

TTM TECHNOLOGIES INC  
Form 10-Q  
May 11, 2017  
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**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 April 3, 2017

Commission File Number: 0-31285

**TTM TECHNOLOGIES, INC.**

(Exact name of registrant as specified in its charter)

**DELAWARE**  
(State or other jurisdiction of

**91-1033443**  
(I.R.S. Employer

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incorporation or organization)

Identification No.)

1665 Scenic Avenue Suite 250, Costa Mesa, California 92626

(Address of principal executive offices)

(714) 327-3000

(Registrant's telephone number, including area code)

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post 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. Check one:

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Smaller reporting company

Emerging growth company

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

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

Number of shares of common stock, \$0.001 par value, of registrant outstanding at May 9, 2017: 101,743,825

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**Table of Contents****PART I. FINANCIAL INFORMATION****Item 1. Financial Statements (unaudited)****TTM TECHNOLOGIES, INC.****Consolidated Condensed Balance Sheets**

	As of	
	April 3, 2017	January 2, 2017
	(Unaudited)	
	(In thousands, except par value)	
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 282,871	\$ 256,277
Accounts receivable, net	419,340	432,788
Inventories	275,092	269,212
Prepaid expenses and other current assets	49,988	54,564
<b>Total current assets</b>	<b>1,027,291</b>	<b>1,012,841</b>
Property, plant and equipment, net	976,446	966,638
Goodwill	372,586	372,609
Definite-lived intangibles, net	120,688	126,613
Deposits and other non-current assets	33,234	21,375
	<b>\$ 2,530,245</b>	<b>\$ 2,500,076</b>
<b>LIABILITIES AND EQUITY</b>		
Current liabilities:		
Short-term debt, including current portion of long-term debt	\$ 160,658	\$ 110,652
Accounts payable	362,141	371,610
Accrued salaries, wages and benefits	75,746	97,171
Other accrued expenses	123,035	109,632
<b>Total current liabilities</b>	<b>721,580</b>	<b>689,065</b>
Long-term debt, net of discount and issuance costs	861,391	909,030
Other long-term liabilities	74,592	72,856
<b>Total long-term liabilities</b>	<b>935,983</b>	<b>981,886</b>
Commitments and contingencies (Note 11)		
Equity:		
Common stock, \$0.001 par value; 300,000 shares authorized, 101,742 and 100,396 shares issued and outstanding in 2017 and 2016, respectively	102	100
Additional paid-in capital	762,139	758,440
Retained earnings	107,746	74,787
Statutory surplus reserve	31,849	31,849
Accumulated other comprehensive loss	(37,598)	(44,329)
<b>Total TTM Technologies, Inc. stockholders' equity</b>	<b>864,238</b>	<b>820,847</b>
Noncontrolling interest	8,444	8,278

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Total equity	872,682	829,125
	\$ 2,530,245	\$ 2,500,076

See accompanying notes to consolidated condensed financial statements.

**Table of Contents****TTM TECHNOLOGIES, INC.****Consolidated Condensed Statements of Operations****For the Quarters Ended April 3, 2017 and March 28, 2016**

	Quarter Ended	
	April 3, 2017	March 28, 2016
	(Unaudited)	
	(In thousands, except per share data)	
Net sales	\$ 625,247	\$ 583,258
Cost of goods sold	520,228	499,695
<b>Gross profit</b>	<b>105,019</b>	<b>83,563</b>
Operating expenses:		
Selling and marketing	16,655	17,306
General and administrative	29,273	36,206
Amortization of definite-lived intangibles	5,912	5,947
Restructuring charges	609	1,856
Impairment of long-lived assets		3,346
Total operating expenses	52,449	64,661
<b>Operating income</b>	<b>52,570</b>	<b>18,902</b>
Other income (expense):		
Interest expense	(13,596)	(21,784)
Other, net	(1,710)	1,209
<b>Total other expense, net</b>	<b>(15,306)</b>	<b>(20,575)</b>
Income (loss) before income taxes	37,264	(1,673)
Income tax provision	(4,139)	(5,477)
Net income (loss)	33,125	(7,150)
Less: Net income attributable to the noncontrolling interest	(166)	(114)
Net income (loss) attributable to TTM Technologies, Inc. stockholders	\$ 32,959	\$ (7,264)
Income (loss) per share attributable to TTM Technologies, Inc. stockholders:		
Basic earnings (loss) per share	\$ 0.33	\$ (0.07)
Diluted earnings (loss) per share	\$ 0.28	\$ (0.07)

See accompanying notes to consolidated condensed financial statements.

**Table of Contents****TTM TECHNOLOGIES, INC.****Consolidated Condensed Statements of Comprehensive Income (Loss)****For the Quarters Ended April 3, 2017 and March 28, 2016**

	<b>Quarter Ended</b>	
	<b>April 3,</b>	<b>March 28,</b>
	<b>2017</b>	<b>2016</b>
	<b>(Unaudited)</b>	
	<b>(In thousands)</b>	
Net income (loss)	\$ 33,125	\$ (7,150)
Other comprehensive income (loss):		
Foreign currency translation adjustments, net of tax	6,619	(3,873)
Net unrealized gains (losses) on cash flow hedges:		
Unrealized gain (loss) on effective cash flow hedges during the period, net	68	(7)
Loss realized in net earnings	44	42
<b>Net</b>	<b>112</b>	<b>35</b>
Other comprehensive income (loss), net of tax	6,731	(3,838)
<b>Comprehensive income (loss)</b>	<b>39,856</b>	<b>(10,988)</b>
Less: Comprehensive income attributable to the noncontrolling interest	(166)	(114)
<b>Comprehensive income (loss) attributable to TTM Technologies, Inc. stockholders</b>	<b>\$ 39,690</b>	<b>\$ (11,102)</b>

See accompanying notes to consolidated condensed financial statements.

**Table of Contents****TTM TECHNOLOGIES, INC.****Consolidated Condensed Statements of Cash Flows****For the Quarters Ended April 3, 2017 and March 28, 2016**

	<b>Quarter Ended</b>	
	<b>April 3,</b>	<b>March 28,</b>
	<b>2017</b>	<b>2016</b>
	<b>(Unaudited)</b>	
	<b>(In thousands)</b>	
<b>Cash flows from operating activities:</b>		
Net income (loss)	\$ 33,125	\$ (7,150)
<b>Adjustments to reconcile net income (loss) to net cash provided by operating activities:</b>		
Depreciation of property, plant and equipment	36,077	40,227
Amortization of definite-lived intangible assets	5,912	5,947
Amortization of debt discount and debt issuance costs	2,601	6,125
Stock-based compensation	3,628	2,246
Impairment of long-lived assets		3,346
Other	394	542
<b>Changes in operating assets and liabilities:</b>		
Accounts receivable, net	13,448	23,748
Inventories	(5,880)	4,368
Prepaid expenses and other current assets	(3,582)	6,985
Accounts payable	(9,475)	(48,691)
Accrued salaries, wages and benefits and other accrued expenses	(26,664)	(19,801)
<b>Net cash provided by operating activities</b>	<b>49,584</b>	<b>17,892</b>
<b>Cash flows from investing activities:</b>		
Purchase of property, plant and equipment and equipment deposits	(33,259)	(20,116)
Proceeds from sale of property, plant and equipment and assets held for sale	9,881	
Release of restricted cash to cash and cash equivalents		3,530
<b>Net cash used in investing activities</b>	<b>(23,378)</b>	<b>(16,586)</b>
<b>Cash flows from financing activities:</b>		
Proceeds from exercise of stock options	74	
Repayment of long-term debt		(76,482)
<b>Net cash provided by (used in) financing activities</b>	<b>74</b>	<b>(76,482)</b>
Effect of foreign currency exchange rates on cash and cash equivalents	314	(246)
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>26,594</b>	<b>(75,422)</b>
Cash and cash equivalents at beginning of period	256,277	259,100
<b>Cash and cash equivalents at end of period</b>	<b>282,871</b>	<b>\$ 183,678</b>
<b>Noncash transactions:</b>		
Purchases of property, plant and equipment recorded in accounts payable and accrued expenses	\$ 44,560	\$ 23,988

See accompanying notes to consolidated condensed financial statements.





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**TTM TECHNOLOGIES, INC.**

**Notes to Consolidated Condensed Financial Statements**

**(Unaudited)**

**(Dollars and shares in thousands, except per share data)**

**(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 complex PCBs and electro-mechanical solutions (E-M Solutions). The Company provides time-to-market and advanced technology products and offers a one-stop manufacturing solution to customers from engineering support to prototype development through final mass production. This one-stop manufacturing solution allows the Company to align technology developments with the diverse needs of the Company's customers and to enable them to reduce the time required to develop new products and bring them to market.

The Company serves a diversified customer base in various markets throughout the world, including networking/communications infrastructure products, smartphones and touchscreen tablets, as well as aerospace and defense, automotive, high-end computing, and medical, industrial and instrumentation related 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. 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. 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 results of operations for the interim periods are not necessarily indicative of the results to be expected for the full year. 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. 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.

***Recently Adopted and Issued Accounting Standards***

In October 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory*. The objective of this update is to improve the accounting for the income tax consequences of intra-entity transfers of assets other than inventory by recognizing the income tax consequences when the transfer occurs. This ASU is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Early adoption is permitted. The Company is currently evaluating the new guidance to determine the impact it may have on its consolidated condensed financial statements.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230)*. The objective of this update is to add or clarify guidance on the classification of certain cash receipts and payments in the statement of cash flows. This ASU is effective for fiscal years beginning after December 15, 2017, including interim periods within those annual periods and is to be applied utilizing a retrospective approach. Early adoption is permitted. The Company adopted this ASU 2016-15 in the first quarter of 2017 and the adoption did not have a material impact on its consolidated condensed financial statements and related disclosures.

In March 2016, the FASB issued ASU 2016-09, *Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*. The objective of this update is to simplify several aspects of the accounting for employee share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. This ASU is effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. The Company adopted ASU 2016-09 on January 3, 2017. The impact of the adoption did not have a material impact on the consolidated condensed financial statements and related disclosures.



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In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. The objective of this update is to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. This ASU is effective for fiscal years beginning after December 15, 2018, including interim periods within those annual periods and is to be applied utilizing a modified retrospective approach. The Company is currently evaluating the new guidance to determine the impact it may have on its consolidated financial statements and related disclosures.

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers*, as amended, which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The ASU will replace most existing revenue recognition guidance in U.S. GAAP when it becomes effective. The new standard is effective for the Company at the beginning of fiscal year 2018, however application of the standard is allowed as early as the beginning of fiscal 2017. The standard permits the use of either the retrospective or cumulative effect transition method. The Company has assessed that the impact of the new guidance will result in a change to the timing of revenue recognition for the Company's revenue stream from point in time upon physical delivery to an over time model and believes this transition could have a material impact on the Company's consolidated financial statements upon adoption. As of April 3, 2017, management intends to apply the cumulative effect transition method. The Company has identified and is in the process of implementing changes to its systems, processes and internal controls to meet the standard update's reporting and disclosure requirements.

**(2) Consolidation Plan, Restructuring and Impairment Charges**

On September 29, 2015, the Company announced a consolidation plan that resulted in the closure of the Company's facilities in Cleveland, Ohio, Milpitas, California and Juarez, Mexico (the Consolidation Plan) and laid off approximately 480 employees at these sites. The Consolidation Plan was part of the Company's integration strategy to improve total plant utilization, operational performance and customer focus following its acquisition of Viasystems. In accordance with the Consolidation Plan, the Company has combined its Cleveland and Milpitas facilities into its North Jackson, Ohio and Silicon Valley, California facilities, respectively, and closed its Juarez, Mexico facility.

In connection with the Consolidation Plan and other global realignment restructuring efforts, the Company recognized employee separation, contract termination and other costs during the quarters ended April 3, 2017 and March 28, 2016. Contract termination and other costs primarily represented plant closure costs for Cleveland, Ohio, Milpitas, California and Juarez, Mexico, as well as costs related to building operating leases associated with the downsizing of the St. Louis, Missouri office.

The below table summarizes such restructuring costs by operating segment for the quarters ended April 3, 2017 and March 28, 2016:

	For the Quarter Ended April 3, 2017			For the Quarter Ended March 28, 2016		
	Employee separation/severance	Contract termination and other costs	Total	Employee separation/severance	Contract termination and other costs	Total
<b>Operating Segment:</b>						
PCB	\$ 127	\$ 99	\$ 226	\$ 570	\$ 611	\$ 1,181
E-M Solutions		271	271	156	519	675
Corporate	33	79	112			
	\$ 160	\$ 449	\$ 609	\$ 726	\$ 1,130	\$ 1,856

The below table shows the utilization of the accrued restructuring costs during the quarter ended April 3, 2017:

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	<b>Employee Separation/ Severance</b>	<b>Contract Termination and Other Costs (In thousands)</b>	<b>Total</b>
Accrued at January 2, 2017	\$ 124	\$ 1,042	\$ 1,166
Charged to expense	160	449	609
Amount paid	(284)	(614)	(898)
Accrued at April 3, 2017	\$	\$ 877	\$ 877

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As of April 3, 2017, the Company has incurred approximately \$16,941 of restructuring charges since the September 29, 2015 announcement. The Company estimates that it will incur total charges related to the Consolidation Plan of approximately \$20,000.

The Company also recognized \$3,346 in impairment charges during the quarter ended March 28, 2016. As a result of the above mentioned plant closures and other plant realignment efforts, \$1,393 of impairment charges were recognized in the consolidated condensed statement of operations related to machinery and equipment in the PCB operating segment. In addition, \$1,953 of impairment charges were recognized in the consolidated condensed statement of operations related to capitalized software costs in the Corporate operating segment.

**(3) Inventories**

Inventories as of April 3, 2017 and January 2, 2017 consist of the following:

	As of	
	April 3, 2017	January 2, 2017
	(In thousands)	
<b>Inventories:</b>		
Raw materials	\$ 78,392	\$ 73,497
Work-in-process	105,318	105,094
Finished goods	91,382	90,621
	<b>\$ 275,092</b>	<b>\$ 269,212</b>

**(4) Goodwill**

As of April 3, 2017 and January 2, 2017, goodwill was as follows:

	Total (In thousands)
Balance as of January 2, 2017	\$ 372,609
Foreign currency translation adjustment and other	(23)
Balance as of April 3, 2017	<b>\$ 372,586</b>

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

Goodwill balances include foreign currency translation adjustments related to foreign subsidiaries with functional currencies other than the U.S. Dollar.

**(5) Definite-lived Intangibles**

As of April 3, 2017 and January 2, 2017, the components of definite-lived intangibles were as follows:

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	Gross Amount	Accumulated Amortization (In thousands)	Foreign Currency Translation Adjustment	Net Carrying Amount	Weighted Average Amortization Period (years)
<b>April 3, 2017:</b>					
Customer relationships	\$ 203,563	\$ (84,118)	\$ 89	\$ 119,534	8.1
Technology	3,000	(1,846)		1,154	3.0
	\$ 206,563	\$ (85,964)	\$ 89	\$ 120,688	
<b>January 2, 2017:</b>					
Customer relationships	\$ 203,563	\$ (78,473)	\$ 119	\$ 125,209	8.1
Technology	3,000	(1,596)		1,404	3.0
	\$ 206,563	\$ (80,069)	\$ 119	\$ 126,613	

**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Condensed Financial Statements (Continued)**

The April 3, 2017 and January 2, 2017 definite-lived intangible balances include foreign currency translation adjustments related to foreign subsidiaries with functional currencies other than the U.S. Dollar.

Definite-lived intangibles are generally amortized using the straight line method of amortization over the useful life, with the exception of certain customer relationship intangibles, which are amortized using an accelerated method of amortization based on estimated cash flows. Amortization expense was \$5,912 and \$5,947, for the quarters ended April 3, 2017 and March 28, 2016, respectively.

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

	(In thousands)
Remaining 2017	\$ 17,732
2018	22,870
2019	18,746
2020	18,746
2021	18,746
Thereafter	23,848
	\$ 120,688

**(6) Long-term Debt and Letters of Credit**

The following table summarizes the long-term debt of the Company as of April 3, 2017 and January 2, 2017:

	Average Effective Interest Rate as of April		Average Effective Interest Rate as of January 2,	
	3, 2017	April 3, 2017	2017	January 2, 2017
	(In thousands)			
Term loan due May 2021	5.25%	\$ 700,000	5.25%	\$ 700,000
U.S. ABL revolving loan due May 2020	2.48%	80,000	2.27%	80,000
Asia ABL revolving loan due May 2020	2.38%	30,000	2.17%	30,000
Convertible Senior Notes due December 2020	1.75%	250,000	1.75%	250,000
Capital lease	6.43%	1,815	6.43%	1,798
		1,061,815		1,061,798
Less: Long-term debt unamortized discount		(35,301)		(37,392)
Long-term debt unamortized debt issuance costs		(4,465)		(4,724)
		1,022,049		1,019,682
Less: current maturities		(160,658)		(110,652)
Long-term debt, less current maturities		\$ 861,391		\$ 909,030



***Term and Revolving Loans***

The Company maintains a Term Loan Credit Agreement (Term Loan), a \$200,000 U.S. Asset-Based Lending Credit Agreement (U.S. ABL), and a \$150,000 Asia Asset-Based Lending Credit Agreement (Asia ABL) (collectively the ABL Revolving Loans).

The Term Loan bears interest at a floating rate of LIBOR, with a 1.0% LIBOR floor, plus an applicable interest margin of 4.25%, or JP Morgan Chase Bank's prime rate, with a 2% floor, plus a margin of 3.25%, at the Company's option. At April 3, 2017 the weighted average interest rate on the outstanding borrowings under the Term Loan was 5.25%. There is no provision, other than an event of default, for the interest margin to increase. The Term Loan will mature on May 31, 2021. The Term Loan is secured by a significant amount of the assets of the Company and a pledge of 65% of voting stock of the Company's first tier foreign subsidiaries and is structurally senior to the Company's convertible senior notes. See Convertible Senior Notes below.

The U.S. ABL consists of three tranches comprised of a revolving credit facility of up to \$200,000, a letter of credit facility of up to \$50,000, and swingline loans of up to \$30,000, provided that at no time may amounts outstanding under the tranches exceed in aggregate \$200,000 or the applicable borrowing base, which is a percentage of the principal amount of Eligible Accounts, as defined in the U.S. ABL agreement. Borrowings under the U.S. ABL bear interest at either a floating rate of LIBOR plus a margin of 150 basis points or JP Morgan Chase Bank's prime rate plus a margin of 50 basis points, at the Company's option. At April 3, 2017, the weighted average interest rate on the outstanding borrowings under the U.S. ABL was 2.48%. The applicable margin can vary based on the remaining availability of the facility, from 125 to 175 basis points for LIBOR-based loans and from 25 to 75 basis points for JP

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Morgan Chase Bank's prime rate-based loans. Other than availability and an event of default, there are no other provisions for the interest margin to increase. The U.S. ABL will mature on May 31, 2020. Loans made under the U.S. ABL are secured first by all of the Company's domestic cash, receivables and inventories as well as by a second position against a significant amount of the assets of the Company and a pledge of 65% of voting stock of the Company's first tier foreign subsidiaries and are structurally senior to the Company's convertible senior notes. See Convertible Senior Notes below. At April 3, 2017, \$80,000 of the U.S. ABL was outstanding and classified as short-term debt. The Company and its domestic subsidiaries have fully and unconditionally guaranteed the full and timely payment of all Term Loan and U.S. ABL related obligations.

The Asia ABL consists of two tranches comprised of a revolving credit facility of up to \$150,000 and a letter of credit facility of up to \$100,000, provided that at no time may amounts outstanding under both tranches exceed in aggregate \$150,000 or the applicable borrowing base, which is a percentage of the principal amount of Eligible Accounts, as defined in the Asia ABL agreement. Borrowings under the Asia ABL bear interest at a floating rate of LIBOR plus 140 basis points. At April 3, 2017, the weighted average interest rate on the outstanding borrowings under the Asia ABL was 2.38%. There is no provision, other than an event of default, for the interest margin to increase. The Asia ABL will mature on May 22, 2020. Loans made under the Asia ABL are secured by a portion of the Company's Asia Pacific cash and receivables and are structurally senior to the Company's domestic obligations, including the convertible senior notes. See Convertible Senior Notes below. The Company's Asia Pacific subsidiary and certain of its subsidiaries have fully and unconditionally guaranteed the full and timely payment of all Asia ABL related obligations. At April 3, 2017, \$30,000 of the Asia ABL was outstanding.

The Company is no longer required to make any quarterly scheduled payments for the remaining term of the outstanding Term Loan balance due to mandatory payments and optional loan prepayments applied to date. Additionally, based on certain parameters defined in the Term Loan agreement, including a secured leverage ratio, the Company is also not required to make any additional principal payments for fiscal year 2017 as our secured leverage ratio is less than or equal to 1.5. The Company may be required to make additional principal payments in future years, if the Company's secured leverage ratio is greater than 1.5. Any remaining outstanding balances under the Term Loan are due at the maturity date of May 31, 2021. Subsequent to the quarter ended April 3, 2017, the Company made an optional debt principal prepayment totaling \$50,000. Borrowings under the Term Loan are subject to financial and operating covenants including maintaining a maximum total leverage ratio. Under the occurrence of certain events, the U.S. ABL and the Asia ABL are subject to financial and operational covenants, including maintaining minimum fixed charge coverage ratios. At April 3, 2017, the Company was in compliance with the covenants under the Term Loan, the U.S. ABL and the Asia ABL.

As of April 3, 2017 and January 2, 2017, remaining unamortized debt issuance costs of \$927 and \$977, respectively, related to the Term Loan. These debt issuance costs are recorded as a reduction of the Term Loan at April 3, 2017 and January 2, 2017, respectively, and are amortized over the duration of the Term Loan into interest expense using an effective interest rate of 5.29%.

Additionally, remaining unamortized debt issuance costs related to the ABL Revolving Loans were \$3,173 and \$3,423 as of April 3, 2017 and January 2, 2017, respectively. These debt issuance costs 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.

At April 3, 2017, the remaining weighted average amortization period for the unamortized debt issuance costs for both the Term Loan and the ABL Revolving Loans was 3.4 years.

The Company is required to pay a commitment fee of 0.25% to 0.375% per annum on any unused portion of the U.S. ABL or Asia ABL. The Company incurred total commitment fees related to unused borrowing availability of \$187 and \$194 for the quarters ended April 3, 2017 and March 28, 2016, respectively. As of April 3, 2017, the outstanding amount of the Term Loan was \$700,000, of which \$50,000 is included in short-term debt and the remaining \$650,000 is included as long-term debt. Additionally, \$80,000 of the U.S. ABL and \$30,000 of the Asia ABL was outstanding as of April 3, 2017. Available borrowing capacity under the U.S. ABL and Asia ABL was \$113,503 and \$99,628, which considers letters of credit outstanding of \$6,497 and \$20,372 mentioned below, respectively, at April 3, 2017.

***Letters of Credit***

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The Company has up to \$50,000 and \$100,000 Letters of Credit Facilities under the U.S. ABL and the Asia ABL, respectively, as mentioned above. As of April 3, 2017, letters of credit in the amount of \$6,497 were outstanding under the U.S. ABL and \$20,372 were outstanding under the Asia ABL with various expiration dates through March 2018.

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**TTM TECHNOLOGIES, INC.**

**Notes to Consolidated Condensed Financial Statements (Continued)**

***Convertible Senior Notes due 2020***

The Company issued 1.75% convertible senior notes due December 15, 2020, in a public offering for an aggregate principal amount of \$250,000 in 2013. The convertible senior notes bear interest at a rate of 1.75% per annum. Interest is payable semiannually in arrears on June 15 and December 15 of each year. The convertible senior notes are senior unsecured obligations and rank equally to the Company's future unsecured senior indebtedness and are senior in right of payment to any of the Company's future subordinated indebtedness.

***Conversion:*** At any time prior to March 15, 2020, holders may convert their convertible senior notes into cash and, if applicable, into shares of the Company's common stock based on a conversion rate of 103.7613 shares of the Company's common stock per \$1 principal amount of convertible senior notes, subject to adjustment, under the following circumstances: (1) during any calendar quarter beginning after March 31, 2015 (and only during such calendar quarter), if the last reported sale price of our common stock for at least 20 trading days during the 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the applicable conversion price on each applicable trading day of such preceding calendar quarter; (2) during the five business day period after any 10 consecutive trading day period in which the trading price per note for each day of that 10 consecutive trading day period was less than 98% of the product of the last reported sale price of the Company's common stock and the conversion rate on such day; or (3) upon the occurrence of specified corporate transactions described in the indenture governing the notes. As of April 3, 2017, the conversion criteria had been met under condition (1) as described above, allowing holders to give notice of conversion in both the first and second quarter of 2017.

On or after March 15, 2020 until the close of business on the third scheduled trading day preceding the maturity date, holders may convert their notes at any time, regardless of the foregoing circumstances. Upon conversion, for each \$1 principal amount of notes, the Company will pay shares of our common stock, cash or a combination of cash and shares of our common stock at its election, if applicable, based on a daily conversion value calculated on a proportionate basis for each day of the 80 trading day observation period. All conversions occurring on the same date or on or after March 15, 2020 shall be settled using the same settlement method. Additionally, in the event of a fundamental change as defined in the indenture governing the notes, or other conversion rate adjustments such as share splits or combinations, other distributions of shares, cash or other assets to stockholders, including self-tender transactions (Other Conversion Rate Adjustments), the conversion rate may be modified to adjust the number of shares per \$1 principal amount of the notes. As of April 3, 2017, none of the criteria for a fundamental change or a conversion rate adjustment had been met.

The maximum number of shares issuable upon conversion, including the effect of a fundamental change and subject to Other Conversion Rate Adjustments, would be 32,425.

***Note Repurchase:*** The Company is not permitted to redeem the convertible senior notes at any time prior to maturity. In the event of a fundamental change or certain default events, as defined in the indenture governing the notes, holders may require the Company to repurchase for cash all or a portion of their convertible senior notes at a price equal to 100% of the principal amount, plus any accrued and unpaid interest.

***Convertible Note Hedge and Warrant Transaction:*** In connection with the issuance of the convertible senior notes due 2020, the Company entered into a convertible note hedge and warrant transaction (Call Spread Transaction), with respect to the Company's common stock. The convertible note hedge consists of the Company's option to purchase up to 25,940 common stock shares at a price of \$9.64 per share. The hedge expires on December 15, 2020 and can only be executed upon the conversion of the above mentioned convertible senior notes due 2020. Additionally, the Company sold warrants to purchase 25,940 shares of its common stock at a price of \$14.26 per share. The warrants expire ratably from March 2021 through January 2022. The 2020 Call Spread Transaction has no effect on the terms of the convertible senior notes due 2020 and reduces potential dilution by effectively increasing the conversion price of the convertible senior notes due 2020 to \$14.26 per share of the Company's common stock.

**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Condensed Financial Statements (Continued)**

As of April 3, 2017 and January 2, 2017, the following summarizes the equity components of the convertible senior notes included in additional paid-in capital:

	As of April 3, 2017 and January 2, 2017		
	Embedded conversion option Convertible Senior Notes	Embedded conversion option Convertible Senior Notes Issuance Costs (in thousands)	Total
Convertible senior notes due 2020	\$ 60,227	\$ (1,916)	\$ 58,311

The components of interest expense resulting from the convertible senior notes for the quarters ended April 3, 2017 and March 28, 2016 are as follows:

	For the Quarter Ended	
	April 3, 2017	March 28, 2016
	(In thousands)	
Contractual coupon interest	\$ 1,094	\$ 1,094
Amortization of debt discount	\$ 2,091	\$ 1,960
Amortization of debt issuance costs	\$ 209	\$ 196

As of April 3, 2017 and January 2, 2017, there remains unamortized debt discount of \$35,301 and \$37,392, respectively, and debt issuance costs of \$3,538 and \$3,747, respectively, related to the convertible senior notes. These debt discount and debt discount issuance costs are recorded as a reduction of the convertible senior notes and are being amortized to interest expense over the term of the convertible senior notes using the effective interest rate method. At April 3, 2017, the remaining weighted average amortization period for the unamortized senior convertible note discount and debt issuance costs was 3.7 years.

For the quarters ended April 3, 2017 and March 28, 2016, the amortization of the convertible senior notes due 2020 debt discount and debt issuance costs is based on an effective interest rate of 6.48%.

**Other Credit Facility**

Additionally, the Company is party to a revolving loan credit facility (Chinese Revolver) with a lender in China. Under this arrangement, the lender has made available to the Company approximately \$30,500 in unsecured borrowing with all terms of the borrowing to be negotiated at the time the Chinese Revolver is drawn upon. There are no commitment fees on the unused portion of the Chinese Revolver, and this arrangement expires in January 2018. As of April 3, 2017, the Chinese Revolver had not been drawn upon.

**(7) Income Taxes**

The Company's effective tax rate will generally differ from the U.S. federal statutory rate of 35% due to favorable tax rates associated with earnings from the Company's operations in lower-tax jurisdictions such as China, the apportioned state income tax rates, generation of other credits and deductions available to the Company, changes in valuation allowances, and certain non-deductible items.

During the quarter ended April 3, 2017, the Company's effective tax rate was impacted by a net discrete benefit of \$2,539 related to a tax incentive offset by accrued interest expense on existing uncertain tax positions. Additionally, no tax benefit was recorded on the losses incurred in the U.S. and certain foreign jurisdictions as a result of corresponding increases in the valuation allowances in these jurisdictions. The Company's foreign earnings attributable to certain subsidiaries in China will be indefinitely reinvested in foreign jurisdictions and, therefore, no deferred tax liabilities for U.S. income taxes on undistributed earnings are recorded.

**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Condensed Financial Statements (Continued)**

Certain entities in China operated under tax incentives effective through 2017. The tax incentives decreased Chinese taxes by \$5,481, which increased both basic and diluted earnings per share by \$0.05 and \$0.04, respectively, for the quarter ended April 3, 2017.

**(8) Accumulated Other Comprehensive Income (Loss)**

The following provides a summary of the components of accumulated other comprehensive income (loss) as of April 3, 2017 and January 2, 2017:

	<b>Foreign Currency Translation</b>	<b>Gains (Losses) on Cash Flow Hedges (In thousands)</b>	<b>Total</b>
Ending balance at January 2, 2017	\$ (43,149)	\$ (1,180)	\$ (44,329)
Other comprehensive income before reclassifications	6,619	68	6,687
Amounts reclassified from accumulated other comprehensive income		44	44
Other comprehensive income	6,619	112	6,731
Ending balance at April 3, 2017	\$ (36,530)	\$ (1,068)	\$ (37,598)

For the quarters ended April 3, 2017 and March 28, 2016, \$44 and \$42 net of tax, respectively, were reclassified out of accumulated other comprehensive income (loss) to depreciation expense related to cash flow hedges.

**(9) 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 quarters ended April 3, 2017 and March 28, 2016, one customer accounted for approximately 16% and 10%, respectively, of the Company's net sales. There were no other customers that accounted for 10% or more of net sales for the quarters ended April 3, 2017 and March 28, 2016.

**(10) 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 at April 3, 2017 and January 2, 2017 were as follows:

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	April 3, 2017		January 2, 2017	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
	(In thousands)			
Term and Revolving Loans	\$ 809,073	\$ 820,500	\$ 809,023	\$ 818,750
Convertible senior notes due 2020	211,161	431,500	208,861	380,875
Capital lease	1,815	1,815	1,798	1,798

The fair value of the long-term debt was estimated based on quoted market prices or discounting the debt over its life using current market rates for similar debt as of April 3, 2017 and January 2, 2017, which are considered Level 1 and Level 2 inputs.





*Environmental Matters*

The process to manufacture PCBs requires adherence to city, county, state, federal, and foreign environmental regulations regarding the storage, use, handling and disposal of chemicals, solid wastes and other hazardous materials, as well as compliance with air quality standards and chemical use reporting. The Company believes that its facilities in the United States, Canada and Mexico comply in all material respects with applicable environmental laws and regulations. In China, governmental authorities have adopted new rules and regulations governing environmental issues. An update to the Chinese environmental waste water law was issued in late 2012, allowing for an interim period in which plants subject to such law may install equipment that meets the new regulatory regime. Some of the Company's plants in China are not yet in full compliance with the updated environmental regulations. The Company believes it has developed plans acceptable to the Chinese government and is in the process of implementing these plans. The Company does not anticipate any immediate risk of government fines or temporary closure of its Chinese plants. The Company has established and enacted an investment plan related to the efforts to come into full compliance with the new regulations. The 2017 capital expenditure costs expected for these plans are included in the Company's capital expenditure projections.

**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Condensed Financial Statements (Continued)****(12) Earnings Per Share**

The following is a reconciliation of the numerator and denominator used to calculate basic earnings (loss) per share and diluted earnings (loss) per share for the quarters ended April 3, 2017 and March 28, 2016:

	Quarter Ended	
	April 3, 2017	March 28, 2016
(In thousands, except per share amounts)		
<b>Basic earnings (loss):</b>		
Basic earnings (loss)	\$ 32,959	\$ (7,264)
<b>Diluted earnings (loss):</b>		
Net income (loss) attributable to TTM Technologies, Inc. stockholders	\$ 32,959	\$ (7,264)
Interest expense from convertible senior notes, net of tax	3,394	
Diluted earnings (loss)	\$ 36,353	\$ (7,264)
Basic weighted average shares	100,932	99,596
Dilutive effect of performance-based restricted stock units, restricted stock units and stock options	1,867	
Dilutive effect of outstanding warrants	2,183	
Dilutive effect of assumed conversion of convertible senior notes outstanding	25,940	
Diluted shares	130,922	99,596
Income (loss) per share attributable to TTM Technologies, Inc. stockholders:		
Basic	\$ 0.33	\$ (0.07)
Diluted	\$ 0.28	\$ (0.07)

For the quarter ended April 3, 2017, performance-based restricted stock units (PRUs), restricted stock units (RSUs) and stock options to purchase 179 shares of common stock were not considered in calculating diluted earnings per share because the options' exercise prices or the total expected proceeds under the treasury stock method for PRUs, RSUs or stock options was greater than the average market price of common shares during the applicable quarter and, therefore, the effect would be anti-dilutive.

For the quarter ended March 28, 2016, potential shares of common stock, consisting of stock options to purchase approximately 387 shares of common stock at exercise prices ranging from \$5.78 to \$16.82 per share, 3,118 RSUs, and 301 PRUs were not included in the computation of diluted earnings per share because the Company incurred a net loss and, as a result, the impact would be anti-dilutive.

For the quarter ended March 28, 2016, 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 because the Company incurred a net loss from operations and, as a result, the impact would be anti-dilutive.

Outstanding warrants for the quarter ended March 28, 2016, to purchase common stock of 25,940 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.

**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Condensed Financial Statements (Continued)****(13) Stock-Based Compensation**

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

	Quarter Ended	
	April 3, 2017	March 28, 2016
	(In thousands)	
Cost of goods sold	\$ 394	\$ 320
Selling and marketing	253	210
General and administrative	2,981	1,716
Stock-based compensation expense recognized	\$ 3,628	\$ 2,246

*Performance-based Restricted Stock Units*

The Company maintains a long-term incentive program for executives that provides for the issuance of PRUs, representing hypothetical shares of the Company's common stock that may be issued. Under the PRU program, a target number of PRUs is awarded at the beginning of each three-year performance period. The number of shares of common stock released at the end of the performance period will range from zero to 2.4 times the target number depending on performance during the period. The performance metrics of the PRU program are based on (a) annual financial targets, which are based on revenue and EBITDA (earnings before interest, tax, depreciation, and amortization expense), each equally weighted, and (b) an overall modifier based on the Company's total stockholder return (TSR) relative to a group of peer companies selected by the Company's compensation committee, over the three-year performance period.

The Company records stock-based compensation expense for PRU awards granted based on management's periodic assessment of the probability of the PRU awards vesting. For the quarter ended April 3, 2017, management determined that vesting of the PRU awards was probable. PRU activity for the quarter ended April 3, 2017 was as follows:

	Shares (In thousands)	Weighted Average Fair Value
Outstanding target shares at January 2, 2017	406	\$ 8.31
Granted	363	22.90
Outstanding target shares at April 3, 2017	769	\$ 15.20

The fair value for PRUs granted is calculated using a Monte Carlo simulation model, as the TSR modifier contains a market condition. For the quarters ended April 3, 2017 and March 28, 2016 the following assumptions were used in determining the fair value:

April 3, 2017 <sup>(1)</sup>	March 28, 2016 <sup>(2)</sup>
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Weighted-average fair value	\$ 22.90	\$ 6.46
Risk-free interest rate	1.20%	0.84%
Dividend yield		
Expected volatility	43%	40%
Expected term in months	21	24

- (1) Reflects the weighted-averages for the third year of the three-year performance period applicable to PRUs granted in 2015, second year of the three-year performance period applicable to PRUs granted in 2016 and first year of the three-year performance period applicable to PRUs granted in 2017.
- (2) Reflects the weighted-averages for the third year of the three-year performance period applicable to PRUs granted in 2014, second year of the three-year performance period applicable to PRUs granted in 2015 and first year of the three-year performance period applicable to PRUs granted in 2016.

**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Condensed Financial Statements (Continued)***Restricted Stock Units*

The Company granted 946 and 1,683 RSUs during the quarters ended April 3, 2017 and March 28, 2016, respectively. The RSUs granted have a weighted-average fair value per unit of \$15.78 and \$6.75 for the quarters ended April 3, 2017 and March 28, 2016, respectively. The fair value for RSUs granted is based on the closing share price of the Company's common stock on the date of grant.

*Stock Options*

The Company did not grant any stock option awards during the quarters ended April 3, 2017 and March 28, 2016.

*Summary of Unrecognized Compensation Costs*

The following is a summary of total unrecognized compensation costs as of April 3, 2017:

	<b>Unrecognized Stock-Based Compensation Cost (In thousands)</b>	<b>Remaining Weighted Average Recognition Period (In years)</b>
RSU awards	\$ 24,888	1.7
PRU awards	9,208	1.6
Stock options	120	2.2
	\$ 34,216	

**(14) Segment Information**

The operating segments reported 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 reviewed its reportable operating segments and determined it continues to have two reportable operating segments: PCB and E-M Solutions. The PCB reportable segment is comprised of multiple operating segments. This determination was made based on the criteria of earning revenues and incurring expenses, the Company's organizational structure which has segment managers who report to the chief operating decision maker, discrete financial information, and the aggregation of similar operating segments into reportable 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 operating 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.

**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Condensed Financial Statements (Continued)**

The Company accounts for inter-segment sales and transfers consistent with the Company's revenue recognition policy. The inter-segment sales for the quarters ended April 3, 2017 and March 28, 2016, are sales primarily from the PCB to the E-M Solutions operating segment.

	<b>For the Quarters Ended</b>	
	<b>April 3, 2017</b>	<b>March 28, 2016</b>
	<b>(In thousands)</b>	
<b>Net Sales:</b>		
PCB	\$ 586,695	\$ 529,945
E-M Solutions	41,669	56,478
<b>Total sales</b>	<b>628,364</b>	<b>586,423</b>
<b>Inter-segment sales</b>	<b>(3,117)</b>	<b>(3,165)</b>
<b>Total net sales</b>	<b>\$ 625,247</b>	<b>\$ 583,258</b>
<b>Operating Segment Income (Loss):</b>		
PCB	\$ 82,256	\$ 49,367
E-M Solutions	(1,642)	387
Corporate	(22,132)	(24,905)
<b>Total operating segment income</b>	<b>58,482</b>	<b>24,849</b>
Amortization of definite-lived intangibles	(5,912)	(5,947)
<b>Total operating income</b>	<b>52,570</b>	<b>18,902</b>
Total other expense	(15,306)	(20,575)
<b>Income (loss) before income taxes</b>	<b>\$ 37,264</b>	<b>\$ (1,673)</b>

The Corporate category includes operating expenses that are not included in the segment operating performance measures. Corporate consists primarily of corporate governance functions such as finance, accounting, corporate sales, information technology, facilities, corporate operations and human resources personnel.

**(15) Related Party Transactions**

In the normal course of business, the Company's foreign subsidiaries purchase laminate and prepreg from related parties in which a significant shareholder of the Company holds an equity interest. For the quarters ended April 3, 2017 and March 28, 2016, the Company's foreign subsidiaries purchased \$13,540 and \$15,998, respectively, of laminate and prepreg from these related parties.

Dongguan Shengyi Electronics Ltd. (SYE) is also a related party as it is a wholly owned subsidiary of an entity in which a significant shareholder of the Company holds an equity interest. The Company sells PCBs to SYE and purchases PCBs including various services relating to PCB manufacturing from SYE. Sales to SYE for the quarters ended April 3, 2017 and March 28, 2016 were \$31 and \$311, respectively. Purchases of PCBs including various services relating to PCB manufacturing for the quarter ended March 28, 2016 was \$28. There were no purchases of PCBs or any services relating to PCB manufacturing for the quarter ended April 3, 2017.

As of April 3, 2017 and January 2, 2017, the Company's consolidated condensed balance sheets included \$17,884 and \$15,836, respectively, in accounts payable due to related parties primarily for purchases of laminate and prepreg and such balances are included as a component of accounts payable on the consolidated condensed balance sheets. Additionally, the Company's consolidated condensed balance sheets included



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\$124 and \$192, respectively, in accounts receivable due from a related party for sales of PCBs to SYE, as mentioned above, and such balances are included as a component of accounts receivable, net on the consolidated condensed balance sheets.

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

The following discussion of our financial condition and results of operations should be read in conjunction with our consolidated condensed financial statements and the related notes and the other financial information included in this Quarterly Report on Form 10-Q. This discussion and analysis contains forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of specified factors, including those set forth in Item 1A Risk Factors of Part II below and elsewhere in this Quarterly Report on Form 10-Q. This discussion and analysis should also be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations set forth in our Annual Report on Form 10-K for the fiscal year ended January 2, 2017, 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 complex PCBs and electro-mechanical solutions (E-M Solutions). We focus on providing time-to-market and volume production of advanced technology products and offer a one-stop manufacturing solution to our customers from engineering support to prototype development through final mass production. This one-stop 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 1,500 customers in various markets throughout the world, including manufacturers of networking/communications infrastructure products, smartphones and touchscreen tablets, as well as aerospace and defense, automotive, high-end computing, and medical, industrial and instrumentation related products. Our customers include both original equipment manufacturers (OEMs) and electronic manufacturing services (EMS) providers.

For the first quarter of 2017, we experienced higher demand in our Cellular Phone, Computing/Storage/Peripherals and Aerospace/ Defense end markets compared to the first quarter of 2016. This increase in sales resulted in higher capacity utilization especially at our Cellular Phone and Computing/Storage/Peripherals focused facilities resulting in higher gross margins.

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 10 largest customers accounted for 45% and 41% of our net sales for the quarters ended April 3, 2017 and March 28, 2016, 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)(2)	Quarter Ended	
	April 3, 2017	March 28, 2016
Aerospace and Defense	15%	15%
Automotive	20	21
Cellular Phone <sup>(2)</sup>	14	9
Computing/Storage/Peripherals <sup>(2)</sup>	15	13
Medical/Industrial/Instrumentation	15	16
Networking/Communications	20	24
Other <sup>(2)</sup>	1	2
Total	100%	100%

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

(2) Smartphones are included in the Cellular Phone end market, tablets are included in the Computing/Storage/Peripherals end market and other mobile devices such as e-readers are included in the Other end market.

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We derive revenues primarily from the sale of PCBs and custom electronic assemblies using customer-supplied engineering and design plans. We recognize revenues when persuasive evidence of a sales arrangement exists, the sales terms are fixed or determinable, title and risk of loss have transferred, and collectability is reasonably assured generally when products are shipped to the customer. Net sales consist of gross sales less an allowance for returns, which typically have been less than 3% of gross sales. We provide our customers a limited right of return for defective PCBs and backplane assemblies. We record an estimate for sales returns and allowances at the time of sale based on historical results. Purchase orders may be cancelled prior to shipment. We generally charge customers a fee, based on the percentage completed, if an order is cancelled once it has entered production.

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. We generally do not participate in any significant long-term contracts with suppliers, and we believe there are a number of potential suppliers for the raw materials we use.

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

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

## **CRITICAL ACCOUNTING POLICIES AND ESTIMATES**

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

See Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations*, in our Annual Report on Form 10-K for the fiscal year ended January 2, 2017 for further discussion of critical accounting policies and estimates. There were no material changes to our critical accounting policies and estimates since January 2, 2017.

**Table of Contents****RESULTS OF OPERATIONS**

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

	Quarter Ended	
	April 3, 2017	March 28, 2016
Net sales	100.0%	100.0%
Cost of goods sold	83.2	85.7
<b>Gross profit</b>	<b>16.8</b>	<b>14.3</b>
Operating expenses:		
Selling and marketing	2.7	3.0
General and administrative	4.7	6.2
Amortization of definite-lived intangibles	0.9	1.0
Restructuring charges	0.1	0.3
Impairment of long-lived assets		0.6
Total operating expenses	8.4	11.1
<b>Operating income</b>	<b>8.4</b>	<b>3.2</b>
Other income (expense):		
Interest expense	(2.2)	(3.7)
Other, net	(0.2)	0.2
<b>Total other expense, net</b>	<b>(2.4)</b>	<b>(3.5)</b>
Income (loss) before income taxes	6.0	(0.3)
Income tax provision	(0.7)	(0.9)
Net income (loss)	5.3	(1.2)
Less: Net income attributable to the non-controlling interest		
Net income (loss) attributable to TTM Technologies, Inc. stockholders	5.3%	(1.2)%

We have reviewed our reportable operating segments and determined that we continue to have two reportable operating segments: PCB and E-M Solutions. This determination was made based on the criteria of earning revenues and incurring expenses, our organizational structure which has segment managers who report to the chief operating decision maker, discrete financial information, and the aggregation of similar operating segments into reportable operating segments for the PCB reportable operating segment.

The following table compares net sales by reportable segment for the quarters ended April 3, 2017 and March 28, 2016:

	For the Quarters Ended	
	April 3, 2017	March 28, 2016
	(In thousands)	
<b>Net Sales:</b>		
PCB	\$ 586,695	\$ 529,945
E-M Solutions	41,669	56,478
Total sales	628,364	586,423
Inter-segment sales	(3,117)	(3,165)

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Total net sales	\$ 625,247	\$ 583,258
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### *Net Sales*

Total net sales increased \$41.9 million, or 7.2%, from \$583.3 million for the quarter ended March 28, 2016 to \$625.2 million for the quarter ended April 3, 2017.

Net sales for the PCB operating segment, excluding inter-segment sales, increased \$56.8 million, or 10.8%, from \$526.8 million for the quarter ended March 28, 2016 to \$583.6 million for the quarter ended April 3, 2017. This increase is primarily due to higher demand in our Cellular Phone, Computing/Storage/Peripherals and Aerospace/Defense end markets, partially offset by a decline in our

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Networking/Communications end market. These changes resulted in a 9% increase in PCB shipments as compared to the quarter ended March 28, 2016, and an average PCB selling price increase of 1%, which was driven by a product mix shift.

Net sales for the E-M Solutions operating segment decreased \$14.8 million from \$56.5 million for the quarter ended March 28, 2016 to \$41.7 million for the quarter ended April 3, 2017. This decrease is primarily due to the closure of our Juarez, Mexico facility and lower demand in our Networking/Communications end market.

***Gross Margin***

Overall gross margin increased from 14.3% for the quarter ended March 28, 2016 to 16.8% for the quarter ended April 3, 2017. Gross margin for the PCB operating segment increased from 15.6% for the quarter ended March 28, 2016 to 18.2% for the quarter ended April 3, 2017 primarily due to increased volumes at our Cellular Phone and Computing/Storage/Peripherals focused facilities, savings from our synergy initiatives, a \$3.0 million insurance settlement from a fire in our Anaheim, California facility a year ago, partially offset by the reclassification of certain facilities and labor support related costs from general and administrative expenses to cost of goods sold due to changes in our business structure. Gross margin for the E-M Solutions operating segment decreased from 6.6% for the quarter ended March 28, 2016 to 2.7% for the quarter ended April 3, 2017 primarily due to decreased volumes and higher inventory reserves.

***Selling and Marketing Expenses***

Selling and marketing expenses decreased \$0.6 million, from \$17.3 million for the quarter ended March 28, 2016 to \$16.7 million for the quarter ended April 3, 2017. As a percentage of net sales, selling and marketing expenses were 3.0% for the quarter ended March 28, 2016, as compared to 2.7% for the quarter ended April 3, 2017. The decrease in selling and marketing expense primarily relates to reduced headcount and lower travel expenses.

***General and Administrative Expenses***

General and administrative expenses decreased \$6.9 million from \$36.2 million, or 6.2% of net sales, for the quarter ended March 28, 2016 to \$29.3 million, or 4.7% of net sales, for the quarter ended April 3, 2017. The decrease in expense primarily relates to reclassification of certain facilities and labor support related costs to cost of goods sold due to changes in our business structure.

***Impairment of Long-Lived Assets and Restructuring Charges***

For the quarter ended April 3, 2017 and March 28, 2016, we incurred restructuring charges of \$0.6 million and \$1.9 million, respectively, related to a consolidation plan announced on September 29, 2015, that resulted in the closure of our facilities in Cleveland, Ohio, Milpitas, California, and Juarez, Mexico (the Consolidation Plan). These charges primarily represent severance and contract termination and other costs. For the quarter ended April 3, 2017, in connection with the Consolidation Plan, we recognized restructuring charges of \$0.2 million, \$0.3 million and \$0.1 million in our PCB, E-M Solutions and Corporate segments, respectively. For the quarter ended March 28, 2016, we recognized restructuring charges of \$1.2 million and \$0.7 million in our PCB and E-M Solutions segments, respectively. As of April 3, 2017, the Company has incurred approximately \$16.9 million of restructuring charges since the September 29, 2015 announcement.

Additionally, as a result of the above mentioned plant closures and other plant realignment efforts, we also recognized impairment charges of \$3.3 million for the quarter ended March 28, 2016, of which \$1.4 million were recognized in our PCB operating segment and \$1.9 million were recognized related in the Corporate operating segment. The impairment charge for the PCB operating segment related to machinery and equipment while the impairment charge for the Corporate operating segment related to the write-off of capitalized software costs.

If forecasts and assumptions used to support the realizability of our long-lived assets change in the future, significant impairment or restructuring charges could result that would adversely affect our results of operations.

***Other Income (Expense)***

Other expense, net decreased \$5.3 million from \$20.6 million for the quarter ended March 28, 2016 to \$15.3 million for the quarter ended April 3, 2017. The decrease in other expense, net was primarily due to a decrease in interest expense due to lower principal outstanding resulting from net debt principal payments totaling \$217.6 million in 2016, a lower Term Loan interest rate by 75 basis points, and lower amortization of debt issuance costs and debt discount after the full repayment of our prior term loan in the fourth quarter of 2016. The decrease in other expense, net was partially offset by \$3.7 million of foreign currency transaction losses for the quarter ended April 3, 2017 due to the appreciation of the Renminbi, which is utilized at certain of our Asia operations.



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### ***Income Taxes***

The provision for income taxes decreased by \$1.4 million from \$5.5 million for the quarter ended March 28, 2016 to \$4.1 million for the quarter ended April 3, 2017. The decrease in income tax expense in 2017 was primarily due to the receipt of China's high and new technology enterprise status in one of our subsidiaries in the quarter ended April 3, 2017, which resulted in a tax incentive benefit effective retroactively to 2016.

Our effective tax rate was primarily impacted by tax rates in China and Hong Kong, the U.S. federal income tax rate, apportioned state income tax rates, generation of other credits and deductions available to us, valuation allowance establishment, and certain non-deductible items. Certain foreign losses generated are not *more likely than not* to be realizable, and thus no income tax benefit has been recognized on these losses. We had net deferred income tax liabilities of approximately \$14.0 million at both April 3, 2017 and January 2, 2017.

### ***Liquidity and Capital Resources***

Our principal sources of liquidity have been cash provided by operations, the issuance of convertible senior notes, and term and revolving debt. Our principal uses of cash have been to finance acquisitions and capital expenditures, meet debt service requirements, fund working capital requirements, and repay 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 during the quarter ended April 3, 2017 was \$49.6 million as compared to \$17.9 million in the same period in 2016. The increase in cash flow was due to stronger operational performance and improved use of working capital. Cash cycle days improved to 46 days for the quarter ended April 3, 2017 as compared to 54 days for the quarter ended March 28, 2016. As of April 3, 2017, we had net working capital of approximately \$305.7 million compared to \$323.8 million as of January 2, 2017.

Net cash used in investing activities was approximately \$23.4 million for the quarter ended April 3, 2017 primarily reflecting purchases of property, plant and equipment of \$33.3 million less proceeds from sale of property, plant and equipment and assets held for sale of \$9.9 million. For the quarter ended March 28, 2016, net cash used in investing activities was approximately \$16.6 million primarily reflecting purchases of property, plant and equipment of \$20.1 million less release of restricted cash to cash and cash equivalents of \$3.5 million.

Net cash provided by financing activities was approximately \$0.1 million for the quarter ended April 3, 2017 reflecting proceeds from exercise of common stock options. Net cash used in financing activities was approximately \$76.5 million for the quarter ended March 28, 2016 reflecting the repayment of normally scheduled principal payments as well as an additional prepayment of principal of long-term debt.

As of April 3, 2017, we had cash and cash equivalents of approximately \$282.9 million, of which approximately \$225.5 million was held by our foreign subsidiaries, primarily Asia. Cash and cash equivalents held by our foreign locations are expected to be used in local operations.

Our 2017 net capital expenditure are expected to be in the range of \$155 million to \$170 million, of which 40 percent are planned for technology enhancements, 30 percent for capacity expansions and 30 percent for compliance and maintenance related expenditures.

### ***Term and Revolving Loans***

We maintain a Term Loan, a \$200.0 million U.S. ABL, and a \$150.0 million Asia ABL (collectively the ABL Revolving Loans).

The Term Loan bears interest at a floating rate of LIBOR, with a 1.0% LIBOR floor, plus an applicable interest margin of 4.25%, or JP Morgan Chase Bank's prime rate, with a 2% floor, plus a margin of 3.25%, at the our option. At April 3, 2017, the weighted average interest rate on the outstanding borrowings under the Term Loan was 5.25%. There is no provision, other than an event of default, for the interest margin to increase. The Term Loan will mature on May 31, 2021. The Term Loan is secured by a significant amount of our assets and a pledge of 65% of voting stock of our first tier foreign subsidiaries and is structurally senior to our convertible senior notes. See Convertible Senior Notes below.



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The U.S. ABL consists of three tranches comprised of a revolving credit facility of up to \$200.0 million, a letter of credit facility of up to \$50.0 million, and swingline loans of up to \$30.0 million, provided that at no time may amounts outstanding under the tranches exceed in aggregate \$200.0 million or the applicable borrowing base, which is a percentage of the principal amount of Eligible Accounts, as defined in the U.S. ABL agreement. Borrowings under the U.S. ABL bear interest at either a floating rate of LIBOR plus a margin of 150 basis points or JP Morgan Chase Bank's prime rate plus a margin of 50 basis points, at our option. At April 3, 2017, the weighted average interest rate on the outstanding borrowings under the U.S. ABL was 2.48%. The applicable margin can vary based on the remaining availability of the facility, from 125 to 175 basis points for LIBOR-based loans and from 25

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to 75 basis points for JP Morgan Chase Bank's prime rate-based loans. Other than availability and an event of default, there are no other provisions for the interest margin to increase. The U.S. ABL will mature on May 31, 2020. Loans made under the U.S. ABL are secured first by all of our domestic cash, receivables and inventories as well as by a second position against a significant amount of our assets and a pledge of 65% of voting stock of our first tier foreign subsidiaries and are structurally senior to our convertible senior notes. See Convertible Senior Notes below. At April 3, 2017, \$80.0 million of the U.S. ABL was outstanding. We and our domestic subsidiaries have fully and unconditionally guaranteed the full and timely payment of all Term Loan and U.S. ABL related obligations.

The Asia ABL consists of two tranches comprised of a revolving credit facility of up to \$150.0 million and a letter of credit facility of up to \$100.0 million, provided that at no time may amounts outstanding under both tranches exceed in aggregate \$150.0 million or the applicable borrowing base, which is a percentage of the principal amount of Eligible Accounts, as defined in the Asia ABL agreement. Borrowings under the Asia ABL bear interest at a floating rate of LIBOR plus 140 basis points. At April 3, 2017, the weighted average interest rate on the outstanding borrowings under the Asia ABL was 2.38%. There is no provision, other than an event of default, for the interest margin to increase. The Asia ABL will mature on May 22, 2020. Loans made under the Asia ABL are secured by a portion of our Asia Pacific cash and receivables and are structurally senior to our domestic obligations, including the convertible senior notes. See Convertible Senior Notes below. Our Asia Pacific subsidiary and certain of our subsidiaries have fully and unconditionally guaranteed the full and timely payment of all Asia ABL related obligations. At April 3, 2017, \$30.0 million of the Asia ABL was outstanding.

We are no longer required to make quarterly scheduled payments for the remaining term of the outstanding Term Loan balance due to mandatory payments and optional loan prepayments applied to date. Additionally, based on certain parameters defined in the Term Loan agreement, including a secured leverage ratio, we are also not required to make an additional principal payment for fiscal year 2017 as our secured leverage ratio is less than or equal to 1.5. We may be required to make additional principal payments in future years, if our secured leverage ratio is greater than 1.5. Any remaining outstanding balances under the Term Loan are due at the maturity date of May 31, 2021. Subsequent to the quarter ended April 3, 2017, the Company made an optional debt principal prepayment totaling \$50.0 million. Borrowings under the Term Loan are subject to financial and operating covenants including maintaining a maximum total leverage ratio. Under the occurrence of certain events, the U.S. ABL and the Asia ABL are subject to financial and operational covenants, including maintaining minimum fixed charge coverage ratios. At April 3, 2017, we were in compliance with the covenants under the Term Loan, the U.S. ABL and the Asia ABL.

We are required to pay a commitment fee of 0.25% to 0.375% per annum on any unused portion of the U.S. ABL or Asia ABL based on utilization levels. We incurred total commitment fees related to unused borrowing availability of \$0.2 million for both quarters ended April 3, 2017 and March 28, 2016. As of April 3, 2017, the outstanding amount of the Term Loan was \$700.0 million, of which \$50.0 million is included in short-term debt and the remaining \$650.0 million is included as long-term debt. Additionally, \$80.0 million of the U.S. ABL and \$30.0 million of the Asia ABL were outstanding as of April 3, 2017, which were classified as short-term debt. Available borrowing capacity under the U.S. ABL and Asia ABL was \$113.5 million and \$99.6 million, which includes letters of credit outstanding of \$6.5 million and \$20.4 million mentioned below, respectively, at April 3, 2017.

*Letters of Credit*

We have up to \$50.0 million and \$100.0 million Letters of Credit Facilities available under the U.S. ABL and the Asia ABL, respectively. As of April 3, 2017, letters of credit in the amount of \$6.5 million were outstanding under the U.S. ABL and \$20.4 million were outstanding under the Asia ABL with various expiration dates through March 2018.

*Chinese Revolver*

We are party to a revolving loan credit facility with a lender in China. Under this arrangement, the lender has made available to us approximately \$30.5 million in unsecured borrowing with all terms of the borrowing to be negotiated at the time the Chinese Revolver is drawn upon. There are no commitment fees on the unused portion of the Chinese Revolver, and this arrangement expires in January 2018. As of April 3, 2017, the Chinese Revolver had not been drawn upon.

*Convertible Senior Notes due 2020*

We issued 1.75% convertible senior notes due December 15, 2020, in a public offering for an aggregate principal amount of \$250.0 million. The convertible senior notes bear interest at a rate of 1.75% per annum. Interest is payable semiannually in arrears on June 15 and December 15 of each year. The convertible senior notes are senior unsecured obligations and rank equally to our future unsecured senior indebtedness and senior in right of payment to any of our future subordinated indebtedness. Offering expenses are being amortized to interest expense over the term of the convertible senior notes.

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**Conversion:** At any time prior to March 15, 2020, holders may convert their convertible senior notes into cash and, if applicable, into shares of our common stock based on a conversion rate of 103.7613 shares of our common stock per \$1,000 principal amount of convertible senior notes, subject to adjustment, under the following circumstances: (1) during any calendar quarter beginning after March 31, 2015 (and only during such calendar quarter), if the last reported sale price of our common stock for at least

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20 trading days during the 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the applicable conversion price on each applicable trading day of such preceding calendar quarter; (2) during the five business day period after any 10 consecutive trading day period in which the trading price per note for each day of that 10 consecutive trading day period was less than 98% of the product of the last reported sale price of our common stock and the conversion rate on such day; or (3) upon the occurrence of specified corporate transactions described in the indenture governing the notes. As of April 3, 2017, the conversion criteria had been met under the condition (1) as described above, allowing holders to give notice of conversion in both the first and second quarter of 2017.

On or after March 15, 2020 until the close of business on the third scheduled trading day preceding the maturity date, holders may convert their notes at any time, regardless of the foregoing circumstances. Upon conversion, for each \$1,000 principal amount of notes, we will pay shares of our common stock, cash or a combination of cash and shares of our common stock at our election, if applicable, based on a daily conversion value calculated on a proportionate basis for each day of the 80 trading day observation period. All conversions occurring on the same date or on or after March 15, 2020 shall be settled using the same settlement method. Additionally, in the event of a fundamental change as defined in the indenture governing the notes, or other conversion rate adjustments such as share splits or combinations, other distributions of shares, cash or other assets to stockholders, including self-tender transactions (Other Conversion Rate Adjustments), the conversion rate may be modified to adjust the number of shares per \$1,000 principal amount of the notes. As of April 3 2017, none of the criteria for a fundamental change or a conversion rate adjustment had been met.

The maximum number of shares issuable upon conversion, including the effect of a fundamental change and subject to Other Conversion Rate Adjustments, would be 32.4 million.

**Note Repurchase:** We are not permitted to redeem the convertible senior notes at any time prior to maturity. In the event of a fundamental change or certain default events, as defined in the indenture governing the notes, holders may require us to repurchase for cash all or a portion of their convertible senior notes at a price equal to 100% of the principal amount, plus any accrued and unpaid interest.

In connection with the issuance of the convertible senior notes due 2020, we entered into a convertible note hedge and warrant transaction (the Call Spread Transaction), with respect to our common stock. The convertible note hedge consists of our option to purchase up to 25.9 million common stock shares at a price of \$9.64 per share. The hedge expires on December 15, 2020 and can only be executed upon the conversion of the above mentioned convertible senior notes due 2020. Additionally, we sold warrants to purchase 25.9 million shares of our common stock at a price of \$14.26 per share. The warrants expire ratably from March 2021 through January 2022. The Call Spread Transaction has no effect on the terms of the convertible senior notes due 2020 and reduces potential dilution by effectively increasing the conversion price of the convertible senior notes due 2020 to \$14.26 per share of our common stock.

Based on our current level of operations, we believe that cash generated from operations, cash on hand and cash from the issuance of term and revolving debt will be adequate to meet our currently anticipated capital expenditure, debt service, and working capital needs for the next 12 months.

**Contractual Obligations and Commitments**

The following table provides information on our contractual obligations as of April 3, 2017:

	Total	Less Than 1 Year	1 - 3 Years	4 - 5 Years	After 5 Years
(In thousands)					
<b>Contractual Obligations (1)</b>					
Long-term debt obligations	\$ 811,815	\$ 160,658	\$ 746	\$ 650,411	\$
Convertible debt obligations	250,000			250,000	
Interest on debt obligations	165,021	42,072	78,168	44,781	
Equipment payables	31,876	31,876			
Purchase obligations	118,208	102,057	16,151		
Operating lease commitments	27,465	8,292	9,451	5,094	4,628
<b>Total contractual obligations</b>	<b>\$ 1,404,385</b>	<b>\$ 344,955</b>	<b>\$ 104,516</b>	<b>\$ 950,286</b>	<b>\$ 4,628</b>

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- (1) Unrecognized uncertain tax benefits of \$39.9 million are not included in the table above as the settlement timing is uncertain.

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### **Off Balance Sheet Arrangements**

We do not currently have, nor have we ever had, 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 higher net sales in the third and fourth quarters due to end customer demand in the fourth quarter for consumer electronics products. Seasonal fluctuations also include the Chinese New Year holidays in the first quarter, which typically results in lower net sales. 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.

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

#### **Foreign currency risks**

In the normal course of business we are exposed to risks associated with fluctuations in foreign currency exchange rates associated with 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. Certain of our China operations utilize the Renminbi (RMB) and the Hong Kong Dollar (HKD) as the functional currencies, which results in recognition of translation adjustments included as a component of other comprehensive income. Our foreign exchange exposure results primarily from employee-related and other costs of running 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. We do not engage in hedging to manage foreign currency risk related to revenue and expenses denominated in RMB and HKD, nor do we currently use derivative instruments to reduce exposure to foreign currency risk for a majority of our loans due from our foreign subsidiaries. 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. Additionally, loans due from our foreign subsidiaries are, in some cases, denominated in currencies other than the RMB, thus providing a natural economic hedge, partially mitigating our RMB foreign currency exposure.

#### **Interest rate risk**

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.

See *Liquidity and Capital Resources, Term and Revolving Loans, Chinese Revolver and Convertible Senior Notes due 2020* appearing in Item 2 of this Form 10-Q for further discussion of our financing facilities and capital structure. As of April 3, 2017, approximately 23.7% of our total debt was based on fixed rates. Based on our borrowings as of April 3, 2017, an assumed 100 basis point increase in variable rates would cause our annual interest cost to increase by \$8.0 million and an assumed 100 basis point decrease in variable rates would cause our annual interest cost to decrease by \$1.1 million after giving consideration to the 1% LIBOR floor on the Term Loan.

#### **Debt Instruments**

The table below presents information about certain of our debt instruments as of April 3, 2017 and January 2, 2017.

Remaining 2017	2018	2019	2020	As of April 3, 2017		Total	Fair Market Value	Weighted Average
				2021	Thereafter			

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	(In thousands)							Interest Rate	
US\$ Variable Rate	\$ 160,000	\$	\$	\$	\$ 650,000	\$	\$ 810,000	\$ 820,500	4.87%
US\$ Fixed Rate	658	361	385	250,411			251,815	433,315	1.78%
Total	\$ 160,658	\$ 361	\$ 385	\$ 250,411	\$ 650,000	\$	\$ 1,061,815	\$ 1,253,815	

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As of January 2, 2017

	2017	2018	2019	2020	2021	Thereafter	Total	Fair Market Value	Weighted Average Interest Rate
					(In thousands)				
US\$ Variable Rate	\$ 110,000	\$	\$	\$	\$ 700,000	\$	\$ 810,000	\$ 818,750	4.84%
US\$ Fixed Rate	652	358	381	250,407			251,798	382,673	1.78%
Total	\$ 110,652	\$ 358	\$ 381	\$ 250,407	\$ 700,000	\$	\$ 1,061,798	\$ 1,201,423	

See Item 7A, *Quantitative and Qualitative Disclosures About Market Risk*, in our Annual Report on Form 10-K for the year ended January 2, 2017 for further discussion of market risks associated with interest rates.

**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 Rules 13a-15(e) and 15d-15(e) under the Exchange Act of 1934, as amended (the Exchange Act)) as of the end of the period covered by this report. Based on this evaluation, our CEO and CFO have concluded that, as of April 3, 2017, 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 have been no material changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended April 3, 2017 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.



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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.

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### **Risks Related to our Business**

*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 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.

*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 2017 we expect to continue to make significant capital expenditures to expand our HDI 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, 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.

*Changes in tax laws could materially affect our financial position and results of operations.*

The U.S. tax laws are subject to significant change. The current U.S. administration and key members of Congress have made public statements indicating that tax reform is a priority. Certain changes to U.S. tax laws including limitations on the ability to defer U.S. taxation on earnings outside of the United States until those earnings are repatriated to the United States, could affect the tax treatment of our earnings. Due to the large and expanding scale of our international business activities, many of these types of changes to the taxation of our activities could increase our worldwide effective tax rate and materially impact our financial position or results of operations.

*An increase in the cost 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, and other commodity products, which we order from our suppliers. 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, it may reduce our gross margins.

*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 a Term Loan Credit Agreement (Term Loan) at an interest rate of LIBOR plus 4.25%, a \$200.0 million U.S. Asset-Based Lending Credit Agreement (U.S. ABL), and a \$150.0 million Asia Asset-Based Lending Credit Agreement (Asia ABL). In addition, we and a number of our direct and indirect subsidiaries have various

credit facilities, letters of credit and guarantee facilities. Such agreements also contain certain

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financial covenants which require us to maintain a specified consolidated leverage ratio and under the occurrence of certain events, a consolidated fixed charge coverage ratio.

Our indebtedness could have important consequences to us and our shareholders because in certain circumstances we may need to comply with the covenants in the agreements governing such indebtedness and dedicate funds to service our outstanding debt. 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.

We may be able to incur substantial additional debt in the future, some or all of which may be secured by a lien on our assets. If new debt or other liabilities or obligations are added to our current debt levels, the related risks that we and our subsidiaries now face could intensify.

***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.***

We are not required to make quarterly scheduled payments of the outstanding Term Loan balance due to mandatory payments and optional loan prepayments applied to date. We may be required to make an additional principal payment on an annual basis, based on certain parameters defined in these agreements, which includes a secured leverage ratio.

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 we are unable to meet our debt service obligations, we may be forced to reduce or delay investments or to sell assets, seek additional capital (which could include obtaining additional equity capital on terms that may be onerous or highly dilutive) or restructure or refinance our debt. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations. Our operating results and available cash may in the future be insufficient to meet our debt service obligations. We could face substantial liquidity challenges and might be required to dispose of material assets or operations to meet our debt service and other obligations. We may not be able to consummate those dispositions or, if consummated, the proceeds of such dispositions may not be adequate to meet any debt service obligations then due.

***We have pursued and intend to continue to pursue 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 grow by pursuing acquisitions of businesses, technologies, assets, or product lines that complement or expand our business. Risks related to an acquisition may include:

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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 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;

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the inability to identify certain unrecorded liabilities;  
the potential need to restructure, modify, or terminate customer relationships of the acquired 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 indefinite-lived 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.

***We are subject to risks of currency fluctuations.***

A portion of our cash and other current assets is held in currencies other than the U.S. dollar. As of April 3, 2017, we had an aggregate of approximately \$148.2 million in current assets denominated in Chinese Renminbi (RMB) and the Hong Kong Dollar (HKD). Changes in exchange rates among other currencies and the U.S. dollar will affect the value of these assets as translated 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. To the extent that we may have outstanding indebtedness denominated in the U.S. dollar or in the HKD, the depreciation of the RMB against the U.S. dollar or the HKD may have a material adverse effect on our business, financial condition, and results of operations (including the cost of servicing, and the value on our balance sheet of, the U.S. dollar and HKD-denominated indebtedness). Additionally, we have revenues and costs denominated in currencies other than the U.S. dollar (primarily the 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. The impact of future exchange rate fluctuations between the U.S. dollar and the RMB and the U.S. dollar and the HKD cannot be predicted. Further, China's government imposes controls over the convertibility of RMB into foreign currencies, which subjects us to further currency exchange risk.

***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.



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***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 34% and 29% of our net sales for the quarters ended April 3, 2017 and March 28, 2016 respectively, and one customer represented 16% of our sales for the quarter ended April 3, 2017. 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.

***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 rely on the cellular phone and mobile technology industry for a significant portion of sales. The economic volatility in this industry has had, and may continue to have, a material adverse effect on our ability to forecast demand and production and to meet desired sales levels.***

A large percentage of our business is conducted with customers who are in the cellular phone and mobile technology industry. This industry is characterized by intense competition, short product life cycles, seasonality, particularly around the year-end holiday season, and significant fluctuations in consumer demand. This industry is heavily dependent on consumers and therefore can be affected by their demand patterns. If the volatility in this industry continues, it may have a material adverse effect on our business, financial condition, and results of operations.

***We participate in the competitive automotive industry, which has strict quality control standards.***

A significant portion of our sales are to customers within the automotive industry. The automotive industry has historically experienced multi-year cycles of growth and decline. In recent years, we have witnessed a growth cycle. 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.



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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

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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.

***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. In particular, the seasonality of the cellular phone and tablet industries and quick-turn ordering patterns affect the overall PCB industry. These seasonal trends have caused fluctuations in our operating results in the past and may continue to do so in the future. Results of operations in any period should not be considered indicative of the results that may be expected for any future period. In addition, our future quarterly operating results may fluctuate and may not meet the expectations of securities analysts or investors.

***We rely on the telecommunication industry for a significant portion of sales. The economic volatility in this industry has had, and may continue to have, a material adverse effect on our ability to forecast demand and production and to meet desired sales levels.***

A large percentage of our business is conducted with customers who are in the telecommunication industry. This industry is characterized by intense competition, relatively short product life cycles, and significant fluctuations in product demand. This industry 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 this industry continues, it would have a material adverse effect on our business, financial condition, and results of operations.

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

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

***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.***

Certain of our foreign subsidiaries have deferred income tax assets. Based on our forecast for future taxable earnings for these foreign subsidiaries, we believe we will utilize the deferred income tax assets in future periods. However, 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.

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

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We are in 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.

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Such disruptions could include, among other things, temporary loss of data, inability to process certain orders, failure of systems to communicate with each other and the inability to track or reconcile key data. We are heavily dependent on automated management systems, and any significant failure or delay in the system upgrade could cause a substantial interruption to our business and additional expense, which could result in an adverse impact on our operating results, cash flows or financial condition.

### ***Our 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. In recent periods there have been regular and significant increases in the minimum wage payable in various provinces of China. In addition, we have experienced very high employee turnover in our manufacturing facilities in China, generally after the Chinese New Year, and we are experiencing ongoing difficulty in recruiting employees for these 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 our North America operations, rising health care costs pose a significant labor-related risk. We work with our insurance brokers and carriers to control the cost of health care for our employees. However, there can be no assurance that our efforts will succeed, especially given recent and pending changes in government oversight of health care.

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

As of April 3, 2017, our consolidated balance sheet reflected \$493.3 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.

### ***Our ability to use net operating loss carryforwards to offset future taxable income for U.S. federal income tax purposes is subject to limitations, and future transfers of shares, when aggregated with the November 2016 secondary sale of our shares, could cause us to experience an ownership change that could further limit our ability to utilize our net operating losses.***

Under U.S. federal income tax law, a corporation's ability to utilize its net operating losses (NOLs) to offset future taxable income may be significantly limited if it experiences an ownership change as defined in Section 382 of the Internal Revenue Code of 1986, as amended (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. In February 2017 and November 2016, 4,000,000 and 13,800,000 shares of common stock, respectively, were sold by Su Sih, our largest shareholder and a 5-percent shareholder. Additional future transfers or sales of our common stock during the rolling period by 5-percent shareholders could cause us to experience an ownership change under Section 382, which could further limit our use of NOLs.



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***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.

***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 have not experienced any labor problems resulting in a work stoppage since 2013.

***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 34% and 37% of our net sales for the quarters ended April 3, 2017 and March 28, 2016, 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 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 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.

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

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

For the quarter ended April 3, 2017, we generated 72% 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. As a result, we are subject to risks relating to significant international operations, including but not limited to:

managing international operations;

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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;  
 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; and  
 the potential for strained trade relationships between the United States and its trading partners.

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

Under its current leadership, the government of China has been pursuing economic reform policies, including the encouragement of foreign trade and investment and greater economic decentralization. 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. 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. 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, we may 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.

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

For the quarter ended April 3, 2017, aerospace and defense sales accounted for approximately 15% 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 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. The U.S. government, however, is facing unprecedented budgeting constraints. 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.



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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.

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***We are subject to the requirements of the National Industrial Security Program Operating Manual 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 National Industrial Security Program Operating Manual (NISPOM), and any other applicable U.S. government industrial security regulations. Further, due to the fact that a significant 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 (the 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 AG, Chin Poon Industrial Co., LTD., Compeq Manufacturing Co., Ltd., IBIDEN Co., Ltd., ISU Petasys Co., Ltd., Multek Corporation, Sanmina Corporation, Tripod Technology Corp., Unimicron Technology Corp., and Wus Printed Circuit Co., Ltd. Our principal E-M Solutions competitors include Amphenol Corp, Flex, Jabil Circuit, Inc. and Sanmina Corporation. 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.



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**Table of Contents*****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 adjoining 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 on June 2, 2014, May 14, 2015 and May 26, 2016. 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.

***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 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, terrorist attacks, and similar events. 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, and similar 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, 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, 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, an outbreak of epidemics such as Ebola or severe acute respiratory syndrome, 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, or in the event that an outbreak of a serious epidemic results in quarantines, temporary closures of offices or manufacturing facilities, travel restrictions or the temporary or permanent loss of key personnel, 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, pandemic, 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.***

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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.

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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. As a result of the recent global economic downturn, 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 customers.***

Sales to EMS companies represented approximately 34% and 37% of our net sales for the quarters ended April 3, 2017 and March 28, 2016, 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.

### ***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 (the 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.

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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

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and other countries. 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 certain 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.

***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 federal, state, local, 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, 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 this trend may continue over time, 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 (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 (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 a 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. 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 in China are subject to 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.



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The process to manufacture PCBs requires adherence to city, county, state, federal, and foreign environmental regulations regarding the storage, use, handling, and disposal of chemicals, solid wastes, and other hazardous materials, as well as compliance with air quality standards and chemical use reporting. In China, governmental authorities have adopted new rules and regulations

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governing environmental issues. An update to Chinese environmental waste water law was issued in late 2012, allowing for an interim period in which plants subject to such law may install equipment that meets the new regulatory regime. Our plants in China are not yet in full compliance with the newly adopted environmental regulations. There can be no assurance that violations will not occur in the future.

### ***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 (IT) 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 IT 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 debarred 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.

### ***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.

### ***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.***

Recently, some of our large customers have consolidated, 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.



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***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 2017;
- 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.

***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 of the 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. California has also recently experienced drought conditions, prompting the Governor of California to proclaim a Drought State of Emergency. Due to the severe drought conditions, some local and regional water districts and the state government are implementing policies or regulations that restrict water usage and increase the cost of water.

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.

***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

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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.

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***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.

***We may be exposed to intellectual property infringement claims by 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 protect our proprietary information. All of these measures afford only limited protection. These measures may be invalidated, circumvented, or challenged, and others may develop technologies or processes that are similar or superior to our technology. We may not have the controls and procedures in place that are needed to adequately protect proprietary information. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy our products or obtain or use information that we regard as proprietary, which could materially 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 to 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 are brought against the customers for such infringement, whether or not these have merit, 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, which could disrupt the production processes, damage our reputation, and materially adversely affect our business, financial condition, and results of operations.

***Future sales of our common stock or other securities by the Company or its large shareholders may adversely affect the market price of our common stock.***

In the future, we may issue additional equity securities or one or more of our large shareholders may offer their shares for sale through public or private offerings. Pursuant to our certificate of incorporation, our board of directors has the authority, without action by stockholders, to designate and issue preferred stock in one or more series. Our board of directors may also designate the rights, preferences and privileges of each series of preferred stock, any or all of which may be superior to the rights of the common stock. Any such issuance of additional shares would reduce your influence over matters on which our stockholders vote, would dilute the percentage of ownership interest of existing stockholders and may dilute the per share book value of the common stock. In addition, option holders may exercise their options at a time when we would otherwise be able to obtain additional equity capital on more favorable terms. Any issuances of preferred stock would likely result in your interest being subject to the priority rights of holders of that preferred stock. Also, we may have shareholders that hold large quantities of our shares. If one or more of these shareholders offered their shares for sale, it could result in a decrease in demand for our shares which could have the effect of decreasing our share price. The market price of our common stock could decline as a result of any future offering as well as sales of shares of our common stock made after such offerings or the perception that such sales could occur.

***Because we do not expect to pay any cash dividends for the foreseeable future, shareholders may not receive any return on investment unless the shareholders sell their common stock for a price greater than that which was paid.***

We have not declared or paid any dividends since 2000 and do not anticipate paying any cash dividends on our common stock in the foreseeable future. Any payment of cash dividends will be at the discretion of our board of directors and will depend on our financial condition, anticipated cash needs, capital requirements, legal requirements, earnings and other factors. Our ability to pay dividends is restricted by the terms of our debt agreements and might be restricted by the terms of any indebtedness that we incur in the future. Consequently, shareholders should not rely on dividends in order to receive a return on your investment. See our dividend policy in Item 5. *Market for Registrants Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities*, in our Annual Report Form 10-K for the fiscal year ended January 2, 2017.



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*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.

*Failure to maintain good relations with the noncontrolling shareholder of a majority-owned subsidiary of TTM in China could materially adversely affect our ability to manage that operation.*

A noncontrolling interest holder owns a 5% interest in a subsidiary of TTM that operates the Huiyang, China facility that became a part of our operations through the acquisition of Viasystems. The noncontrolling interest holder is affiliated with the Chinese government and has close ties to local economic development and other Chinese government agencies. The noncontrolling interest holder has certain rights to be consulted and to consent to certain operating and investment matters concerning the Huiyang facility and the board of directors of our subsidiary that operates the Huiyang facility. Failure to maintain good relations with the noncontrolling interest holder could materially adversely affect our ability to manage the operations of the plant.

*Security breaches and other disruptions could compromise our information and expose us to liability, which could cause our business and reputation to suffer.*

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 business information and that of our customers, suppliers and business partners, and personally identifiable information of our employees. The secure processing, maintenance and transmission of this information is critical to our operations. Despite our security measures, our information technology and infrastructure may be vulnerable to attacks by hackers or breached due to employee error, malfeasance or other disruptions. Any such breach could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, disrupt our operations, damage our reputation, and cause a loss of confidence in our products and services, which could have a material adverse effect on our business, financial condition, results of operations or cash flows.

**Item 6. Exhibits**

<b>Exhibit</b>		
<b>Number</b>		<b>Exhibits</b>
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	XBRL Instance Document	
101.SCH	XBRL Taxonomy Extension Schema Document	
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Documents	
101.DEF	XBRL Taxonomy Extension Definition Linkbase Documents	
101.LAB	XBRL Taxonomy Extension Label Linkbase Documents	
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Documents	



± Management contract or Compensation Plan

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**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.

Dated: May 11, 2017

/s/ Thomas T. Edman  
**Thomas T. Edman**  
**President and Chief Executive Officer**

Dated: May 11, 2017

/s/ Todd B. Schull  
**Todd B. Schull**  
**Executive Vice President and Chief Financial Officer**

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**EXHIBIT INDEX**

<b>Exhibit</b>	
<b>Number</b>	<b>Exhibits</b>
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.
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