UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

Form 10-Q

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

For the quarterly period ended June 29, 2020

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 August 3, 2020: 106,725,174

TABLE OF CONTENTS

	Page
PART I: FINANCIAL INFORMATION	3
Item 1. Financial Statements (unaudited)	3
Consolidated Condensed Balance Sheets as of June 29, 2020 and December 30, 2019	3
Consolidated Condensed Statements of Operations for the quarter and two quarters ended June 29, 2020 and July 1, 2019	4
Consolidated Condensed Statements of Comprehensive Income (Loss) for the quarter and two quarters ended June 29, 2020 and July 1, 2019	5
Consolidated Condensed Statements of Stockholders' Equity for the two quarters ended June 29, 2020 and July 1, 2019	6
Consolidated Condensed Statements of Cash Flows for the two quarters ended June 29, 2020 and July 1, 2019	7
Notes to Consolidated Condensed Financial Statements	8
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	23
Item 3. Quantitative and Qualitative Disclosures About Market Risk	28
Item 4. Controls and Procedures	30
PART II: OTHER INFORMATION	31
Item 1. Legal Proceedings	31
Item 1A. Risk Factors	31
Item 6. Exhibits	50
SIGNATURES	51

PART I. FINANCIAL INFORMATION

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

TTM TECHNOLOGIES, INC.

Consolidated Condensed Balance Sheets

	As of	
	June 29, 2020	December 30, 2019
	(Unaudited) (In thousands, except par value)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 694,668	$ 379,818
Accounts receivable, net	414,329	503,598
Contract assets	287,281	254,600
Inventories	122,847	113,753
Current assets held for sale	—	67,572
Receivable from Purchaser of the Mobility business unit	314,585	—
Prepaid expenses and other current assets	38,202	23,343
Total current assets	1,871,912	1,342,684
Property, plant and equipment, net	660,866	678,201
Operating lease right-of-use assets	21,993	22,173
Goodwill	706,524	706,524
Definite-lived intangibles, net	303,790	325,680
Non-current assets held for sale	—	425,597
Deposits and other non-current assets	29,586	60,074
	$ 3,594,671	$ 3,560,933
LIABILITIES AND EQUITY		
Current liabilities:		
Short-term debt, including current portion of long-term debt	$ 649,975	$ 249,975
Accounts payable	351,819	329,866
Contract liabilities	3,140	3,838
Accrued salaries, wages and benefits	79,424	85,114
Current liabilities held for sale	—	185,391
Other current liabilities	113,099	92,482
Total current liabilities	1,197,457	946,666
Long-term debt, net of discount and issuance costs	832,834	1,225,962
Operating lease liabilities	15,015	15,413
Non-current liabilities held for sale	—	1,530
Other long-term liabilities	103,800	92,325
Total long-term liabilities	951,649	1,335,230
Commitments and contingencies (Note 14)		
Equity:		
Common stock, $0.001 par value; 300,000 shares authorized, 106,701 and 105,510 shares issued and outstanding as of June 29, 2020 and December 30, 2019, respectively	107	106
Additional paid-in capital	822,189	814,708
Retained earnings	665,945	474,309
Accumulated other comprehensive loss	(42,676)	(10,086)
Total stockholders' equity	1,445,565	1,279,037
	$ 3,594,671	$ 3,560,933

See accompanying notes to consolidated condensed financial statements.

TTM TECHNOLOGIES, INC.

Consolidated Condensed Statements of Operations
For the Quarter and Two Quarters Ended June 29, 2020 and July 1, 2019

	Quarter Ended		Two Quarters Ended	
	June 29, 2020	July 1, 2019	June 29, 2020	July 1, 2019
	(Unaudited) (In thousands, except per share data)			
Net sales	$ 570,298	$ 526,877	$ 1,067,944	$ 1,063,322
Cost of goods sold	469,868	434,029	886,172	871,648
Gross profit	100,430	92,848	181,772	191,674
Operating expenses:				
Selling and marketing	15,969	16,898	32,138	34,458
General and administrative	46,723	31,869	81,390	62,151
Research and development	5,181	4,496	9,943	9,212
Amortization of definite-lived intangibles	9,561	10,593	19,123	26,745
Total operating expenses	77,434	63,856	142,594	132,566
Operating income	22,996	28,992	39,178	59,108
Other (expense) income:				
Interest expense	(18,572)	(20,553)	(38,353)	(41,688)
Other, net	455	3,007	2,957	2,650
Total other expense, net	(18,117)	(17,546)	(35,396)	(39,038)
Income from continuing operations before income taxes	4,879	11,446	3,782	20,070
Income tax benefit (provision)	4,467	1,047	2,344	(1,339)
Net income from continuing operations	9,346	12,493	6,126	18,731
Income (loss) from discontinued operations, net of income taxes	183,464	(9,069)	185,510	(18,559)
Net income	$ 192,810	$ 3,424	$ 191,636	$ 172
Earnings per share:				
Basic earnings per share from continuing operations	$ 0.09	$ 0.12	$ 0.06	$ 0.18
Basic earnings (loss) per share from discontinued operations	1.72	(0.09)	1.75	(0.18)
Basic earnings per share	$ 1.81	$ 0.03	1.81	$ —
Diluted earnings per share from continuing operations	$ 0.09	$ 0.12	$ 0.06	$ 0.18
Diluted earnings (loss) per share from discontinued operations	1.70	(0.09)	1.72	(0.18)
Diluted earnings per share	$ 1.79	$ 0.03	1.78	$ —

See accompanying notes to consolidated condensed financial statements.

TTM TECHNOLOGIES, INC.

Consolidated Condensed Statements of Comprehensive Income (Loss)
For the Quarter and Two Quarters Ended June 29, 2020 and July 1, 2019

	Quarter Ended		Two Quarters Ended	
	June 29, 2020	July 1, 2019	June 29, 2020	July 1, 2019
	(Unaudited) (In thousands)			
Net income	$ 192,810	$ 3,424	$ 191,636	$ 172
Other comprehensive income (loss), net of tax:				
Pension obligation adjustments, net	(6)	—	21	19
Derecognition of foreign currency translation adjustments due to sale of Mobility business unit	(27,341)	—	(27,341)	—
Foreign currency translation adjustments, net	96	(601)	(271)	29
Derecognition of unrealized losses on cash flow hedge due to sale of Mobility business unit	384	—	384	—
Net unrealized losses on cash flow hedges:				
Unrealized loss on effective cash flow hedges during the period, net	(1,994)	(4,503)	(8,012)	(6,331)
Loss realized in the statement of operations, net	1,769	296	2,629	574
Net	(225)	(4,207)	(5,383)	(5,757)
Other comprehensive loss, net of tax	(27,092)	(4,808)	(32,590)	(5,709)
Comprehensive income (loss), net of tax	$ 165,718	$ (1,384)	$ 159,046	$ (5,537)

See accompanying notes to consolidated condensed financial statements.

TTM TECHNOLOGIES, INC.

Consolidated Condensed Statements of Stockholders’ Equity
For the Two Quarters Ended June 29, 2020 and July 1, 2019

	Common Stock		Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount				
			(Unaudited) (In thousands)			
Balance, December 30, 2019	105,510	$ 106	$ 814,708	$ 474,309	$ (10,086)	$ 1,279,037
Net loss	—	—	—	(1,174)	—	(1,174)
Other comprehensive loss	—	—	—	—	(5,498)	(5,498)
Issuance of common stock for performance-based restricted stock units	187	—	—	—	—	—
Issuance of common stock for restricted stock units	520	—	—	—	—	—
Stock-based compensation	—	—	4,835	—	—	4,835
Balance, March 30, 2020	106,217	$ 106	$ 819,543	$ 473,135	$ (15,584)	$ 1,277,200
Net income	—	—	—	192,810	—	192,810
Other comprehensive loss	—	—	—	—	(27,092)	(27,092)
Issuance of common stock for restricted stock units	484	1	(1)	—	—	—
Stock-based compensation	—	—	2,647	—	—	2,647
Balance, June 29, 2020	106,701	$ 107	$ 822,189	$ 665,945	$ (42,676)	$ 1,445,565

	Common Stock		Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount				
			(Unaudited) (In thousands)			
Balance, December 31, 2018	103,687	$ 104	$ 797,895	$ 433,008	$ (3,920)	$ 1,227,087
Net loss	—	—	—	(3,252)	—	(3,252)
Other comprehensive loss	—	—	—	—	(901)	(901)
Redemption of convertible notes, net	—	—	(1)	—	—	(1)
Issuance of common stock for performance-based restricted stock units	694	—	—	—	—	—
Issuance of common stock for restricted stock units	1,040	1	(1)	—	—	—
Stock-based compensation	—	—	3,926	—	—	3,926
Balance, April 1, 2019	105,421	$ 105	$ 801,819	$ 429,756	$ (4,821)	$ 1,226,859
Net income	—	—	—	3,424	—	3,424
Other comprehensive loss	—	—	—	—	(4,808)	(4,808)
Issuance of common stock for restricted stock units	70	—	—	—	—	—
Stock-based compensation	—	—	3,602	—	—	3,602
Balance, July 1, 2019	105,491	$ 105	$ 805,421	$ 433,180	$ (9,629)	$ 1,229,077

See accompanying notes to consolidated condensed financial statements.

TTM TECHNOLOGIES, INC.
Consolidated Condensed Statements of Cash Flows
For the Two Quarters Ended June 29, 2020 and July 1, 2019

	Two Quarters Ended	
	June 29, 2020	July 1, 2019
	(Unaudited) (In thousands)	
Cash flows from operating activities:		
Net income	$ 191,636	$ 172
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation of property, plant and equipment	71,503	82,837
Amortization of definite-lived intangible assets	22,699	30,452
Amortization of debt discount and issuance costs	7,157	7,313
Deferred income taxes	34,206	(2,228)
Stock-based compensation	7,482	7,528
Gain on sale of the Mobility business unit	(248,863)	—
Other	157	(8,785)
Changes in operating assets and liabilities:		
Accounts receivable, net	89,323	40,425
Contract assets	(39,118)	26,670
Inventories	(6,470)	(12,772)
Prepaid expenses and other current assets	(14,574)	(8,934)
Accounts payable	24,183	(10,659)
Contract liabilities	(698)	(834)
Accrued salaries, wages and benefits and other current liabilities	8,286	(28,138)
Net cash provided by operating activities	146,909	123,047
Cash flows from investing activities:		
Proceeds from sale of the Mobility business unit, net of cash disposed	202,752	—
Purchase of property, plant and equipment and other assets	(54,899)	(69,099)
Proceeds from sale of property, plant and equipment and other assets	78	5,912
Net cash provided by (used in) investing activities	147,931	(63,187)
Cash flows from financing activities:		
Repayment of long-term debt borrowing	—	(30,000)
Payment of debt issuance costs	—	(1,532)
Redemption of convertible notes	—	(10)
Net cash used in financing activities	—	(31,542)
Effect of foreign currency exchange rates on cash and cash equivalents	(326)	(212)
Net increase in cash and cash equivalents	294,514	28,106
Cash and cash equivalents at beginning of period	400,154	256,360
Cash and cash equivalents at end of period	694,668	284,466
Cash and cash equivalents in assets held for sale	—	(18,133)
Cash and cash equivalents as presented on the consolidated condensed balance sheet	$ 694,668	$ 266,333
Supplemental cash flow information:		
Cash paid, net for interest	$ 32,814	$ 39,739
Cash paid, net for income taxes	11,678	13,119
Net cash provided by operating activities from discontinued operations	39,462	2,768
Net cash provided by (used in) investing activities from discontinued operations	193,202	(13,003)
Net cash used in financing activities from discontinued operations	—	—
Supplemental disclosure of noncash investing activities:		
Property, plant and equipment recorded in accounts payable	$ 38,223	$ 61,475
Supplemental disclosure of noncash investing activities from discontinued operations:		
Property, plant and equipment recorded in accounts payable	$ —	$ 9,635

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 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 and manufacturing solution enables 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, 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 to the coronavirus (COVID-19) global pandemic, the global economy and financial markets have been disrupted and there is a significant amount of uncertainty about the length and severity of the consequences caused by the 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 13-week fiscal quarter accounting period with the fourth quarter ending on the Monday nearest December 31.

On January 19, 2020, the Company entered into a definitive equity interests purchase agreement with AKMMeadville Electronics (Xiamen) Co., Ltd (the Purchaser) for the sale of the Company's following subsidiaries, which was completed on April 17, 2020: Shanghai Kaiser Electronics Co., Ltd. (SKE), Shanghai Meadville Electronics Co., Ltd. (SME), Shanghai Meadville Science & Technology Co., Ltd. (SP) and Guangzhou Meadville Electronics Co., Ltd. (GME) (collectively, the Mobility business unit). Prior to the closing of the sale of the Company's Mobility business unit, all assets and liabilities attributable to the Mobility business unit have been aggregated under the captions "Current assets held for sale", "Non-current assets held for sale", "Current liabilities held for sale" and "Non-current liabilities held for sale". For all periods presented in the consolidated condensed statements of operations, all sales, costs, expenses, income taxes and gain on sale attributable to the Mobility business unit have been aggregated under the caption "Income from discontinued operations, net of income taxes". Prior year results have been recast to conform with the current presentation. Refer to Note 2, *Discontinued Operations*, for additional information.

Unless otherwise noted, amounts and disclosures throughout these notes to consolidated condensed financial statements relate to continuing operations. These consolidated condensed financial statements reflect all adjustments (consisting only of normal recurring adjustments) which, in the opinion of management, are necessary to present fairly the financial position, the results of operations and cash flows of the Company for the periods presented. The results of operations for the interim periods are not necessarily indicative of the results to be expected for the full year.

Reclassifications

Certain prior year amounts in the consolidated condensed financial statements have been reclassified due to the sale of the Company's Mobility business unit. Refer to Note 2, *Discontinued Operations*, for further information regarding this sale and the resulting prior year reclassifications. Further, in 2020, the Company began presenting research and development expenses as a separate line item on the consolidated condensed statements of operations to better align with similar presentation made by peers and to provide additional disclosure that is meaningful for investors. The prior year consolidated condensed statements of operations were adjusted to conform with this new presentation. Research and development expense were previously presented within general and administrative expense on the consolidated condensed statements of operations.

Recently Adopted and Issued Accounting Standards

Recently Adopted Accounting Standards

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which amends the current accounting guidance and requires the measurement of all expected losses based on historical experience, current conditions and reasonable and supportable forecasts. For trade receivables, loans, and other financial instruments, the Company will be required to use a forward-looking expected loss model that reflects losses that are probable rather than the incurred loss model for recognizing credit losses. The standard became effective for interim and annual periods beginning after December 15, 2019. Application of the amendments is through a cumulative-effect adjustment to retained earnings as of the effective date. The Company adopted this ASU as of December 31, 2019 and it did not have a material impact on its financial statements.

Recently Issued Accounting Standards Not Yet Adopted

In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting*, which provides temporary relief to the GAAP guidance on contract modifications and hedge accounting to ease the financial reporting burdens of the expected market transition from LIBOR and other interbank offered rates to alternative rates. This guidance is effective beginning on March 12, 2020 through December 31, 2022. The guidance on contract modifications can be applied prospectively from any date beginning March 12, 2020 and may also be applied to modifications of existing contracts made earlier in the interim period that includes March 12, 2020. The guidance on hedging can be applied to eligible hedging relationships existing at the beginning of the interim period that includes March 12, 2020 and to new eligible hedging relationships entered into after the beginning of that interim period. The Company is currently evaluating the new guidance to determine the impact it may have on its consolidated condensed financial statements and related disclosures.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, which is intended to simplify various aspects related to accounting for income taxes. ASU 2019-12 removes certain exceptions to the general principles in Topic 740 and also clarifies and amends existing guidance to improve consistent application. The guidance is effective for fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. Early adoption is permitted. The Company has evaluated the new guidance to determine the impact it may have on its consolidated condensed financial statements and related disclosures and the impact is not expected to be material.

In August 2018, the FASB issued ASU 2018-14, *Compensation—Retirement Benefits—Defined Benefit Plans—General (Subtopic 715-20)—Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans*. The amendments in this update change the disclosure requirements for employers that sponsor defined benefit pension and/or other postretirement benefit plans. It eliminates requirements for certain disclosures that are no longer considered cost beneficial and requires new disclosures that the FASB considers pertinent. The guidance is effective for fiscal years ending after December 15, 2020. Early adoption is permitted. The Company does not anticipate the adoption will have a material impact on its consolidated condensed financial statements and related disclosures.

(2) Discontinued Operations

On January 19, 2020, the Company entered into a definitive equity interests purchase agreement for the sale of the Company's Mobility business unit. The sale was completed on April 17, 2020 for a base purchase price of $550,000, subject to customary purchase price adjustments. The base purchase price does not include certain accounts receivable of the divested business, which are estimated to total approximately $95,000.

On April 18, 2020, the Company also entered into a Transition Services Agreement (TSA) with the Purchaser pursuant to which the Purchaser is receiving certain services (the Services) to enable it to operate the Mobility business unit after the closing of the sale of the Mobility business unit. The Services include finance and accounting, human resources, legal and compliance, sales, information technology, and other corporate support services. Under the TSA, the Services are being provided at cost for a period of up to 24 months. The Company does not anticipate this will have a material impact on its consolidated condensed financial statements.

Further, on June 29, 2020, the Company entered into a Sales Force Agreement with the Purchaser pursuant to which the Company's sales representatives will assist the Purchaser in selling PCBs manufactured by the Purchaser to certain customers for a commission for a period up to April 17, 2021. The Company does not anticipate this will have a material impact on its consolidated condensed financial statements.

As the sale of the Company's Mobility business unit represents a strategic shift that will have a major effect on the Company's operations and financial results, in accordance with the provisions of FASB authoritative guidance on the presentation of financial statements, Mobility business unit results are classified as discontinued operations in the consolidated condensed statements of operations for all periods presented. Prior year results have been recast to conform with the current presentation.

The following table summarizes the results of Mobility operations for each period prior to sale:

	Quarter Ended		Two Quarters Ended	
	June 29, 2020	July 1, 2019	June 29, 2020	July 1, 2019
	(In thousands, except per share data)			
Net sales	$ 30,777	$ 106,161	$ 143,951	$ 189,916
Cost of goods sold	28,375	114,394	136,800	208,290
Gross profit	2,402	(8,233)	7,151	(18,374)
Operating expenses:				
Selling and marketing	285	969	1,461	2,310
General and administrative	1,007	2,272	2,317	2,742
Research and development	—	—	147	—
Amortization of definite-lived intangibles	134	674	809	1,348
Total operating expenses	1,426	3,915	4,734	6,400
Operating income (loss)	976	(12,148)	2,417	(24,774)
Other (expense) income:				
Interest expense	—	(318)	(223)	(871)
Gain on sale of the Mobility business unit	248,863	—	248,863	—
Other, net	(411)	1,614	1,160	1,441
Total other income, net	248,452	1,296	249,800	570
Income (loss) from discontinued operations before income taxes	249,428	(10,852)	252,217	(24,204)
Income tax (provision) benefit	(65,964)	1,783	(66,707)	5,645
Income (loss) from discontinued operations, net of income taxes	$ 183,464	$ (9,069)	$ 185,510	$ (18,559)
Earnings (loss) per share from discontinued operations:				
Basic earnings (loss) per share	$ 1.72	$ (0.09)	$ 1.75	$ (0.18)
Diluted earnings (loss) per share	$ 1.70	$ (0.09)	$ 1.72	$ (0.18)

Depreciation expense related to the discontinued operations for the quarters ended June 29, 2020 and July 1, 2019 was $3,117 and $17,866, respectively, and $21,382 and $35,941 for the two quarters ended June 29, 2020 and July 1, 2019, respectively.

During the quarter and two quarters ended June 29, 2020, the Company's income tax expense related to the discontinued operations was impacted by a net discrete expense of $65,774. As a result of the sale of the Mobility business unit, the discrete income tax expense is related mainly to (i) China withholding tax related to gain on sale, (ii) U.S. income tax related to Global Intangible Low Taxed Income (GILTI) inclusion net of IRC Section 250 deduction and foreign tax credits, and offset by (iii) release of U.S. FIN 48 uncertain tax positions.

Proceeds from the sale of the Company's Mobility business unit have been presented in the consolidated condensed statements of cash flows within net cash provided by investing activities from discontinued operations. As of June 29, 2020, the Company's consolidated condensed balance sheet included $314,585 of receivable from Purchaser of the Mobility business unit. Subsequent to June 29, 2020, the Company received the remaining portion of the proceeds. The following is a reconciliation of the gain recorded for the sale of the Company's Mobility business unit *(in thousands)*:

Net proceeds from the sale of the Mobility business unit(1)	$	567,585
Mobility business unit assets:		
Cash and cash equivalents		12,513
Restricted cash		35,412
Accounts receivable, net		12
Contract assets		40,072
Inventories		5,642
Prepaid expenses and other current assets		4,593
Property, plant and equipment, net		328,648
Goodwill		68,267
Definite-lived intangibles, net		5,520
Deposits and other non-current assets		6,291
Total Mobility business unit assets		506,970
Mobility business unit liabilities:		
Accounts payable		142,636
Accrued salaries, wages and benefits		9,392
Other current liabilities		11,283
Other long-term liabilities		303
Total Mobility business unit liabilities		163,614
Derecognition of foreign currency translation adjustments and unrealized losses on cash flow hedges recorded in accumulated other comprehensive loss		26,957
Other transaction costs incurred as part of the sale of the Mobility business unit(2)		2,323
Gain on sale of the Mobility business unit before income taxes	$	248,863

(1) Net proceeds from the sale of the Mobility business unit are net of customary purchase price adjustments. As of June 29, 2020, the Company received a portion of the proceeds amounting to $ 253,000.
(2) Costs directly incurred as a result of the sale of the Company's Mobility business unit, including legal fees, professional fees, and other costs.

(3) Leases

The Company leases some of its manufacturing and assembly plants, sales offices and equipment under non-cancellable operating 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		Two Quarters Ended	
	June 29, 2020	July 1, 2019	June 29, 2020	July 1, 2019
	(In thousands)			
Operating lease cost	$ 2,227	$ 2,132	$ 4,708	$ 4,164
Variable lease cost	137	102	243	261
Short-term lease cost	169	144	398	185

Supplemental cash flow information related to leases was as follows:

	Two Quarters Ended	
	June 29, 2020	July 1, 2019
	(In thousands)	
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	$ 4,342	$ 4,164
Right-of-use assets obtained in exchange for new lease obligations:		
Operating leases	3,205	12,896

Supplemental balance sheet information related to leases was as follows:

	As of	
	June 29, 2020	December 30, 2019
	(In thousands)	
Operating lease right-of-use assets	$ 21,993	$ 22,173
Other current liabilities	7,641	7,111
Operating lease liabilities	15,015	15,413
Total operating lease liabilities	$ 22,656	$ 22,524

	As of	
	June 29, 2020	December 30, 2019
Weighted average remaining lease term	4.1 years	4.4 years
Weighted average discount rate	3.76 %	3.92 %

Maturities of operating lease liabilities were as follows(1):

	(In thousands)
Less than one year	$ 8,339
1 - 2 years	6,111
2 - 3 years	3,413
3 - 4 years	2,540
4 - 5 years	1,725
Thereafter	2,415
Total lease payments	24,543
Less imputed interest	(1,887)
Total	$ 22,656

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

(4) Revenues

As of June 29, 2020, the aggregate amount of the transaction price allocated to remaining performance obligations for long-term contracts was $19,172. The Company expects to recognize revenue on approximately 83% of the remaining performance obligations for the Company's long-term contracts over the next twelve months with the remaining amount recognized thereafter. The remaining performance obligations for the Company's short-term contracts are expected to be recognized within one year.

Revenue from products and services transferred to customers over time and at a point in time accounted for 98% and 2%, respectively, of the Company's revenue for the quarter and two quarters ended June 29, 2020. 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 July 1, 2019, and 96% and 4%, respectively, of the Company's revenue for the two quarters ended July 1, 2019.

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

	Quarter Ended June 29, 2020			Quarter Ended July 1, 2019		
	PCB	E-M Solutions	Total	PCB	E-M Solutions	Total
End Markets	(In thousands)					
Aerospace and Defense	$ 188,620	$ 20	$ 188,640	$ 174,810	$ 362	$ 175,172
Automotive	58,100	11,462	69,562	73,049	23,993	97,042
Cellular Phone	—	—	—	—	—	—
Computing/Storage/Peripherals	71,864	36	71,900	56,482	—	56,482
Medical/Industrial/Instrumentation	114,105	3,187	117,292	82,453	9,641	92,094
Networking/Communications	73,595	36,267	109,862	74,485	25,926	100,411
Other	13,783	(741)	13,042	5,681	(5)	5,676
Total	$ 520,067	$ 50,231	$ 570,298	$ 466,960	$ 59,917	$ 526,877

	Two Quarters Ended June 29, 2020			Two Quarters Ended July 1, 2019		
	PCB	E-M Solutions	Total	PCB	E-M Solutions	Total
End Markets	(In thousands)					
Aerospace and Defense	$ 373,071	$ 20	$ 373,091	$ 339,607	$ 366	$ 339,973
Automotive	119,521	18,925	138,446	154,642	43,758	198,400
Cellular Phone	1,164	—	1,164	—	—	—
Computing/Storage/Peripherals	130,146	140	130,286	114,328	189	114,517
Medical/Industrial/Instrumentation	202,329	6,945	209,274	164,635	17,808	182,443
Networking/Communications	134,493	55,244	189,737	158,508	49,265	207,773
Other	26,773	(827)	25,946	20,307	(91)	20,216
Total	$ 987,497	$ 80,447	$ 1,067,944	$ 952,027	$ 111,295	$ 1,063,322

(5) Composition of Certain Consolidated Condensed Financial Statement Captions

	As of	
	June 29, 2020	December 30, 2019
	(In thousands)	
Inventories:		
Raw materials	$ 111,382	$ 97,660
Work-in-process	8,795	10,898
Finished goods	2,670	5,195
	$ 122,847	$ 113,753
Property, plant and equipment, net:		
Land and land use rights	$ 62,009	$ 62,009
Buildings and improvements	393,322	381,980
Machinery and equipment	820,570	777,916
Furniture and fixtures and other	10,625	10,329
Construction-in-progress	33,363	58,195
	1,319,889	1,290,429
Less: Accumulated depreciation	(659,023)	(612,228)
	$ 660,866	$ 678,201

(6) Goodwill

As of June 29, 2020 and December 30, 2019, goodwill was as follows:

	Total
	(In thousands)
Balance as of December 30, 2019 and June 29, 2020	
Goodwill	$ 946,191
Accumulated impairment loss	(171,400)
Goodwill related to the Mobility business unit	(68,267)
	$ 706,524

All goodwill relates to the Company's PCB reportable segment.

(7) Definite-lived Intangibles

As of June 29, 2020 and December 30, 2019, the components of definite-lived intangibles were as follows:

	Gross Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Amortization Period
		(In thousands)		(In years)
June 29, 2020				
Customer relationships	$ 397,500	$ (130,426)	$ 267,074	11.0
Technology	47,650	(10,934)	36,716	9.5
	$ 445,150	$ (141,360)	$ 303,790	
December 30, 2019				
Customer relationships	$ 396,270	$ (111,272)	$ 284,998	11.0
Technology	39,500	(8,064)	31,436	9.4
Acquired intangibles from acquisition in 2019				
Customer relationships	1,230	(31)	1,199	5.0
Technology	8,150	(103)	8,047	10.0
	$ 445,150	$ (119,470)	$ 325,680	

Definite-lived intangibles are generally amortized using the straight-line method of amortization over the estimated useful life. Amortization expense was $10,945 and $11,773 for the quarters ended June 29, 2020 and July 1, 2019, respectively, and $21,890 and $29,104 for the two quarters ended June 29, 2020 and July 1, 2019, respectively. For the quarter and two quarters ended June 29, 2020, $1,384 and $2,767, respectively, of amortization expense is included in cost of goods sold. For the quarter and two quarters ended July 1, 2019, $1,180 and $2,359, respectively, 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 2020	$ 21,891
2021	41,344
2022	38,793
2023	36,838
2024	29,812
Thereafter	135,112
	$ 303,790

(8) Long-term Debt and Letters of Credit

The following table summarizes the long-term debt of the Company as of June 29, 2020 and December 30, 2019:

	Interest Rate as of June 29, 2020	Principal Outstanding as of June 29, 2020	Interest Rate as of December 30, 2019	Principal Outstanding as of December 30, 2019
		(In thousands)		
Term Loan due September 2024	2.67 %	$ 805,879	4.28 %	$ 805,879
Senior Notes due October 2025	5.63	375,000	5.63	375,000
Convertible Senior Notes due December 2020	1.75	249,975	1.75	249,975
U.S. ABL Revolving Loan due June 2024	1.42	40,000	3.03	40,000
Asia ABL Revolving Loan due June 2024	1.57	30,000	3.18	30,000
		1,500,854		1,500,854
Less: Long-term debt unamortized discount		(6,627)		(11,943)
Long-term debt unamortized debt issuance costs		(11,418)		(12,974)
		1,482,809		1,475,937
Less: current maturities		(649,975)		(249,975)
Long-term debt, less current maturities		$ 832,834		$ 1,225,962

The Company has twelve months to reinvest the cash proceeds received from the sale of the Mobility business unit. If the proceeds are not reinvested, the Company is required to use the proceeds to prepay the Term Loan. The Company plans to use the cash proceeds for debt repayment and reinvestment. As of June 29, 2020, the Term Loan had an outstanding balance of $805,879, of which $400,000 is included in short-term debt. Subsequent to June 29, 2020, the Company made a debt principal prepayment for the Term Loan of $400,000. Permitted investments, as defined in the Term Loan Credit Agreement, include extensions of trade credit in the ordinary course of business, investments in cash and cash equivalents, permitted acquisitions, investments in assets useful in the business of the Company and its restricted subsidiaries, investments in joint ventures and unrestricted subsidiaries among others.

Debt Covenants

Borrowings under the Term Loan and Senior Notes are subject to certain affirmative and negative covenants, including limitations on indebtedness, corporate transactions, investments and 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 and operational covenants, including maintaining minimum fixed charge coverage ratios.

Debt Issuance and Debt Discount

As of June 29, 2020 and December 30, 2019, remaining unamortized debt discount and debt issuance costs for the Term Loan Facility, Senior Notes and Convertible Senior Notes are as follows:

	As of June 29, 2020			As of December 30, 2019		
	Debt Issuance Costs	Debt Discount	Effective Interest Rate	Debt Issuance Costs	Debt Discount	Effective Interest Rate
	(In thousands, except interest rates)					
Term Loan due September 2024	$ 6,013	$ 1,819	4.66 %	$ 6,663	$ 2,016	4.66 %
Senior Notes due October 2025	4,923	—	5.92	5,316	—	5.92
Convertible Senior Notes	482	4,808	6.48	995	9,927	6.48
	$ 11,418	$ 6,627		$ 12,974	$ 11,943	

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 $2,226 and $2,511 as of June 29, 2020 and December 30, 2019, 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 June 29, 2020, the remaining weighted average amortization period for all unamortized debt discount and debt issuance costs was 3.5 years.

(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 and two quarters ended June 29, 2020, the Company's effective tax rate was impacted by a net discrete benefit of $6,871 and $4,818, respectively. This is related mainly to release of uncertain tax positions due to the expiration of the statute of limitation in foreign jurisdictions netted against (i) an increase of valuation allowance and withholding tax expense related to the announced closure of two of the E-M Solutions plants, (ii) retroactive approval of the Company's renewal application for High and New Tax Enterprise status for two of the Company's manufacturing subsidiaries in China (including the impact on the respective Company's deferred tax assets) and (iii) by the 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 interest rate 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 the first interest payments of 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 June 29, 2020, the fair value of the interest rate swap was recorded as a liability in the amount of $19,582 and included as a component of other long-term 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. No ineffectiveness was recognized for the quarter and two quarters ended June 29, 2020 and July 1, 2019. The interest rate swap increased interest expense by $2,342 and $367 for the quarters ended June 29, 2020 and July 1, 2019, respectively, and $3,517 and $706 for the two quarters ended June 29, 2020 and July 1, 2019, respectively.

Foreign Exchange Contracts

The Company enters into foreign currency forward contracts to mitigate the impact of changes in foreign currency exchange rates and to reduce the volatility of purchases and other obligations generated in currencies other than its functional currencies. 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 June 29, 2020 and December 30, 2019 was approximately $1,361 and $1,994, respectively. The Company has designated certain of these foreign exchange contracts as cash flow hedges.

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

		Asset/(Liability) Fair Value	
	Balance Sheet Location	June 29, 2020	December 30, 2019
		(In thousands)	
Cash flow derivative instruments designated as hedges:			
Interest rate swap	Other long-term liabilities	$ (19,582)	$ (12,067)
Cash flow derivative instruments not designated as hedges:			
Foreign exchange contracts	Prepaid expenses and other current assets	1	1
Foreign exchange contracts	Other current liabilities	(4)	(3)

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 quarter and two quarters ended June 29, 2020 and July 1, 2019:

		Quarter Ended June 29, 2020		Quarter Ended July 1, 2019	
	Financial Statement Caption	Loss Recognized in Other Comprehensive Loss	Loss Reclassified into Income	Loss Recognized in Other Comprehensive Loss	Loss Reclassified into Income
		(In thousands)			
Cash flow hedge:					
Interest rate swap	Interest expense	$ (2,583)	$ (2,342)	$ (6,077)	$ (367)

		Two Quarters Ended June 29, 2020		Two Quarters Ended July 1, 2019	
	Financial Statement Caption	Loss Recognized in Other Comprehensive Loss	Loss Reclassified into Income	Loss Recognized in Other Comprehensive Loss	Loss Reclassified into Income
		(In thousands)			
Cash flow hedge:					
Interest rate swap	Interest expense	$ (11,032)	$ (3,517)	$ (8,663)	$ (706)

The following table provides a summary of the activity associated with the designated cash flow hedges reflected in accumulated other comprehensive loss for the two quarters ended June 29, 2020 and July 1, 2019:

	Two Quarters Ended	
	June 29, 2020	July 1, 2019
	(In thousands)	
Beginning balance, net of tax	$ (9,617)	$ (4,214)
Changes in fair value loss, net of tax	(8,012)	(6,331)
Reclassification to earnings, net of tax	2,629	574
Derecognition of unrealized losses on cash flow hedge due to sale of Mobility business unit	384	—
Ending balance, net of tax	$ (14,616)	$ (9,971)

Based on the current yield curve, the Company expects that losses of approximately $7,588 of the accumulated other comprehensive loss will be reclassified into the statement of operations, net of tax, in the next twelve months.

(11) Accumulated Other Comprehensive Loss

The following provides a summary of the components of accumulated other comprehensive loss, net of tax, as of June 29, 2020 and December 30, 2019:

	Foreign Currency Translation	Pension Obligation	(Losses) Gains on Cash Flow Hedges	Total
		(In thousands)		
Ending balance as of December 30, 2019	$ 1,115	$ (1,584)	$ (9,617)	$ (10,086)
Other comprehensive (loss) income before reclassifications	(271)	21	(8,012)	(8,262)
Amounts reclassified from accumulated other comprehensive loss	—	—	2,629	2,629
Derecognition of foreign currency translation adjustments due to sale of Mobility business unit	(27,341)	—	—	(27,341)
Derecognition of unrealized losses on cash flow hedge due to sale of Mobility business unit	—	—	384	384
Other comprehensive (loss) income	(27,612)	21	(4,999)	(32,590)
Ending balance as of June 29, 2020	$ (26,497)	$ (1,563)	$ (14,616)	$ (42,676)

(12) Significant Customers and Concentration of Credit Risk

In the normal course of business, the Company extends credit to its customers. Most customers to which 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 quarter ended June 29, 2020, one customer accounted for approximately 11% of the Company's net sales. There were no other customers that accounted for 10% or more of net sales for the quarter ended June 29, 2020. There were no customers that accounted for 10% or more of net sales for the quarter ended July 1, 2019 and two quarters ended June 29, 2020 and July 1, 2019.

(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 June 29, 2020 and December 30, 2019 were as follows:

	As of June 29, 2020		As of December 30, 2019	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
		(In thousands)		
Derivative assets, current	$ 1	$ 1	$ 1	$ 1
Derivative liabilities, current	4	4	3	3
Derivative liabilities, non-current	19,582	19,582	12,067	12,067
Term Loan due September 2024	798,047	765,585	797,200	808,901
Senior Notes due October 2025	370,077	373,448	369,684	390,143
Convertible Senior Notes due December 2020	244,685	306,994	239,053	391,686
ABL Revolving Loans	70,000	70,000	70,000	70,000

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 June 29, 2020 and December 30, 2019, which are considered Level 2 inputs.

The fair value of the Convertible Senior Notes was estimated based on quoted market prices of the securities on an active exchange, which are considered Level 2 inputs.

As of June 29, 2020 and December 30, 2019, the Company's other financial instruments also included cash and cash equivalents, accounts receivable, and accounts payable. Due to short-term maturities, the carrying amount of these instruments approximates fair value. The Company's cash and cash equivalents as of June 29, 2020 consisted of $305,263 held in the U.S., with the remaining $389,405 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 June 29, 2020 and December 30, 2019. However, these amounts are not material to the consolidated condensed financial statements of the Company.

(15) Earnings Per Share

The following is a reconciliation of the numerator and denominator used to calculate basic earnings per share and diluted earnings per share from continuing operations for the quarter and two quarters ended June 29, 2020 and July 1, 2019:

	Quarter Ended		Two Quarters Ended	
	June 29, 2020	July 1, 2019	June 29, 2020	July 1, 2019
	(In thousands, except per share amounts)			
Basic earnings:				
Basic earnings	$ 9,346	$ 12,493	$ 6,126	$ 18,731
Diluted earnings:				
Net income	$ 9,346	$ 12,493	$ 6,126	$ 18,731
Interest expense from Convertible Senior Notes, net of tax	—	2,780	—	—
Diluted earnings	$ 9,346	$ 15,273	$ 6,126	$ 18,731
Basic weighted average shares	106,295	105,470	105,990	104,893
Dilutive effect of performance-based restricted stock units, restricted stock units and stock options	1,190	637	1,441	967
Dilutive effect of assumed conversion of Convertible Senior Notes outstanding	—	25,938	—	—
Diluted shares	107,485	132,045	107,431	105,860
Earnings per share:				
Basic	$ 0.09	$ 0.12	$ 0.06	$ 0.18
Diluted	$ 0.09	$ 0.12	$ 0.06	$ 0.18

PRUs, RSUs, and stock options to purchase 1,162 and 1,089 shares of common stock for the quarters ended June 29, 2020 and July 1, 2019, respectively, and750 and 1,089 shares of common stock for the two quarters ended June 29, 2020 and July 1, 2019, respectively, 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 June 29, 2020 and July 1, 2019, 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 shares during the applicable quarter and two quarters and, as a result, the impact would be anti-dilutive.

Outstanding warrants for the quarter and two quarters ended June 29, 2020 and July 1, 2019, 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 were greater than the average market price of common shares during the applicable quarter, and therefore, the effect would be anti-dilutive.

For the quarter and two quarters ended June 29, 2020 and for the two quarters ended July 1, 2019, the effect of shares of common stock related to the Company's Convertible Senior Notes, based on the if-converted method, were not included in the computation of dilutive earnings per share as the impact 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		Two Quarters Ended	
	June 29, 2020	July 1, 2019	June 29, 2020	July 1, 2019
	(In thousands)		(In thousands)	
Cost of goods sold	$ 620	$ 569	$ 1,470	$ 1,273
Selling and marketing	291	383	742	834
General and administrative	1,690	2,611	5,167	5,332
Research and development	46	39	103	89
Stock-based compensation expense recognized	$ 2,647	$ 3,602	$ 7,482	$ 7,528

Summary of Unrecognized Compensation Costs

The following is a summary of total unrecognized compensation costs as of June 29, 2020:

	Unrecognized Stock-Based Compensation Cost	Remaining Weighted Average Recognition Period
	(In thousands)	(In years)
RSU awards	$ 28,531	1.7
PRU awards	1,760	1.1
Stock options	184	1.4
	$ 30,475	

(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 has two reportable segments: PCB and E-M Solutions. The PCB reportable segment is comprised of multiple operating segments. Factors considered to determine whether operating segments can be aggregated into reportable segments included similarity regarding economic characteristics, products, production processes, type or classes of customers, distribution methods, and regulatory environments.

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		Two Quarters Ended	
	June 29, 2020	July 1, 2019	June 29, 2020	July 1, 2019
	(In thousands)			
Net Sales:				
PCB	$ 520,067	$ 466,960	$ 987,497	$ 952,027
E-M Solutions	50,231	59,917	80,447	111,295
Total net sales	$ 570,298	$ 526,877	$ 1,067,944	$ 1,063,322
Operating Segment Income (Loss):				
PCB	$ 80,056	$ 62,463	$ 141,682	$ 132,957
E-M Solutions	(15,577)	863	(19,906)	2,042
Corporate	(30,538)	(22,561)	(60,708)	(46,787)
Total operating segment income	33,941	40,765	61,068	88,212
Amortization of definite-lived intangibles (1)	(10,945)	(11,773)	(21,890)	(29,104)
Total operating income	22,996	28,992	39,178	59,108
Total other expense	(18,117)	(17,546)	(35,396)	(39,038)
Income before income taxes	$ 4,879	$ 11,446	$ 3,782	$ 20,070

(1) Amortization of definite-lived intangibles relates to the PCB reportable segment. For the quarter and two quarters ended June 29, 2020, $ 1,384 and $2,767, respectively, of amortization expense is included in cost of goods sold. For the quarter and two quarters ended July 1, 2019, $1,180 and $2,359, respectively, 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, facilities and human resources personnel, as well as global sales and marketing personnel, research and development costs, and acquisition and integration costs associated with acquisitions.

(18) Related Party Transactions

In the normal course of business, the Company’s foreign subsidiaries purchase laminate and prepreg from related parties in which a former member of the Board of Directors of the Company holds an equity interest. The Company’s foreign subsidiaries purchased laminate and prepreg from these related parties in the amount of $5,986 and $8,193 for the quarters ended June 29, 2020 and July 1, 2019, respectively, and $11,767 and $15,696 for the two quarters ended June 29, 2020 and July 1, 2019, respectively.

As of June 29, 2020 and December 30, 2019, the Company’s consolidated condensed balance sheets included $7,601 and $9,220, respectively, in accounts payable due to related parties for purchases of laminate and prepreg and such balances are included as a component of accounts payable on the consolidated condensed balance sheets.

(19) Restructuring Charges

On April 29, 2020, the Company announced the restructuring of its E-M Solutions business unit. The E-MS business unit consists of three Chinese manufacturing facilities with two being in Shanghai (SH BPA and SH E-MS) and one in Shenzhen (SZ). The Company will discontinue operations at the SH E-MS and SZ facilities while integrating the SH BPA facility into its PCB operations. The restructuring is another step in advancing the Company’s stated strategy of increasing its focus on differentiated higher margin products that more fully leverage the Company’s early engagement capabilities and industry leading engineering-based technology solutions. The closure of the SH E-MS and SZ facilities will not be immediate as the Company has obligations to fulfill with customers. The Company anticipates phasing out production over the remainder of 2020. As of June 29, 2020, the Company has incurred approximately $13,414 of restructuring charges since the April 29, 2020 announcement. The Company estimates that it will incur total charges related to restructuring of its E-M Solutions business unit of approximately $18,500 and accelerated depreciation expense of approximately $8,000.

In connection with the restructuring of its E-M Solutions business unit and other global realignment restructuring efforts, the Company recognized employee separation, contract termination and other costs during the quarter and two quarters ended June 29, 2020 and July 1, 2019. Contract termination and other costs primarily represented plant closure costs.

The below table summarizes such restructuring costs by reportable segment, which are included as a component of general and administrative expenses in the consolidated condensed statements of operations, for the quarter and two quarters ended
June 29, 2020 and July 1, 2019:

	Quarter Ended June 29, 2020			Two Quarters Ended June 29, 2020		
	Employee Separation/ Severance	Contract Termination and Other Costs	Total	Employee Separation/ Severance	Contract Termination and Other Costs	Total
	(In thousands)					
Reportable Segment:						
PCB	$ (8)	$ 1	$ (7)	$ (8)	$ 14	$ 6
E-M Solutions	13,085	292	13,377	13,394	291	13,685
Corporate	—	44	44	—	51	51
	$ 13,077	$ 337	$ 13,414	$ 13,386	$ 356	$ 13,742

	Quarter Ended July 1, 2019			Two Quarters Ended July 1, 2019		
	Employee Separation/ Severance	Contract Termination and Other Costs	Total	Employee Separation/ Severance	Contract Termination and Other Costs	Total
	(In thousands)					
Reportable Segment:						
PCB	$ 2,564	$ —	$ 2,564	$ 2,988	$ —	$ 2,988
E-M Solutions	—	—	—	—	—	—
Corporate	160	8	168	160	16	176
	$ 2,724	$ 8	$ 2,732	$ 3,148	$ 16	$ 3,164

Accrued restructuring costs are included as a component of other current liabilities in the consolidated condensed balance sheet. The below table shows the utilization of the accrued restructuring costs during the two quarters ended June 29, 2020:

	Employee Separation/ Severance	Contract Termination and Other Costs	Total
	(In thousands)		
Accrued as of December 30, 2019	$ 260	$ 242	$ 502
Charged to expense	13,386	356	13,742
Amount paid	(2,130)	(358)	(2,488)
Accrued as of June 29, 2020	$ 11,516	$ 240	$ 11,756

(20) Subsequent Event

Subsequent to June 29, 2020, the Company made a $400,000 debt principal prepayment for its Term Loan.

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 December 30, 2019, 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 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 1,200 customers in various markets throughout the world, including aerospace and defense, 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 recent coronavirus (COVID-19) pandemic first caused some business disruption in our operations in China beginning 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. There is significant uncertainty relating to the potential impacts of the COVID-19 pandemic, and we cannot reasonably estimate its duration or severity. The COVID-19 pandemic creates various global macroeconomic, operational and supply chain risks any one 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 measures to protect our employees, suppliers and customers by implementing our pandemic recovery protocols, establishing situational leadership teams in Asia-Pacific and North America along with routine executive review 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.

FINANCIAL OVERVIEW

Results related to our Mobility business unit are reported as discontinued operations for all periods presented. See Part I, Item 1, Note 2*Discontinued Operations*, of the Notes to Consolidated Condensed Financial Statements included in this Quarterly Report on Form 10-Q for further information. Unless otherwise noted, amounts and disclosures throughout our MD&A relate to our continuing operations.

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 accounted for 36% and 38% of our net sales for the quarter and two quarters ended June 29, 2020. Sales to our ten largest customers accounted for 40% and 41% of our net sales for the quarter and two quarters ended July 1, 2019, respectively. 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		Two Quarters Ended	
	June 29, 2020	July 1, 2019	June 29, 2020	July 1, 2019
Aerospace and Defense	33 %	33 %	35 %	32 %
Automotive	12	18	13	19
Cellular Phone	—	—	—	—
Computing/Storage/Peripherals	13	11	12	11
Medical/Industrial/Instrumentation	20	18	20	17
Networking/Communications	19	19	18	19
Other (2)	3	1	2	2
Total	100 %	100 %	100 %	100 %

(1) Sales to EMS companies are classified by the end markets of their OEM customers.

(2) Other consumer devices that include wearables, portable video devices and personal headphones are included in the Other end market.

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 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 the cost-to-cost method as it best depicts the transfer of control to the customer which takes place as we incur costs. Under the cost-to-cost measure of progress, the extent of progress toward completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligation. Revenues are recorded proportionally as costs are incurred.

We also manufacture certain components, assemblies, and subsystems which service our wireless communications 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, facilities, and human resources personnel, as well as expenses for restructuring, accounting, legal assistance and 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 December 30, 2019 for further discussion of critical accounting policies and estimates. There were no material changes to our critical accounting policies and estimates since December 30, 2019.

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		Two Quarters Ended	
	June 29, 2020	July 1, 2019	June 29, 2020	July 1, 2019
Net sales	100.0 %	100.0 %	100.0 %	100.0 %
Cost of goods sold	82.4	82.4	83.0	82.0
Gross profit	17.6	17.6	17.0	18.0
Operating expenses:				
Selling and marketing	2.8	3.2	3.0	3.2
General and administrative	8.2	6.0	7.6	5.8
Research and development	0.9	0.9	0.9	0.9
Amortization of definite-lived intangibles	1.7	2.0	1.8	2.5
Total operating expenses	13.6	12.1	13.3	12.4
Operating income	4.0	5.5	3.7	5.6
Other (expense) income:				
Interest expense	(3.3)	(3.9)	(3.6)	(3.9)
Other, net	0.1	0.6	0.3	0.2
Total other expense, net	(3.2)	(3.3)	(3.3)	(3.7)
Income from continuing operations before income taxes	0.8	2.2	0.4	1.9
Income tax benefit (provision)	0.8	0.2	0.2	(0.1)
Net income from continuing operations	1.6 %	2.4 %	0.6 %	1.8 %

We have two reportable segments: PCB and E-M Solutions. The PCB reportable segment is comprised of multiple operating segments. Factors considered in determining whether operating segments can be aggregated into reportable segments included similarity regarding economic characteristics, products, production process, type or class of customers, distribution methods and regulatory environments.

Net Sales

Total net sales increased $43.4 million, or 8.2%, to $570.3 million for the second quarter of 2020 from $526.9 million for the second quarter of 2019. This increase primarily resulted from an increase in net sales for the PCB reportable segment of $53.1 million, or 11.4%, to $520.1 million for the second quarter of 2020 from $467.0 million for the second quarter of 2019. The increase was primarily due to increased demand in our Medical/Industrial/Instrumentation, Computing/Storage/Peripherals, and Aerospace and Defense end markets, partially offset by lower demand in our Automotive end market. These changes resulted in a higher price per square foot of 22.5%, driven mainly by product mix shift, however the resulting increase in net sales was partially offset by a 13.3% decrease in the volume of PCB shipments as compared to the second quarter of 2019. The increase in net sales was partially offset by a reduction in net sales for the E-M Solutions reportable segment of $9.7 million, or 16.2%, to $50.2 million for the second quarter of 2020 from $59.9 million for the second quarter of 2019. The decrease was primarily due to lower demand in our Automotive and Medical/Industrial/Instrumentation end markets, partially offset by increased demand in our Networking/Communications end market.

Total net sales increased $4.6 million, or 0.4%, to $1,067.9 million for the first two quarters of 2020 from $1,063.3 million for the first two quarters of 2019. This increase primarily resulted from an increase in net sales for the PCB reportable segment of $35.5 million, or 3.7%, to $987.5 million for the first two quarters of 2020 from $952.0 million for the first two quarters of 2019. The increase was primarily due to increased demand in our Medical/Industrial/Instrumentation, Aerospace and Defense, and Computing/Storage/Peripherals end markets, partially offset by lower demand in our Automotive and Networking/Communications end markets. These changes resulted in a higher price per square foot of 24.6%, driven mainly by product mix shift, however the resulting increase in net sales was partially offset by an 18.7% decrease in the volume of PCB shipments as compared to the first two quarters of 2019. The increase in net sales was partially offset by a reduction in net sales for the E-M Solutions reportable segment of $30.8 million, or 27.7%, to $80.5 million for the first two quarters of 2020 from $111.3 million for the first two quarters of 2019. The decrease was primarily due to lower demand in our Automotive and Medical/Industrial/Instrumentation end markets, partially offset by increased demand in our Networking/Communications end market.

Gross Margin

Overall gross margin was 17.6% for the both the second quarter of 2020 and the second quarter of 2019. Gross margin for the PCB reportable segment increased to 20.3% for the second quarter of 2020 from 19.6% for the second quarter of 2019, primarily due to higher volumes in our commercially focused facilities. Gross margin for the E-M Solutions reportable segment decreased to

(1.1%) for the second quarter of 2020 from 7.3% for the second quarter of 2019, primarily due to lower sales and additional provision for excess and obsolete inventories.

Overall gross margin decreased to 17.0% for the first two quarters of 2020 from 18.0% for the first two quarters of 2019. Gross margin for the PCB reportable segment decreased to 19.5% for the first two quarters of 2020 from 19.9% for the first two quarters of 2019. Gross margin for the E-M Solutions reportable segment decreased to (2.8%) for the first two quarters of 2020 from 6.8% for the first two quarters of 2019, primarily due to lower sales and additional provision for excess and obsolete inventories.

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 second quarter of 2020 in our Asia and North America PCB facilities was 70% and 63%, respectively, compared to 60% and 62%, respectively, for the second quarter of 2019. Capacity utilization for the first two quarters of 2020 in our Asia and North America PCB facilities was 61% and 65%, respectively, compared to 62% and 62%, respectively for the first two quarters of 2019. The significant increase in capacity utilization in our Asia PCB facilities for the second quarter of 2020 compared to the second quarter of 2019 was primarily due to an increase in production related to increased sales in our Medical/Industrial/Instrumentation and Computing/Storage/Peripherals end markets.

Selling and Marketing Expenses

Selling and marketing expenses decreased $0.9 million, to $16.0 million for the second quarter of 2020 from $16.9 million for the second quarter of 2019. As a percentage of net sales, selling and marketing expenses was 2.8% for the second quarter of 2020, as compared to 3.2% for the second quarter of 2019. The decrease in selling and marketing expense for the quarter ended June 29, 2020 was primarily due to reduced travel expense due to the COVID-19 pandemic, which has decreased travel on a temporary basis.

Selling and marketing expenses decreased $2.4 million, to $32.1 million for the first two quarters of 2020 from $34.5 million for the first two quarters of 2019. As a percentage of net sales, selling and marketing expenses was 3.0% for the first two quarters of 2020, as compared to 3.2% for the first two quarters of 2019. The decrease in selling and marketing expense for the two quarters ended June 29, 2020 was primarily due to reduced travel and commission expense.

General and Administrative Expenses

General and administrative expenses increased $14.9 million to $46.7 million, or 8.2% of net sales, for the second quarter of 2020 from $31.9 million, or 6.0% of net sales, for the second quarter of 2019. The increase in general and administrative expenses for the quarter ended June 29, 2020 was primarily due to the increase in restructuring charges of $10.7 million associated with the restructuring of its E-M Solutions business unit and higher incentive compensation and supplies expense.

General and administrative expenses increased $19.2 million to $81.4 million, or 7.6% of net sales, for the first two quarters of 2020 from $62.2 million, or 5.8% of net sales, for the first two quarters of 2019. The increase in general and administrative expenses for the two quarters ended June 29, 2020 was primarily due to the increase in restructuring charges of $10.6 million associated with the restructuring of its E-M Solutions business unit and higher incentive compensation and supplies expense.

Other (Expense) Income

Other expense, net increased $0.6 million to $18.1 million for the second quarter of 2020 from $17.5 million for the second quarter of 2019. The increase in other expense, net for the quarter ended June 29, 2020 was primarily the result of lower foreign currency gains due to the depreciation of the Chinese Renminbi (RMB) in the second quarter of 2020 compared to the second quarter of 2019. We utilize the RMB at our China facilities for employee-related expenses, RMB denominated purchases, and other costs of running our operations in China. This was partially offset by a decrease in interest expense of $2.0 million mainly as a result of lower interest rates.

Other expense, net decreased $3.6 million to $35.4 million for the first two quarters of 2020 from $39.0 million for the first two quarters of 2019. The decrease in other expense, net for the two quarters ended June 29, 2020 was primarily due to the decrease in interest expense of $3.3 million mainly as a result of lower interest rates and a $30.0 million debt pay down for the Term Loan Facility during February 2019, and decrease in other income related to the sale of other assets of $2.8 million. This was partially offset by lower foreign currency gains due to the depreciation of the RMB in the first two quarters of 2020 compared to the first two quarters of 2019.

Income Taxes

The income tax benefit increased by $3.5 million to $4.5 million of tax benefit for the second quarter of 2020 from $1.0 million of tax benefit for the second quarter of 2019. The increase in income tax benefit for the second quarter of 2020 was primarily due to an increase in the release of uncertain tax positions due to the expiration of the statute of limitation in foreign jurisdictions netted against an increase in the valuation allowance and withholding tax expense related to the announced closure of two of the E-M Solutions plants.

The income tax benefit increased by $3.6 million to $2.3 million of tax benefit for the first two quarters of 2020 from $1.3 million of tax expense for the first two quarters of 2019. The increase in income tax benefit for the first two quarters of 2020 was primarily due to (i) a decrease in continuing operating income, (ii) an increase in the release of uncertain tax positions due to the expiration of the statute of limitation in foreign jurisdictions, (iii) an increase related to the retroactive approval of the Company's renewal application for High and New Tax Enterprise status for two of the Company's manufacturing subsidiaries in China, netted against (iv) an increase in the valuation allowance and withholding tax deferred tax liability related to the announced closure of two of the E-M Solutions plants.

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 us, as well as changes in valuation allowances and certain non-deductible items. We had a net deferred income tax liability of approximately $10.9 million as of June 29, 2020 and a net deferred income tax asset of approximately $12.6 million as of July 1, 2019.

On March 27, 2020, the President of the United States signed the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) providing economic relief to disruptions caused by the Coronavirus pandemic. Accounting Standard Codification (ASC) 740, *Accounting for Income Taxes*, requires companies to recognize the effect of tax law changes in the period of enactment regardless of the effective date of those tax law changes. We considered the impact to our financial statements of the corporate income tax aspects of the CARES Act and determined the impact is not material to our financial statements. The CARES Act includes a number of provisions, including the increase of IRC Section 163(j) interest expense deduction limitation of Adjusted Tax Income (ATI) from 30% to 50%. This is applicable to 2019 and 2020 tax years. The Company accounted for such change in the Q1 2020 provision calculation. There are also provisions that allow for a 100% refund of Alternative Minimum Tax Credit carryforwards and which postpone tax compliance deadlines and payments ordinarily due April 15, 2020.

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, meet debt service requirements, fund working capital requirements, and pay down existing debt. We anticipate that servicing debt, financing capital expenditures, financing acquisitions, and funding working capital requirements will continue to be the principal demands on our cash in the future.

Cash flow provided by operating activities for continuing operations during the first two quarters of 2020 was $107.4 million as compared to cash flow provided by operating activities for continuing operations of $120.3 million in the same period in 2019. The decrease in cash flow was primarily due to the $12.6 million decrease in net income from continuing operations to $6.1 million for the first two quarters of 2020 from $18.7 million in the same period in 2019.

Net cash used in investing activities for continuing operations was approximately $45.3 million for the first two quarters of 2020, reflecting purchases of property, plant and equipment and other assets. Net cash used in investing activities for continuing operations was approximately $50.2 million for the first two quarters of 2019, reflecting $55.9 million for purchases of property, plant and equipment and other assets less proceeds from sale of property, plant and equipment and other assets of $5.7 million.

There was no activity related to cash flows from financing activities for the first two quarters of 2020. Net cash used in financing activities was approximately $31.5 million for the first two quarters of 2019, reflecting repayment of long-term debt of $30.0 million and payment of debt issuance costs of $1.5 million.

As of June 29, 2020, we had cash and cash equivalents of approximately $694.7 million, of which approximately $389.4 million was held by our foreign subsidiaries, primarily in Hong Kong and China.

Our 2020 net capital expenditures and asset acquisitions are expected to be in the range of $100.0 million to $110.0 million.

We believe our existing cash resources and sources of liquidity, together with cash generated from operations, will be sufficient to meet our working capital requirements for at least the next twelve months. However, should demand for our products change significantly over the next twelve months or should we experience significant increases in delinquent or uncollectible accounts receivable for any reason, including in particular continued or worsening economic conditions caused by the COVID-19 global pandemic, our cash provided by operations could decrease significantly and we could be required to seek additional sources of liquidity to continue our operations at their current level.

Long-term Debt and Letters of Credit

As of June 29, 2020, we had $1,482.8 million of outstanding debt, net of discount and debt issuance costs, composed of $798.0 million of Term Loan debt due September 2024, $370.1 million of Senior Notes due October 2025, $244.7 million of Convertible Senior Notes due December 2020, $40.0 million under the U.S. ABL, and $30.0 million under the Asia ABL. Subsequent to June 29, 2020, we made a debt principal prepayment for the Term Loan of $400.0 million.

Borrowings under the Term Loan Facility and Senior Notes 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 ABL Revolving Loans are subject to various financial and operational covenants, including maintaining minimum fixed charge coverage ratios. As of June 29, 2020, we were in compliance with the covenants under the Term Loan Facility, Senior Notes Facility and ABL Revolving Loans.

Additional information regarding our indebtedness, including information about availability under our credit 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 of the date of this report, there were no material changes to our contractual obligations and commitments outside the ordinary course of business since December 30, 2019 as reported in our Annual Report on Form 10-K for the fiscal year ended December 30, 2019.

Off Balance Sheet Arrangements

We do not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. In addition, we do not engage in trading activities involving non-exchange traded contracts. As a result, we are not materially exposed to any financing, liquidity, market, or credit risk that could arise if we had engaged in these relationships.

Seasonality

Orders for our products generally correspond to the production schedules of our customers. We historically experience seasonal fluctuations in the first quarter due to the Chinese New Year holidays, which typically results in lower net sales for that quarter. We attribute this decline to shutdowns of our customers' and our own China based manufacturing facilities surrounding the Chinese New Year public holidays, which normally occur in January or February of each year.

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 and foreign currency exchange rates. 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 and foreign exchange hedge positions, we continually monitor our interest rate swap positions and foreign exchange forward positions, both on a stand-alone basis and in conjunction with their underlying interest rate and foreign currency 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 or foreign exchange rates. 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 interest rate 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 June 29, 2020, the fair value of the interest rate swap was recorded as a liability and as a component of other long-term liabilities in the amount of $19.6 million. No ineffectiveness was recognized for the quarter and two quarters ended June 29, 2020. During the quarter and two quarters ended June 29, 2020, the interest rate swap increased interest expense by $2.3 million and $3.5 million, respectively.

See *Liquidity and Capital Resources* and *Long-term Debt and Letters of Credit* appearing in Item 2 of this Quarterly Report on Form 10-Q for further discussion of our financing facilities and capital structure. As of June 29, 2020, approximately 68.3% of our total debt was based on fixed rates. Based on our borrowings as of June 29, 2020, an assumed 100 basis point increase in variable rates would cause our annual interest cost to increase by $4.8 million and an assumed 100 basis point decrease in variable rates would cause our annual interest cost to decrease by $0.8 million.

On July 27, 2017, the Financial Conduct Authority announced the desire to phase out the use of LIBOR by the end of 2021, which may affect us adversely. If LIBOR is discontinued, we may need to renegotiate the terms of certain of our capital securities and credit instruments, which utilize LIBOR as a benchmark in determining the interest rate, to replace LIBOR with the new standard that is established. There is currently no definitive information regarding the future utilization of LIBOR or of any particular replacement rate. As such, the potential effect of any such event on our cost of capital and net investment income cannot yet be determined.

Foreign Currency 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 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 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.

We enter into foreign currency forward contracts to mitigate the impact of changes in foreign currency exchange rates and to reduce the volatility of purchases and other obligations generated in currencies other than our functional currencies. 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 June 29, 2020 and December 30, 2019 was approximately $1.4 million and $2.0 million, respectively. We designated certain of these foreign exchange contracts as cash flow hedges.

The table below presents information about certain of the foreign currency forward contracts as of June 29, 2020 and December 30, 2019:

	As of June 29, 2020		As of December 30, 2019	
	Notional Amount	Average Contract Rate or Strike Amount	Notional Amount	Average Contract Rate or Strike Amount
	(In thousands)			
Receive foreign currency/pay USD				
Japanese Yen	$ 1,361	0.01	$ 1,994	0.01
Estimated fair value, net liability	$ (3)		$ (2)	

Debt Instruments

The table below presents information about certain of our debt instruments as of June 29, 2020:

	As of June 29, 2020								
	Remaining 2020	2021	2022	2023	2024 (1)	Thereafter	Total	Fair Market Value	Weighted Average Interest Rate
	(In thousands)								
US$ Variable Rate	$ 400,000	$ —	$ —	$ —	$ 475,879	$ —	$ 875,879	$ 835,585	2.58%
US$ Fixed Rate	249,975	—	—	—	—	375,000	624,975	680,442	4.08%
Total	$ 649,975	$ —	$ —	$ —	$ 475,879	$ 375,000	$ 1,500,854	$ 1,516,027	

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

Interest Rate Swap Contracts

As of June 29, 2020, the fair value of the interest rate swap was recorded as a liability in the amount of $19,582. The table below presents information regarding our interest rate swaps during the two quarters ended June 29, 2020:

	Two Quarters Ended June 29, 2020
	(In thousands, except interest rates)
Average interest payout rate	2.84 %
Interest payout amount	$ (5,741)
Average interest received rate	1.10 %
Interest received amount	2,224

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 Report. Based on this evaluation, our CEO and CFO have concluded that, as of June 29, 2020, 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

There were no changes in our internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) during the quarter ended June 29, 2020 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 global pandemic and other similar risks, including without limitation, coronavirus (COVID-19), which could materially adversely affect our business, financial condition, and results of operations.

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 region, 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. There is a possibility of widespread infection in the United States and abroad, with the potential for catastrophic impact. National, state and local authorities have recommended social distancing and have imposed or are considering quarantine and isolation measures on large portions of the population, including mandatory business closures. These measures, while intended to protect human life, are expected to have serious adverse impacts on domestic and foreign economies of uncertain severity and duration. The effectiveness of economic stabilization efforts, including proposed government payments to affected citizens and industries, is uncertain. Some economists are predicting the United States may enter a recession as a result of the pandemic.

In particular, 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 scrutiny or embargoing of goods produced in infected areas;
- reduced workforces, which may be caused by, but not limited to, the temporary inability of the workforce to work due to illness, quarantine, or government mandates;
- 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 and uncertain nature of the circumstances involving the COVID-19 pandemic.

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

For the quarter ended June 29, 2020, we generated approximately 50% 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;
- 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.

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.

Uncertainty and adverse changes in the economy and financial markets 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 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.

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

A significant portion of our sales are to customers within the telecommunications and automotive industry. The telecommunications industry is characterized by intense competition, relatively short product life cycles, and significant fluctuations in product demand, which is heavily dependent on the end markets it serves and therefore can be affected by the demand patterns of those markets. If the volatility in the telecommunications industry continues, it may have a material adverse effect on our business, financial condition and result of operations. The automotive industry has historically experienced multi-year cycles of growth and decline. If sales of automobiles should decline or go into a cyclical down turn, our sales could decline and this could have a materially adverse impact on our business, financial condition and result of operations.

In addition, 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.

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.

As part of our business strategy, we expect that we will continue to align our strategy by pursuing potential divestitures of assets and acquisitions of businesses, technologies, assets, or product lines that complement or expand our business. Risks related to such activity 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;
- 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;
- 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 are inherently risky, and no assurance can be given that our recent 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.

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, 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 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 $250.0 million of Convertible Senior Notes due 2020 at an interest rate of 1.75%, an $805.9 million Term Loan Facility due 2024 (Term Loan Facility) at a floating rate of LIBOR plus 2.5%, $375.0 million of Senior Notes due 2025 (Senior Notes) at an interest rate of 5.63%, $40.0 million outstanding under a $150.0 million U.S. Asset-Based Lending Credit Agreement (U.S. ABL), 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, 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 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.

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 June 29, 2020, our consolidated condensed balance sheet included $1,010.3 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.

We rely on suppliers and equipment manufacturers for the timely delivery of raw materials, components, equipment and spare parts used in manufacturing our PCBs and E-M Solutions. If a raw material supplier or equipment manufacturer goes bankrupt, liquidates, consolidates out of existence or fails to satisfy our product quality standards, 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.

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, financial instability, environmental occurrences, or supplier interruptions due to fire, natural catastrophes, public health crises (including, but not limited to, the COVID-19 pandemic) or otherwise. Suppliers and equipment manufacturers may extend lead times, limit supplies, or increase prices due to capacity constraints or other factors, which could harm our ability to deliver our products on a timely basis and negatively impact our financial results. In addition, in extreme circumstances, the suppliers we purchase from could cease production due to a fire, natural disaster, consolidation or liquidation of their businesses. As such, this may impact our ability to deliver our products on a timely basis and harm our customer relationships and negatively impact our financial results.

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.

Despite our current level of indebtedness, we and our subsidiaries may decide to incur substantially more debt. This could further exacerbate the risks to our financial condition described above.

We and our subsidiaries may decide to incur significant additional indebtedness in the future. Although the indenture governing the Senior Notes 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.

A lowering or withdrawal of the ratings assigned to our debt securities by rating agencies may increase our future borrowing costs and reduce our access to capital.

Our debt has a non-investment grade rating, and any rating assigned could be lowered or withdrawn entirely by a rating agency if, in that rating agency's judgment, future circumstances relating to the basis of rating, such as adverse changes, so warrant. Any future lowering of our ratings likely would make it more difficult or more expensive for us to obtain additional debt financing.

Possible replacement of the LIBOR benchmark interest rate may have an impact on our financial condition or results of operations.

On July 27, 2017, the Financial Conduct Authority (FCA), a regulator of financial services firms in the United Kingdom, announced that it intends to stop persuading or compelling banks to submit LIBOR rates after 2021. The FCA and the submitting LIBOR banks have indicated they will support the LIBOR indices through 2021 to allow for an orderly transition to an alternative reference rate. In the United States, efforts to identify a set of alternative U.S. dollar reference interest rates include proposals by the Alternative Reference Rates Committee of the Federal Reserve Board. Other financial services regulators and industry groups are evaluating the possible phase-out of LIBOR and the development of alternate reference rate indices or reference rates. Many of our assets and liabilities are indexed to LIBOR. We are evaluating the potential impact of the possible replacement of the LIBOR benchmark interest rate, but are not able to predict whether LIBOR will cease to be available after 2021, whether the alternative rates the Federal Reserve Board proposes to publish will become market benchmarks in place of LIBOR, or what the impact of such a transition will have on our financial condition or results of operations.

We are exposed to the credit risk of some 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 38% and 36% of our net sales for the quarters ended June 29, 2020 and July 1, 2019, 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.

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 accounted for approximately 27% and 31% of our net sales for the quarters ended June 29, 2020 and July 1, 2019, respectively. 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 are heavily dependent upon the worldwide electronics industry, which is characterized by economic cycles and fluctuations in product demand. A downturn in the electronics industry or prolonged global economic crisis could result in decreased demand for our manufacturing services and materially adversely affect our business, financial condition, and results of operations.

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.

Our manufacturing processes depend on the collective industry experience of our employees. If a significant number of these employees were to leave us, it could limit our ability to compete effectively and could materially adversely affect our business, financial condition, and results of operations.

We have limited patent or trade secret protection for our manufacturing processes. We 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. Although we are not dependent on any one employee or a small number of employees, if a significant number of our employees involved in our manufacturing processes were to leave our employment, and we were not able to replace these people with new employees with comparable experience, our manufacturing processes might suffer as we might be unable to keep up with innovations in the industry. As a result, we may lose our ability to continue to compete effectively. For example, we have experienced a significant amount of employee attrition in our China operations each year, which has negatively impacted our yield, costs of production, and service times.

Changes in prices or availability of raw materials could have a material adverse effect on our business, financial condition, and results of operations and reduce our gross margins.

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.

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 copper, it may reduce our gross margins. Should the supply of materials used in our 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 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 June 29, 2020, aerospace and defense sales accounted for approximately 33% 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, we are a supplier to OEMs that sell to the U.S. government and its agencies, as well as foreign governments and agencies. 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 led to an increase in demand for defense products and services and homeland security solutions in the recent past. Although a two-year budget agreement has recently been approved by the U.S. government and the budget agreement includes sustained spending on defense programs, the termination or failure to fund one or more significant 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 may be unable to hire and retain sufficient qualified personnel, and the loss of any of our key executive officers 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. 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. Further, our ability to successfully integrate acquired companies depends in part on our ability to retain key management and existing employees at the time of the acquisition.

Increasingly, our customers are requesting that we enter into supply agreements with them that have restrictive terms and conditions. These agreements typically include provisions that increase our financial exposure, which could result in significant costs to us.

Increasingly, our customers are requesting that we enter into supply agreements with them. These agreements typically do not include volume commitments, but do include provisions that generally serve to increase our exposure for product liability and limited sales returns, which could result in higher costs to us as a result of such claims. In addition, these agreements typically contain provisions that seek to limit our operational and pricing flexibility and extend payment terms, which could materially adversely affect our cash flow, business, financial condition, and results of operations.

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 operations beyond 2020;
- 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; or
- to respond to competitive pressures or perceived opportunities, such as investment, acquisition, and international expansion activities.

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.

The Company may experience cash flow volatility.

We experience fluctuations in our revenues and cost structure and the resulting cash flows and expect that this will continue to occur in the future. We experience fluctuations in our cash flows for reasons that include (i) the types and complexity, number, size, timing and duration of client engagements; (ii) the seasonality of our business; (iii) fluctuations in costs of labor; (iv) fluctuations in the cost and availability of raw materials; (v) fluctuations in demand for our products; (vi) the length of billing and collection cycles and changes in amounts that may become uncollectible; (vii) changes in the frequency and complexity of government regulatory and enforcement activities; (viii) timing of customer payments; (ix) fluctuations in the exchange rates of various currencies against the U.S. dollar; and (x) economic factors beyond our control. Such fluctuations could affect our ability to meet our obligations including debt repayments. Any failure to meet our financial obligations could have a material adverse effect on our financial position and results of operations.

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

Borrowings under the Term Loan Facility, the U.S. ABL and the Asia ABL are at variable rates of interest and expose us to interest rate risk. If interest rates were to increase, our debt service obligations on the variable rate indebtedness would increase even though the amount borrowed remained the same, and our net income and cash flows, including cash available for servicing our indebtedness, will correspondingly decrease. On May 15, 2018, we entered into an interest rate swap arrangement with a notional amount of $400.0 million, which expires on June 1, 2022, in order to reduce interest rate volatility exposure. This arrangement effectively converts $400.0 million of our variable rate debt to fixed rate. Under the terms of the interest rate swap, we would pay a fixed rate of 2.84% and would receive floating 1-month LIBOR during the swap period.

For illustrative purposes and assuming all loans under the Term Loan Facility, the U.S. ABL and the Asia ABL were fully drawn, each quarter point change in interest rates would result in a $1.8 million change in annual interest expense on our indebtedness under the Term Loan Facility, the U.S. ABL and the Asia ABL, after giving effect to our interest rate swap.

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.

If we are unable to respond to rapid technological change and process development, we may not be able to compete effectively.

The market for our manufacturing services is characterized by rapidly changing technology and continual implementation of new production processes. The future success of our business will depend in large part upon our ability to maintain and enhance our technological capabilities, to 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 2020 we expect to continue to make significant capital expenditures to expand our HDI, RF technology, and other advanced manufacturing capabilities. 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, failure to adopt and implement technological improvements quickly may cause inefficiencies as our product yields or quality may decrease, resulting in increased costs.

In addition, the PCB industry could encounter competition from new or revised manufacturing and production technologies that render existing manufacturing and production 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 to remain competitive, the development, acquisition, and implementation of those technologies and equipment will require us to make significant capital investments.

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, the indenture governing the Senior Notes will 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 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 and the credit agreements governing the Term Loan Facility, the U.S. ABL and the Asia ABL will 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 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.

Products we manufacture may contain design or manufacturing defects, which could result in reduced demand for our services and 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. 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.

Our results can be adversely affected by rising labor costs.

There is uncertainty with respect to rising labor costs, particularly within China, where we have most of our manufacturing facilities. 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, the high turnover rate and our difficulty in recruiting and retaining qualified employees and the other labor trends we are noting in China 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. 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 or that our international operations will contribute positively to our operating results.

In North America, low unemployment rates are making it difficult to recruit and retain employees and 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.

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.

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.

Adverse judgments or settlements resulting from legal proceedings in which we may be involved in the normal course of our business could reduce our profitability or limit our ability to operate our business.

In the normal course of our business, we have been, and may in the future be subject to employee claims based on, among other things, discrimination, minimum wage, overtime pay and other employment related matters. We cannot predict with certainty the cost of defense, the cost of prosecution or the ultimate outcome of these legal proceedings. Any significant adverse determinations, judgments or settlements could reduce our profitability and could materially adversely affect our business, financial condition and results of operations, limit our ability to operate our business or harm our reputation.

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 non-applicability 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, waste water, 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.

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. 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 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 the 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.

Competition in the PCB market is intense, and we could lose market share 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. Our principal PCB and substrate competitors include AT&S (Austria Technologie & Systemtechnik Aktiengesellschaft), BoardTek Electronics Corporation, Chin-Poon Industrial Co., Ltd., ISU Petasys Co., Ltd., Suzhou Dongshan Precision Manufacturing Co., Ltd., Sanmina Corporation, Tripod Technology Corporation, Unimicron Technology Corporation, Shennan Circuits Co., Ltd., and WUS Printed Circuit Co., Ltd. Our principal E-M Solutions competitors include Amphenol Corporation, Flex Ltd., Jabil Inc., and Sanmina Corporation. Our competition for RF products include Cobham plc, Crane Aerospace & Electronics, TRM Microwave, Mercury Systems, Inc., AVX Corporation, Molex, and Smiths Group plc. 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.

If we are unable to provide our customers with high-end technology, high-quality products, and responsive service, or if we are unable to deliver our products to our customers in a timely manner, our business, financial condition, and results of operations may be materially adversely affected.

In order to maintain our existing customer base and obtain business from new customers, we must demonstrate our ability to produce our products at the level of technology, quality, responsiveness of service, timeliness of delivery, and cost that our customers require. If our products are of substandard quality, if they are not delivered on time, if we are not responsive to our customers' demands, or if we cannot meet our customers' technological requirements, our reputation as a reliable supplier of our products would likely be damaged. If we are unable to meet anticipated product and service standards, we may be unable to obtain new contracts or keep our existing customers, and this would have a material adverse effect on our business, financial condition, and results of operations.

Outages, computer viruses, break-ins, 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.

Damage to 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.

We face constant pricing pressure from our customers and competitors, which may decrease our profit margins.

Competition in the PCB market is intense, and we expect that competition will continue to increase, thereby creating a highly aggressive pricing environment. 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.

The effects of such pricing pressures on our business may be exacerbated by inflationary pressures that affect our costs of supply. When we are unable to extract comparable concessions from our suppliers on prices they charge us, this in turn reduces gross profit if we are unable to raise prices. Further, uncertainty or adverse changes in the economy could also lead to a significant decline in demand for our products and pressure to reduce our prices. Recently, many businesses have taken a more conservative stance in ordering inventory. Any decrease in demand for our products, coupled with pressure from the market and our customers to decrease our prices, would materially adversely affect our business, financial condition, and results of operations.

The pricing pressure we face on our products requires us to introduce new and more advanced technology products to maintain average selling prices or reduce any declines in average selling prices. As we shift production to more advanced, higher-density PCBs, we tend to make significant investments in plants and other capital equipment and incur higher costs of production, which may not be recovered.

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

Sales to EMS companies represented approximately 38% and 36% of our net sales for the quarters ended June 29, 2020 and July 1, 2019, 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.

If we are unable to manage our growth effectively, our business, financial condition, and results of operations could be materially adversely affected.

We have experienced, and expect to continue to experience, growth in the scope and complexity of our operations. This growth may strain our managerial, financial, manufacturing, and other resources. In order to manage our growth, we may be required to continue 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.

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 net deferred income tax assets, resulting in a higher income tax provision, which would reduce our results of operations.

On March 27, 2020, the President signed the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) providing economic relief to disruptions caused by the Coronavirus pandemic. The CARES Act includes a number of provisions, including the delay in certain employer payroll tax payments, employee retention payroll tax credits, increase of IRC Section 163(j) limitation of Adjusted Tax Income (ATI) from 30% to 50% (applicable to 2019 and 2020 tax years), changes to net operating loss rules, alternative minimum tax relief, modification of charitable contribution limits and others.

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 sanctions 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 sanctions 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.

Employee theft or fraud could result in loss.

Certain of our employees have access to, or signature authority with respect to, bank accounts or other company assets, which could expose us to fraud or theft. In addition, certain employees have access to certain precious metals used in connection with our manufacturing and key information technology infrastructure and to customer and other information that is commercially valuable. Should any employee, for any reason, steal any such precious metals (which has occurred from time to time), compromise our information technology systems, or misappropriate customer or other information, we could incur losses, including losses relating to claims by our customers against us, and the willingness of customers to do business with us may be damaged. Additionally, in the case of our defense business, we could be barred from future participation in government programs. Any such losses may not be fully covered by insurance.

Because we sell on a purchase order basis, we are subject to uncertainties and variability in demand by our customers that could decrease revenues and harm our operating results.

Although we have long-term contracts with many customers, those contracts generally do not contain volume commitments. We generally sell to customers on a purchase order basis. Our quick-turn orders are subject to particularly short lead times. Consequently, our sales are subject to short-term variability in demand by our customers. Customers submitting purchase orders may cancel, reduce, or delay their orders for a variety of reasons, subject to negotiations. The level and timing of orders placed by our customers may vary due to:

- customer attempts to manage inventory;
- changes in customers' manufacturing strategies, such as a decision by a customer to either diversify or consolidate the number of PCB manufacturers or backplane assembly service providers used or to manufacture or assemble its own products internally;
- variation in demand for our customers' products; and
- changes in new product introductions.

We have periodically experienced terminations, reductions, and delays in our customers' orders. Further terminations, reductions, or delays in our customers' orders could materially adversely affect our business, financial condition, and results of operations.

Our business has benefited from OEMs deciding to outsource their PCB manufacturing and backplane assembly needs to us. If OEMs choose to provide these services in-house or select other providers, our business could suffer.

Our future revenue growth partially depends on new outsourcing opportunities from OEMs. Current and prospective customers continuously evaluate our performance against other providers. They also evaluate the potential benefits of manufacturing their products themselves. To the extent that outsourcing opportunities are not available either due to OEM decisions to produce these products themselves or to use other providers, our financial results and future growth could be materially adversely affected.

Consolidation among our customers could materially adversely affect our business, financial condition, and results of operations.

Some of our large customers have consolidated in the past, and further consolidation of customers may occur. Depending on which organization becomes the controller of the supply chain function following the consolidation, we may not be retained as a preferred or approved supplier. In addition, product duplication could result in the termination of a product line that we currently support. While there is potential for increasing our position with the combined customer, there does exist the potential for decreased revenue if we are not retained as a continuing supplier. We also face the risk of increased pricing pressure from the combined customer because of its increased market share.

Our operations could be materially adversely affected by a shortage of utilities or a discontinuation of priority supply status offered for such utilities.

The manufacturing of PCBs requires significant quantities of electricity and water. Our operations in Asia have historically purchased substantially all of the electrical power for their manufacturing plants in China from local power plants. Because China's economy has recently been in a state of growth, the strain on the nation's power plants is increasing, which has led to continuing power outages in various parts of the country. There may be times when our operations in China may be unable to obtain adequate sources of electricity to meet production requirements. Various regions in China have in the past experienced shortages of both electricity and water and unexpected interruptions of power supply. From time to time, the Chinese government rations electrical power, which can lead to unscheduled production interruptions at our manufacturing facilities.

In addition, certain areas in which our North America operations have manufacturing facilities, particularly in California, have experienced power and resource shortages from time to time, including mandatory periods without electrical power, changes to water availability, and significant increases in utility and resource costs.

We do not generally maintain any back-up power generation facilities or reserves of water for our operations, so if we were to lose supplies of power or water at any of our facilities, we would be required to cease operations until such supply was restored. Any resulting cessation of operations could materially adversely affect our ability to meet our customers' orders in a timely manner, thus potentially resulting in a loss of business, along with increased costs of manufacturing, and under-utilization of capacity. In addition, the sudden cessation of our power or water supply could damage our equipment, resulting in the need for costly repairs or maintenance, as well as damage to products in production, resulting in an increase in scrapped products.

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, and 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, whether or not they have merit, are brought against our customers for such infringement, we could be required to expend significant resources in defending such claims. In the event we are subject to any infringement claims, we may be required to spend a significant amount of money to develop non-infringing alternatives or obtain 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.

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.

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 (NOL's) 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 (the Code). 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 NOLs.

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 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 agreements 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 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.

We are subject to risks for the use of certain metals from "conflict minerals" originating in the Democratic Republic of the Congo.

During the third quarter of 2012, the SEC adopted rules implementing the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank). These rules impose diligence and disclosure requirements regarding the use of "conflict minerals" mined from the Democratic Republic of Congo and neighboring countries. While these new rules continue to be the subject of ongoing litigation and, as a result, uncertainty, we submitted a conflict minerals report on Form SD with the SEC for the past seven years, most recently on May 29, 2020. Compliance with these rules results in additional costs and expenses, including costs and expenses incurred for due diligence to determine and verify the sources of any conflict minerals used in our products, in addition to the costs and expenses of remediation and other changes to products, processes, or sources of supply as a consequence of such verification efforts. These rules may also affect the sourcing and availability of minerals used in the manufacture of our PCBs, as there may be only a limited number of suppliers offering "conflict free" minerals that can be used in our products. There can be no assurance that we will be able to obtain such minerals in sufficient quantities or at competitive prices. Also, since our supply chain is complex, we may, at a minimum, face reputational challenges with our customers, stockholders, and other stakeholders if we are unable to sufficiently verify the origins of the minerals used in our products. We may also encounter customers who require that all of the components of our products be certified as conflict free. If we are not able to meet customer requirements, such customers may choose to disqualify us as a supplier, which could impact our sales and the value of portions of our inventory.

Item 6. ***Exhibits***

Exhibit Number	Exhibits
3.1	Registrant's Certificate of Incorporation, as amended May 12, 2016 (1)
3.2	Registrant's Fourth Amended and Restated Bylaws, as amended March 2, 2016 (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 to the Registrant's Current Report on Form 8-K as filed with the Commission on June 6, 2011 and to the Registrant's Form 8-K as filed with the Commission on May 18, 2016.

(2) Incorporated by reference to the Registrant's Current Report on Form 8-K as filed with the Commission on March 8, 2016.

* 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: August 6, 2020

Thomas T. Edman
President and Chief Executive Officer

/s/ Todd B. Schull

Dated: August 6, 2020

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 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)

Date: August 6, 2020

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 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)

Date: August 6, 2020

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 and two quarters ended June 29, 2020, 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)

August 6, 2020

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 and two quarters ended June 29, 2020, 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)

August 6, 2020