debt, liens, investments and restricted payments such as dividends) as set forth therein.

After effectiveness of the Second Amendment, interest on loans made under the Credit Agreement 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 2.75% depending upon our consolidated leverage ratio (except that, during the period that financial covenant relief pursuant to the Second Amendment is in effect, the margin will not be less than 2.25% per annum) or (2) Adjusted Term SOFR (as defined in the Credit Agreement, including certain credit spread adjustments) for an interest period to be selected by us plus a margin ranging from 1.25% to 3.75% depending upon our consolidated leverage ratio (except that, during the period that financial covenant relief pursuant to the Second Amendment is in effect, the margin will not be less than 3.25% per annum) (such margin, the "Applicable Margin"). The "Base Rate" is equal to a fluctuating rate equal to the highest of (a) the Prime Rate (as defined in the Credit Agreement), (b) 0.50% above the NYFRB Rate (as defined in the Credit Agreement) and (c) one-month Adjusted Term SOFR (as defined in the Credit Agreement) plus 1.00%. Interest on loans made under the Revolving Credit Facility in Alternative Currencies accrues at a rate per annum equal to a customary benchmark rate (including, in certain cases, credit spread adjustments) plus the Applicable Margin.

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 which, after effectiveness of the Second Amendment are as follows (unless the covenant relief period under the Second Amendment is earlier terminated by us):

- maintaining a maximum consolidated leverage ratio, determined as of the last day of each fiscal quarter, of (i) 4.75 to 1.00, for the fiscal quarter ending on or around April 30, 2023, (ii) 6.80 to 1.00 for the fiscal quarter ending on or around July 31, 2023, (iii) 8.17 to 1.00 for the fiscal quarter ending on or around October 31, 2023, (iv) 8.58 to 1.00 for the fiscal quarter ending on or around January 31, 2024, (v) 7.26 to 1.00 for the fiscal quarter ending on or around April 30, 2024, (vi) 6.36 to 1.00 for the fiscal quarter ending on or around July 31, 2024, (vii) 5.85 to 1.00 for the fiscal quarter ending on or around October 31, 2024, (viii) 5.77 to 1.00 for the fiscal quarter ending on or around January 31, 2025, and (ix) 3.75 to 1.00 for the fiscal quarter ending on or around April 30, 2025 and each fiscal quarter thereafter subject to increase to 4.25 to 1.00 for the four full 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;

- maintaining a minimum consolidated interest expense coverage ratio, determined as of the last day of each fiscal quarter, of (i) 2.50 to 1.00 for the fiscal quarter ending on or around April 30, 2023, (ii) 2.04 to 1.00 for the fiscal quarter ending on or around July 31, 2023, (iii) 1.66 to 1.00 for the fiscal quarter ending on or around October 31, 2023, (iv) 1.61 to 1.00 for the fiscal quarter ending on or around January 31, 2024, (v) 1.81 to 1.00 for the fiscal quarter ending on or around April 30, 2024, (vi) 2.07 to 1.00 for the fiscal quarter ending on or around July 31, 2024, (vii) 2.27 to 1.00 for the fiscal quarter ending on or around October 31, 2024, (viii) 2.41 to 1.00 for the fiscal quarter ending on or around January 31, 2025, and (ix) 3.50 to 1.00 for the fiscal quarter ending April 30, 2025 and each fiscal quarter thereafter; and
- until January 31, 2025, maintaining a minimum consolidated liquidity (as further defined in the Credit Agreement but excluding revolving credit commitments scheduled to expire in 2024) of $150 million as of the last day of each monthly accounting period.

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.

Compliance with the leverage and interest expense coverage financial covenants is measured quarterly based upon our performance over the most recent four quarters, and compliance with the liquidity covenant is measured as of the last day of each monthly accounting period. As of July 30, 2023, we were in compliance with the financial covenants in our Credit Agreement. As described above, our ability to comply with the financial covenants in the Credit Agreement (particularly, the maximum consolidated leverage ratio requirement) in future periods may be adversely impacted if market conditions do not improve or the actions we are taking do not sufficiently counter the softer demand environment and reduced revenue levels we are continuing to experience in our end markets.

The $100 million reduction in borrowing capacity of the Revolving Credit Facility in connection with the Second Amendment resulted in a write-off of deferred financing costs and debt discount totaling $0.8 million in the second quarter of fiscal year 2024, which was included in "Interest expense" in the Statements of Operations.

In the first quarter of fiscal year 2024, we entered into an interest rate swap agreement with a 2.75 year term to hedge the variability of interest payments on $150.0 million of debt outstanding on the Term Loans at a Term SOFR rate of 3.58%, plus a variable margin and spread based on our consolidated leverage ratio.

In the fourth quarter of fiscal year 2023, we entered into an interest rate swap agreement with a 5 year term to hedge the variability of interest payments on $450.0 million of debt outstanding on the Term Loans at a Term SOFR rate of 3.44%, plus a variable margin and spread based on our consolidated leverage ratio.

In the first quarter of fiscal year 2021, we entered into an interest rate swap agreement with a 3 year term to hedge the variability of interest payments on the first $150.0 million of debt outstanding under the Revolving Credit Facility at a LIBOR-referenced rate of 0.73%, plus a variable margin and spread based on our consolidated leverage ratio. This interest rate swap agreement matured during the first quarter of 2024.

Convertible Senior Notes

On October 6, 2022 and October 21, 2022, we issued and sold $300.0 million and $19.5 million, respectively, in aggregate principal amount of the Notes in a private placement. The Notes were issued pursuant to an indenture, dated October 12, 2022, by and among us, the subsidiary guarantors party thereto ("Subsidiary Guarantors") and U.S. Bank Trust Company, National Association, as trustee. The Notes bear interest at a rate of 1.625% per year, payable semi-annually in arrears on May 1 and November 1 of each year, beginning on May 1, 2023. The Notes will mature on November 1, 2027, unless earlier converted, redeemed or repurchased. The Notes were initially issued pursuant to an exemption from the registration requirements of the Securities Act afforded by Section 4(a)(2) of the Securities Act.

We used approximately $72.6 million of the net proceeds from the Notes to pay for the cost of the Convertible Note Hedge Transactions, after such cost was partially offset by approximately $42.9 million of proceeds to us from the sale of Warrants in connection with the issuance of the Notes, all as described in Note 9, Long-Term Debt to our interim unaudited condensed consolidated financial statements. The Convertible Note Hedge Transactions and Warrants transactions are indexed to, and potentially settled in, our common stock and the net cost of $29.7 million has been recorded as a reduction to additional paid-in capital in the consolidated statement of shareholders’ equity. We used the remaining net proceeds to fund a portion of the consideration in the Sierra Wireless Acquisition and to pay related fees and expenses. For additional information on the Convertible Note Hedge Transactions and the Warrants, see Note 9, Long-Term Debt to our interim unaudited condensed consolidated financial statements.

Expected Uses of Liquidity

Capital Expenditures and Research and Development

We incur significant expenditures in order to fund the development, design and manufacture of new products. We intend to continue to focus on those areas that have shown potential for viable and profitable market opportunities, which may require additional investment in equipment and the hiring of additional design and application engineers aimed at developing new products. Certain of these expenditures, particularly the addition of design engineers, do not generate significant payback in the short-term. We plan to finance these expenditures with cash generated by our operations, our existing cash balances and additional draws on our Revolving Credit Facility, as needed. Borrowings under our Revolving Credit Facility are subject to customary conditions precedent, including the accuracy of representations and warranties and the absence of any defaults under the facility.

Purchases under our Stock Repurchase Program

We currently have in effect a stock repurchase program that was initially approved by our Board of Directors in March 2008. On March 11, 2021, our Board of Directors approved the expansion of the stock repurchase program by an additional $350.0 million. This program represents one of our principal efforts to return value to our stockholders. Under the program, subject to the terms of the Credit Agreement, we may repurchase our common stock at any time or from time to time, without prior notice, subject to market conditions and other considerations. Our repurchases may be made through Rule 10b5-1 and/or Rule 10b-18 or other trading plans, open market purchases, privately negotiated transactions, block purchases or other transactions.

We did not repurchase any shares of our common stock under the program in the first six months of fiscal year 2024. In the first six months of fiscal year 2023, we repurchased 762,093 shares under the program for $50.0 million. As of July 30, 2023, the remaining authorization under the program was $209.4 million. To the extent we repurchase any shares of our common stock under the program in the future, we expect to fund such repurchases from cash on hand and borrowings on our Revolving Credit Facility. 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 including the current portion of long-term debt, 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 $161.0 million and $90.4 million as of July 30, 2023 and January 29, 2023, respectively. Our working capital, including cash and cash equivalents, was $308.9 million and $325.9 million as of July 30, 2023 and January 29, 2023, respectively.

Other than as disclosed above, there have been no material changes to our cash requirements from those disclosed in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023.

Cash Flows

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

	Six Months Ended	
(in thousands)	July 30, 2023	July 31, 2022
Net cash (used in) provided by operating activities	$ (101,992)	$ 127,329
Net cash (used in) provided by investing activities	(19,577)	10,216
Net cash provided by (used in) financing activities	34,727	(54,996)
Effect of foreign exchange rate changes on cash and cash equivalents	(756)	—
Net (decrease) increase in cash and cash equivalents	$ (87,598)	$ 82,549

Operating Activities

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

Operating cash flows for the first six months of fiscal year 2024 compared to the first six months of fiscal year 2023 were unfavorably impacted by transaction and integration costs related to the Sierra Wireless Acquisition, higher annual bonus payments related to increased headcount, and restructuring costs, offset by a 15.4% increase in net sales and a $22.1 million incremental decrease in inventory spend.

Investing Activities

Net cash provided by or used in investing activities is primarily driven by capital expenditures, purchases of investments and premiums paid for corporate-owned life insurance, offset by proceeds from the divestiture of the Disposal Group and proceeds from corporate-owned life insurance.

In the first six months of fiscal year 2023, we received $26.8 million of proceeds from the divestiture of the Disposal Group, net of cash disposed, in May 2022. For additional information on the divestiture, see Note 2 to our interim unaudited condensed consolidated financial statements.

Capital expenditures were $20.9 million for the first six months of fiscal year 2024, compared to $15.6 million for the first six months of fiscal year 2023. In the first six months of fiscal years 2024 and 2023, we made significant investments to update and expand our production capabilities.

In the first six months of fiscal year 2024, we paid $0.9 million for strategic investments, including investments in companies that are enabling the LoRa® and LoRaWAN® -based ecosystem, compared to $3.3 million of strategic investments in the first six months of fiscal year 2023.

In the first six months of fiscal year 2024, we received $2.5 million of proceeds from corporate-owned life insurance, which were used to pay deferred compensation distributions.

In the first six months of fiscal year 2023, we received $2.7 million of proceeds from a corporate-owned life insurance death benefit, which included a $1.6 million gain. All $2.7 million of the proceeds were re-invested into our corporate-owned life insurance policy in order to provide substantive coverage for our deferred compensation liability.

Financing Activities

Net cash provided by or used in financing activities is primarily attributable to proceeds from our Revolving Credit Facility, offset by repurchases of outstanding common stock, payments on our Term Loans and Revolving Credit Facility, deferred financing costs and payments related to employee share-based compensation payroll taxes.

In the first six months of fiscal year 2024, we paid $2.4 million for employee share-based compensation payroll taxes. In the first six months of fiscal year 2023, we paid $5.6 million for employee share-based compensation payroll taxes and received proceeds of $0.6 million from the exercise of stock options. 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 for the fiscal year ended January 29, 2023. There have been no significant changes to our policies during the six months ended July 30, 2023.

Recent Accounting Pronouncements

For a discussion of recent accounting pronouncements, see Note 1, Organization and Basis of Presentation to our interim unaudited condensed consolidated financial statements.

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 on Form 10-K for the fiscal year ended January 29, 2023. Many of the factors that can have an impact on our market risk are external to us, and so we are unable to fully predict them.

Market Conditions

A deterioration of global economic conditions has impacted, and may continue to impact, demand for our products, resulting in changes in customer order patterns, including order cancellations, and changes in the level of inventory held by vendors.

Commodity Risk

We are subject to risk from fluctuating market prices of certain commodity raw materials, particularly gold, that are incorporated into our end products or used by our suppliers to process our end products. Increased commodity prices are passed on to us in the form of higher prices from our suppliers, either in the form of general price increases or a commodity surcharge.

Although we generally deal with our suppliers on a purchase order basis rather than on a long-term contract basis, we generally attempt to obtain firm pricing for volumes consistent with planned production. Our gross margins may decline if we are not able to increase selling prices of our products or obtain manufacturing efficiencies to offset the increased cost. We do not enter into formal hedging arrangements to mitigate against commodity risk.

Foreign Currency Risk

Our foreign operations expose us to the risk of fluctuations in foreign currency exchange rates against our functional currencies and we may economically hedge this risk with foreign currency contracts (such as currency forward contracts). Gains or losses on these balances are generally offset by corresponding losses or gains on the related hedging instruments. As of July 30, 2023, our largest foreign currency exposures were from the Canadian Dollar, Swiss Franc and Great British Pound.

We considered the historical trends in foreign currency exchange rates and determined that it is reasonably possible that adverse changes in foreign exchange rates of 10% for all currencies could be experienced in the near-term. These reasonably possible adverse changes were applied to our total monetary assets and liabilities denominated in currencies other than our functional currency as of the end of our second quarter of fiscal year 2024. The adverse impact these changes would have had (after taking into account balance sheet hedges only) on our income before taxes is $1.8 million for the quarter ended July 30, 2023.

Interest rate and credit risk

We are subject to interest rate risk in connection with the portion of the outstanding debt under our Credit Agreement that bears interest at a variable rate as of July 30, 2023.

In the first quarter of fiscal year 2024, we entered into an interest rate swap agreement with a 2.75 year term to hedge the variability of interest payments on $150.0 million of debt outstanding on the Term Loans at a Term SOFR rate of 3.58%, plus a variable margin and spread based on our consolidated leverage ratio.

In the fourth quarter of fiscal year 2023, we entered into an interest rate swap agreement with a 5 year term to hedge the variability of interest payments on $450.0 million of debt outstanding on the Term Loans at a Term SOFR rate of 3.44%, plus a variable margin and spread based on our consolidated leverage ratio.

In the first quarter of fiscal year 2021, we entered into an interest rate swap agreement with a 3 year term to hedge the variability of interest payments on the first $150.0 million of debt outstanding under the Revolving Credit Facility at a LIBOR-referenced rate of 0.73%, plus a variable margin and spread based on our consolidated leverage ratio. This interest rate swap agreement matured during the first quarter of 2024.

Based upon our $494.0 million of unhedged floating-rate outstanding indebtedness as of July 30, 2023, the adverse impact a one percentage point increase in Term SOFR would have on our interest expense is $4.9 million.

Interest rates also affect our return on excess cash and investments. As of July 30, 2023, we had $147.9 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 $0.7 million in the second quarter of fiscal year 2024. 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.

Actual events involving limited liquidity, defaults, non-performance or other adverse developments that affect financial institutions or other companies in the financial services industry or the financial services industry generally, or concerns or rumors about any events of these kinds, have in the past and may in the future lead to market-wide liquidity problems. Financial instruments that potentially subject us to significant concentrations of credit risk consist primarily of cash, cash equivalents and marketable securities. We maintain cash held in deposit at financial institutions in the U.S. These deposits are insured by the FDIC in an amount up to $250,000 for any depositor. To the extent we hold cash deposits in amounts that exceed the FDIC insurance limitation, we may incur a loss in the event of a failure of any of the financial institutions where we maintain deposits. There can be no assurance that our deposits in excess of the FDIC or other comparable insurance limits will be backstopped by the U.S. or any applicable foreign government in the future or that any bank or financial institution with which we do business will be able to obtain needed liquidity from other banks, government institutions or by acquisition in the event of a future failure or liquidity crisis. In addition, if any of our partners or parties with whom we conduct business are unable to access funds due to the status of their financial institution, such parties' ability to pay their obligations to us or to enter into new commercial arrangements requiring additional payments to us could be adversely affected. Management believes we are not exposed to significant risk due to the financial position of the depository institution, but will continue to monitor regularly and adjust, if needed, to mitigate risk. We have established guidelines regarding diversification of our investments and their maturities, which are designed to maintain principal and maximize liquidity. To date, we have not experienced any losses associated with this credit risk and continue to believe that this exposure is not significant.

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 July 30, 2023.

Changes in Internal Controls

There were no changes to our internal control over financial reporting that occurred during the fiscal quarter ended July 30, 2023 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 our material legal proceedings is set forth in Note 12, Commitments and Contingencies to the interim unaudited condensed consolidated financial statements included in Part I, Item 1 of this Quarterly Report and incorporated by reference herein.

We have elected to disclose environmental proceedings described in Item 103(c)(3)(iii) of Regulation S-K unless we reasonably believe that such proceeding will result in no monetary sanctions, or in monetary sanctions, exclusive of interest and costs, of less than $1,000,000.

ITEM 1A. Risk Factors

Please carefully consider and evaluate all of the information in this Quarterly Report and the risk factors set forth below and in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023. 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.

Other than as set forth below, 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 29, 2023.

Restrictive and financial covenants in the Credit Agreement governing our credit facilities may restrict our ability to pursue our business strategies, and any violation of one or more of these covenants could have a material adverse effect on our financial condition and results of operations.

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

In addition, under the Credit Agreement, we are required to maintain a maximum consolidated leverage ratio, a minimum interest expense coverage ratio and minimum liquidity. Due to the impact of macroeconomic conditions and a softer demand environment on our business and results of operations, we entered into a First Amendment and Second Amendment to the Credit Agreement in February 2023 and June 2023, respectively, to provide additional financial flexibility with respect to the financial covenants in the Credit Agreement. These amendments resulted in, among other things, an increase in the maximum leverage ratio, a decrease in the minimum interest ratio and also introduced the minimum liquidity covenant that applies through January 31, 2025. We were in compliance with these covenants as of July 30, 2023.

In response to adverse market demand conditions, management has taken, actions to reduce expenses to preserve cash and maintain compliance with the financial covenants. Failure to meet the covenant requirements in the Credit Agreement would constitute an event of default under the Credit Agreement and there is no certainty we would be able to obtain waivers or amendments with the requisite lenders party thereto in order to maintain compliance. Other covenants in the Credit Agreement may also limit or restrict our ability to take certain actions to address our compliance with certain of the financial covenants in the Credit Agreement. Our ability to meet such financial covenants can also be affected by events beyond our control, and we cannot assure you that we will be able to meet such financial covenants.

If an event of default occurs and we are unable to obtain necessary waivers or amendments, the requisite lenders may elect to declare all outstanding borrowings, together with accrued and unpaid interest and other amounts payable thereunder, to be immediately due and payable. Further, if an event of default occurs, the lenders will have the right to proceed against the collateral granted to them to secure that debt. If the debt under the Credit Agreement were to be accelerated, our assets may not be sufficient to repay in full that debt that may become due as a result of that acceleration. We could seek replacement financing at prevailing market rates or raise additional capital by issuing equity or debt securities; however, this may not be on terms favorable to us, or available at all.

We are required to assess our ability to continue as a going concern as part of our preparation of financial statements at each quarter-end. This assessment includes, among other things, our ability to comply with the financial covenants and other requirements under the Credit Agreement. If in future periods we are not able to demonstrate that we will be in compliance with the financial covenant requirements in the Credit Agreement over the next twelve months from the issuance of the financial statements and would not have sufficient funds or financing plans to satisfy the obligations thereunder if an event of default occurs, management may be required to conclude that the uncertainty surrounding compliance with these financial covenants raises substantial doubt about our ability to continue as a going concern. Any such determination that we may be unable to continue as a going concern, or the perception that we may be unable to do so, may materially harm our business and reputation and may make it more difficult for us to obtain financing for the continuation of our operations, which, in turn, may adversely impact our financial condition, results of operations and cash flows.

If, in the event of such a determination, we are not successful in raising additional capital or refinancing our existing debt or securing new financing, we may be required to reduce the scope of our operations, liquidate some of our assets where possible, and/or suspend or curtain planned programs among other possible courses of action.

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

Recent Sales of Unregistered Securities

None.

Issuer Purchase of Equity Securities

None.

ITEM 3. Defaults Upon Senior Securities

None.

ITEM 4. Mine Safety Disclosures

Not applicable.

ITEM 5. Other Information

Insider Trading Arrangements

None.

Recent Restructuring Actions

During the three months ended July 30, 2023, we commenced a reduction in workforce plan as a result of cost-saving measures and internal resource alignment. The reduction in workforce plan, which is expected to be largely completed by the third quarter of fiscal year 2024, impacts approximately 5% of our full-time employees. We expect to incur total aggregate charges of approximately $6 million in connection with this reduction in workforce plan primarily consisting of cash charges for one-time employee termination benefits, of which $5.8 million of the restructuring charges were incurred during the three months ended July 30, 2023. See Note 13, Restructuring, to our interim unaudited condensed consolidated financial statements for additional information.

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	Amended and Restated Bylaws of Semtech Corporation	Exhibit 3.2 to our Quarterly Report on Form 10-Q for the quarter ended, October 30, 2022
10.1	Employment Agreement, dated May 25, 2023, between Paul H. Pickle and Semtech Corporation	Exhibit 10.1 to our Current Report on Form 8-K filed on May 30, 2023
10.2	Second Amendment to Third Amended and Restated Credit Agreement, dated as of June 6, 2023, by and among Semtech Corporation, the subsidiary guarantors, JPMorgan Chase Bank, N.A., as administrative agent, and certain lenders party thereto	Exhibit 10.5 to our Quarterly Report on Form 10-Q for the quarter ended April 30, 2023
10.3	Retention Agreement, dated June 8, 2023, between Asaf Silberstein and Semtech Corporation	Exhibit 10.1 to our Current Report on Form 8-K filed on June 9, 2023
10.4	Employment Agreement, dated September 5, 2023, between Mark Lin and Semtech Corporation	Exhibit 10.1 to our Current Report on Form 8-K filed on September 8, 2023
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 July 30, 2023, formatted in Inline XBRL: (i) Consolidated Statements of Operations, (ii) Consolidated Statements of Comprehensive Income and Loss, (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 July 30, 2023, 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: September 13, 2023	/s/ Paul H. Pickle
	Paul H. Pickle President and Chief Executive Officer (Principal Executive Officer; Duly Authorized Officer)
Date: September 13, 2023	/s/ Emeka N. Chukwu
	Emeka N. Chukwu Executive Vice President and Chief Financial Officer (Principal Financial Officer)