UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

Form 10-Q

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

For the quarterly period ended April 4, 2022

Or

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

For the transition period from____________ to ____________

Commission File Number: 0-31285

TTM TECHNOLOGIES, INC.
(Exact name of registrant as specified in its charter)

DELAWARE	**91-1033443**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

200 East Sandpointe, Suite 400, Santa Ana, California 92707
(Address of principal executive offices)

(714) 327-3000
(Registrant's telephone number, including area code)

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, $0.001 par value	TTMI	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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

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

Number of shares of common stock, $0.001 par value, of registrant outstanding at May 9, 2022: 101,012,236

TABLE OF CONTENTS

PART I. FINANCIAL INFORMATION

Item 1. ***Financial Statements (unaudited)***

TTM TECHNOLOGIES, INC.

Consolidated Condensed Balance Sheets
As of April 4, 2022 and January 3, 2022

	As of	
	April 4, 2022	January 3, 2022
	(Unaudited) (In thousands, except par value)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 519,079	$ 537,678
Accounts receivable, net	412,432	386,347
Contract assets	318,713	324,862
Inventories	137,343	127,612
Prepaid expenses and other current assets	46,616	30,914
Total current assets	1,434,183	1,407,413
Property, plant and equipment, net	663,394	665,755
Operating lease right-of-use assets	19,503	20,802
Goodwill	637,324	637,324
Definite-lived intangibles, net	230,260	239,918
Deposits and other non-current assets	59,484	54,335
Total assets	$ 3,044,148	$ 3,025,547
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 383,929	$ 361,484
Contract liabilities	22,524	14,189
Accrued salaries, wages and benefits	88,992	89,446
Other current liabilities	91,121	93,029
Total current liabilities	586,566	558,148
Long-term debt, net of discount and issuance costs	928,210	927,818
Operating lease liabilities	13,917	15,252
Other long-term liabilities	67,626	68,912
Total long-term liabilities	1,009,753	1,011,982
Commitments and contingencies (Note 14)		
Equity:		
Common stock, $0.001 par value; 300,000 shares authorized; 108,383 and 108,194 shares issued as of April 4, 2022 and January 3, 2022, respectively; 101,387 and 103,533 shares outstanding as of April 4, 2022 and January 3, 2022, respectively	108	108
Treasury stock – common stock at cost;6,996 and 4,661 shares as of April 4, 2022 and January 3, 2022, respectively	(93,467)	(63,807)
Additional paid-in capital	842,788	840,113
Retained earnings	723,504	706,258
Accumulated other comprehensive loss	(25,104)	(27,255)
Total stockholders' equity	1,447,829	1,455,417
Total liabilities and stockholders' equity	$ 3,044,148	$ 3,025,547

See accompanying notes to consolidated condensed financial statements.

TTM TECHNOLOGIES, INC.

Consolidated Condensed Statements of Operations
For the Quarters Ended April 4, 2022 and March 29, 2021

	Quarter Ended	
	April 4, 2022	March 29, 2021
	(Unaudited) (In thousands, except per share data)	
Net sales	$ 581,260	$ 526,432
Cost of goods sold	490,337	444,832
Gross profit	90,923	81,600
Operating expenses:		
Selling and marketing	18,272	16,282
General and administrative	32,954	31,527
Research and development	5,555	4,470
Amortization of definite-lived intangibles	8,274	9,521
Total operating expenses	65,055	61,800
Operating income	25,868	19,800
Other (expense) income:		
Interest expense	(11,361)	(11,389)
Loss on extinguishment of debt	—	(15,217)
Other, net	1,970	2,507
Total other expense, net	(9,391)	(24,099)
Income (loss) before income taxes	16,477	(4,299)
Income tax benefit	769	1,107
Net income (loss)	$ 17,246	$ (3,192)
Earnings (loss) per share:		
Basic earnings (loss) per share	$ 0.17	$ (0.03)
Diluted earnings (loss) per share	$ 0.17	$ (0.03)

See accompanying notes to consolidated condensed financial statements.

TTM TECHNOLOGIES, INC.

Consolidated Condensed Statements of Comprehensive Income (Loss)
For the Quarters Ended April 4, 2022 and March 29, 2021

	Quarter Ended	
	April 4, 2022	March 29, 2021
	(Unaudited) (In thousands)	
Net income (loss)	$ 17,246	$ (3,192)
Other comprehensive income, net of tax:		
Foreign currency translation adjustments, net	(36)	(3)
Net unrealized gain on cash flow hedges:		
Unrealized gain (loss) on effective cash flow hedges during the period, net	153	(263)
Loss realized in the statement of operations, net	2,034	2,052
Net	2,187	1,789
Other comprehensive income, net of tax	2,151	1,786
Comprehensive income (loss), net of tax	$ 19,397	$ (1,406)

See accompanying notes to consolidated condensed financial statements.

TTM TECHNOLOGIES, INC.

Consolidated Condensed Statements of Stockholders' Equity
For the Quarters Ended April 4, 2022 and March 29, 2021

(Unaudited)
(In thousands)

	Common Stock Shares	Common Stock Amount	Treasury Stock Shares	Treasury Stock Amount	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive (Loss) Income	Total Stockholders' Equity
Balance, January 3, 2022	108,194	$ 108	(4,661)	$ (63,807)	$ 840,113	$ 706,258	$ (27,255)	$ 1,455,417
Net income	—	—	—	—	—	17,246	—	17,246
Other comprehensive income	—	—	—	—	—	—	2,151	2,151
Issuance of common stock for performance-based restricted stock units	182	—	—	—	—	—	—	—
Issuance of common stock for restricted stock units	7	—	—	—	—	—	—	—
Repurchases of common stock	—	—	(2,373)	(30,232)	—	—	—	(30,232)
Fair value of warrants reclassified to warrant liabilities	—	—	—	—	(987)	—	—	(987)
Issuance of stock from warrant exercises	—	—	38	572	(572)	—	—	—
Stock-based compensation	—	—	—	—	4,234	—	—	4,234
Balance, April 4, 2022	108,383	$ 108	(6,996)	$ (93,467)	$ 842,788	$ 723,504	$ (25,104)	$ 1,447,829

	Common Stock Shares	Common Stock Amount	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive (Loss) Income	Total Stockholders' Equity
Balance, December 28, 2020	106,770	$ 107	$ 830,971	$ 651,844	$ (38,913)	$ 1,444,009
Net loss	—	—	—	(3,192)	—	(3,192)
Other comprehensive income	—	—	—	—	1,786	1,786
Issuance of common stock for performance-based restricted stock units	135	—	—	—	—	—
Issuance of common stock for restricted stock units	203	—	—	—	—	—
Fair value of warrants reclassified to warrant liabilities	—	—	(4,345)	—	—	(4,345)
Issuance of common stock from warrant exercises	5	—	—	—	—	—
Stock-based compensation	—	—	4,209	—	—	4,209
Balance, March 29, 2021	107,113	$ 107	$ 830,835	$ 648,652	$ (37,127)	$ 1,442,467

See accompanying notes to consolidated condensed financial statements.

TTM TECHNOLOGIES, INC.

Consolidated Condensed Statements of Cash Flows
For the Quarters Ended April 4, 2022 and March 29, 2021

	Quarter Ended	
	April 4, 2022	March 29, 2021
	(Unaudited) (In thousands)	
Cash flows from operating activities:		
Net income (loss)	$ 17,246	$ (3,192)
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation of property, plant and equipment	21,500	21,476
Amortization of definite-lived intangible assets	9,658	10,905
Amortization of debt discount and issuance costs	533	537
Loss on extinguishment of debt	—	15,217
Deferred income taxes	(3,298)	683
Stock-based compensation	4,234	4,209
Other	(1,360)	(534)
Changes in operating assets and liabilities:		
Accounts receivable, net	(26,085)	14,337
Contract assets	6,149	1,554
Inventories	(9,731)	(5,473)
Prepaid expenses and other current assets	(15,848)	(6,495)
Accounts payable	24,112	10,885
Contract liabilities	8,335	(768)
Accrued salaries, wages and benefits	(454)	(15,067)
Other current liabilities	1,000	(7,129)
Net cash provided by operating activities	35,991	41,145
Cash flows from investing activities:		
Purchase of property, plant and equipment and other assets	(23,445)	(21,797)
Proceeds from sale of property, plant and equipment and other assets	25	831
Net cash used in investing activities	(23,420)	(20,966)
Cash flows from financing activities:		
Repurchases of common stock	(30,232)	—
Cash used to settle warrants	(887)	—
Proceeds from long-term debt borrowing	—	500,000
Repayment of long-term debt borrowings	—	(425,838)
Payment of debt issuance costs	—	(4,773)
Other	—	(1,309)
Net cash (used in) provided by financing activities	(31,119)	68,080
Effect of foreign currency exchange rates on cash and cash equivalents	(51)	(176)
Net (decrease) increase in cash and cash equivalents	(18,599)	88,083
Cash and cash equivalents at beginning of period	537,678	451,565
Cash and cash equivalents at end of period	$ 519,079	$ 539,648
Supplemental cash flow information:		
Cash paid, net for interest	$ 17,563	$ 15,244
Cash paid, net for income taxes	3,259	713
Supplemental disclosure of noncash investing and financing activities:		
Property, plant and equipment recorded in accounts payable	$ 31,656	$ 28,960
Issuance of common stock for warrant settlement	589	68

See accompanying notes to consolidated condensed financial statements.

(1) Nature of Operations and Basis of Presentation

TTM Technologies, Inc. (the Company or TTM) is a leading global printed circuit board (PCB) manufacturer, focusing on quick-turn and volume production of technologically advanced PCBs and backplane assemblies as well as a global designer and manufacturer of high-frequency radio frequency (RF) and microwave/microelectronics components and assemblies. The Company provides time-to-market and volume production of advanced technology products and offers a one-stop design, engineering, and manufacturing solution to customers. This one-stop design, engineering, and manufacturing solution allows the Company to align technology developments with the diverse needs of the Company's customers and to enable them to reduce the time required to develop new products and bring them to market.

The Company serves a diversified customer base in various markets throughout the world, including aerospace and defense, data center computing, automotive components, medical, industrial and instrumentation related products, as well as networking/communications infrastructure products. The Company's customers include both original equipment manufacturers (OEMs) and electronic manufacturing services (EMS) providers.

The accompanying consolidated condensed financial statements have been prepared by the Company, without audit, pursuant to the rules and regulations of the Securities and Exchange Commission (SEC). Certain information and disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP) have been condensed or omitted pursuant to such rules and regulations. It is suggested that these consolidated condensed financial statements be read in conjunction with the consolidated financial statements and the notes thereto included in the Company's most recent Annual Report on Form 10-K. The preparation of financial statements in accordance with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the Company's consolidated condensed financial statements and accompanying notes. Due, in part, to the on-going coronavirus (COVID-19) global pandemic, the global economy and financial markets have been volatile, and the pandemic has contributed to disruptions in global supply chains and labor shortages and high inflation, and there is a significant amount of uncertainty about the length and severity of the consequences caused by the ongoing pandemic. The Company has considered information available to it as of the date of issuance of these financial statements and is not aware of any specific events or circumstances that would require an update to its estimates or judgments, or a revision to the carrying value of its assets or liabilities. Actual results could differ materially from those estimates. The Company uses a 52/53 week fiscal calendar with the fourth quarter ending on the Monday nearest December 31.

Recently Adopted and Issued Accounting Standards

Recently Adopted Accounting Standards

In October 2021, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2021-08, *Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*, which requires that an acquirer recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with Accounting Standards Codification (ASC) 606, *Revenue from Contracts with Customers*, as if it had originated the contracts. Prior to this ASU, an acquirer generally recognizes contract assets acquired and contract liabilities assumed that arose from contracts with customers at fair value on the acquisition date. The ASU is effective for fiscal years beginning after December 15, 2022, with early adoption permitted. The ASU is to be applied prospectively to business combinations occurring on or after the effective date of the amendment (or if adopted early as of an interim period, as of the beginning of the fiscal year that includes the interim period of early application). The Company early adopted ASU 2021-08 on April 4, 2022 and any impact on the condensed consolidated financial statements will be dependent on the magnitude and nature of future acquired entities.

Recently Issued Accounting Standards Not Yet Adopted

In November 2021, the FASB issued ASU 2021-10, *Government Assistance (Topic 832): Disclosures by Business Entities about Government Assistance*, which provides guidance on disclosures for transactions with a government that are accounted for by applying a grant or contribution accounting model by analogy. The guidance is effective for annual periods beginning after December 15, 2021. Early adoption is permitted. The Company does not anticipate the adoption will have a material impact on the consolidated financial statements and related disclosures.

(2) Share Repurchase Program

On February 3, 2021, the Company's Board of Directors authorized and approved a share repurchase program. Under the program, the Company may repurchase up to $100,000 in value of the Company's outstanding shares of common stock from time to time through February 3, 2023. The Company may repurchase shares through open market purchases, privately-negotiated transactions, or otherwise in accordance with applicable federal securities laws, including Rule 10b-18 of the Securities Exchange Act of 1934, as amended (the Exchange Act) which sets certain restrictions on the method, timing, price, and volume of open market stock repurchases. In addition, the Company adopted a trading plan, which may be amended from time to time, in accordance with Rule 10b5-1 of the Exchange Act to facilitate certain purchases that may be effected under the share repurchase program. The timing, manner, price, and amount of any repurchases are determined at the Company's discretion, and the share repurchase program may be suspended, terminated, or modified at any time for any reason. The repurchase program does not obligate the Company to acquire any specific number of shares.

During the quarter ended April 4, 2022, the Company repurchased 2,373 shares of common stock for a total cost of $30,232 (including commissions). As of April 4, 2022, the remaining amount available to be repurchased under the Company's share repurchase program was $5,184. Subsequent to April 4, 2022, the Company repurchased 374 shares of common stock for a total cost of $5,192 (including commissions) and there are no amounts available for repurchase as of May 4, 2022.

(3) Leases

The Company leases some of its manufacturing and assembly plants, sales offices and equipment under non-cancellable operating leases and finance leases that expire at various dates through 2049. The majority of the Company's lease arrangements are comprised of fixed payments, and certain leases consist of variable payments based on equipment usage. These variable payments are not included in the measurement of the right-of-use (ROU) asset or lease liability due to uncertainty of the payment amount and are recorded as lease expense in the period incurred. Certain leases contain renewal provisions at the Company's option. Most of the leases require the Company to pay for certain other costs such as property taxes and maintenance. Certain leases also contain rent escalation clauses (step rents) that require additional rental amounts in the later years of the term. Rent expense for leases with step rents is recognized on a straight-line basis over the minimum lease term. The lease agreements do not contain any material residual value guarantees or material restrictive covenants.

The components of lease expense were as follows:

	Quarter Ended	
	April 4, 2022	March 29, 2021
	(In thousands)	
Operating lease cost	$ 1,884	$ 2,208
Variable lease cost	246	234
Short-term lease cost	140	54
Finance lease costs:		
Amortization of right-of-use assets	344	—
Interest on lease liabilities	98	—

Supplemental cash flow information related to leases was as follows:

	Quarter Ended	
	April 4, 2022	March 29, 2021
	(In thousands)	
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows for operating leases	$ 1,861	$ 2,159
Right-of-use assets obtained in exchange for new lease obligations:		
Operating leases	421	284

Supplemental balance sheet information related to leases was as follows:

	Balance Sheet Location	As of April 4, 2022	As of January 3, 2022
		(In thousands)	
Assets:			
Operating leases	Operating lease right-of-use assets	$ 19,503	$ 20,802
Finance leases	Property, plant and equipment, net	14,415	14,759
Total lease assets		$ 33,918	$ 35,561
Liabilities:			
Current:			
Operating leases	Other current liabilities	$ 6,423	$ 6,362
Finance leases	Other current liabilities	702	698
Long-term:			
Operating leases	Operating lease liabilities	13,917	15,252
Finance leases	Other long-term liabilities	14,139	14,317
Total lease liabilities		$ 35,181	$ 36,629

	As of April 4, 2022	As of January 3, 2022
Weighted average remaining lease term (years):		
Operating leases	3.7	3.9
Finance leases	14.3	14.6
Weighted average discount rate:		
Operating leases	2.60 %	2.56 %
Finance leases	2.68 %	2.68 %

Maturities of lease liabilities were as follows:

	Operating Leases (1)	Finance Leases
	(In thousands)	
Less than one year	$ 5,195	$ 817
1 - 2 years	6,196	1,110
2 - 3 years	5,014	1,135
3 - 4 years	2,639	1,146
4 - 5 years	1,474	1,175
Thereafter	904	12,656
Total lease payments	21,422	18,039
Less imputed interest	(1,082)	(3,198)
Total	$ 20,340	$ 14,841

(1) Excludes $851 of legally binding minimum lease payments for leases signed but not yet commenced.

(4) Revenues

As of April 4, 2022, the aggregate amount of the transaction price allocated to remaining performance obligations for long-term contracts was $11,877. The Company expects to recognize revenue on approximately 48% of the remaining performance obligations for the Company's long-term contracts over the next twelve months.

Revenue from products and services transferred to customers over time and at a point in time accounted for 97% and 3%, respectively, of the Company's revenue for the quarter ended April 4, 2022, and 98% and 2%, respectively, of the Company's revenue for the quarter ended March 29, 2021.

The following tables represent a disaggregation of revenue by principal end markets with the reportable segments:

	Quarter Ended April 4, 2022		
	PCB	RF&S Components	Total
End Markets	(In thousands)		
Aerospace and Defense	$ 172,180	$ —	$ 172,180
Automotive	115,236	—	115,236
Data Center Computing	91,784	—	91,784
Medical/Industrial/Instrumentation	120,362	1,538	121,900
Networking/Communications	63,643	13,757	77,400
Other	2,865	(105)	2,760
Total	$ 566,070	$ 15,190	$ 581,260

	Quarter Ended March 29, 2021			
	PCB	RF&S Components	Other (1)	Total
End Markets	(In thousands)			
Aerospace and Defense	$ 186,539	$ 6	$ —	$ 186,545
Automotive	91,792	—	3,642	95,434
Data Center Computing	71,759	432	—	72,191
Medical/Industrial/Instrumentation	90,770	1,081	25	91,876
Networking/Communications	66,938	10,653	1	77,592
Other	2,688	518	(412)	2,794
Total	$ 510,486	$ 12,690	$ 3,256	$ 526,432

(1) Other represents results from the now closed Shanghai (SH E-MS) and Shenzhen (SZ) facilities previously utilized by the Company's former E-M Solutions business unit.

(5) Composition of Certain Consolidated Condensed Financial Statement Captions

	As of	
	April 4, 2022	January 3, 2022
	(In thousands)	
Inventories:		
Raw materials	$ 123,322	$ 114,653
Work-in-process	9,424	9,620
Finished goods	4,597	3,339
	$ 137,343	$ 127,612
Property, plant and equipment, net:		
Land and land use rights	$ 62,080	$ 62,015
Buildings and improvements	434,308	429,344
Machinery and equipment	906,406	891,925
Furniture and fixtures and other	10,406	10,360
Construction-in-progress	23,277	25,554
	1,436,477	1,419,198
Less: Accumulated depreciation	(773,083)	(753,443)
	$ 663,394	$ 665,755
Other current liabilities:		
Sales return and allowances	$ 12,463	$ 12,853
Income taxes payable	10,531	7,162
Operating lease	6,423	6,362
Interest	1,948	8,741
Derivative liabilities	1,437	4,295
Finance leases	702	698
Other	57,617	52,918
	$ 91,121	$ 93,029
Other long-term liabilities:		
Deferred income taxes	$ 26,344	$ 28,361
Finance leases	14,139	14,317
Defined benefit pension plan liability	5,013	5,276
Other	22,130	20,958
	$ 67,626	$ 68,912

(6) Goodwill

As of April 4, 2022 and January 3, 2022, goodwill by reportable segment was as follows:

	PCB	RF&S Components	Total
		(In thousands)	
Balance as of January 3, 2022 and April 4, 2022			
Goodwill	$ 700,724	$ 177,200	$ 877,924
Accumulated impairment losses	(171,400)	(69,200)	(240,600)
	$ 529,324	$ 108,000	$ 637,324

(7) Definite-lived Intangibles

As of April 4, 2022 and January 3, 2022, the components of definite-lived intangibles were as follows:

	Gross Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Amortization Period
		(In thousands)		(In years)
April 4, 2022				
Customer relationships	$ 366,071	$ (162,736)	$ 203,335	11.3
Technology	47,650	(20,725)	26,925	9.5
	$ 413,721	$ (183,461)	$ 230,260	
January 3, 2022				
Customer relationships	$ 366,071	$ (154,461)	$ 211,610	11.3
Technology	47,650	(19,342)	28,308	9.5
	$ 413,721	$ (173,803)	$ 239,918	

Definite-lived intangibles are amortized using the straight-line method of amortization over the useful life. Amortization expense was $9,658 and $10,905 for the quarters ended April 4, 2022 and March 29, 2021, respectively. For both the quarters ended April 4, 2022 and March 29, 2021, $ 1,384 of amortization expense is included in cost of goods sold.

Estimated aggregate amortization for definite-lived intangible assets for the next five years and thereafter is as follows:

	(In thousands)
Remaining 2022	$ 28,973
2023	36,699
2024	29,516
2025	25,397
2026	25,397
Thereafter	84,278
	$ 230,260

(8) Long-term Debt and Letters of Credit

The following table summarizes the long-term debt of the Company as of April 4, 2022 and January 3, 2022:

	Interest Rate as of April 4, 2022	Principal Outstanding as of April 4, 2022	Interest Rate as of January 3, 2022	Principal Outstanding as of January 3, 2022
		(In thousands)		
Senior Notes due March 2029	4.00 %	$ 500,000	4.00 %	$ 500,000
Term Loan due September 2024	2.93	405,879	2.60	405,879
Asia ABL Revolving Loan due June 2024	1.83	30,000	1.50	30,000
		935,879		935,879
Less: Long-term debt unamortized discount		(555)		(607)
Long-term debt unamortized debt issuance costs		(7,114)		(7,454)
		928,210		927,818
Less: current maturities		—		—
Long-term debt, less current maturities		$ 928,210		$ 927,818

Debt Covenants

Borrowings under the Senior Notes due 2029 and Term Loan Facility are subject to certain affirmative and negative covenants, including limitations on indebtedness, corporate transactions, investments, dispositions, and share payments.

Under the occurrence of certain events, the U.S. Asset-Based Lending Credit Agreement (U.S. ABL) and Asia Asset-Based Lending Credit Agreement (Asia ABL) (collectively, the ABL Revolving Loans), are subject to various financial covenants, including leverage and fixed charge coverage ratios.

Debt Issuance and Debt Discount

As of April 4, 2022 and January 3, 2022, remaining unamortized debt discount and debt issuance costs for the Senior Notes due 2029 and Term Loan Facility are as follows:

	As of April 4, 2022			As of January 3, 2022		
	Debt Issuance Costs	Debt Discount	Effective Interest Rate	Debt Issuance Costs	Debt Discount	Effective Interest Rate
	(In thousands, except interest rates)					
Senior Notes due March 2029	$ 5,280	$ —	4.18 %	$ 5,444	$ —	4.18 %
Term Loan due September 2024	1,834	555	4.66	2,010	607	4.66
	$ 7,114	$ 555		$ 7,454	$ 607	

The above debt discount and debt issuance costs are recorded as a reduction of the debt and are amortized into interest expense using an effective interest rate over the duration of the debt.

Remaining unamortized debt issuance costs for the ABL Revolving Loans of $1,214 and $1,355 as of April 4, 2022 and January 3, 2022, respectively, are included in other non-current assets and are amortized to interest expense over the duration of the ABL Revolving Loans using the straight-line method of amortization.

As of April 4, 2022, the remaining weighted average amortization period for all unamortized debt discount and debt issuance costs was 5.1 years.

Loss on Extinguishment of Debt

During the quarter ended March 29, 2021, the Company recognized losses of $15,217 associated with the premium paid on extinguishment of debt and the write-off of the remaining unamortized debt issuance costs as a result of the repayment of the remaining outstanding balance of the Senior Notes due 2025.

(9) Income Taxes

The Company's effective tax rate is impacted by tax rates in China and Hong Kong, the U.S. federal income tax rate, apportioned state income tax rates, generation of credits and deductions available to the Company as well as changes in valuation allowances and certain non-deductible items. Additionally, no tax benefit was recorded on the losses incurred in certain foreign jurisdictions as a result of corresponding increases in the valuation allowances in these jurisdictions.

During the quarter ended April 4, 2022, the Company's effective tax rate was impacted by a net discrete benefit of $2,047. This is mainly related to the approval of the Company's renewal application for High and New Tax Enterprise status for two of the Company's manufacturing subsidiaries in China, and windfall tax benefit of the stock-based compensation releases, which are offset by accrued interest expense on existing uncertain tax positions.

The Company has various foreign subsidiaries formed or acquired to conduct or support its business outside the United States. The Company expects its earnings attributable to most foreign subsidiaries may be repatriated back to the U.S. and so a deferred tax liability has been recorded for foreign withholding and the estimated federal/state tax impact. For those other companies with earnings currently being reinvested outside of the U.S., no deferred tax liabilities on undistributed earnings are recorded.

(10) Financial Instruments

Derivatives

Interest Rate Swaps

The Company's business is exposed to risk resulting from fluctuations in interest rates on certain LIBOR-based variable rate debt. Increases in interest rates would increase interest expenses relating to the outstanding variable rate borrowings and increase the cost of debt. Fluctuations in interest rates can also lead to significant fluctuations in the fair value of the debt obligations.

On May 15, 2018, the Company entered into a four-year pay-fixed, receive floating (1-month LIBOR), interest rate swap arrangement with a notional amount of $400,000 for the period beginning June 1, 2018 and ending on June 1, 2022. Under the terms of the interest rate swap, the Company pays a fixed rate of 2.84% against a portion of its LIBOR-based debt and receives floating 1-month LIBOR during the swap period.

At inception, the Company designated the interest rate swap as a cash flow hedge and the fair value of the interest rate swap was zero. As of April 4, 2022, the fair value of the interest rate swap was recorded as a liability in the amount of $1,385 and included as a component of other current liabilities. The change in the fair value of the interest rate swap is recorded as a component of accumulated other comprehensive loss, net of tax, in the Company's consolidated condensed balance sheets. No ineffectiveness was recognized for the quarters ended April 4, 2022 and March 29, 2021. The interest rate swap increased interest expense by $2,706 and $2,740 for the quarters ended April 4, 2022 and March 29, 2021, respectively.

Foreign Exchange Contracts

The Company's foreign subsidiaries may at times purchase forward exchange contracts to manage their foreign currency risks in relation to certain purchases of machinery denominated in foreign currencies other than the Company's functional currencies. The notional amount of the foreign exchange contracts as of April 4, 2022 was approximately $1,625 (Euro (EUR) 1.4 million). There were no foreign exchange contracts as of January 3, 2022.

Commodity Price Risk Management

The Company uses various raw materials in the manufacturing of PCBs. In particular, the Company has been experiencing increasing prices and lead times of copper clad laminates (CCLs), a key raw material for the manufacture of PCBs. CCLs are made from epoxy resin, glass cloth and copper foil, all of which are seeing limited supply and resulting increased prices. The Company only buys a small amount of copper directly. However, copper is a major driver of laminate cost. As such, the Company enters into commodity contracts to hedge copper as a proxy for hedging laminate. As of April 4, 2022, the Company has commodity contracts with a notional quantity of (i) 0.5 metric tonnes for the period beginning April 5, 2022 and ending on June 29, 2022, (ii) 0.6 metric tonnes for the period beginning June 30, 2022 and ending on October 3, 2022, (iii) 0.7 metric tonnes for the period beginning October 4, 2022 and ending on January 3, 2023, and (iv) 0.7 metric tonnes for the period beginning January 1, 2023 and ending on March 31, 2023. As of April 4, 2022, the fair value of the commodity contracts was recorded as an asset in the amount of $1,699 and included as a component of prepaid expenses and other current assets. The changes in the fair value of these commodity contracts are recorded in cost of goods sold in the consolidated condensed statements of operations. The commodity contracts decreased cost of goods sold by $1,402 for the quarter ended April 4, 2022. These commodity contracts are not designated as accounting hedges.

The fair values of derivative instruments in the consolidated condensed balance sheets are as follows:

	Balance Sheet Location	Asset/(Liability) Fair Value April 4, 2022	January 3, 2022
		(In thousands)	
Cash flow derivative instruments designated as hedges:			
Interest rate swap	Other current liabilities	$ (1,385)	$ (4,295)
Cash flow derivative instruments not designated as hedges:			
Commodity contracts	Prepaid expenses and other current assets	1,699	297
Foreign exchange contracts	Other current liabilities	(52)	—

The following table provides information about the amounts recorded in accumulated other comprehensive loss related to derivatives designated as cash flow hedges, as well as the amounts recorded in each caption in the consolidated condensed statements of operations when derivative amounts are reclassified out of accumulated other comprehensive loss for the quarters ended April 4, 2022 and March 29, 2021:

	Financial Statement Caption	Quarter Ended April 4, 2022: Gain Recognized in Other Comprehensive Income	Loss Reclassified into Income	Quarter Ended March 29, 2021: Loss Recognized in Other Comprehensive Loss	Loss Reclassified into Income
		(In thousands)			
Cash flow hedge:					
Interest rate swap	Interest expense	$ 204	$ (2,706)	$ (351)	$ (2,740)

The following table provides a summary of the activity associated with the designated cash flow hedges reflected in accumulated other comprehensive loss for the quarters ended April 4, 2022 and March 29, 2021:

	Quarter Ended April 4, 2022	March 29, 2021
	(In thousands)	
Beginning balance, net of tax	$ (3,223)	$ (11,231)
Changes in fair value gain (loss), net of tax	153	(263)
Reclassification to earnings	2,034	2,052
Ending balance, net of tax	$ (1,036)	$ (9,442)

Based on the current yield curve, the Company expects that losses of approximately $1,087 of the accumulated other comprehensive loss will be reclassified into the statement of operations, net of tax, in the next quarter since the interest rate swap arrangement is expiring on June 1, 2022.

(11) Accumulated Other Comprehensive Loss

The following provides a summary of the components of accumulated other comprehensive loss, net of tax, as of April 4, 2022 and January 3, 2022:

	Foreign Currency Translation	Pension Obligation	(Losses) Gains on Cash Flow Hedges	Total
		(In thousands)		
Ending balance as of January 3, 2022	$ (23,899)	$ (133)	$ (3,223)	$ (27,255)
Other comprehensive (loss) income before reclassifications	(36)	—	153	117
Amounts reclassified from accumulated other comprehensive loss	—	—	2,034	2,034
Other comprehensive (loss) income	(36)	—	2,187	2,151
Ending balance as of April 4, 2022	$ (23,935)	$ (133)	$ (1,036)	$ (25,104)

(12) Significant Customers and Concentration of Credit Risk

In the normal course of business, the Company extends credit to its customers. Some customers to whom the Company extends credit are located outside the United States. The Company performs ongoing credit evaluations of customers, does not require collateral, and considers the credit risk profile of the entity from which the receivable is due in further evaluating collection risk.

The Company’s customers include both OEMs and EMS companies. The Company’s OEM customers often direct a significant portion of their purchases through EMS companies. While the Company’s customers include both OEM and EMS providers, the Company measures customer concentration based on OEM companies, as they are the ultimate end customers.

For the quarters ended April 4, 2022 and March 29, 2021,one customer accounted for approximately 10% and 13% of the Company’s net sales, respectively.

(13) Fair Value Measures

The Company measures at fair value its financial and non-financial assets by using a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, essentially an exit price, based on the highest and best use of the asset or liability.

The carrying amount and estimated fair value of the Company’s financial instruments as of April 4, 2022 and January 3, 2022 were as follows:

	As of April 4, 2022		As of January 3, 2022	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
		(In thousands)		
Derivative assets, current	$ 1,699	$ 1,699	$ 297	$ 297
Derivative liabilities, current	1,437	1,437	4,295	4,295
Senior Notes due March 2029	494,720	465,035	494,556	498,200
Term Loan due September 2024	403,490	404,357	403,262	406,135
ABL Revolving Loans	30,000	30,000	30,000	30,000

The fair value of the derivative instruments was determined using pricing models developed based on the LIBOR swap rate, foreign currency exchange rates, and other observable market data, including quoted market prices, as appropriate using Level 2 inputs. The values were adjusted to reflect non-performance risk of both the counterparty and the Company, as necessary.

The fair value of the long-term debt was estimated based on quoted market prices or discounting the debt over its life using current market rates for similar debt as of April 4, 2022 and January 3, 2022, which are considered Level 2 inputs.

As of April 4, 2022 and January 3, 2022, the Company’s other financial instruments included cash and cash equivalents, accounts receivable, contract assets, accounts payable, and contract liabilities. Due to short-term maturities, the carrying amount of these instruments approximates fair value. The Company’s cash and cash equivalents as of April 4, 2022 consisted of $332,757 held in the U.S., with the remaining $186,322 held by foreign subsidiaries.

The majority of the Company's non-financial assets and liabilities, which include goodwill, intangible assets, inventories, and property, plant and equipment, are not required to be carried at fair value on a recurring basis. However, if certain triggering events occur (or are tested at least annually in the case of goodwill) such that a non-financial instrument is required to be evaluated for impairment, based upon a comparison of the non-financial instrument's fair value to its carrying value, an impairment is recorded to reduce the carrying value to the fair value, if the carrying value exceeds the fair value.

(14) Commitments and Contingencies

Legal Matters

The Company is subject to various legal matters, which it considers normal for its business activities. While the Company currently believes that the amount of any reasonably possible loss for known matters would not be material to the Company's financial condition, the outcome of these actions is inherently difficult to predict. In the event of an adverse outcome, the ultimate potential loss could have a material adverse effect on the Company's financial condition or results of operations in a particular period. The Company has accrued amounts for its loss contingencies which are probable and estimable as of April 4, 2022 and January 3, 2022. However, these amounts are not material to the consolidated condensed financial statements of the Company.

(15) Earnings (Loss) Per Share

The following is a reconciliation of the numerator and denominator used to calculate basic earnings (loss) per share and diluted earnings (loss) per share for the quarters ended April 4, 2022 and March 29, 2021:

	Quarter Ended	
	April 4, 2022	March 29, 2021
	(In thousands, except per share amounts)	
Net income (loss)	$ 17,246	$ (3,192)
Basic weighted average shares	102,613	106,825
Dilutive effect of performance-based restricted stock units, restricted stock units and stock options	1,685	—
Dilutive effect of outstanding warrants	6	—
Diluted shares	104,304	106,825
Earnings (loss) per share:		
Basic	$ 0.17	$ (0.03)
Diluted	$ 0.17	$ (0.03)

Performance-based restricted stock units (PRUs), restricted stock units (RSUs), and stock options to purchase 975 shares of common stock for the quarter ended April 4, 2022 were not included in the computation of diluted earnings per share. The PRUs were not included in the computation of diluted earnings per share because the performance conditions had not been met at April 4, 2022, and for RSUs and stock options, the options' exercise prices or the total expected proceeds under the treasury stock method was greater than the average market price of common stock during the applicable quarter and, as a result, the impact would be anti-dilutive.

For the quarter ended March 29, 2021, potential shares of common stock, consisting of stock options to purchase approximately 60 shares of common stock at exercise prices ranging from $11.83 to $16.60 per share, 2,897 RSUs, and 289 PRUs were not included in the computation of diluted earnings per share because the Company incurred a net loss during that quarter and as a result, the impact would be anti-dilutive.

Outstanding warrants for the quarter ended March 29, 2021 to purchase common stock were not included in the computation of dilutive earnings per share because the strike price of the warrants to purchase the Company's common stock was greater than the average market price of common shares during the applicable quarter and because the Company incurred a net loss during that quarter, and therefore, the effect would be anti-dilutive.

(16) Stock-Based Compensation

Stock-based compensation expense is recognized in the accompanying consolidated condensed statements of operations as follows:

	Quarter Ended	
	April 4, 2022	March 29, 2021
	(In thousands)	
Cost of goods sold	$ 1,276	$ 1,165
Selling and marketing	650	646
General and administrative	2,053	2,355
Research and development	255	43
Stock-based compensation expense recognized	$ 4,234	$ 4,209

Summary of Unrecognized Compensation Costs

The following is a summary of total unrecognized compensation costs as of April 4, 2022:

	Unrecognized Stock-Based Compensation Cost	Remaining Weighted Average Recognition Period
	(In thousands)	(In years)
RSU awards	$ 20,594	1.4
PRU awards	1,092	0.8
Stock options	25	0.5
	$ 21,711	

(17) Segment Information

The reportable segments shown below are the Company's segments for which separate financial information is available and upon which operating results are evaluated by the chief operating decision maker to assess performance and to allocate resources.

The Company, including the chief operating decision maker, evaluates segment performance based on reportable segment income, which is operating income before amortization of intangibles. Interest expense and interest income are not presented by segment since they are not included in the measure of segment profitability reviewed by the chief operating decision maker. All inter-segment transactions have been eliminated.

	Quarter Ended	
	April 4, 2022	March 29, 2021
	(In thousands)	
Net Sales:		
PCB	$ 566,070	$ 510,486
RF&S Components	15,190	12,690
Other (1)	—	3,256
Total net sales	$ 581,260	$ 526,432
Operating Segment Income (Loss):		
PCB	$ 56,540	$ 57,232
RF&S Components	5,750	3,862
Corporate and Other (1)	(26,764)	(30,389)
Total operating segment income	35,526	30,705
Amortization of definite-lived intangibles (2)	(9,658)	(10,905)
Total operating income	25,868	19,800
Total other expense	(9,391)	(24,099)
Income (loss) before income taxes	$ 16,477	$ (4,299)

	As of	
	April 4, 2022	January 3, 2022
	(In thousands)	
Segment Assets:		
PCB	$ 1,634,299	$ 1,655,401
RF&S Components	213,139	216,737
Corporate and Other (1)	1,196,710	1,153,409
Total assets	$ 3,044,148	$ 3,025,547

(1) Other represents results from the now closed SH E-MS and SZ facilities.

(2) Amortization of definite-lived intangibles primarily relates to the PCB and RF&S Components reportable segments. For both the quarters ended April 4, 2022 and March 29, 2021, $ 1,384 of amortization expense is included in cost of goods sold.

The Corporate category primarily includes operating expenses that are not included in the segment operating performance measures. Corporate consists primarily of corporate governance functions such as finance, accounting, information technology and human resources personnel, as well as global sales and marketing personnel, research and development costs, and acquisition and integration costs associated with acquisitions and divestitures.

The Company markets and sells its products in approximately 50 countries. Other than in the United States and China, the Company does not conduct business in any country in which its net sales in that country exceed 10% of the Company's total net sales. Net sales are as follows:

	Quarter Ended	
	April 4, 2022	March 29, 2021
	(In thousands)	
Net Sales:		
United States	$ 264,401	$ 268,467
China	77,205	81,709
Other	239,654	176,256
Total net sales	$ 581,260	$ 526,432

Net sales are attributed to countries by country invoiced.

(18) Subsequent Events

On April 18, 2022, the Company entered into a definitive share purchase agreement to purchase all of the issued and outstanding capital stock of Telephonics Corporation and ISC Farmingdale Corp. for an aggregate purchase price of $330,000 in cash, subject to customary working capital and certain other adjustments. The transaction is expected to close in the second quarter of 2022.

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

The following discussion of our financial condition and results of operations should be read in conjunction with our consolidated condensed financial statements and the related notes and the other financial information included in this Quarterly Report on Form 10-Q. This discussion and analysis contains forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of specified factors, including those set forth in Item 1A "Risk Factors" of Part II below and elsewhere in this Quarterly Report on Form 10-Q. This discussion and analysis should also be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" set forth in our Annual Report on Form 10-K for the fiscal year ended January 3, 2022, filed with the SEC.

COMPANY OVERVIEW

We are a leading global printed circuit board (PCB) manufacturer, focusing on quick-turn and volume production of technologically advanced PCBs and backplane assemblies as well as a global designer and manufacturer of high-frequency radio frequency (RF) and microwave/microelectronics components and assemblies. We focus on providing time-to-market and volume production of advanced technology products and offer a one-stop design, engineering, and manufacturing solution to our customers. This one-stop design, engineering, and manufacturing solution allows us to align technology development with the diverse needs of our customers and to enable them to reduce the time required to develop new products and bring them to market. We serve a diversified customer base consisting of approximately 1,000 customers in various markets throughout the world, including aerospace and defense, data center computing, automotive components, medical, industrial and instrumentation related products, as well as networking/communications infrastructure products. Our customers include both original equipment manufacturers (OEMs) and electronic manufacturing services (EMS) providers.

RECENT DEVELOPMENTS

The coronavirus (COVID-19) pandemic initially caused business disruption to our operations in China in January 2020. By March 2020, the situation escalated as the scope of the COVID-19 pandemic worsened outside of the Asia-Pacific region, with Europe and North America being affected by the pandemic. With the development and deployment of vaccines, certain of the adverse societal and economic effects of the pandemic have declined. However, as new variants of the virus emerge and evolve, we could see a rebound in the severity of the adverse effects of the pandemic. As a result, we expect continued impacts on our production, as well as ongoing significant uncertainty relating to the actual and potential impacts of the COVID-19 pandemic, and we cannot reasonably estimate its duration or severity. For example, during the first quarter, an outbreak in Mainland China forced temporary lockdown orders in several cities in which we operate. Further, in North America, there was a surge in cases resulting from the Omicron variant from December 2021 through January 2022 which resulted in production inefficiencies caused by a combination of quarantine impacts and direct labor shortages on our overall production. The COVID-19 pandemic has created and continues to create various global macroeconomic, customer demand, operational and supply chain risks and has contributed to high inflation, each of which could have a material and adverse impact on our business going forward. See Item 1A, *Risk Factors*, of Part II below for further information related to the COVID-19 pandemic.

We have taken active measures to seek to protect our employees, suppliers, and customers by implementing extensive pandemic related protocols, establishing situational leadership teams in Asia-Pacific and North America along with regularly scheduled executive reviews and planning calls, implementing global travel restrictions, and conforming to the guidance and direction of local governments and global health organizations. We are monitoring the impacts the COVID-19 pandemic has had, and continues to have, on our supply chain and are collaborating with our third-party partners with the goal of mitigating, to the extent reasonably practicable, significant delays in delivery of our products.

We continue to experience supply chain constraints and inflationary pressures. We have been actively taking measures intended to manage both supply chain constraints and higher raw materials costs, including, without limitation, through such measures as supplier diversification, ongoing operational efficiency efforts and quotation adjustments to mitigate the impact on our business.

We also continue to see more challenges in attracting and retaining labor in North America. We actively seek to demonstrate employees' value to our business through a combination of financial and non-financial methods. However, a number of factors may continue to adversely affect the labor force available to us, including high employment levels, government regulations, and wage inflation. An overall labor shortage, lack of skilled labor, increased turnover or labor inflation could have a material adverse impact on our business.

On April 18, 2022, we entered into a definitive share purchase agreement to purchase all of the issued and outstanding capital stock of Telephonics Corporation and ISC Farmingdale Corp. for an aggregate purchase price of $330.0 million in cash, subject to customary working capital and certain other adjustments. Consummation of the transaction is subject to certain closing conditions, and the share purchase agreement may be terminated in certain circumstances.

On March 1, 2022, we announced that we will open a new, state of the art, highly automated PCB manufacturing facility in Penang, Malaysia. We expect construction to begin later in 2022 with equipment installation in 2023. We expect that the total capital spending for this facility will be $130.0 million and this investment will be spread from 2022 through 2025.

FINANCIAL OVERVIEW

While our customers include both OEMs and EMS providers, we measure customers based on OEM companies, as they are the ultimate end customers. Sales to our ten largest customers collectively accounted for 45% of our net sales for both the quarters ended April 4, 2022 and March 29, 2021. We sell to OEMs both directly and indirectly through EMS providers.

The following table shows the percentage of our net sales attributable to each of the principal end markets we served for the periods indicated:

End Markets (1)	Quarter Ended April 4, 2022	Quarter Ended March 29, 2021
Aerospace and Defense	30 %	35 %
Automotive	20	18
Data Center Computing	16	14
Medical/Industrial/Instrumentation	21	17
Networking/Communications	13	15
Other (2)	—	1
Total	100 %	100 %

(1) Sales to EMS companies are classified by the end markets of their OEM customers.
(2) Other end market reflects direct sales to EMS and distributor customers.

We derive revenues primarily from the sale of PCBs, custom electronic assemblies using customer-supplied engineering and design plans as well as our long-term contracts related to the design and manufacture of RF and microwave/microelectronics components, assemblies, and subsystems. Orders for products generally correspond to the production schedules of our customers and are supported with firm purchase orders. Our customers have continuous control of the work in progress and finished goods throughout the PCB and custom electronic assemblies manufacturing process, as these are built to customer specifications with no alternative use, and there is an enforceable right of payment for work performed to date. As a result, we recognize revenue progressively over time based on the extent of progress towards completion of the performance obligation. We recognize revenue based on a cost method as it best depicts the transfer of control to the customer which takes place as we incur costs. Revenues are recorded proportionally as costs are incurred.

We also manufacture certain components, assemblies, and subsystems which service our RF and Specialty Components (RF&S Components) customers. We recognize revenue at a point in time upon transfer of control of the products to our customer. Point in time recognition was determined as our customers do not simultaneously receive or consume the benefits provided by our performance and the asset being manufactured has alternative uses to us.

Net sales consist of gross sales less an allowance for returns, which typically have been approximately 2% of gross sales. We provide our customers a limited right of return for defective PCBs including components, subsystems, and assemblies. We record an estimate for sales returns and allowances at the time of sale based on historical results and anticipated returns.

Cost of goods sold consists of materials, labor, outside services, and overhead expenses incurred in the manufacture and testing of our products. Shipping and handling fees and related freight costs and supplies associated with shipping products are also included as a component of cost of goods sold. Many factors affect our gross margin, including capacity utilization, product mix, production volume, and yield. While we have entered into supply assurance agreements with some of our key suppliers to maintain the continuity of supply of some of the key materials we use, we generally do not participate in any significant long-term contracts with suppliers, and we believe there are a number of potential suppliers for most of the raw materials we use.

Selling and marketing expenses consist primarily of salaries, labor related benefits, and commissions paid to our internal sales force, independent sales representatives, and our sales support staff, as well as costs associated with marketing materials and trade shows.

General and administrative costs primarily include the salaries for executive, finance, accounting, information technology, and human resources personnel, as well as expenses for accounting and legal assistance, incentive compensation expense, and gains or losses on the sale or disposal of property, plant, and equipment.

Research and development expenses consist primarily of salaries and labor related benefits paid to our research and development staff, as well as material costs.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our consolidated condensed financial statements included in this report have been prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP). The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, net sales and expenses, and related disclosure of contingent assets and liabilities.

See Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations*, in our Annual Report on Form 10-K for the fiscal year ended January 3, 2022 for further discussion of critical accounting policies and estimates. There were no material changes to our critical accounting policies and estimates since January 3, 2022.

RESULTS OF OPERATIONS

The following table sets forth the relationship of various items to net sales in our consolidated condensed statements of operations:

	Quarter Ended	
	April 4, 2022	**March 29, 2021**
Net sales	100.0 %	100.0 %
Cost of goods sold	84.4	84.5
Gross profit	15.6	15.5
Operating expenses:		
Selling and marketing	3.1	3.1
General and administrative	5.6	6.0
Research and development	1.0	0.8
Amortization of definite-lived intangibles	1.4	1.8
Total operating expenses	11.1	11.7
Operating income	4.5	3.8
Other (expense) income:		
Interest expense	(2.0)	(2.2)
Loss on extinguishment of debt	—	(2.9)
Other, net	0.3	0.5
Total other expense, net	(1.7)	(4.6)
Income (loss) before income taxes	2.8	(0.8)
Income tax benefit	0.2	0.2
Net income (loss)	3.0 %	(0.6) %

Net Sales

Total net sales increased $54.8 million, or 10.4%, to $581.3 million for the first quarter of 2022 from $526.4 million for the first quarter of 2021. The primary driver for the increase in total net sales was an increase in net sales for the PCB reportable segment of $55.6 million, or 10.8%, to $566.1 million for the first quarter of 2022 from $510.5 million for the first quarter of 2021, which was primarily due to higher demand in most of our commercial end markets which more than offset a decline in our Aerospace and Defense end market due to commercial aerospace softness and production challenges in North America. The increase in PCB net sales also benefitted from a 7.6% increase in the volume of PCB shipments and a 3.9% increase in the average price per square foot as compared to the first quarter of 2021. Another contributing factor to the increase in total net sales was an increase in net sales for the RF&S Components reportable segment of $2.5 million, or 19.7%, to $15.2 million for the first quarter of 2022 from $12.7 million for the first quarter of 2021, which was primarily due to higher demand in our Networking/Communications end market. Partially offsetting the PCB and RF&S Components increases was a $3.3 million reduction in net sales due to the closure of our two assembly plants.

Gross Margin

Overall gross margin increased to 15.6% for the first quarter of 2022 from 15.5% for the first quarter of 2021. Gross margin for the PCB reportable segment decreased to 14.7% for the first quarter of 2022 from 15.7% for the first quarter of 2021. This decline was primarily due to labor and production challenges in North America partially offset by revenue growth in our commercial businesses. During the quarter, we did experience significant material cost increases, but we were able to mitigate the profit impact of those increases through customer price increases and manufacturing efficiencies. Gross margin for the RF&S Components reportable segment increased to 57.0% for the first quarter of 2022 from 47.5% for the first quarter of 2021, primarily due to higher sales.

Capacity utilization is a key driver for us, which is measured by the actual production as a percentage of maximum capacity. This measure is particularly important in our high-volume facilities in Asia, as a significant portion of our operating costs are fixed in nature. Capacity utilization for the first quarter of 2022 in our Asia and North America PCB facilities was 85% and 46%, respectively, compared to 80% and 55%, respectively, for the first quarter of 2021. The increase in capacity utilization in our Asia PCB facilities was due to an increase in production resulting from increased sales in our commercial end markets. The decrease in our capacity utilization in our North America PCB facilities was primarily due to increased capacity resulting from equipment expansion and the challenges posed by COVID-19 absences and direct labor shortages.

Selling and Marketing Expenses

Selling and marketing expense increased $2.0 million, to $18.3 million for the first quarter of 2022 from $16.3 million for the first quarter of 2021. As a percentage of net sales, selling and marketing expense was 3.1% for both the first quarter of 2022 and 2021. The increase in selling and marketing expenses was primarily due to an increase in commission expense and labor costs.

General and Administrative Expenses

General and administrative expense increased $1.4 million to $33.0 million, or 5.6% of net sales, for the first quarter of 2022 from $31.5 million, or 6.0% of net sales, for the first quarter of 2021. This increase was primarily due to an increase in labor costs, bad debt, acquisition/integration costs, and other general and administrative spending. These increases were partially offset by the decrease in restructuring charges of $3.0 million associated with the restructuring of our E-M Solutions business unit during the first quarter of 2021.

Other Expense

Other expense, net decreased $14.7 million to $9.4 million for the first quarter of 2022 from $24.1 million for the first quarter of 2021. This decrease was primarily the result of the absence of $15.2 million loss on extinguishment of debt partially offset by a decrease in other income of $0.5 million for the first quarter of 2022 due to lower government subsidies.

Income Taxes

Income tax benefit decreased by $0.3 million to $0.8 million of tax benefit for the first quarter of 2022 from $1.1 million of tax benefit for the first quarter of 2021. The decrease in income tax benefit for the first quarter of 2022 was primarily due to an increase in pre-tax income partially offset by the tax benefit resulting from the approval of the Company's renewal application for High and New Enterprise status for two of the Company's manufacturing subsidiaries in China.

Our effective tax rate is primarily impacted by tax rates in China and Hong Kong, the U.S. federal income tax rate, apportioned state income tax rates, the generation of credits and deductions available to the Company as well as changes in valuation allowances and certain non-deductible items. We had a net deferred income tax asset of approximately $10.2 million and $16.0 million as of April 4, 2022 and March 29, 2021, respectively.

Liquidity and Capital Resources

Our principal sources of liquidity have been cash provided by operations, the issuance of debt, and borrowings under our Revolving Credit Facility. Our principal uses of cash have been to finance capital expenditures, finance acquisitions, fund working capital requirements, to repay debt obligations, and to repurchase common stock. We anticipate that financing capital expenditures, financing acquisitions including our potential acquisition of Telephonics Corporation and ISC Farmingdale Corp., which is expected to close in the second quarter of 2022, funding working capital requirements, and servicing debt will be the principal demands on our cash in the future.

Cash flow provided by operating activities during the first quarter of 2022 was $36.0 million as compared to cash flow provided by operating activities of $41.1 million in the same period in 2021. The decrease in cash flow was primarily due to increased investment in working capital.

Net cash used in investing activities was approximately $23.4 million for the first quarter of 2022, comprised of purchases of property, plant and equipment and other assets. Net cash used in investing activities was approximately $21.0 million for the first quarter of 2021, reflecting $21.8 million for purchases of property, plant and equipment and other assets less $0.8 million for proceeds from sale of property, plant and equipment and other assets.

Net cash used in financing activities during the first quarter of 2022 was $31.1million, primarily reflecting repurchases of common stock of $30.2 million and cash used to settle warrants of $0.9 million. Net cash provided by financing activities during the first quarter of 2021 was $68.1 million, primarily reflecting proceeds from long-term debt borrowing of $500.0 million, less the repayment of long-term debt borrowings of $425.8 million and payment of debt issuance costs of $4.8 million.

As of April 4, 2022, we had cash and cash equivalents of approximately $519.1 million, of which approximately $186.3million was held by our foreign subsidiaries, primarily in China. Should we choose to remit cash to the United States from our foreign locations, we may incur tax obligations which would reduce the amount of cash ultimately available to the United States. However, we believe there would be no material tax consequences not previously accrued for the repatriation of this cash.

Our total 2022 capital expenditures are expected to be in the range of $110.0 million to $130.0 million.

Share Repurchases

On February 3, 2021, our board of directors authorized a share repurchase program allowing us to repurchase up to $100.0 million of our common stock. During the first quarter of 2022, we repurchased a total of 2.4 million shares of our common stock for $30.2 million (including commissions). Subsequent to April 4, 2022, we repurchased a total of 0.4 million shares of our common stock for $5.2 million (including commissions) and there are no amounts available for repurchase as of May 4, 2022. We repurchased a total of 7.5 million shares of our common stock for $100.0 million under the share repurchase program.

Long-term Debt and Letters of Credit

As of April 4, 2022, we had $928.2 million of outstanding debt, net of discount and debt issuance costs, composed of $494.7 million of Senior Notes due March 2029, $403.5 million of a Term Loan due September 2024, and $30.0 million under the Asia Asset-Based Lending Credit Agreement (Asia ABL).

Pursuant to the terms of the Term Loan Facility and Senior Notes due 2029, we are subject to certain affirmative and negative covenants, including limitations on indebtedness, corporate transactions, investments, dispositions, and share payments. Under the occurrence of certain events, under the U.S. Asset-Based Lending Credit Agreement (U.S. ABL) and Asia ABL (collectively, the ABL Revolving Loans), we are also subject to various financial covenants, including leverage and fixed charge coverage ratios. As of April 4, 2022, we were in compliance with the covenants under the Term Loan Facility, Senior Notes due 2029 and ABL Revolving Loans.

Based on our current level of operations, we believe that cash generated from operations, cash on hand and cash from the issuance of term and revolving debt will be adequate to meet our currently anticipated capital expenditure, debt service, and working capital needs for the next twelve months. Additional information regarding our indebtedness, including information about the credit available under our debt facilities, interest rates and other key terms of our outstanding indebtedness, is included in Part I, Item 1, Note 8, *Long-term Debt and Letters of Credit*, of the Notes to Consolidated Condensed Financial Statements included in this Quarterly Report on Form 10-Q.

Contractual Obligations and Commitments

As part of our ongoing operations, we enter into contractual arrangements that obligate us to make future cash payments. These obligations impact our liquidity and capital resource needs. Our estimated future obligations consist of long-term debt obligations, interest on debt obligations, derivative liabilities, purchase obligations, and leases as of April 4, 2022. As of the date of this report, other than the share purchase agreement we entered into on April 18, 2022 to purchase all of the issued and outstanding capital stock of Telephonics Corporation and ISC Farmingdale Corp., there were no material changes outside the ordinary course of business since January 3, 2022 to our contractual obligations and commitments and the related cash requirements.

Seasonality

Historically, we experienced significant seasonality in revenues with a softer first half of the fiscal year and generally ramping volumes in the third quarter which usually peaked in the fourth quarter. After the divestiture of our former Mobility business unit in 2020, this pattern has changed. Barring end market demand changes, we now tend to experience modest seasonal softness in the first and third quarters due to holidays and vacation periods in China and North America, respectively, which limit production leading to stronger revenue levels in the second and fourth quarters.

Recently Issued Accounting Standards

For a description of recently adopted and issued accounting standards, including the respective dates of adoption and expected effects on our results of operations and financial condition, see Part I, Item 1, Note 1, *Nature of Operations and Basis of Presentation*, of the Notes to Consolidated Condensed Financial Statements included in this Quarterly Report on Form 10-Q.

Item 3. ***Quantitative and Qualitative Disclosures About Market Risk***

In the normal course of business operations, we are exposed to risks associated with fluctuations in interest rates, foreign currency exchange rates, and commodity prices. We address these risks through controlled risk management that includes the use of derivative financial instruments to economically hedge or reduce these exposures. We do not enter into derivative financial instruments for trading or speculative purposes.

We have not experienced any losses to date on any derivative financial instruments due to counterparty credit risk.

To ensure the adequacy and effectiveness of our interest rate, foreign exchange, and commodity price hedge positions, we continually monitor our interest rate swap positions, foreign exchange forward positions, and commodity hedge price positions, both on a stand-alone basis and in conjunction with their underlying interest rate, foreign currency, and commodity price exposures, from an accounting and economic perspective. However, given the inherent limitations of forecasting and the anticipatory nature of the exposures intended to be hedged, we cannot be assured that such programs will offset more than a portion of the adverse financial impact resulting from unfavorable movements in either interest, foreign exchange rates, or commodity prices. In addition, the timing of the accounting for recognition of gains and losses related to mark-to-market instruments for any given period may not coincide with the timing of gains and losses related to the underlying economic exposures and, therefore, may adversely affect our consolidated operating results and financial position.

Interest Rate Risks

Our business is exposed to risk resulting from fluctuations in interest rates. Our interest expense is more sensitive to fluctuations in the general level of LIBOR interest rates than to changes in rates in other markets. Increases in interest rates would increase interest expense relating to our outstanding variable rate borrowings and increase the cost of debt. Fluctuations in interest rates can also lead to significant fluctuations in the fair value of our debt obligations.

On May 15, 2018, we entered into a four-year pay-fixed, receive floating (1-month LIBOR), interest rate swap arrangement with a notional amount of $400.0 million for the period beginning June 1, 2018 and ending on June 1, 2022. Under the terms of the interest rate swap, we pay a fixed rate of 2.84% against the first interest payments of a portion of our LIBOR-based debt and receive floating 1-month LIBOR during the swap period. At inception, we designated the interest rate swap as a cash flow hedge and the fair value of the interest rate swap was zero. As of April 4, 2022, the fair value of the interest rate swap was recorded as a liability in the amount of $1.4 million and included as a component of other current liabilities. No ineffectiveness was recognized for the quarter ended April 4, 2022. During the quarter ended April 4, 2022, the interest rate swap increased interest expense by $2.7 million. After June 1, 2022, our $400.0 million LIBOR-based variable debt will be more sensitive to fluctuations in interest rates due to the expiration of the interest rate swap arrangement. We currently do not expect to enter into a new arrangement after the arrangement described above ends.

See *Liquidity and Capital Resources* and *Long-term Debt and Letters of Credit* appearing in Part I, Item 2 of this Quarterly Report on Form 10-Q for further discussion of our financing facilities and capital structure. As of April 4, 2022, approximately 96.2% of our total debt was based on fixed rates. Based on our borrowings as of April 4, 2022, an assumed 100 basis point increase in variable rates would cause our annual interest cost to increase by $0.4 million and an assumed 100 basis point decrease in variable rates would cause our annual interest cost to decrease by $0.2 million. However, without the swap arrangement described above, an assumed 100 basis point increase in variable rates would cause our annual interest cost to increase by $4.4 million and an assumed 100 basis point decrease in variable rates would cause our annual interest cost to decrease by $1.9 million.

On July 27, 2017, the Financial Conduct Authority (FCA) announced the desire to phase out the use of LIBOR by the end of 2021. More recently, on March 5, 2021, the FCA announced that all LIBOR settings will either cease to be provided by any administrator or no longer be representative. Specifically, this occurred immediately after December 31, 2021, in the case of all Sterling, Euro (EUR), Swiss franc and Japanese yen settings, and the 1-week, and 2-month U.S. dollar settings; and immediately after June 30, 2023, in the case of the remaining U.S. dollar settings. However, U.S. banking regulators have made it clear that U.S.-dollar LIBOR originations should end by no later than December 31, 2021, and that new LIBOR originations prior to that date must provide for an alternative reference rate in existing contracts. On July 29, 2021, the Alternative Reference Rates Committee (ARRC) announced that it is now formally recommending CME Group's forward-looking Secured Overnight Financing Rate term rates (SOFR Term Rates). In accordance with recommendations from ARRC, U.S.-dollar LIBOR is expected to be replaced with the Secured Overnight Financing Rate (SOFR) and SOFR Term Rates, a new index calculated by reference to short-term repurchase agreements for U.S. Treasury securities. Further, the International Swaps and Derivatives Association, Inc. recently announced fallback language for LIBOR-referencing derivatives contracts that also provides for SOFR as the primary replacement rate in the event of a LIBOR cessation.

The market transition from LIBOR to SOFR is expected to be complicated, including the development of term SOFR rates and credit adjustments to accommodate differences between LIBOR and SOFR. During the transition period, LIBOR may exhibit increased volatility or become less representative, and the overnight Treasury repurchase market underlying SOFR may also experience disruptions from time to time, which may result in unexpected fluctuations in SOFR.

Foreign Currency Rate Risks

In the normal course of business, we are exposed to risks associated with fluctuations in foreign currency exchange rates related to transactions that are denominated in currencies other than our functional currencies, as well as the effects of translating amounts denominated in a foreign currency to the U.S. Dollar as a normal part of our financial reporting process. Most of our foreign operations have the U.S. Dollar as their functional currency, however, two of our China facilities utilize the Renminbi (RMB), which results in recognition of translation adjustments included as a component of other comprehensive income (loss). Our foreign exchange exposure results primarily from employee-related and other costs of running our operations in foreign countries, foreign currency denominated purchases and translation of balance sheet accounts denominated in foreign currencies. Our primary foreign exchange exposure is to the RMB. Except for certain equipment purchases, we do not engage in hedging to manage this foreign currency risk. However, we may consider the use of derivatives in the future. In general, our Chinese customers pay us in RMB, which partially mitigates this foreign currency exchange risk.

Our foreign subsidiaries may at times enter into forward exchange contracts to manage foreign currency risks in relation to certain purchases of machinery denominated in foreign currencies other than our functional currencies. The notional amount of the foreign exchange contracts as of April 4, 2022 was approximately $1.6 million (EUR 1.4 million). There were no foreign exchange contracts as of January 3, 2022.

Commodity Price Risks

We are exposed to certain commodity risks associated with prices for various raw materials. In particular, we have been experiencing increasing prices and lead times of copper clad laminates (CCLs), a key raw material for the manufacture of PCBs. This may negatively affect our profitability. CCLs are made from epoxy resin, glass cloth, and copper foil, all of which are seeing limited supply and increased prices. We only buy a small amount of copper directly. However, copper is a major driver of laminate cost. We are hedging copper as a proxy for hedging laminate. As of April 4, 2022, we had commodity contracts with a notional quantity of (i) 500 metric tonnes for the period beginning April 5, 2022 and ending on June 29, 2022, (ii) 630 metric tonnes for the period beginning June 30, 2022 and ending on October 3, 2022, (iii) 700 metric tonnes for the period beginning October 4, 2022 and ending on January 3, 2023, and (iv) 700 metric tonnes for the period beginning January 1, 2023 and ending on March 31, 2023. As of April 4, 2022, the fair value of the commodity contracts was recorded as an asset in the amount of $1.7 million and included as a component of prepaid expenses and other current assets. We will continue to evaluate our commodity risks and may utilize commodity forward purchase contracts more frequently in the future.

Debt Instruments

The table below presents the fiscal calendar maturities of long-term debt through 2026 and thereafter of our debt instruments as of April 4, 2022:

	As of April 4, 2022								
	Remaining 2022	2023	2024 (1)	2025	2026	Thereafter	Total	Fair Value	Weighted Average Interest Rate
	(In thousands)								
US$ Variable Rate	$ —	$ —	$ 435,879	$ —	$ —	$ —	$ 435,879	$ 434,357	2.85%
US$ Fixed Rate	—	—	—	—	—	500,000	500,000	465,035	4.00%
Total	$ —	$ —	$ 435,879	$ —	$ —	$ 500,000	$ 935,879	$ 899,392	

(1) Interest rate swap effectively fixed $400,000 of variable rate debt through June 1, 2022.

Interest Rate Swap Contracts

As of April 4, 2022, the fair value of the interest rate swap was recorded as a liability in the amount of $1.4 million. The table below presents information regarding our interest rate swap during the quarter ended April 4, 2022:

	Quarter Ended April 4, 2022
	(In thousands, except interest rates)
Average interest payout rate	2.84 %
Interest payout amount	$ (2,871)
Average interest received rate	0.16 %
Interest received amount	$ 164

Item 4. ***Controls and Procedures***

Evaluation of Disclosure Controls and Procedures

Our management, under the supervision and with the participation of our Chief Executive Officer (CEO) and Chief Financial Officer (CFO), has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) as of the end of the period covered by this Quarterly Report. Based on this evaluation, our CEO and CFO have concluded that, as of April 4, 2022 such disclosure controls and procedures were effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and (ii) accumulated and communicated to our management, including our CEO and CFO, as appropriate to allow timely decisions regarding required disclosures.

In designing and evaluating our disclosure controls and procedures, our management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their desired control objectives, and our management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Changes in Internal Control over Financial Reporting

We continue to expand our implementation of an enterprise resource planning (ERP) system on a worldwide basis, which is expected to improve the efficiency of the financial reporting and related transaction processes. During the quarter ended April 4, 2022, we did not complete any implementations. As we continue to implement the ERP system at our remaining locations, we will continue to assess the impact on our internal control over financial reporting.

There have been no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended April 4, 2022 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***

From time to time, we may become a party to various legal proceedings arising in the ordinary course of our business. There can be no assurance that we will prevail in any such litigation. We believe that the amount of any reasonably possible or probable loss for known matters would not be material to our financial statements; however, the outcome of these actions is inherently difficult to predict. In the event of an adverse outcome, the ultimate potential loss could have a material adverse effect on our financial condition, results of operations, or cash flows in a particular period.

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

An investment in our common stock involves a high degree of risk. You should carefully consider the factors described below, in addition to those discussed elsewhere in this report, in analyzing an investment in our common stock. If any of the events described below occurs, our business, financial condition, and results of operations would likely suffer, the trading price of our common stock could fall, and you could lose all or part of the money you paid for our common stock. The risk factors described below are not the only ones we face. Risks and uncertainties not known to us currently, or that may appear immaterial, also may have a material adverse effect on our business, financial condition, and results of operations.

In addition, the following risk factors and uncertainties could cause our actual results to differ materially from those projected in our forward-looking statements, whether made in this report or the other documents we file with the SEC, or our annual or quarterly reports to stockholders, future press releases, or orally, whether in presentations, responses to questions, or otherwise.

Risks Related to our Business

We serve customers and have manufacturing facilities throughout the world and are subject to risks caused by local and global pandemics and other similar risks, including without limitation, the COVID-19 pandemic, which could materially adversely affect our business, financial condition, and results of operations.

Local and global pandemics or other disasters or public health concerns in regions of the world where we have operations or source material or sell products could result in the disruption of our business. Specifically, these pandemics, disasters and health concerns can result in increased travel restrictions and extended shutdowns of certain businesses in the regions in which we operate, as well as social, economic, or labor instability. Disruptions in our product shipments or impacts on our manufacturing in affected regions over a prolonged period could have a material adverse impact on our business and our financial results.

On March 11, 2020, the World Health Organization announced that COVID-19 infections had become a pandemic, and on March 13, 2020, the U.S. President announced a National Emergency relating to the disease. Federal, state, and local government responses to COVID-19 and our responses to the outbreak have all, at times, disrupted and will likely continue to disrupt our business. In the United States, individuals at times and in certain locations are being required to practice social distancing, in many places have been restricted from gathering in large groups, and in some cases have been placed on complete restriction from non-essential movements outside of their homes. Even as efforts to contain the pandemic have made progress and many restrictions have relaxed, new variants of the virus have arisen globally. At times, variants of COVID-19 have caused a surge in COVID-19 cases, both regionally, such as the recent outbreak in Mainland China that forced temporary lockdown orders in several cities in which we operate, and globally. The ultimate impact of new variants, such as the Delta variant and Omicron variant, or other variants that may emerge, cannot be predicted at this time, and could depend on numerous factors, including the availability of vaccines in different parts of the world, vaccination rates among the population, the effectiveness of COVID-19 vaccines, and the response by governmental bodies to reinstate restrictive measures.

In particular, multiple facets of our business may be negatively impacted by the fear of exposure to or actual effects of COVID-19 and other disease outbreaks, epidemics, pandemics and similar widespread public health concerns. These impacts include but are not limited to:

- failure of third parties on which we rely, including, without limitation, our suppliers, commercial banks, and other external business partners, to meet their obligations to us, caused by significant disruptions in their ability to do so or their own financial or operational difficulties;
- supply chain risks such as disruptions of supply chains, excess demand on suppliers, and scrutiny or embargoing of goods produced in infected areas;
- reduced workforces and labor shortages at all levels of our organization, which may be caused by, but not limited to, the temporary inability of the workforce to work due to illness, quarantine, or government mandates and incentives;
- temporary business closures due to reduced workforces or government mandates;
- reduced demand for our products and services caused by, but not limited to, the effect of quarantine or other travel restrictions or financial hardship on the businesses in the industries we service;

- restrictions to our business as a result of federal or state laws, regulations, orders or other governmental or regulatory actions, if adopted; or
- lawsuits from employees and others exposed to COVID-19 at our facilities, which may involve large demands or substantial defense costs that our professional and general liability insurance may not cover.

Any of the foregoing factors, or other cascading effects that are not currently foreseeable, could materially increase our costs, negatively impact our sales, or damage the Company's financial condition, results of operations, cash flows and its liquidity position, possibly to a significant degree. The duration of any such impacts cannot be predicted because of the sweeping, ongoing and uncertain nature of the circumstances involving the COVID-19 pandemic.

We have pursued and intend to continue to pursue potential divestitures of assets and acquisitions of other businesses and may encounter risks associated with these activities, which could harm our business and operating results. If we are unable to manage our growth effectively, our business, financial condition, and results of operations could be materially adversely affected.

As part of our business strategy, we expect that we will continue to implement and align our strategy by pursuing potential divestitures of assets and acquisitions of businesses, technologies, assets, or product lines that complement or expand our business, such as our recently announced proposed acquisition of Telephonics Corporation and ISC Farmingdale Corp. Risks related to such activities and transactions may include:

- the potential inability to successfully integrate acquired operations and businesses or to realize anticipated synergies, economies of scale, or other expected value;
- diversion of management's attention from normal daily operations of our existing business to focus on integration of the newly acquired business;
- unforeseen expenses associated with the integration of the newly acquired business or assets;
- difficulties in managing production and coordinating operations at new sites;
- the potential loss of key employees of acquired or divested operations;
- the potential inability to retain existing customers of acquired companies when we desire to do so;
- insufficient revenues to offset increased expenses associated with acquisitions;
- the potential decrease in overall gross margins associated with acquiring a business with a different product mix;
- the inability to identify certain unrecorded liabilities;
- the inability to consummate a potential divestiture due to regulatory constraints or other closing conditions;
- the separation of business infrastructure involved in a potential divestiture may create disruption in our business;
- the tax burden related to the divestiture may be larger than expected;
- the potential divestiture of assets or product lines could create dis-synergies and change our profitability;
- the potential need to restructure, modify, or terminate customer relationships of the acquired or divested assets or company;
- an increased concentration of business from existing or new customers; and
- the potential inability to identify assets best suited to our business plan.

Acquisitions may cause us to:

- enter lines of business and/or markets in which we have limited or no prior experience;
- issue debt and be required to abide by stringent loan covenants;
- assume liabilities;
- record goodwill and intangible assets that will be subject to impairment testing and potential periodic impairment charges;
- become subject to litigation and environmental issues, which include product material content certifications related to conflict minerals;
- incur unanticipated costs;
- incur large and immediate write-offs; and
- incur substantial transaction-related costs, whether or not a proposed acquisition is consummated.

Acquisitions of high technology companies and assets are inherently risky, and no assurance can be given that our prior or future acquisitions will be successful. Failure to manage and successfully integrate acquisitions we make could have a material adverse effect on our business, financial condition, and results of operations. Even when an acquired company has already developed and marketed products, product enhancements may not be made in a timely fashion. In addition, unforeseen issues might arise with respect to such products after any such acquisition.

As we continue to experience growth in the scope and complexity of our operations, we may be required to implement additional operating and financial controls and hire and train additional personnel. There can be no assurance that we will be able to do so in the future, and failure to do so could jeopardize our expansion plans and seriously harm our operations. In addition, growth in our capacity could result in reduced capacity utilization and a corresponding decrease in gross margins.

Uncertainty and adverse changes in the global economy and financial markets, including the conflict between Russia and Ukraine, could have an adverse impact on our business and operating results.

Uncertainty or adverse changes in the economy could lead to a significant decline in demand for the end products manufactured by our customers, which, in turn, could result in a decline in the demand for our products and increase pressure to reduce our prices. Any decrease in demand for our products could have an adverse impact on our financial condition, operating results and cash flows. Uncertainty and adverse changes in the economy could also increase the cost and decrease the availability of potential sources of financing and increase our exposure to losses from bad debts, either of which could have a material adverse effect on our financial condition, operating results and cash flows.

In February 2022, Russia commenced military hostilities against Ukraine, which has created extreme volatility in the global economy and markets and is expected to create geopolitical instability and have further global economic consequences, including disruptions of the global supply chain and energy markets. The effects of the conflict could also include significant volatility in credit and capital markets, changes in laws and regulations affecting our business, sanctions or counter-sanctions which may be enacted and increased cybersecurity threats and concerns. As a result, there is a risk that supplies of our products may be significantly delayed by or may become unavailable as a result of the conflict between Russia and Ukraine affecting us or our suppliers. The conflict may also reduce demand for our products because of reduced global or national economic activity, disruptions and extreme volatility in global financial markets, increased rates of default and bankruptcy, and reduced levels of business and consumer spending. The effects of the conflict between Russia and Ukraine could heighten or exacerbate many of the risk factors described in this Item 1A, *Risk Factors*, and may adversely affect our business, financial condition and results of operation.

We have manufacturing facilities and serve customers outside the United States and are subject to the risks characteristic of international operations, including tariffs.

We have significant manufacturing operations in Asia and Canada and sales offices located in Asia and Europe. We continue to consider additional opportunities to make foreign investments and construct new foreign facilities.

In addition, for the quarter ended April 4, 2022, we generated approximately 58% of our net sales from non-U.S. operations, and a significant portion of our manufacturing material was provided by international suppliers during this period. The United States' trade policies and those of foreign countries are subject to change which could adversely affect our ability to purchase and sell goods and materials without significant tariffs, taxes or duties that may be imposed on the materials we purchase or the goods we sell, thereby increasing the cost of such materials and potentially decreasing our margins. Further, our revenues could be impacted if our customers' ability to sell their goods is reduced by such tariffs, taxes or duties. Both the U.S. and Chinese governments have included PCBs among items subjected to tariffs imposed on imports from such countries, which may negatively impact our revenue and profitability. In addition, we are subject to risks relating to significant international operations, including but not limited to:

- managing international operations;
- imposition of governmental controls;
- unstable regulatory environments;
- compliance with employment laws;
- implementation of disclosure controls, internal controls, financial reporting systems, and governance standards to comply with U.S. accounting and securities laws and regulations;
- limitations on imports or exports of our product offerings;
- fluctuations in the value of local currencies;
- inflation or changes in political and economic conditions;
- public health crises, such as the COVID-19 pandemic;
- labor unrest, rising wages, difficulties in staffing, and geographical labor shortages;

- government or political unrest;
- conflict or war between nations over territory that impacts the electronics supply chain leading to potential trade restrictions to and from the nations involved, including Russia, Ukraine and China;
- longer payment cycles;
- language and communication barriers, as well as time zone differences;
- cultural differences;
- increases in duties and taxation levied on our products;
- other potentially adverse tax consequences;
- imposition of restrictions on currency conversion or the transfer of funds;
- travel restrictions;
- expropriation of private enterprises;
- the potential reversal of current favorable policies encouraging foreign investment and trade;
- the potential for strained trade relationships between the United States and its trading partners, including trade tariffs which could create competitive pricing risk; and
- government imposed sanction laws and regulations.

Further, the conflict between Russia and Ukraine described in the previous risk factors, and the effects thereof, may adversely affect our manufacturing facilities and our customers.

Rising labor costs and labor shortages, including due to pandemics and other disasters, employee strikes and other labor-related disruptions may materially adversely affect our business, financial condition, and results of operations.

Our business is labor intensive, utilizing large numbers of engineering and manufacturing personnel. There is uncertainty with respect to rising labor costs. Furthermore, labor disputes and strikes based partly on wages have in the past slowed or stopped production by certain manufacturers in China. In some cases, employers have responded by significantly increasing the wages of workers at such plants. Any increase in labor costs due to minimum wage laws or customer requirements about scheduling and overtime that we are unable to recover in our pricing to our customers could materially adversely affect our business, financial condition, and results of operations. In addition, general labor shortages (such as occurred during 2021), a high turnover rate and our difficulty in recruiting and retaining qualified employees at any level of our organization could result in a potential for defects in our products, production disruptions or delays, or the inability to ramp production to meet increased customer orders, resulting in order cancellation or imposition of customer penalties if we are unable to deliver products in a timely manner.

To respond to competitive pressures and customer requirements, we may further expand internationally in lower-cost locations. If we pursue such expansions, we may be required to make additional capital expenditures. For instance, we recently announced our plans to construct a new plant in Penang, Malaysia, which we project will require approximately $130.0 million in capital expenditures over a three-year period. In addition, the cost structure in certain countries that are now considered to be favorable may increase as economies develop or as such countries join multinational economic communities or organizations, causing local wages to rise. As a result, we may need to continue to seek new locations with lower costs and the employee and infrastructure base to support PCB manufacturing. We cannot assure investors that we will realize the anticipated strategic benefits of our international operations, including our new plant, or that our international operations will contribute positively to our operating results.

In North America, we are experiencing wage inflation pressures, some of which are mandated by local and state governments. Further, we are experiencing rising health care costs. While we strive to manage these challenges, there can be no assurance that our efforts will succeed which would result in higher costs and lower profits.

The competition for talent and labor in general is currently extremely high. In this competitive environment, our business could be adversely impacted by increases in labor costs, which could include increases in wages and benefits necessary to attract and retain high quality employees with the right skill sets, increases triggered by regulatory actions regarding wages, scheduling, and benefits; increases in health care and workers' compensation insurance costs; and increases in benefits and costs related to the COVID-19 pandemic and its resurgence from time to time. In light of the current challenging labor market conditions, due in part to the COVID-19 pandemic, our wages and benefits programs and any steps we take to increase our wages and benefits, may be insufficient to attract and retain talent at all levels of our organization. Existing labor shortages, and our inability to attract employees to maintain a qualified workforce, could adversely affect our production and our overall business and financial performance.

Strikes or labor disputes with our unionized employees, primarily in China, may adversely affect our ability to conduct our business. If we are unable to reach agreement with any of our unionized work groups on future negotiations regarding the terms of their collective bargaining agreements, we may be subject to work interruptions or stoppages. Any of these events could be disruptive to our operations and could result in negative publicity, loss of contracts, and a decrease in revenues. We may also become subject to additional collective bargaining agreements in the future if more employees or segments of our workforce become unionized, including any of our employees in the United States.

We may be unable to hire and retain sufficient qualified personnel at all levels of our organization, and the loss of any of our key executive officers, or the inability to maintain a sufficient workforce to satisfy production demands, could materially adversely affect our business, financial condition, and results of operations.

We believe that our future success will depend in large part on our ability to attract and retain highly skilled, knowledgeable, sophisticated, and qualified managerial and professional personnel. Furthermore, we have limited patent or trade secret protection for our manufacturing processes and rely on the collective experience of our employees involved in our manufacturing processes to ensure that we continuously evaluate and adopt new technologies in our industry. We may not be able to retain our executive officers and key personnel or attract additional qualified management in the future. We can make no assurances that future changes in executive management will not have a material adverse effect on our business, financial condition, or results of operations. Our business also depends on our continuing ability to recruit, train, and retain highly qualified employees, particularly engineering and sales and marketing personnel. The competition for these employees is intense, and the loss of these employees could harm our business.

In addition, our industry experienced in 2021, and continues to experience, a shortage of workers. Although we believe this shortage is due, in part, to the COVID-19 pandemic, the shortage may be systemic and may continue after the pandemic ends. We rely on maintaining a sufficient workforce at all levels of our organization to design, manufacture and distribute our products. If the labor markets remain tight and we are unable to adequately staff our facilities due to a shortage of qualified workers, our operations and financial performance would likely be adversely affected.

We rely on suppliers and equipment manufacturers for the timely delivery of raw materials, components, equipment, and spare parts used in manufacturing our PCBs. If a raw material supplier or equipment manufacturer goes bankrupt, liquidates, consolidates out of existence, experiences excess demands or other disruptions to their supply chain or operations, or otherwise fails to satisfy our product quality standards, or if the prices or availability of raw materials change, it could harm our ability to purchase new manufacturing equipment, service the equipment we have, or timely produce our products, thereby affecting our customer relationships.

To manufacture PCBs, we use raw materials such as laminated layers of fiberglass, copper foil, chemical solutions, gold, copper, and other commodity products, which we order from our suppliers. For RF components, we use various high-performance materials such as ceramics and printed circuit board materials. In the case of backplane assemblies, components include connectors, sheet metal, capacitors, resistors and diodes, many of which are custom made and controlled by our customers' approved vendors.

Our success is due in part to our ability to deliver products timely to our customers, which requires successful planning and logistics infrastructure, including, ordering, transportation and receipt processing, and the ability of suppliers to meet our materials requirements.

Consolidations and restructuring in our supplier base and equipment fabricators related to our raw materials purchases or the manufacturing equipment we use to fabricate our products may result in adverse changes in pricing of materials due to reduction in competition among our raw material suppliers or an elimination or shortage of equipment and spare parts from our manufacturing equipment supply base. Suppliers and equipment manufacturers may be impacted by other events outside our control including macro-economic events, financial instability, environmental occurrences, or supplier interruptions due to fire, natural catastrophes, public health crises or otherwise. Several of these factors, including the ongoing COVID-19 pandemic, have contributed to supply chain constraints we have experienced during 2021 and into 2022. As a result, suppliers and equipment manufacturers have extended lead times, limited supplies, and/or increased prices due to capacity constraints and other factors. These have impacted our ability to deliver our products on a timely basis, our inventory levels and cash flow, and could negatively impact our financial results. The severity of the constraints in the supply chain is continuously changing, which creates substantial uncertainties in our business. In addition, in extreme circumstances, the suppliers we purchase from could cease production altogether due to a fire, natural disaster, consolidation or liquidation of their businesses. The supply chain constraints and other factors discussed above may continue to impact our ability to deliver our products on a timely basis, harm our customer relationships and negatively impact our financial results.

In particular, the current macroeconomic trends towards increasing inflation could increase the cost of our raw materials and components. If raw material and component prices increase or if there is inflationary pressure on the cost of the metals that we use to produce our product, especially if the prices of copper, gold, palladium and other precious metals we use to manufacture our products increase, it may reduce our gross margins. Should the supply of materials used in the above manufacturing processes become limited, our ability to obtain the quantities necessary to meet our customers' demand may be impacted which could cause us to encounter reduced revenue levels or price increases which would impact our profit margins. If either of these situations occurs, our financial condition and results of operations could be negatively impacted.

We are subject to risks of currency fluctuations.

A portion of our cash, other current assets and current liabilities is held in currencies other than the U.S. dollar. Changes in exchange rates among other currencies and the U.S. dollar will affect the value of these assets or liabilities as re-measured to U.S. dollars on our balance sheet. To the extent that we ultimately decide to repatriate some portion of these funds to the United States, the actual value transferred could be impacted by movements in exchange rates. Any such type of movement could negatively impact the amount of cash available to fund operations or to repay debt. Additionally, we have revenues and costs denominated in currencies other than the U.S. dollar (primarily the Renminbi (RMB)). Fluctuations in the exchange rates between the U.S. dollar and the RMB could result in increases or decreases in our costs or revenues which could negatively impact our business, financial condition, and results of operations. Significant inflation or disproportionate changes in foreign exchange rates could occur as a result of general economic conditions, acts of war or terrorism, changes in governmental monetary or tax policy, or changes in local interest rates Further, China's government imposes controls over the convertibility of RMB into foreign currencies, which subjects us to further currency exchange risk.

The worldwide electronics industry is intensely competitive and volatile.

A majority of our revenue is generated from the electronics industry, which is characterized by intense competition, relatively short product life cycles, and significant fluctuations in product demand. The industry is subject to economic cycles and recessionary periods. Due to the uncertainty in the end markets served by most of our customers, we have a low level of visibility with respect to future financial results. Consequently, our past operating results, earnings, and cash flows may not be indicative of our future operating results, earnings, and cash flows.

If we are unable to maintain satisfactory capacity utilization rates, our business, financial condition, and results of operations would be materially adversely affected.

Given the high fixed costs of our operations, decreases in capacity utilization rates can have a significant effect on our business. Accordingly, our ability to maintain or enhance gross margins will continue to depend, in part, on maintaining satisfactory capacity utilization rates. In turn, our ability to maintain satisfactory capacity utilization will depend on the demand for our products, the volume of orders we receive, our ability to maintain a sufficient workforce at our facilities, and our ability to offer products that meet our customers' requirements at competitive prices. If current or future production capacity fails to match current or future customer demands, our facilities would be underutilized, our sales may not fully cover our fixed overhead expenses, and we would be less likely to achieve expected gross margins. If forecasts and assumptions used to support the realizability of our long-lived assets change in the future, significant impairment charges could result that would materially adversely affect our business, financial condition, and results of operations.

In addition, we generally schedule our quick turnaround production facilities at less than full capacity to retain our ability to respond to unexpected additional quick-turn orders. However, if these orders are not received, we may forego some production and could experience continued excess capacity. If we conclude we have significant, long-term excess capacity, we may decide to permanently close one or more of our facilities and lay off some of our employees. Closures or lay-offs could result in our recording restructuring charges such as severance, other exit costs, and asset impairments, as well as potentially causing disruptions in our ability to supply customers.

We have a significant amount of goodwill and other intangible assets on our consolidated condensed balance sheet. If our goodwill or other intangible assets become impaired in the future, we would be required to record a non-cash charge to earnings, which may be material and would also reduce our stockholders' equity.

As of April 4, 2022, our consolidated condensed balance sheet included $867.6 million of goodwill and definite-lived intangible assets. We periodically evaluate whether events and circumstances have occurred, such that the potential for reduced expectations for future cash flows coupled with further decline in the market price of our stock and market capitalization may indicate that the remaining balance of goodwill and definite-lived intangible assets may not be recoverable. If factors indicate that assets are impaired, we would be required to reduce the carrying value of our goodwill and definite-lived intangible assets, which could harm our results during the periods in which such a reduction is recognized.

Our results of operations are often subject to demand fluctuations and seasonality. With a high level of fixed operating costs, even small revenue shortfalls would decrease our gross margins.

Our results of operations fluctuate for a variety of reasons, including:

- timing of orders from and shipments to major customers;
- the levels at which we utilize our manufacturing capacity;
- price competition;
- changes in our mix of revenues generated from quick-turn versus standard delivery time services;

- expenditures, charges or write-offs, including those related to acquisitions, facility restructurings, or asset impairments; and
- expenses relating to expanding existing manufacturing facilities.

A significant portion of our operating expenses is relatively fixed in nature, and planned expenditures are based in part on anticipated orders. Accordingly, unexpected revenue shortfalls may decrease our gross margins. In addition, we have experienced sales fluctuations due to seasonal patterns in the capital budgeting and purchasing cycles, as well as inventory management practices of our customers and the end markets we serve. These seasonal trends have caused fluctuations in our operating results in the past and may continue to do so in the future. Results of operations in any period should not be considered indicative of the results that may be expected for any future period. In addition, our future quarterly operating results may fluctuate and may not meet the expectations of securities analysts or investors.

We participate in competitive industries, including the automotive industry, which requires strict quality control standards. Failure to meet these standards may adversely affect our business, financial condition, and results of operations.

Our customer base demands the highest customer service, on time delivery and quality standards in a competitive market. Failure to meet these ever-increasing standards may result in a loss of market share for our products and services to our competitors, which may result in a decline in our overall revenue.

In addition, a significant portion of our sales are to customers within the automotive industry. The automotive industry has historically experienced multi-year cycles of growth and decline. If sales of automobiles should decline or go into a cyclical downturn, our sales could decline, and this could have a materially adverse impact on our business, financial condition and result of operations. For safety reasons, automotive customers have strict quality standards that generally exceed the quality requirements of other customers. If such products do not meet these quality standards, our business, financial condition, and results of operations may be materially adversely affected. These automotive customers may require long periods of time to evaluate whether our manufacturing processes and facilities meet their quality standards. If we were to lose automotive customers due to quality control issues, we might not be able to regain those customers or gain new automotive customers for long periods of time, which could have a material adverse effect on our business, financial condition, and results of operations. Moreover, we may be required under our contracts with automotive industry customers to indemnify them for the cost of warranties and recalls relating to our products.

The prominence of EMS companies as our customers could reduce our gross margins, potential sales, and customers.

Sales to EMS companies represented approximately 40% and 35% of our net sales for the quarters ended April 4, 2022 and March 29, 2021, respectively. Sales to EMS providers include sales directed by OEMs as well as orders placed with us at the EMS providers' discretion. EMS providers source on a global basis to a greater extent than OEMs. The growth of EMS providers increases the purchasing power of such providers and has in the past, and could in the future, result in increased price competition or the loss of existing OEM customers. In addition, some EMS providers, including some of our customers, have the ability to directly manufacture PCBs and create backplane assemblies. If a significant number of our other EMS customers were to acquire these abilities, our customer base might shrink, and our sales might decline substantially. Moreover, if any of our OEM customers outsource the production of PCBs and creation of backplane assemblies to these EMS providers, our business, financial condition, and results of operations may be materially adversely affected.

We depend upon a relatively small number of OEM customers for a large portion of our sales, and a decline in sales to major customers would materially adversely affect our business, financial condition, and results of operations.

A small number of customers are responsible for a significant portion of our sales. Our five largest OEM customers collectively accounted for approximately 33% and 32% of our net sales for the quarters ended April 4, 2022 and March 29, 2021, respectively. Furthermore, our business has benefited from OEMs deciding to outsource their PCB manufacturing and backplane assembly needs to us, and our future revenue growth partially depends on new outsourcing opportunities from OEMs. Sales attributed to OEMs include both direct sales as well as sales that the OEMs place through EMS providers. Our customer concentration could fluctuate, depending on future customer requirements, which will depend in large part on market conditions in the electronics industry segments in which our customers participate. The loss of one or more significant customers or a decline in sales to our significant customers would materially adversely affect our business, financial condition, and results of operations. In addition, we generate significant accounts receivable in connection with providing manufacturing services to our customers. If one or more of our significant customers were to become insolvent or were otherwise unable to pay for the manufacturing services provided by us, our business, financial condition, and results of operations would be materially adversely affected.

In addition, during industry downturns, we may need to reduce prices to limit the level of order losses, and we may be unable to collect payments from our customers. There can be no assurance that key customers would not cancel orders, that they would continue to place orders with us in the future at the same levels as experienced by us in prior periods, that they would be able to meet their payment obligations, or that the end-products that use our products would be successful. This concentration of customer base may materially adversely affect our business, financial condition, and results of operations due to the loss or cancellation of business from any of these key customers, significant changes in scheduled deliveries to any of these customers or decreases in the prices of the products sold to any of these customers

We depend on the U.S. government for a significant portion of our business, which involves unique risks. Changes in government defense spending or regulations could have a material adverse effect on our business, financial condition, and results of operations.

A significant portion of our revenues is derived from products and services that are ultimately sold to the U.S. government by our OEM and EMS customers and is therefore affected by, among other things, the federal government budget process. We are a supplier, primarily as a subcontractor, to the U.S. government and its agencies, as well as foreign governments and agencies. The contracts between our direct customers and the government end user are subject to political and budgetary constraints and processes, changes in short-range and long-range strategic plans, the timing of contract awards, the congressional budget authorization and appropriation processes, the government's ability to terminate contracts for convenience or for default, as well as other risks, such as contractor suspension or debarment in the event of certain violations of legal and regulatory requirements.

For the quarter ended April 4, 2022, aerospace and defense sales accounted for approximately 30% of our total net sales. The substantial majority of aerospace and defense sales are related to both U.S. and foreign military and defense programs. While we do not sell any significant volume of products directly to the U.S. government or to foreign governments and agencies, we are a supplier to OEMs that sell to these entities. Consequently, our sales are affected by changes in the defense budgets of the U.S. and foreign governments and may be affected by federal budget sequestration measures.

The domestic and international threat of terrorist activity, emerging nuclear states, and conventional military threats have generally led to an increase in demand for defense products and services and homeland security solutions in the recent past. The termination or failure to fund one or more significant defense programs or contracts by the U.S. government could have a material adverse effect on our business, financial condition, and results of operations.

Future changes to the U.S. Munitions List could reduce or eliminate restrictions that currently apply to some of the products we produce. If these regulations or others are changed in a manner that reduces restrictions on products being manufactured overseas, we would likely face an increase in the number of competitors and increased price competition from overseas manufacturers, who are restricted by the current export laws from manufacturing products for U.S. defense systems.

We are exposed to the credit risk of our customers and to credit exposures in weakened markets.

Most of our sales are on an "open credit" basis, with standard industry payment terms. We monitor individual customer payment capability in granting such open credit arrangements, seek to limit such open credit to amounts we believe the customers can pay, and maintain reserves we believe are adequate to cover exposure for doubtful accounts. During periods of economic downturn in the electronics industry and the global economy, our exposure to credit risks from our customers increases. Although we have programs in place to monitor and mitigate the associated risks, such programs may not be effective in reducing our credit risks.

Additionally, our OEM customers often direct a significant portion of their purchases through a relatively limited number of EMS companies. Sales to EMS companies represented approximately 40% and 35% of our net sales for the quarters ended April 4, 2022 and March 29, 2021, respectively. Our contractual relationship is often with the EMS companies, who are obligated to pay us for our products. Because we expect our OEM customers to continue to direct our sales to EMS companies, we expect to continue to be subject to this credit risk with a limited number of EMS customers. If one or more of our significant customers were to become insolvent or were otherwise unable to pay us, our business, financial condition, and results of operations would be materially adversely affected.

Our business, financial condition, and results of operations could be materially adversely affected by climate change initiatives.

Our manufacturing processes require that we purchase significant quantities of energy from third parties, which results in the generation of greenhouse gases, either directly on-site or indirectly at electric utilities. Both domestic and international legislation to address climate change by reducing greenhouse gas emissions could create increases in energy costs and price volatility. Considerable international attention is now focused on development of an international policy framework to guide international action to address climate change. Proposed and existing legislative efforts to control or limit greenhouse gas emissions could affect our energy sources and supply choices, as well as increase the cost of energy and raw materials that are derived from sources that generate greenhouse gas emissions.

Competition in the PCB market is intense, and we could lose market share, or our profit margins may decrease, if we are unable to maintain our current competitive position in end markets using our quick-turn, high technology, and high-mix manufacturing services.

The PCB industry is intensely competitive, highly fragmented, and rapidly changing. We expect competition to continue, which could result in price reductions, reduced gross margins, and loss of market share. In addition, we increasingly compete on an international basis, and new and emerging technologies may result in new competitors entering our markets.

Some of our competitors and potential competitors have advantages over us, including:

- greater financial and manufacturing resources that can be devoted to the development, production, and sale of their products;
- more established and broader sales and marketing channels;
- more manufacturing facilities worldwide, some of which are closer in proximity to OEMs;
- manufacturing facilities that are located in countries with lower production costs;
- lower capacity utilization, which in peak market conditions can result in shorter lead times to customers;
- ability to add additional capacity faster or more efficiently;
- preferred vendor status with existing and potential customers;
- greater name recognition; and
- larger customer bases.

In addition, these competitors may respond more quickly to new or emerging technologies or adapt more quickly to changes in customer requirements than we do. We must continually develop improved manufacturing processes to meet our customers' needs for complex products, and our manufacturing process technology is generally not subject to significant proprietary protection. During recessionary periods in the electronics industry, our strategy of providing quick-turn services, an integrated manufacturing solution, and responsive customer service may take on reduced importance to our customers. As a result, we may need to compete more on the basis of price, which would cause our gross margins to decline.

We and some of our competitors have reduced average selling prices in the past. In addition, competitors may reduce their average selling prices faster than our ability to reduce costs, which can also accelerate the rate of decline of our selling prices. When prices decline, we may also be required to write down the value of our inventory.

If we are unable to adapt our design and production processes in response to rapid technological change and process development, we may not be able to compete effectively.

The markets for our products and manufacturing services are characterized by rapidly changing technology and continual implementation of new designs and production processes. The future success of our business will depend in large part upon our ability to maintain and enhance our technological capabilities, to design and manufacture products that meet changing customer needs, and to successfully anticipate or respond to technological changes on a cost-effective and timely basis. We expect that the investment necessary to maintain our technological position will increase as customers make demands for products and services requiring more advanced technology on a quicker turnaround basis. For example, in 2022 in our PCB segment, we expect to continue to make significant capital expenditures to expand our HDI, RF technology, and other advanced manufacturing capabilities while in our RF&S Components segment, we are designing products that we hope our customers adopt and incorporate into their products. We may not be able to obtain access to additional sources of funds in order to respond to technological changes as quickly as our competitors. In addition, our failure to adopt and implement technological improvements quickly may cause inefficiencies in our production process as our product yields or quality may decrease, resulting in increased costs, and may lead to customers not adopting our product designs.

We also could encounter competition from new or revised manufacturing, production and design technologies that render existing manufacturing, production and design technology less competitive or obsolete. We may not respond effectively to the technological requirements of the changing market. If we need new technologies and equipment or if we are not able to design new products acceptable to customers to remain competitive, the development, acquisition, and implementation of those designs, technologies and equipment may require us to make significant capital investments.

Products we manufacture may contain design or manufacturing defects, which could result in reduced revenue from the sale of our products or services and may result in liability claims against us.

We manufacture products to our customers' specifications, which are highly complex and may contain design or manufacturing errors or failures, despite our quality control and quality assurance efforts. Defects in the products we manufacture, whether caused by a design, manufacturing, or materials failure or error, may result in delayed shipments, customer dissatisfaction, a reduction or cancellation of purchase orders, or liability claims against us. If these defects occur either in large quantities or too frequently, our business reputation may be impaired, and our customers may decrease the orders for products or services that they purchase from us, thereby decreasing our overall revenue. Since our products are used in products that are integral to our customers' businesses, errors, defects, or other performance problems could result in financial or other damages to our customers beyond the cost of the PCB, for which we may be liable. Although our invoices and sales arrangements generally contain provisions designed to limit our exposure to product liability and related claims, existing or future laws or unfavorable judicial decisions could negate these limitation of liability provisions. In addition, we manufacture products for a range of automotive customers. If any of our products are or are alleged to be defective, we may be required to participate in a recall of such products. As suppliers become more integral to the vehicle design process and assume more of the vehicle assembly functions, vehicle manufacturers are increasingly looking to their suppliers for contributions when faced with product liability claims or recalls. In addition, vehicle manufacturers, which have traditionally borne the costs associated with warranty programs offered on their vehicles, are increasingly requiring suppliers to guarantee or warrant their products and may seek to hold us responsible for some or all of the costs related to the repair and replacement of parts supplied by us to the vehicle manufacturer.

Infringement of our intellectual property rights could negatively affect us, and we may be exposed to intellectual property infringement claims from third parties that could be costly to defend, could divert management's attention and resources, and if successful, could result in liability.

We rely on a combination of copyright, patent, trademark, trade secret laws, confidentiality procedures, contractual provisions, and other measures to establish and protect our proprietary and confidential information. All of these measures afford only limited protection. These measures may be invalidated, circumvented, breached, or challenged, and others may develop intellectual property, technologies or processes that are similar, or superior to, our intellectual property or technology. We may not have adequate controls and procedures in place to protect our proprietary and confidential information. Despite our efforts to protect our intellectual property and proprietary rights, unauthorized parties may attempt to copy and succeed in copying our products or may obtain or use information that we regard as proprietary or confidential. If it becomes necessary for us to resort to litigation to protect our intellectual property rights, any proceedings could be burdensome, costly, and distracting to management, and we may not prevail. Further, adequate remedies may not be available in the event of an unauthorized use or disclosure of our proprietary or confidential information. Failure to successfully establish or enforce our intellectual property rights could materially and adversely affect our business, financial condition, and results of operations. Furthermore, there is a risk that we may infringe on the intellectual property rights of others. As is the case with many other companies in the PCB industry, we from time to time receive communications from third parties asserting patent rights over our products and enter into discussions with such third parties. Irrespective of the validity or the successful assertion of such claims, we could incur costs in either defending or settling any intellectual property disputes alleging infringement. If any claims, regardless of whether they have merit, are brought against our customers for such infringement, we could be required to expend significant resources in defending such claims, developing non-infringing alternatives or obtaining licenses. We may not be successful in developing such alternatives or in obtaining such licenses on reasonable terms, or at all, and may be required to modify or cease marketing our products or services, which could disrupt the production processes, damage our reputation, and materially and adversely affect our business, financial condition, and results of operations.

Foreign laws may not afford us sufficient protections for our intellectual property, and we may not be able to obtain patent protection outside of the United States.

Certain nations that we operate in may not grant us certain intellectual property rights that are customarily granted in more developed legal systems. Patent law reform in the United States and other countries may also weaken our ability to enforce our patent rights or make such enforcement financially unattractive. For example, despite continuing international pressure on the Chinese government, intellectual property rights protection continues to present significant challenges to foreign investors and, increasingly, Chinese companies. Chinese commercial law is considered by some to be relatively undeveloped compared to the commercial law in our other major markets and only limited protection of intellectual property is available in China as a practical matter. Although we have taken precautions in the operations of our Chinese subsidiaries and in our joint venture agreement to protect our intellectual property, any local design or manufacture of products that we undertake in China could subject us to an increased risk that unauthorized parties will be able to copy or otherwise obtain or use our intellectual property, which could harm our business. We may also have limited legal recourse in the event we encounter patent or trademark infringement. Uncertainties with respect to the Chinese legal system may adversely affect the operations of our Chinese subsidiaries. China has put in place a comprehensive system of intellectual property laws; however, incidents of infringement are relatively common, and enforcement of rights can, in practice, be difficult. If we are unable to manage our intellectual property rights, our business and operating results may be seriously harmed.

Damage to any of our manufacturing facilities due to fire, natural disaster, or other events could materially adversely affect our business, financial condition, and results of operations.

The destruction or closure of any of our facilities for a significant period of time as a result of fire, explosion, blizzard, act of war or terrorism, flood, tornado, earthquake, lightning, other natural disasters, required maintenance, or other events could harm us financially, increasing our costs of doing business and limiting our ability to deliver our manufacturing services on a timely basis.

Our insurance coverage with respect to damages to our facilities or our customers' products caused by natural disasters is limited and is subject to deductibles and coverage limits. Such coverage may not be adequate or continue to be available at commercially reasonable rates and terms.

In the event one or more of our facilities is closed on a temporary or permanent basis as a result of a natural disaster, required maintenance or other event, our operations could be significantly disrupted. Such events could delay or prevent product manufacturing and shipment for the time required to transfer production or repair, rebuild or replace the affected manufacturing facilities. This time frame could be lengthy and result in significant expenses for repair and related costs. While we have disaster recovery plans in place, there can be no assurance that such plans will be sufficient to allow our operations to continue in the event of every natural or man-made disaster, required repair or other extraordinary event. Any extended inability to continue our operations at unaffected facilities following such an event would reduce our revenue and potentially damage our reputation as a reliable supplier.

Risks Related to our Indebtedness

We have substantial outstanding indebtedness, and our outstanding indebtedness could adversely impact our liquidity and flexibility in obtaining additional financing, our ability to fulfill our debt obligations and our financial condition and results of operations.

We have substantial debt and, as a result, we have significant debt service obligations. We maintain $405.9 million outstanding in a Term Loan Facility due 2024 (Term Loan Facility) at a floating rate of LIBOR plus 2.5%, $500.0 million of Senior Notes due 2029 (Senior Notes due 2029) at an interest rate of 4.0%, and $30.0 million outstanding under a $150.0 million Asia Asset-Based Lending Credit Agreement (Asia ABL). We and a number of our direct and indirect subsidiaries also have various credit facilities and letters of credit. Such agreements also contain certain financial covenants which require us to maintain, under the occurrence of certain events, a consolidated fixed charge coverage ratio.

Subject to the limits contained in the credit agreements governing the Term Loan Facility, the U.S. ABL, the Asia ABL, the indenture governing the Senior Notes due 2029, and our other debt instruments, we may be able to incur substantial additional debt from time to time to finance working capital, capital expenditures, investments or acquisitions, or for other purposes. If we do so, the risks related to our high level of debt could intensify. Specifically, our high level of debt could have important consequences to us and our shareholders. For example, it could:

- make it more difficult for us to satisfy our obligations with respect to our indebtedness, which could in turn result in an event of default on such indebtedness;
- require us to use a substantial portion of our cash flow from operations for debt service payments, thereby reducing the availability of cash for working capital, capital expenditures, acquisitions and other general corporate purposes;
- impair our ability to obtain additional financing in the future for working capital, capital expenditures, acquisitions and other investments or general corporate purposes, which may limit our ability to execute our business strategy;
- diminish our ability to withstand a downturn in our business, the industry in which we operate or the economy generally and restrict us from exploiting business opportunities or making acquisitions;
- limit our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate or the general economy;
- increase our vulnerability to general adverse economic and industry conditions, including movements in interest rates, which could result in increased borrowing costs;
- limit management’s discretion in operating our business; and
- place us at a competitive disadvantage as compared to our competitors that have less debt as it could limit our ability to capitalize on future business opportunities and to react to competitive pressures or adverse changes.

In addition, the indenture governing the Senior Notes due 2029 and the credit agreements governing the Term Loan Facility, the U.S. ABL and the Asia ABL contain restrictive covenants that will limit our ability to engage in activities that may be in our long-term best interest. Our failure to comply with those covenants could result in an event of default which, if not cured or waived, could result in the acceleration of all our debt.

Furthermore, we and our subsidiaries may decide to incur significant additional indebtedness in the future. Although the indenture governing the Senior Notes due 2029 and the credit agreements governing the Term Loan Facility, the U.S. ABL and the Asia ABL will contain restrictions on the incurrence of additional indebtedness, these restrictions are subject to a number of qualifications and exceptions, and the additional indebtedness incurred in compliance with these restrictions could be substantial. These restrictions also will not prevent us from incurring obligations that do not constitute indebtedness.

Our variable rate indebtedness subjects us to interest rate risk, which could cause our debt service obligations to increase significantly.

The $405.9 million outstanding we maintain in our Term Loan Facility and the $30.0 million borrowed under our Asia ABL are subject to interest at a floating rate of LIBOR plus a margin, and as a result, we have exposure to interest rate risk. Certain central banks, such as the U.S. Federal Reserve, have effected interest rate increases in 2022 and signaled that further rate increases are likely to be implemented later in 2022. Increases in interest rates would increase our cost of borrowing and/or potentially make it more difficult to refinance our existing indebtedness, if necessary. At times, we have sought to reduce our exposure to interest rate fluctuations by entering into interest rate hedging arrangements. Although we are currently in a four-year pay-fixed, receive floating (1-month LIBOR) interest rate swap arrangement, that arrangement is scheduled to end on June 1, 2022, and we do not currently expect to enter into a new interest rate swap arrangement. As a result, as interest rates increase we will likely need to dedicate more of our cash flow from operations to service our debt obligations. See *Quantitative and Qualitative Disclosures About Market Risk* and *Interest Rate Risks* appearing in Part 1, Item 3 of this Quarterly Report on Form 10-Q for further information.

Servicing our debt requires a significant amount of cash and we may not be able to generate sufficient cash to service all of our debt and may be forced to take other actions to satisfy our obligations under our debt, which may not be successful.

Based on certain parameters defined in the Term Loan Facility, including a First Lien Leverage Ratio, we may be required to make an additional principal payment on an annual basis if our First Lien Leverage Ratio is greater than 2.0.

Our ability to make scheduled payments on or to refinance our debt obligations and to fund planned capital expenditures and expansion efforts depends on our ability to generate cash in the future and our financial condition and operating performance, which are subject to prevailing economic and competitive conditions and to certain regulatory, competitive, financial, business and other factors beyond our control. We cannot assure you that we will maintain a level of cash flows from operating activities sufficient to permit us to pay the principal, premium, if any, and interest on our debt.

If our cash flows and capital resources are insufficient to fund our debt service obligations, we could face substantial liquidity problems and could be forced to reduce or delay investments and capital expenditures or to dispose of material assets or operations, seek additional capital (which could include obtaining additional equity capital on terms that may be onerous or highly dilutive) or restructure or refinance our indebtedness. We may not be able to effect any such alternative measures, if necessary, on commercially reasonable terms or at all and, even if successful, those alternative actions may not allow us to meet our scheduled debt service obligations. The credit agreements governing the Term Loan Facility, the U.S. ABL and the Asia ABL and the indenture governing the Senior Notes due 2029 restrict our ability to dispose of assets and use the proceeds from those dispositions and may also restrict our ability to raise debt or equity capital to be used to repay other indebtedness when it becomes due. We may not be able to consummate those dispositions or to obtain proceeds in an amount sufficient to meet any debt service obligations then due.

In addition, we conduct certain of our operations through our subsidiaries. Accordingly, repayment of our indebtedness may be dependent on the generation of cash flow by our subsidiaries and their ability to make such cash available to us, by dividend, debt repayment or otherwise. Unless they are guarantors of the Senior Notes due 2029 or our other indebtedness, our subsidiaries do not have any obligation to pay amounts due on our indebtedness or to make funds available for that purpose. Our subsidiaries may not be able to, or may not be permitted to, make distributions to enable us to make payments in respect of our indebtedness. Each subsidiary is a distinct legal entity, and under certain circumstances, legal and contractual restrictions may limit our ability to obtain cash from our subsidiaries. While the indenture governing the Senior Notes due 2029 and the credit agreements governing the Term Loan Facility, the U.S. ABL and the Asia ABL limit the ability of our subsidiaries to incur consensual restrictions on their ability to pay dividends or make other intercompany payments to us, these limitations are subject to qualifications and exceptions. In the event that we do not receive distributions from our subsidiaries, we may be unable to make required principal and interest payments on our indebtedness.

Our inability to generate sufficient cash flows to satisfy our debt obligations, or to refinance our indebtedness on commercially reasonable terms or at all, would materially and adversely affect our financial position and results of operations and our ability to satisfy our obligations under our indebtedness.

If we cannot make scheduled payments on our debt, we will be in default and holders of the Senior Notes due 2029 could declare all outstanding principal and interest to be due and payable, the lenders under the Term Loan Facility, the U.S. ABL and the Asia ABL could terminate their commitments to loan money, the lenders could foreclose against the assets securing their borrowings and we could be forced into bankruptcy or liquidation.

Regulatory Risks

Because of power shortages in China, we may have to temporarily close our China operations, which would adversely impact our ability to manufacture our products, meet customer orders, and result in reduced revenues.

China is currently facing a growing power supply shortage. Instability in electrical supply can cause sporadic outages among residential and commercial consumers. As a result, the Chinese government is implementing power restrictions to ease the energy shortage. If we are required to make temporary closures of our facilities in China at any time, we may be unable to manufacture our products, and would then be unable to meet customer orders except from inventory on hand. As a result, we could lose sales, adversely impacting our revenues, and our relationships with our customers could suffer, impacting our ability to generate future sales.

We are subject to the requirements of the National Industrial Security Program Operating Manual (NISPOM) for our facility security clearance, which is a prerequisite to our ability to perform on classified contracts for the U.S. government.

A facility security clearance is required in order to be awarded and perform on classified contracts for the Department of Defense and certain other agencies of the U.S. government. As a cleared entity, we must comply with the requirements of the NISPOM, and any other applicable U.S. government industrial security regulations. Further, due to the fact that a portion of our voting equity is owned by a non-U.S. entity, we are required to be governed by and operate in accordance with the terms and requirements of a Special Security Agreement (SSA). The terms of the SSA have been previously disclosed in our SEC filings.

If we were to violate the terms and requirements of the SSA, the NISPOM, or any other applicable U.S. government industrial security regulations (which may apply to us under the terms of classified contracts), we could lose our security clearance. We cannot be certain that we will be able to maintain our security clearance. If for some reason our security clearance is invalidated or terminated, we may not be able to continue to perform on classified contracts and would not be able to enter into new classified contracts, which could materially adversely affect our business, financial condition, and results of operations.

Our operations in China and Hong Kong subject us to risks and uncertainties relating to the laws and regulations of China and Hong Kong.

Under its current leadership, the government of China has been pursuing economic reform policies, including the encouragement of foreign trade and investment. No assurance can be given, however, that the government of China will continue to pursue such policies, that such policies will be successful if pursued, or that such policies will not be significantly altered from time to time, particularly in light of the increasingly tense trade climate with the United States. Despite progress in developing its legal system, China does not have a comprehensive and highly developed system of laws, particularly with respect to foreign investment activities and foreign trade. Enforcement of existing and future laws and contracts is uncertain, and implementation and interpretation thereof may be inconsistent. As the Chinese legal system develops, the promulgation of new laws, changes to existing laws, and the preemption of local regulations by national laws may adversely affect foreign investors. Further, any litigation in China may be protracted and may result in substantial costs and diversion of resources and management's attention. Also, the evolving landscape of the interrelation between China and Hong Kong may have an adverse impact on our operations in Hong Kong and may impact our ability to attract and maintain necessary talent in that area. In addition, though changes in government policies and rules are timely published or communicated, there is usually no indication of the duration of any grace period before which full implementation and compliance will be required. As a result, it is possible that we might operate our business in violation of new rules and policies before full compliance can be achieved. These uncertainties could limit the legal protections available to us and adversely impact our results of operations.

Our failure to comply with the requirements of environmental laws could result in litigation, fines, revocation of permits necessary to our manufacturing processes, or debarment from our participation in federal government contracts.

Our operations are regulated under a number of domestic and foreign environmental and safety laws and regulations that govern, among other things, the discharge of hazardous materials into the air and water, as well as the handling, storage, recycling, and disposal of such materials. These laws and regulations include the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Superfund Amendment and Reauthorization Act, the Comprehensive Environmental Response, Compensation and Liability Act, the Toxic Substances Control Act, and the Federal Motor Carrier Safety Improvement Act, as well as analogous state, local, and foreign laws. Compliance with these environmental laws is a major consideration for us because our manufacturing processes use and generate materials classified as hazardous. Because we use hazardous materials and generate hazardous wastes in our manufacturing processes, we may be subject to potential financial liability for costs associated with the investigation and remediation of our own sites, or sites at which we have arranged for the disposal of hazardous wastes, if such sites become contaminated. Even if we fully comply with applicable environmental laws and are not directly at fault for the contamination, we may still be liable. The wastes we generate include spent ammoniacal and cupric etching solutions, metal stripping solutions, waste acid solutions, waste alkaline cleaners, waste oil, and waste waters that contain heavy metals such as copper, tin, lead, nickel, gold, silver, cyanide, and fluoride, and both filter cake and spent ion exchange resins from equipment used for on-site waste treatment.

Environmental law violations, including the failure to maintain required environmental permits, could subject us to fines, penalties, and other sanctions, including the revocation of our effluent discharge permits. This could require us to cease or limit production at one or more of our facilities and could have a material adverse effect on our business, financial condition, and results of operations. Even if we ultimately prevail, environmental lawsuits against us would be time consuming and costly to defend.

Environmental laws have generally become more stringent, and we expect this trend to continue over time, especially in developing countries, imposing greater compliance costs and increasing risks and penalties associated with violation. We operate in environmentally sensitive locations, and we are subject to potentially conflicting and changing regulatory agendas of political, business, and environmental groups. Changes or restrictions on discharge limits, emissions levels, material storage, handling, or disposal might require a high level of unplanned capital investment or relocation to another global location where prohibitive regulations do not exist. It is possible that environmental compliance costs and penalties from new or existing regulations may materially adversely affect our business, financial condition, and results of operations.

We are increasingly required to certify compliance with various material content restrictions in our products based on laws of various jurisdictions or territories such as the Restriction of Hazardous Substances (RoHS) and Registration, Evaluation, Authorization and Restriction of Chemicals, or REACH directives in the European Union and China's RoHS legislation. Similar laws have been adopted in other jurisdictions and may become increasingly prevalent. In addition, we must also certify as to the nonapplicability of the EU's Waste Electrical and Electronic Equipment directive for certain products that we manufacture. The REACH directive requires the identification of Substances of Very High Concern, or SVHCs periodically. We must survey our supply chain and certify to the non-presence or presence of SVHCs to our customers. As with other types of product certifications that we routinely provide, we may incur liability and pay damages if our products do not conform to our certifications.

We are also subject to an increasing variety of environmental laws and regulations in China, which impose limitations on the discharge of pollutants into the air and water and establish standards for the treatment, storage, and disposal of solid and hazardous wastes for us and our vendors that assist us in managing the waste generated by our manufacturing processes. The manufacturing of our products generates gaseous chemical wastes, liquid wastes, wastewater, and other industrial wastes from various stages of the manufacturing process. Production sites, waste collectors, and vendors in China are subject to increasing regulation and periodic monitoring by the relevant environmental protection authorities. Environmental claims or the failure to comply with current or future regulations could result in the assessment of damages or imposition of fines against us, suspension of production, or cessation of operations.

The process to manufacture PCBs requires adherence to city, county, state, federal, and foreign environmental laws and regulations regarding the storage, use, handling, and disposal of chemicals, solid wastes, and other hazardous materials, as well as compliance with wastewater and air quality standards. We rely on our vendors for the transportation and disposal of our solid and hazardous wastes generated by our manufacturing processes. If we are not able to find such services, our ability to conduct our business and our results of operations may be adversely impacted. In China, the government has a history of changing legal requirements with no or minimal notice. We believe that our facilities in China comply in all material respects with current applicable environmental laws and regulations and have resources in place to maintain compliance to them. The capital expenditure costs expected for environmental improvement initiatives are included in our annual capital expenditure projections.

Our international sales are subject to laws and regulations relating to corrupt practices, trade, and export controls and economic sanctions. Any non-compliance could have a material adverse effect on our business, financial condition, and results of operations.

We operate on a global basis and are subject to anti-corruption, anti-bribery, and anti-kickback laws and regulations, including restrictions imposed by the Foreign Corrupt Practices Act (FCPA). The FCPA and similar anti-corruption, anti-bribery, and anti-kickback laws in other jurisdictions generally prohibit companies and their intermediaries and agents from making improper payments to government officials or any other persons for the purpose of obtaining or retaining business. We operate and sell our products in many parts of the world that have experienced governmental corruption to some degree and, in certain circumstances, strict compliance with anti-corruption, anti-bribery, and anti-kickback laws may conflict with local customs and practices. We also, from time to time, undertake business ventures with state-owned companies or enterprises.

Our global business operations must also comply with all applicable domestic and foreign export control laws, including International Traffic In Arms Regulations (ITAR) and Export Administration Regulations (EAR). Some items we manufacture are controlled for export by the U.S. Department of Commerce's Bureau of Industry and Security under EAR.

We train our employees concerning anti-corruption, anti-bribery, and anti-kickback laws and compliance with international regulations regarding trades and exports, and we have policies in place that prohibit employees from making improper payments. We cannot provide assurances that our internal controls and procedures will guarantee compliance by our employees or third parties with whom we work. If we are found to be liable for violations of the FCPA or similar anti-corruption, anti-bribery, or anti-kickback laws in international jurisdictions or for violations of ITAR, EAR, or other similar regulations regarding trades and exports, either due to our own acts or out of inadvertence, or due to the inadvertence of others, we could suffer criminal or civil fines or penalties or other repercussions, including reputational harm, which could have a material adverse effect on our business, financial condition, and results of operations.

Our global business operations also must be conducted in compliance with applicable economic sanction laws and regulations, such as laws administered by the U.S. Department of the Treasury's Office of Foreign Asset Control, the U.S. State Department, and the U.S. Department of Commerce. We must comply with all applicable economic sanction laws and regulations of the United States and other countries. Imposition of economic sanction laws and regulations on a company or country could impact our revenue levels. Violations of these laws or regulations could result in significant additional sanctions including criminal or civil fines or penalties, more onerous compliance requirements, more extensive debarments from export privileges, or loss of authorizations needed to conduct aspects of our international business.

In certain countries, we may engage third-party agents or intermediaries, such as customs agents, to act on our behalf, and if these third-party agents or intermediaries violate applicable laws, their actions may result in criminal or civil fines or penalties or other sanctions being assessed against us. We take specific measures designed to ensure our compliance with U.S. export and economic sanctions laws, anti-corruption laws and regulations, and export control laws. However, it is possible that some of our products were sold or will be sold to distributors or other parties, without our knowledge or consent, in violation of applicable law. There can be no assurances that we will be in compliance in the future. Any such violation could result in significant criminal or civil fines, penalties, or other sanctions and repercussions, including reputational harm, which could have a material adverse effect on our business, financial condition, and results of operations.

Other Risks

We may need additional capital in the future to fund investments in our operations, refinance our indebtedness, and to maintain and grow our business, and such capital may not be available on a timely basis, on acceptable terms, or at all.

Our business is capital-intensive, and our ability to increase revenue, profit, and cash flow depends upon continued capital spending. To the extent that the funds generated by our ongoing operations are insufficient to cover our liquidity requirements, we may need to raise additional funds through financings. If we are unable to fund our operations and make capital expenditures as currently planned or if we do not have sufficient liquidity to service the interest and principal payments on our debt, it would have a material adverse effect on our business, financial condition, and results of operations. If we do not achieve our expected operating results, we would need to reallocate our sources and uses of operating cash flows. This may include borrowing additional funds to service debt payments, which may impair our ability to make investments in our business. Looking ahead at long-term needs, we may need to raise additional funds for a number of purposes, including the following:

- to fund capital equipment purchases to increase production capacity, upgrade and expand our technological capabilities and replace aging equipment or introduce new products;
- to refinance our existing indebtedness;
- to fund our current or planned operations;
- to fund potential acquisitions or strategic relationships;
- to fund working capital requirements for future growth that we may experience;
- to enhance or expand the range of services we offer;
- to increase our sales and marketing activities;
- to respond to competitive pressures or perceived opportunities, such as investment, acquisition, and international expansion activities; or
- to fund our initiatives set forth in our ESG policies and practices.

Should we need to raise funds through incurring additional debt, we may become subject to covenants even more restrictive than those contained in our current debt instruments. There can be no assurance that additional capital, including any future equity or debt financing, would be available on a timely basis, on favorable terms, or at all. If such funds are not available to us when required or on acceptable terms, our business, financial condition, and results of operations could be materially adversely affected.

Outages, computer viruses, cyber-attacks, and similar events could disrupt our operations, and breaches of our security systems may cause us to incur significant legal and financial exposure.

We rely on information technology networks and systems, some of which are owned and operated by third parties, to collect, process, transmit, and store electronic information. In particular, we depend on our information technology infrastructure for a variety of functions, including worldwide financial reporting, inventory management, procurement, invoicing, and email communications. Any of these systems may be susceptible to outages due to fire, floods, power loss, telecommunications failures, hacking, terrorist attacks, and similar events. In addition, in the ordinary course of our business, we collect and store sensitive data in our data centers and on our networks, including intellectual property, our proprietary and confidential business information and that of our customers, suppliers and business partners, and personally identifiable information of our employees. The secure collection, processing, storage, maintenance and transmission of this information is critical to our operations. Despite the implementation of network security measures, our systems and those of third parties on which we rely may also be vulnerable to computer viruses, break-ins, cyber-attacks, attacks by hackers or breaches due to employee or third party (including suppliers and business partners) error, malfeasance or other disruptions. If we or our vendors are unable to prevent such outages and breaches, our operations could be disrupted. If unauthorized parties gain access to our information systems or such information is used in an unauthorized manner, misdirected, altered, lost, or stolen during transmission, any theft or misuse of such information could result in, among other things, unfavorable publicity, governmental inquiry and oversight, difficulty in marketing our services, allegations by our customers that we have not performed our contractual obligations, loss of customers, litigation by affected parties, and possible financial obligations for damages related to the theft or misuse of such information, any of which could have a material adverse effect on our business, financial condition, and results of operations.

Issues arising during the upgrade of our enterprise resource planning system could affect our operating results and ability to manage our business effectively.

We are continuing the process of upgrading our enterprise resource planning, or ERP, management system to enhance operating efficiencies and provide more effective management of our business operations. We are investing significant financial and personnel resources into this project. However, there is no assurance that the system upgrade will meet our current or future business needs or that it will operate as designed. The transition to the new ERP system will affect numerous systems necessary for our operation. If we fail to correctly implement one or more components of the ERP system, we could experience significant disruption to our operations. Such disruptions could include, among other things, temporary loss of data, inability to process certain orders, failure of systems to communicate with each other and the inability to track or reconcile key data. We are heavily dependent on automated management systems, and any significant failure or delay in the system upgrade could cause a substantial interruption to our business and additional expense, which could result in an adverse impact on our operating results, cash flows or financial condition.

Our ability to use net operating loss carryforwards to offset future taxable income for U.S. federal, state and foreign income tax purposes is subject to limitations, and future transfers of shares of our common stock could cause us to experience an "ownership change" that could further limit our ability to utilize our net operating losses.

Under U.S. federal income tax law, a corporation's ability to utilize its net operating losses (NOLs) to offset future taxable income may be significantly limited if it experiences an "ownership change" as defined in Section 382 of the Internal Revenue Code of 1986, as amended. In general, an ownership change will occur if there is a cumulative change in a corporation's ownership by "5-percent shareholders" that exceeds 50 percentage points over a rolling three-year period.

A corporation that experiences an ownership change will generally be subject to an annual limitation on its pre-ownership change NOLs equal to the value of the corporation immediately before the ownership change, multiplied by the long-term tax-exempt rate (subject to certain adjustments). The annual limitation for a taxable year is generally increased by the amount of any "recognized built-in gains" for such year and the amount of any unused annual limitation in a prior year. As a result of our acquisition of Viasystems, the NOLs acquired were subject to this limitation. Future transfers or sales of our common stock during a rolling three-year period by any of our "5-percent shareholders" could cause us to experience an ownership change under Section 382, which could further limit our use of NOL.

If our net earnings do not remain at or above recent levels, or we are not able to predict with a reasonable degree of probability that they will continue, we may have to record a valuation allowance against our net deferred income tax assets.

Our U.S. entities and certain of our foreign subsidiaries have deferred income tax assets. Based on our forecast for future taxable earnings, we believe we will utilize the deferred income tax assets in future periods except with respect to certain amounts where we have recorded valuation allowances. If our estimates of future earnings decline, we may have to increase our valuation allowance against our deferred income tax assets, resulting in a higher income tax provision, which would reduce our results of operations.

Unanticipated changes in our tax rates or in our assessment of the realizability of our deferred income tax assets or exposure to additional income tax liabilities could affect our business, financial condition, and results of operations.

We are subject to income taxes in the United States and various foreign jurisdictions. Significant judgment is required in determining our provision for income taxes and, in the ordinary course of business, there are many transactions and calculations in which the ultimate tax determination is uncertain. Our effective tax rates could be materially adversely affected by changes in the mix of earnings in countries and states with differing statutory tax rates, changes in the valuation of deferred income tax assets and liabilities, changes in tax laws, as well as other factors. Our tax determinations are regularly subject to audit by tax authorities, and developments in those audits could adversely affect our income tax provision. Although we believe that our tax estimates are reasonable, the final determination of tax audits or tax disputes may be different from what is reflected in our historical income tax provisions, which could materially adversely affect our business, financial condition, and results of operations.

Item 2. ***Unregistered Sales of Equity Securities and Use of Proceeds***

The following table provides information about repurchases by us of shares of our common stock during the quarter ended April 4, 2022:

	Total Number of Shares Purchased	Average Price Paid per Share(1)	Total Number of Shares Purchased As Part of Publicly Announced Program(2)	Maximum Value of Shares that May Yet be Purchased Under the Program(2)
	(In thousands, except average price paid per share)			
January 4, 2022 - January 31, 2022	237	$ 13.44	237	$ 32,187
February 1, 2022 - February 28, 2022	1,193	12.51	1,193	$ 17,295
March 1, 2022 - April 4, 2022	943	12.86	943	$ 5,184
Total for the quarter ended April 4, 2022	2,373	$ 12.74	2,373	

(1) Includes commissions.

(2) On February 3, 2021, we announced that our Board of Directors authorized and approved a share repurchase program. Under the program, we may repurchase up to $100.0 million in value of our outstanding shares of common stock from time to time through February 3, 2023. Subsequent to April 4, 2022, the Company repurchased 374 shares of common stock for a total cost of $5.2 million (including commissions) and there are no amounts available for repurchase as of May 4, 2022.

Item 6. ***Exhibits***

Exhibit Number	Exhibits
3.1(a)	Registrant's Certificate of Incorporation, as amended June 3, 2011 (1(a))
3.1(b)	Registrant's Certificate of Amendment of Certificate of Incorporation, dated May 12, 2016 (1(b))
3.2	Registrant's Fifth Amended and Restated Bylaws, as amended August 3, 2021 (2)
31.1*	CEO Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	CFO Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1*	CEO Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2*	CFO Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Documents
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Documents
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Documents
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Documents
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)

(1) Incorporated by reference (a) to the Registrant's Current Report on Form 8-K as filed with the Commission on June 6, 2011 and (b) to the Registrant's Current Report on Form 8-K as filed with the Commission on May 18, 2016.

(2) Incorporated by reference to the Registrant's Current Report on Form 10-Q as filed with the Commission on August 4, 2021.

* Filed herewith

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.

TTM Technologies, Inc.

/s/ Thomas T. Edman

Dated: May 11, 2022

Thomas T. Edman
President and Chief Executive Officer

/s/ Todd B. Schull

Dated: May 11, 2022

Todd B. Schull
Executive Vice President and Chief Financial Officer

Exhibit 31.1

CERTIFICATION

I, Thomas T. Edman, certify that:

1. I have reviewed this quarterly report on Form 10-Q of TTM Technologies, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Thomas T. Edman

Thomas T. Edman
President and Chief Executive Officer
(Principal Executive Officer)

May 11, 2022

Exhibit 31.2

CERTIFICATION

I, Todd B. Schull, certify that:

1. I have reviewed this quarterly report on Form 10-Q of TTM Technologies, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Todd B. Schull

Todd B. Schull
Executive Vice President and Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

May 11, 2022

Exhibit 32.1

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

In connection with the Quarterly Report on Form 10-Q of TTM Technologies, Inc. (the "Company") for the quarter ended April 4, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Thomas T. Edman, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a) or 78o(d)); and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ Thomas T. Edman

Thomas T. Edman
President and Chief Executive Officer
(Principal Executive Officer)

May 11, 2022

Exhibit 32.2

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

In connection with the Quarterly Report on Form 10-Q of TTM Technologies, Inc. (the "Company") for the quarter ended April 4, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Todd B. Schull, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a) or 78o(d)); and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ Todd B. Schull

Todd B. Schull
Executive Vice President and Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

May 11, 2022