

VISHAY INTERTECHNOLOGY INC  
Form 10-Q  
November 07, 2016  
UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended October 1, 2016

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 1-7416

VISHAY INTERTECHNOLOGY, INC.  
(Exact name of registrant as specified in its charter)

Delaware 38-1686453  
(State or Other Jurisdiction of Incorporation) (I.R.S. Employer Identification Number)

63 Lancaster Avenue 610-644-1300  
Malvern, PA 19355-2143  
(Address of Principal Executive Offices) (Registrant's Area Code and Telephone Number)

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 (section 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, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer   
Non-accelerated filer (Do not check if smaller reporting company)  Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ý No

As of November 3, 2016, the registrant had 133,845,509 shares of its common stock and 12,129,227 shares of its Class B common stock outstanding.

1

---

This page intentionally left blank.

VISHAY INTERTECHNOLOGY, INC.  
 FORM 10-Q  
 October 1, 2016  
 CONTENTS

	Page Number
<b>PART I. FINANCIAL INFORMATION</b>	
<b>Item 1. Financial Statements</b>	
Consolidated Condensed Balance Sheets – October 1, 2016 (Unaudited) and December 31, 2015	4
Consolidated Condensed Statements of Operations (Unaudited) – Fiscal Quarters Ended October 1, 2016 and October 3, 2015	6
Consolidated Condensed Statements of Comprehensive Income (Unaudited) – Fiscal Quarters Ended October 1, 2016 and October 3, 2015	7
Consolidated Condensed Statements of Operations (Unaudited) – Nine Fiscal Months Ended October 1, 2016 and October 3, 2015	8
Consolidated Condensed Statements of Comprehensive Income (Unaudited) – Nine Fiscal Months Ended October 1, 2016 and October 3, 2015	9
Consolidated Condensed Statements of Cash Flows (Unaudited) – Nine Fiscal Months Ended October 1, 2016 and October 3, 2015	10
Consolidated Condensed Statement of Equity (Unaudited)	11
Notes to the Consolidated Condensed Financial Statements (Unaudited)	12
<b>Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations</b>	35
<b>Item 3. Quantitative and Qualitative Disclosures About Market Risk</b>	58
<b>Item 4. Controls and Procedures</b>	58
<b>PART II. OTHER INFORMATION</b>	
<b>Item 1. Legal Proceedings</b>	59
<b>Item 1A. Risk Factors</b>	59
<b>Item 2. Unregistered Sales of Equity Securities and Use of Proceeds</b>	59
<b>Item 3. Defaults Upon Senior Securities</b>	60

Item 4. Mine Safety Disclosures	60
Item 5. Other Information	60
Item 6. Exhibits	60
SIGNATURES	61

3

---

## PART I - FINANCIAL INFORMATION

Item 1. Financial StatementsVISHAY INTERTECHNOLOGY, INC.  
Consolidated Condensed Balance Sheets  
(In thousands)

	October 1, 2016 (Unaudited)	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	\$511,587	\$475,507
Short-term investments	608,314	619,040
Accounts receivable, net	295,341	272,559
Inventories:		
Finished goods	118,853	108,869
Work in process	182,896	201,045
Raw materials	106,754	110,657
Total inventories	408,503	420,571
Prepaid expenses and other current assets	94,309	99,815
Total current assets	1,918,054	1,887,492
Property and equipment, at cost:		
Land	91,188	89,593
Buildings and improvements	579,544	562,171
Machinery and equipment	2,417,598	2,380,299
Construction in progress	61,328	79,910
Allowance for depreciation	(2,300,896)	(2,246,677)
	848,762	865,296
Goodwill	142,032	138,244
Other intangible assets, net	89,784	103,258
Other assets	150,194	158,696
Total assets	\$3,148,826	\$3,152,986

Continues on following page.

4

VISHAY INTERTECHNOLOGY, INC.  
 Consolidated Condensed Balance Sheets (continued)  
 (In thousands)

	October 1, 2016 (Unaudited)	December 31, 2015
Liabilities and equity		
Current liabilities:		
Notes payable to banks	\$ 105	\$4
Trade accounts payable	160,221	157,210
Payroll and related expenses	128,012	113,976
Other accrued expenses	157,482	164,336
Income taxes	16,624	22,198
Total current liabilities	462,444	457,724
Long-term debt less current portion	361,467	436,738
Deferred income taxes	298,623	305,413
Other liabilities	64,257	60,450
Accrued pension and other postretirement costs	252,653	264,618
Total liabilities	1,439,444	1,524,943
Stockholders' equity:		
Vishay stockholders' equity		
Common stock	13,425	13,546
Class B convertible common stock	1,213	1,213
Capital in excess of par value	2,044,564	2,058,492
(Accumulated deficit) retained earnings	(249,535 )	(319,448 )
Accumulated other comprehensive income (loss)	(105,582 )	(131,327 )
Total Vishay stockholders' equity	1,704,085	1,622,476
Noncontrolling interests	5,297	5,567
Total equity	1,709,382	1,628,043
Total liabilities and equity	\$3,148,826	\$3,152,986

See accompanying notes.

5

---

VISHAY INTERTECHNOLOGY, INC.  
 Consolidated Condensed Statements of Operations  
 (Unaudited - In thousands, except per share amounts)

	Fiscal quarters ended	
	October 1, 2016	October 3, 2015
Net revenues	\$591,955	\$560,654
Costs of products sold	438,054	430,510
Gross profit	153,901	130,144
Selling, general, and administrative expenses	93,916	88,995
Restructuring and severance costs	1,197	2,324
Impairment of intangible assets	1,559	57,600
Impairment of goodwill	-	5,380
Operating income (loss)	57,229	(24,155 )
Other income (expense):		
Interest expense	(6,165 )	(6,677 )
Other	(380 )	3,240
Loss on Tianjin explosion	-	(5,350 )
	(6,545 )	(8,787 )
Income (loss) before taxes	50,684	(32,942 )
Income tax expense (benefit)	14,088	(5,392 )
Net earnings (loss)	36,596	(27,550 )
Less: net earnings (loss) attributable to noncontrolling interests	156	116
Net earnings (loss) attributable to Vishay stockholders	\$36,440	\$(27,666 )
Basic earnings (loss) per share attributable to Vishay stockholders	\$0.25	\$(0.19 )
Diluted earnings (loss) per share attributable to Vishay stockholders	\$0.24	\$(0.19 )
Weighted average shares outstanding - basic	146,924	147,701
Weighted average shares outstanding - diluted	149,894	147,701
Cash dividends per share	\$0.0625	\$0.0600

See accompanying notes.

VISHAY INTERTECHNOLOGY, INC.  
 Consolidated Condensed Statements of Comprehensive Income  
 (Unaudited - In thousands)

	Fiscal quarters ended	
	October 1, 2016	October 3, 2015
Net earnings (loss)	\$36,596	\$(27,550)
Other comprehensive income (loss), net of tax		
Pension and other post-retirement actuarial items	1,923	2,305
Foreign currency translation adjustment	8,585	3,662
Unrealized gain (loss) on available-for-sale securities	318	(253 )
Other comprehensive income	10,826	5,714
Comprehensive income (loss)	47,422	(21,836)
Less: comprehensive income attributable to noncontrolling interests	156	116
Comprehensive income (loss) attributable to Vishay stockholders	\$47,266	\$(21,952)

See accompanying notes.

7

---

VISHAY INTERTECHNOLOGY, INC.  
 Consolidated Condensed Statements of Operations  
 (Unaudited - In thousands, except per share amounts)

	Nine fiscal months ended	
	October 1, 2016	October 3, 2015
Net revenues	\$1,752,612	\$1,744,560
Costs of products sold	1,315,274	1,327,896
Gross profit	437,338	416,664
Selling, general, and administrative expenses	276,455	276,717
Restructuring and severance costs	12,139	9,394
Impairment of intangible assets	1,559	57,600
Impairment of goodwill	-	5,380
Operating income	147,185	67,573
Other income (expense):		
Interest expense	(18,901 )	(19,774 )
Other	2,655	7,860
Gain on early extinguishment of debt	4,597	-
Loss related to Tianjin explosion	-	(5,350 )
	(11,649 )	(17,264 )
Income before taxes	135,536	50,309
Income taxes	37,559	20,416
Net earnings	97,977	29,893
Less: net earnings attributable to noncontrolling interests	437	592
Net earnings attributable to Vishay stockholders	\$97,540	\$29,301
Basic earnings per share attributable to Vishay stockholders	\$0.66	\$0.20
Diluted earnings per share attributable to Vishay stockholders	\$0.65	\$0.19
Weighted average shares outstanding - basic	147,470	147,700
Weighted average shares outstanding - diluted	150,125	151,607
Cash dividends per share	\$0.1875	\$0.1800

See accompanying notes.

VISHAY INTERTECHNOLOGY, INC.  
 Consolidated Condensed Statements of Comprehensive Income  
 (Unaudited - In thousands)

	Nine fiscal months ended	
	October 1, 2016	October 3, 2015
Net earnings	\$97,977	\$29,893
Other comprehensive income (loss), net of tax		
Pension and other post-retirement actuarial items	5,448	6,496
Foreign currency translation adjustment	18,633	(57,174)
Unrealized gain (loss) on available-for-sale securities	1,664	(1,368 )
Other comprehensive income (loss)	25,745	(52,046)
Comprehensive income (loss)	123,722	(22,153)
Less: comprehensive income attributable to noncontrolling interests	437	592
Comprehensive income (loss) attributable to Vishay stockholders	\$123,285	\$(22,745)

See accompanying notes.

9

---

VISHAY INTERTECHNOLOGY, INC.  
Consolidated Condensed Statements of Cash Flows  
(Unaudited - In thousands)

	Nine fiscal months ended	
	October 1, 2016	October 3, 2015
Operating activities		
Net earnings	\$97,977	\$29,893
Adjustments to reconcile net earnings to net cash provided by operating activities:		
Depreciation and amortization	119,143	134,281
(Gain) loss on disposal of property and equipment	(1,373 )	(116 )
Accretion of interest on convertible debentures	3,425	3,167
Inventory write-offs for obsolescence	17,085	15,348
Impairment of goodwill and intangible assets	1,559	62,980
Deferred income taxes	(1,750 )	(32,523 )
Gain on early extinguishment of debt	(4,597 )	-
Other	(5,386 )	(1,939 )
Net change in operating assets and liabilities, net of effects of businesses acquired	(13,455 )	(57,522 )
Net cash provided by operating activities	212,628	153,569
Investing activities		
Capital expenditures	(81,346 )	(86,767 )
Proceeds from sale of property and equipment	1,241	1,989
Purchase of short-term investments	(472,938)	(362,595)
Maturity of short-term investments	491,867	161,611
Sale of short-term investments	-	503
Sale of other investments	-	400
Other investing activities	2,886	(3,967 )
Net cash provided by (used in) investing activities	(58,290 )	(288,826)
Financing activities		
Principal payments on long-term debt and capital leases	(34,044 )	-
Net proceeds (payments) on revolving credit lines	(41,000 )	(27,000 )
Common stock repurchases	(16,981 )	-
Net changes in short-term borrowings	(626 )	(7 )
Dividends paid to common stockholders	(25,329 )	(24,378 )
Dividends paid to Class B common stockholders	(2,274 )	(2,184 )
Excess tax benefit from RSUs vested	-	21
Distributions to noncontrolling interests	(707 )	(725 )
Net cash provided by (used in) financing activities	(120,961)	(54,273 )
Effect of exchange rate changes on cash and cash equivalents	2,703	(12,337 )
Net increase (decrease) in cash and cash equivalents	36,080	(201,867)
Cash and cash equivalents at beginning of period	475,507	592,172
Cash and cash equivalents at end of period	\$511,587	\$390,305

See accompanying notes.



## VISHAY INTERTECHNOLOGY, INC.

## Consolidated Condensed Statement of Equity

(Unaudited - In thousands, except share and per share amounts)

	Common Stock	Class B Convertible Common Stock	Capital in Excess of Par Value	Retained Earnings (Accumulated Deficit)	Accumulated Other Comprehensive Income (Loss)	Total Vishay Stockholders' Equity	Noncontrolling Interests	Total Equity
Balance at January 1, 2016	\$13,546	\$1,213	\$2,058,492	\$(319,448)	\$(131,327)	\$1,622,476	\$5,567	\$1,628,043
Net earnings	-	-	-	97,540	-	97,540	437	97,977
Other comprehensive income	-	-	-	-	25,745	25,745	-	25,745
Distributions to noncontrolling interests	-	-	-	-	-	-	(707)	(707)
Common stock repurchase (1,309,855 shares)	(131)	-	(16,850)	-	-	(16,981)	-	(16,981)
Restricted stock issuances (103,918 shares)	10	-	(452)	-	-	(442)	-	(442)
Dividends declared (\$ 0.1875 per share)	-	-	24	(27,627)	-	(27,603)	-	(27,603)
Stock compensation expense	-	-	3,371	-	-	3,371	-	3,371
Tax effects of stock plan	-	-	(21)	-	-	(21)	-	(21)
Balance at October 1, 2016	\$13,425	\$1,213	\$2,044,564	\$(249,535)	\$(105,582)	\$1,704,085	\$5,297	\$1,709,382

See accompanying notes.

11

NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 1 – Basis of Presentation

The accompanying unaudited consolidated condensed financial statements of Vishay Intertechnology, Inc. ("Vishay" or the "Company") have been prepared in accordance with the instructions to Form 10-Q and therefore do not include all information and footnotes necessary for presentation of financial position, results of operations, and cash flows required by accounting principles generally accepted in the United States ("GAAP") for complete financial statements. The information furnished reflects all normal recurring adjustments which are, in the opinion of management, necessary for a fair summary of the financial position, results of operations, and cash flows for the interim periods presented. The financial statements should be read in conjunction with the consolidated financial statements filed with the Company's Annual Report on Form 10-K for the year ended December 31, 2015. The results of operations for the fiscal quarter and nine fiscal months ended October 1, 2016 are not necessarily indicative of the results to be expected for the full year.

The Company reports interim financial information for 13-week periods beginning on a Sunday and ending on a Saturday, except for the first fiscal quarter, which always begins on January 1, and the fourth fiscal quarter, which always ends on December 31. The four fiscal quarters in 2016 end on April 2, 2016, July 2, 2016, October 1, 2016, and December 31, 2016, respectively. The four fiscal quarters in 2015 ended on April 4, 2015, July 4, 2015, October 3, 2015, and December 31, 2015, respectively.

Recently Issued Accounting Guidance

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, Revenue from Contracts with Customers (Topic 606). The ASU is the result of a convergence project between the FASB and the International Accounting Standards Board to clarify the principles for recognizing revenue and to develop a common revenue standard for GAAP and International Financial Reporting Standards. The ASU removes inconsistencies and weaknesses in revenue requirements; provides a more robust framework for addressing revenue issues; improves comparability of revenue recognition practices across entities, industries, jurisdictions, and capital markets; provides more useful information to users of financial statements through expanded disclosure requirements; and simplifies the preparation of financial statements by reducing the number of requirements to which an entity must refer. The ASU is effective for the Company for interim and annual periods beginning on or after January 1, 2018, with the ability to early adopt on January 1, 2017. The Company intends to adopt the ASU effective January 1, 2018. The Company is currently evaluating the effect of the ASU on its revenue contracts.

In September 2015, the FASB issued ASU No. 2015-16, Business Combinations (Topic 805): Simplifying the Accounting for Measurement-Period Adjustments. The ASU is the result of the FASB's simplification initiative intended to improve GAAP by reducing costs and complexity while maintaining or enhancing the usefulness of related financial statement information. The ASU eliminates the requirement for an acquirer in a business combination to account for measurement-period adjustments retrospectively, and to instead recognize measurement-period adjustments during the period in which the acquirer determines the amount, including the effect on earnings of any amounts which would have been recorded in previous periods if the accounting had been completed at the acquisition date. The Company adopted the ASU effective January 1, 2016. The ASU had no effect on the Company's results of operations or liquidity.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842). The ASU is the result of a project between the FASB and the International Accounting Standards Board 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. Upon adoption of the ASU, the Company will recognize lease assets and liabilities for its operating leases which are not currently reported on its consolidated balance sheets. The ASU is

effective for the Company for interim and annual periods beginning on or after January 1, 2019, with the ability to early adopt. The Company is currently evaluating the effect of the ASU on its lease contracts.

In March 2016, the FASB issued ASU No. 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. The ASU is the result of the FASB's simplification initiative intended to improve GAAP by reducing costs and complexity while maintaining or enhancing the usefulness of related financial statement information. The ASU simplifies several aspects of the accounting for employee share-based payment transactions, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. The ASU is effective for the Company for interim and annual periods beginning on or after January 1, 2017, with the ability to early adopt. The Company is currently evaluating the effect of the ASU on its employee share-based payment accounting.

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. The ASU replaces the incurred loss impairment methodology in current GAAP with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The ASU is effective for the Company for interim and annual periods beginning on or after January 1, 2020, with the ability to early adopt for interim and annual periods beginning on or after January 1, 2019. The Company is currently evaluating the effect of the ASU on its financial assets measured at amortized cost.

#### Reclassifications

Certain prior period amounts have been reclassified to conform to the current financial statements presentation.

12

---

NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 2 – Acquisition Activities

As part of its growth strategy, the Company seeks to expand through targeted acquisitions of other manufacturers of electronic components that have established positions in major markets, reputations for product quality and reliability, and product lines with which the Company has substantial marketing and technical expertise.

In the fourth fiscal quarter of 2015, the Company deposited the \$6,750 purchase price of Sonntag Electronic GmbH ("Sonntag"). The purchase price, net of cash acquired was \$5,450. The acquisition was effective January 1, 2016. Sonntag is a distributor of electronic components in Germany. The inclusion of this business did not have a material impact on the Company's consolidated results for the fiscal quarter or nine fiscal months ended October 1, 2016. After allocating the purchase price to the assets acquired and liabilities assumed based on an estimation of their fair values at the date of acquisition, the Company recorded goodwill of \$3,485 related to this acquisition. The goodwill related to this acquisition is included in the Resistors & Inductors reporting unit for goodwill impairment testing.

Had this acquisition occurred as of the beginning of the periods presented in these consolidated condensed financial statements, the pro forma statements of operations would not be materially different than the consolidated condensed statements of operations presented.

The remaining fluctuation in the goodwill account balance is due to foreign currency translation.

13

---

NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 3 – Goodwill and Other Intangible Assets

Goodwill represents the excess of the cost of a business acquired over the fair value of the related net assets at the date of acquisition. Goodwill is not amortized but rather tested for impairment at least annually. Similarly, indefinite-lived intangible assets are not amortized, but rather tested for impairment at least annually. These impairment tests must be performed more frequently whenever events or changes in circumstances indicate that the asset might be impaired. The Company's business segments (see Note 11) represent its reporting units for goodwill impairment testing purposes.

As a result of a review of recent financial results and outlook for the MOSFETs segment following the recent completion of the production transfers, Vishay determined that an interim indefinite-lived intangible asset impairment test was required for its Siliconix tradenames as of the end of the third fiscal quarter of 2016.

As a result of this analysis, the Company determined that its Siliconix tradenames, with a carrying value of \$20,359, were impaired. The Company recorded an impairment charge of \$1,559 to write-down the tradenames to their fair value. The tradenames are no longer considered indefinite-lived and the remaining value will be amortized over the 10 year estimated remaining useful life.

The fair value of indefinite-lived trademarks is measured as the discounted cash flow savings realized from owning such tradenames and not having to pay a royalty for their use. The evaluation of the fair value of indefinite-lived trademarks requires us to make significant estimates and assumptions. These estimates and assumptions primarily include, but are not limited to: the assumed market-royalty rate; the discount rate; terminal growth rates; and forecasts of revenue.

Due to the inherent uncertainty involved in making these estimates, actual financial results could differ from those estimates. Changes in assumptions concerning future financial results or other underlying assumptions could have a significant impact on the fair value, whether an impairment is present, and the amount of the impairment charge, if applicable.

In light of a sustained decline in market capitalization for Vishay and its peer group companies, and other factors (including the cost reduction programs announced during the third fiscal quarter of 2015 as described in Note 3), Vishay determined that interim impairment tests were required as of the end of the third fiscal quarter of 2015. The Company recorded impairment charges totaling \$62,980 as a result of these tests.

The recorded impairment charges are noncash in nature and do not affect Vishay's liquidity, cash flows from operating activities, or debt covenants, and will not have a material impact on future operations.

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 4 – Restructuring and Related Activities

The Company places a strong emphasis on controlling its costs and combats general price inflation by continuously improving its efficiency and operating performance. When the ongoing cost containment activities are not adequate, the Company takes actions to maintain its cost competitiveness.

The Company incurred significant restructuring costs in its past to reduce its cost structure. Historically, the Company's primary cost reduction technique was through the transfer of production from high-labor-cost countries to lower-labor-cost countries. Since 2013, the Company's cost reduction programs have primarily focused on reducing fixed costs, including selling, general, and administrative expenses.

In 2013, the Company announced various cost reduction programs. These programs were substantially implemented by the end of the first fiscal quarter of 2016, with some additional costs incurred in the second and third fiscal quarters of 2016. Many of the severance costs were recognized ratably over the required stay periods. In November 2016, the Company announced an extension of one of these programs.

In 2015, the Company announced additional global cost reduction programs. These programs include a facility closure in the Netherlands. The cash costs of these programs, primarily severance, are expected to aggregate to approximately \$30,000. Complete implementation of these programs is expected to occur before the end of 2017.

The following table summarizes restructuring and related expenses which were recognized and reported on a separate line in the accompanying consolidated condensed statements of operations:

	Fiscal quarters ended		Nine fiscal months ended	
	October		October	
	1, 2016	3, 2015	1, 2016	3, 2015
MOSFETs Enhanced Competitiveness Program	\$675	\$1,445	\$5,700	\$3,737
Voluntary Separation / Retirement Program	-	-	-	77
Modules Production Transfer Program	(464 )	-	(464 )	-
Global Cost Reduction Programs	986	879	6,903	5,580
Total	\$1,197	\$2,324	\$12,139	\$9,394

MOSFETs Enhanced Competitiveness Program

Over a period of approximately 2 years and in a series of discrete steps, the manufacture of wafers for a substantial share of products was transferred into a more cost-efficient fab. As a consequence, certain other manufacturing currently occurring in-house was transferred to third-party foundries. This transfer of production was substantially completed by the end of the first fiscal quarter of 2016.

Employees generally were required to remain with the Company during the production transfer period. Accordingly, the Company accrued these severance costs ratably over the respective employees' remaining service periods. The Company has incurred and may continue to incur other exit costs associated with the production transfer, including certain contract termination costs.

As a result of a review of recent financial results and outlook for the Company's MOSFETs segment following the recent completion of production transfers, the Company has determined to implement further cost reductions for the

MOSFETs segment.

On November 7, 2016, the Company announced an extension of the MOSFETs Enhanced Competitiveness Program. The revised program includes various cost reduction initiatives, primarily the transfer of all remaining manufacturing operations at its Santa Clara, California facility to other Vishay facilities or third-party subcontractors. The production transfers will be completed in steps by the end of 2017. The Company expects to incur cash charges of approximately \$4,000 to \$8,000, primarily related to severance, to implement these steps. The Company expects to maintain its R&D and management presence in the Silicon Valley area, even after the cessation of manufacturing operations there.

15

---

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

The following table summarizes the activity to date related to this program:

Expense recorded in 2013	\$2,328
Cash paid	(267 )
Balance at December 31, 2013	\$2,061
Expense recorded in 2014	6,025
Cash paid	(856 )
Balance at December 31, 2014	\$7,230
Expense recorded in 2015	5,367
Cash paid	(426 )
Foreign currency translation	1
Balance at December 31, 2015	\$12,172
Expense recorded in 2016	5,700
Cash paid	(13,492)
Foreign currency translation	4
Balance at October 1, 2016	\$4,384

Severance benefits are generally paid in a lump sum at cessation of employment. Other exit costs of \$5,027 are included in the expenses incurred in 2016 in the table above. The entire amount of the liability is considered current and is included in other accrued expenses in the accompanying consolidated condensed balance sheets.

Voluntary Separation / Retirement Program

The voluntary separation / early retirement program was offered to employees worldwide who were eligible because they met job classification, age, and years-of-service criteria as of October 31, 2013. The program benefits varied by country and job classification, but generally included a cash loyalty bonus based on years of service. All employees eligible for the program have left the Company.

These employees generally were not aligned with any particular segment. The effective separation / retirement date for most employees who accepted the offer was June 30, 2014 or earlier, with a few exceptions to allow for a transition period.

The following table summarizes the activity to date related to this program:

Expense recorded in 2013	\$486
Cash paid	(98 )
Foreign currency translation	3
Balance at December 31, 2013	\$391
Expense recorded in 2014	12,792
Cash paid	(8,054 )
Foreign currency translation	(455 )
Balance at December 31, 2014	\$4,674
Expense recorded in 2015	95
Cash paid	(3,166 )
Foreign currency translation	(258 )
Balance at December 31, 2015	\$1,345
Cash paid	(716 )
Foreign currency translation	25

Balance at October 1, 2016      \$654

The payment terms vary by country, but generally are paid in a lump sum at cessation of employment. Certain participants are being paid in installments. The entire amount of the liability is considered current and is included in other accrued expenses in the accompanying consolidated condensed balance sheets.

16

---

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Modules Production Transfer

In an effort to reduce costs and streamline production of its module products within its Diodes segment, the Company committed to two smaller cost reduction programs related to the transfer of production of certain of its products.

The following table summarizes the activity to date related to this program:

Expense recorded in 2014	\$2,080
Cash paid	(464 )
Foreign currency translation	(121 )
Balance at December 31, 2014	\$1,495
Cash paid	(718 )
Foreign currency translation	(120 )
Balance at December 31, 2015	\$657
Change in estimate	(464 )
Cash paid	(125 )
Foreign currency translation	18
Balance at October 1, 2016	\$86

Severance benefits are generally paid in a lump sum at cessation of employment. The entire amount of the liability is considered current and is included in other accrued expenses in the accompanying consolidated condensed balance sheets.

Global Cost Reduction Programs

The global cost reduction programs announced in 2015 include a plan to reduce selling, general, and administrative costs company-wide, and targeted streamlining and consolidation of production for certain product lines within its Capacitors and Resistors & Inductors segments.

The following table summarizes the activity to date related to this program:

Expense recorded in 2015	\$13,753
Cash paid	(986 )
Foreign currency translation	(150 )
Balance at December 31, 2015	\$12,617
Expense recorded in 2016	6,903
Cash paid	(12,918)
Foreign currency translation	181
Balance at October 1, 2016	\$6,783

The following table summarizes the expense recognized in 2016 by segment related to this program:

Diodes	\$788
Optoelectronic Components	953
Resistors & Inductors	3,163
Capacitors	459
Unallocated Selling, General, and Administrative Expenses	1,540
Total	\$6,903

Severance benefits are generally paid in a lump sum at cessation of employment. The current portion of the liability is \$4,138 and is included in other accrued expenses in the accompanying consolidated condensed balance sheets. The non-current portion of the liability is included in other liabilities in the accompanying consolidated balance sheets.

17

---

NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 5 – Income Taxes

The provision for income taxes consists of provisions for federal, state, and foreign income taxes. The effective tax rates for the periods ended October 1, 2016 and October 3, 2015 reflect the Company's expected tax rate on reported income from continuing operations before income tax and tax adjustments. The Company operates in a global environment with significant operations in various jurisdictions outside the United States. Accordingly, the consolidated income tax rate is a composite rate reflecting the Company's earnings and the applicable tax rates in the various jurisdictions where the Company operates.

Income tax expense for the fiscal quarter and nine fiscal months ended October 1, 2016 includes the remeasurement of the deferred tax liability recorded for the cash repatriation program announced in the fourth fiscal quarter of 2015 of \$1,402 and \$3,388, respectively. During the second fiscal quarter of 2016, the Company repatriated \$46,000 pursuant to this program.

During the nine fiscal months ended October 1, 2016, the liabilities for unrecognized tax benefits increased by \$1,339 on a net basis, principally due to increases for tax positions taken in prior periods, interest, and foreign currency effects, partially offset by payments and settlements.

18

---

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 6 – Long-Term Debt

Long-term debt consists of the following:

	October 1, 2016	December 31, 2015
Credit facility	\$ 149,000	\$ 190,000
Exchangeable unsecured notes, due 2102	-	38,642
Convertible senior debentures, due 2040	107,563	106,011
Convertible senior debentures, due 2041	55,157	54,424
Convertible senior debentures, due 2042	61,072	60,320
Deferred financing costs	(11,325 )	(12,659 )
	361,467	436,738
Less current portion	-	-
	\$ 361,467	\$ 436,738

## Convertible Senior Debentures

Vishay currently has three issuances of convertible senior debentures outstanding with generally congruent terms. The quarterly cash dividend program of the Company results in adjustments to the conversion rate and effective conversion price for each issuance of the Company's convertible senior debentures effective as of the ex-dividend date of each cash dividend.

The following table summarizes some key facts and terms regarding the three series of outstanding convertible senior debentures following the adjustment made to the conversion rate of the debentures on the ex-dividend date of the September 29, 2016 dividend payment:

	Due 2040 November 9, 2010	Due 2041 May 13, 2011	Due 2042 May 31, 2012
Issuance date	November 15, 2040	May 15, 2041	June 1, 2042
Maturity date	\$ 275,000	\$ 150,000	\$ 150,000
Principal amount	2.25 %	2.25 %	2.25 %
Cash coupon rate (per annum)	8.00 %	8.375 %	7.50 %
Nonconvertible debt borrowing rate at issuance (per annum)	75.8043	55.3180	89.1277
Conversion rate effective September 13, 2016 (per \$1 principal amount)	\$ 13.19	\$ 18.08	\$ 11.22
Effective conversion price effective September 13, 2016 (per share)	\$ 17.15	\$ 23.50	\$ 14.59
130% of the conversion price (per share)	November 20, 2020	May 20, 2021	June 7, 2022
Call date			

Prior to three months before the maturity date, the holders may only convert their debentures under the following circumstances: (1) during any fiscal quarter after the first full quarter subsequent to issuance, if the sale price of Vishay common stock reaches 130% of the conversion price for a specified period; (2) the trading price of the debentures falls below 98% of the product of the sale price of Vishay's common stock and the conversion rate for a specified period; (3) Vishay calls any or all of the debentures for redemption, at any time prior to the close of business on the third scheduled trading day immediately preceding the redemption date; or (4) upon the occurrence of specified

corporate events.

Based on an evaluation of the conversion criteria at October 1, 2016 and December 31, 2015, none of the convertible senior debentures due 2040, due 2041, or due 2042 were convertible. The conversion criteria of the debentures will continue to be evaluated and the debentures may become convertible in the future. At the direction of the Company's Board of Directors, the Company intends, upon conversion, to repay the principal amount of the convertible debentures in cash and settle any additional amounts in shares of the Company's common stock. The Company intends to finance the principal amount of any converted debentures using borrowings under its credit facility.

19

---

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

GAAP requires an issuer to separately account for the liability and equity components of the instrument in a manner that reflects the issuer's nonconvertible debt borrowing rate when interest costs are recognized in subsequent periods. The resulting discount on the debt is amortized as non-cash interest expense in future periods.

The carrying values of the liability and equity components of the convertible debentures are reflected in the Company's consolidated condensed balance sheets as follows:

	Principal amount of the debentures	Unamortized discount	Embedded derivative	Carrying value of liability component	Equity component - net carrying value
<u>October 1, 2016</u>					
Due 2040	\$ 275,000	(167,863 )	426	\$ 107,563	\$ 110,094
Due 2041	\$ 150,000	(95,145 )	302	\$ 55,157	\$ 62,246
Due 2042	\$ 150,000	(89,128 )	200	\$ 61,072	\$ 57,874
Total	\$ 575,000	\$ (352,136 )	\$ 928	\$ 223,792	\$ 230,214

December 31, 2015

Due 2040	\$ 275,000	(169,565 )	576	\$ 106,011	\$ 110,094
Due 2041	\$ 150,000	(96,014 )	438	\$ 54,424	\$ 62,246
Due 2042	\$ 150,000	(89,982 )	302	\$ 60,320	\$ 57,874
Total	\$ 575,000	\$ (355,561 )	\$ 1,316	\$ 220,755	\$ 230,214

Interest is payable on the debentures semi-annually at the cash coupon rate; however, the remaining debt discount is being amortized as additional non-cash interest expense using an effective annual interest rate equal to the Company's estimated nonconvertible debt borrowing rate at the time of issuance. In addition to ordinary interest, contingent interest will accrue in certain circumstances relating to the trading price of the debentures and under certain other circumstances beginning ten years subsequent to issuance.

Interest expense related to the debentures is reflected on the consolidated condensed statements of operations for the fiscal quarters ended:

	Contractual coupon interest	Non-cash amortization of debt discount	Non-cash amortization of deferred financing costs	Non-cash change in value of derivative liability	Total interest expense related to the debentures
<u>October 1, 2016</u>					
Due 2040	\$ 1,547	579	22	(115 )	\$ 2,033
Due 2041	\$ 844	296	11	(102 )	\$ 1,049
Due 2042	\$ 844	291	13	(71 )	\$ 1,077
Total	\$ 3,235	\$ 1,166	\$ 46	\$ (288 )	\$ 4,159

October 3, 2015

Due 2040	\$ 1,547	535	22	198	\$ 2,302
Due 2041	\$ 844	272	12	92	\$ 1,220

Edgar Filing: VISHAY INTERTECHNOLOGY INC - Form 10-Q

Due 2042	\$ 844	270	13	105	\$ 1,232
Total	\$ 3,235	\$ 1,077	\$ 47	\$ 395	\$ 4,754

---

20

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Interest expense related to the debentures is reflected on the consolidated condensed statements of operations for the nine fiscal months ended:

	Contractual coupon interest	Non-cash amortization of debt discount	Non-cash amortization of deferred financing costs	Non-cash change in value of derivative liability	Total interest expense related to the debentures
<u>October 1, 2016</u>					
Due 2040	\$ 4,641	1,702	66	(150)	) \$ 6,259
Due 2041	\$ 2,532	869	35	(136)	) \$ 3,300
Due 2042	\$ 2,532	854	40	(102)	) \$ 3,324
Total	\$ 9,705	\$ 3,425	\$ 141	\$ (388)	) \$ 12,883
<u>October 3, 2015</u>					
Due 2040	\$ 4,641	1,574	66	304	\$ 6,585
Due 2041	\$ 2,532	800	36	229	\$ 3,597
Due 2042	\$ 2,532	793	40	144	\$ 3,509
Total	\$ 9,705	\$ 3,167	\$ 142	\$ 677	\$ 13,691

## Exchangeable Unsecured Notes, due 2102

On June 28, 2016 and March 31, 2016, pursuant to agreements dated June 13, 2016 and March 10, 2016, respectively, the Company acquired from holders \$12,436 and \$26,206, respectively, principal amount of the Company's floating rate exchangeable unsecured notes due 2102. The purchase price for these privately negotiated transactions was \$11,449 and \$22,595, respectively. Vishay recognized gains on early extinguishment of debt of \$4,597 presented as a separate line item in the accompanying consolidated condensed statement of operations for the nine fiscal months ended October 1, 2016.

The notes that Vishay repurchased had been exchangeable for 2,510,808 shares of Vishay common stock.

Following the June 28, 2016 transaction, no exchangeable unsecured notes are outstanding.

NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 7 – Other Income (Expense)

On August 12, 2015, a major explosion occurred in the port of Tianjin, China. Vishay owns and operates a diodes manufacturing facility in Tianjin near the port. The shockwave of the explosion resulted in some damage to the facility and caused a temporary shutdown. Full production resumed on September 8, 2015.

As a result of this incident, through the end of the third fiscal quarter of 2016, the Company estimates that it has incurred \$10,174 for inventory, property, and equipment damage (at net book value) and related repair and clean-up costs. The Company received payments totaling \$3,321 primarily related to its inventory damage claim in 2016. As of October 1, 2016, the Company has recorded a receivable of \$1,503 for amounts which are probable of recovery under its property insurance policies. The Company recorded, as a separate line item, a loss of \$5,350 related to these items in the third fiscal quarter of 2015, which represents the insurance deductible and certain costs which are potentially not recoverable.

The Company's insurance coverage generally provides for replacement cost of damaged items. The insurance claims process continues as expected. Any amount expected to be received in excess of the book value of the damaged item will be treated as a gain, but will not be recorded until contingencies are resolved. The Company also believes that it has valid claims under its business interruption insurance policies, but those claims cannot be quantified at this time. The Company will not record a receivable for business interruption claims until all contingencies have been resolved.

22

---

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 8 – Accumulated Other Comprehensive Income (Loss)

The cumulative balance of each component of other comprehensive income (loss) and the income tax effects allocated to each component are as follows:

	Pension and other post-retirement actuarial items	Currency translation adjustment	Unrealized gain (loss) on available-for-sale securities	Total
Balance at January 1, 2016	\$ (136,422 )	\$ 4,597	498	\$(131,327)
Other comprehensive income before reclassifications	-	18,633	2,560	\$21,193
Tax effect	-	-	(896 )	\$(896 )
Other comprehensive income before reclassifications, net of tax	-	18,633	1,664	\$20,297
Amounts reclassified out of AOCI	8,065	-	-	\$8,065
Tax effect	(2,617 )	-	-	\$(2,617 )
Amounts reclassified out of AOCI, net of tax	5,448	-	-	\$5,448
Net other comprehensive income	\$ 5,448	\$ 18,633	\$ 1,664	\$25,745
Balance at October 1, 2016	\$ (130,974 )	\$ 23,230	\$ 2,162	\$(105,582)

Reclassifications of pension and other post-retirement actuarial items out of AOCI are included in the computation of net periodic benefit cost. (See Note 9 for further information).

Other comprehensive income (loss) includes Vishay's proportionate share of other comprehensive income (loss) of nonconsolidated subsidiaries accounted for under the equity method.

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 9 – Pensions and Other Postretirement Benefits

The Company maintains various retirement benefit plans.

## Defined Benefit Pension Plans

The following table shows the components of the net periodic pension cost for the third fiscal quarters of 2016 and 2015 for the Company's defined benefit pension plans:

	Fiscal quarter ended		Fiscal quarter ended	
	October 1, 2016		October 3, 2015	
	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans
Net service cost	\$-	\$ 790	\$-	\$ 812
Interest cost	2,945	1,361	2,915	1,412
Expected return on plan assets	(2,825)	(529 )	(3,391)	(448 )
Amortization of prior service cost	36	12	16	-
Amortization of losses	1,650	1,196	2,048	1,278
Curtailed and settlement losses	-	205	-	-
Net periodic benefit cost	\$ 1,806	\$ 3,035	\$ 1,588	\$ 3,054

The following table shows the components of the net periodic pension cost for the nine fiscal months ended October 1, 2016 and October 3, 2015 for the Company's defined benefit pension plans:

	Nine fiscal months ended		Nine fiscal months ended	
	October 1, 2016		October 3, 2015	
	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans
Net service cost	\$-	\$ 2,355	\$-	\$ 2,467
Interest cost	8,834	4,097	8,743	4,263
Expected return on plan assets	(8,476)	(1,605 )	(10,174)	(1,358 )
Amortization of prior service cost	108	37	48	-
Amortization of losses	4,951	3,568	6,144	3,859
Curtailed and settlement losses	-	601	-	-
Net periodic benefit cost	\$ 5,417	\$ 9,053	\$ 4,761	\$ 9,231

In the second fiscal quarter of 2015, the Company began the process of terminating the Vishay Retirement Plan, the Company's U.S. qualified pension plan. Plan participants will not be adversely affected by the plan termination, but rather will have their benefits either converted into a lump sum cash payment or an annuity contract placed with an insurance carrier.

The completion of this proposed termination and settlement was contingent upon the receipt of a favorable determination letter from the Internal Revenue Service ("IRS") and meeting certain IRS and Pension Benefit Guarantee Corporation ("PBGC") requirements. During the third fiscal quarter of 2016, the Company received a

favorable determination letter from the IRS, and has met all other applicable IRS and PBGC requirements. The Company is in the final stages of completing the termination and settlement, which is expected to occur in December 2016. The settlement will result in a non-cash charge to recognize the unrecognized actuarial items related to the Vishay Retirement Plan recorded in accumulated other comprehensive income.

As of the last fiscal year-end measurement date (December 31, 2015), the Vishay Retirement Plan was fully-funded on a GAAP basis. In order to terminate the plan in accordance with IRS and PBGC requirements, the Company is required to fully fund the plan on a termination basis and will commit to contribute the additional assets necessary to do so. The amount necessary to do so is not yet known, but is currently estimated to be between zero and \$20,000.

The Company contributed \$16,966 to the Company's Taiwanese pension plans to improve the funded status of those plans in 2016.

24

---

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

## Other Postretirement Benefits

The following table shows the components of the net periodic benefit cost for the third fiscal quarters of 2016 and 2015 for the Company's other postretirement benefit plans:

	Fiscal quarter ended		Fiscal quarter ended	
	October 1, 2016		October 3, 2015	
	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans
Service cost	\$31	\$ 67	\$31	\$ 69
Interest cost	85	36	83	37
Amortization of prior service (credit)	(209)	-	(209)	-
Amortization of losses (gains)	(8 )	17	22	19
Net periodic benefit cost	\$(101)	\$ 120	\$(73 )	\$ 125

The following table shows the components of the net periodic pension cost for the nine fiscal months ended October 1, 2016 and October 3, 2015 for the Company's other postretirement benefit plans:

	Nine fiscal months ended		Nine fiscal months ended	
	October 1, 2016		October 3, 2015	
	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans
Service cost	\$94	\$ 202	\$91	\$ 206
Interest cost	255	108	250	110
Amortization of prior service (credit)	(627)	-	(627)	-
Amortization of losses (gains)	(23 )	51	67	57
Net periodic benefit cost	\$(301)	\$ 361	\$(219)	\$ 373

25

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 10 – Stock-Based Compensation

The Company has various stockholder-approved programs which allow for the grant of stock-based compensation to officers, employees, and non-employee directors of the Company.

The amount of compensation cost related to stock-based payment transactions is measured based on the grant-date fair value of the equity instruments issued. The fair value of each option award is estimated on the date of grant using the Black-Scholes option-pricing model. The Company determines compensation cost for restricted stock units ("RSUs"), phantom stock units, and restricted stock based on the grant-date fair value of the underlying common stock adjusted for expected dividends paid over the required vesting period for non-participating awards. Compensation cost is recognized over the period that an officer, employee, or non-employee director provides service in exchange for the award.

The following table summarizes stock-based compensation expense recognized:

	Fiscal quarters ended		Nine fiscal months ended	
	October		October	
	1, 2016	October 3, 2015	1, 2016	October 3, 2015
Restricted stock units	\$ 1,085	\$ 933	\$ 3,254	2,771
Phantom stock units	-	-	117	141
Stock options	-	-	-	-
Total	\$ 1,085	\$ 933	\$ 3,371	2,912

The Company recognizes compensation cost for RSUs that are expected to vest and records cumulative adjustments in the period that the expectation changes.

The following table summarizes unrecognized compensation cost and the weighted average remaining amortization periods at October 1, 2016 (amortization periods in years):

	Unrecognized Compensation Cost	Weighted Average Remaining Amortization Periods
Restricted stock units	\$ 5,302	1.3
Phantom stock units	-	0.0
Stock options	-	0.0
Total	\$ 5,302	

The Company currently expects all performance-based RSUs to vest and all of the associated unrecognized compensation cost for performance-based RSUs presented in the table above to be recognized.

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

## 2007 Stock Incentive Plan

The Company's 2007 Stock Incentive Program (the "2007 Program"), as amended and restated, permits the grant of up to 6,500,000 shares of restricted stock, unrestricted stock, RSUs, stock options, and phantom stock units, to officers, employees, and non-employee directors of the Company. Such instruments are available for grant until May 20, 2024.

## Restricted Stock Units

RSU activity under the 2007 Program as of October 1, 2016 and changes during the nine fiscal months then ended are presented below (number of RSUs in thousands):

	Number of RSUs	Weighted Average Grant-date Fair Value per Unit
Outstanding:		
January 1, 2016	1,028	\$ 13.24
Granted	353	11.35
Vested*	(142 )	12.21
Cancelled or forfeited	(222 )	13.19
Outstanding at October 1, 2016	1,017	\$ 12.74

Expected to vest at October 1, 2016 1,017

\* The number of RSUs vested includes shares that the Company withheld on behalf of employees to satisfy the statutory tax withholding requirements.

The number of performance-based RSUs that are scheduled to vest increases ratably based on the achievement of defined performance criteria between the established target and maximum levels. RSUs with performance-based vesting criteria are expected to vest as follows (number of RSUs in thousands):

Vesting Date	Expected to Vest	Not Expected to Vest	Total
January 1, 2017	192	-	192
January 1, 2018	202	-	202
January 1, 2019	213	-	213

## Phantom Stock Units

The 2007 Program authorizes the grant of phantom stock units to the extent provided for in the Company's employment agreements with certain executives. Each phantom stock unit entitles the recipient to receive a share of common stock at the individual's termination of employment or any other future date specified in the applicable employment agreement. Phantom stock units participate in dividend distribution on the same basis as the Company's common stock and Class B common stock. Dividend equivalents are issued in the form of additional units of phantom stock. The phantom stock units are fully vested at all times.

Edgar Filing: VISHAY INTERTECHNOLOGY INC - Form 10-Q

Phantom stock unit activity under the phantom stock plan as of October 1, 2016 and changes during the nine fiscal months then ended are presented below (number of phantom stock units in thousands):

	Number	Grant-date
	of units	Fair Value
		per Unit
Outstanding:		
January 1, 2016	132	
Granted	10	\$ 11.71
Dividend equivalents issued	2	
Outstanding at October 1, 2016	144	

---

27

NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Stock Options

In addition to stock options outstanding pursuant to the 2007 Program, during the periods presented, the Company had stock options outstanding under previous stockholder-approved stock option programs. These programs are more fully described in Note 12 to the Company's consolidated financial statements included in its Annual Report on Form 10-K for the year ended December 31, 2015. No additional options may be granted pursuant to these programs.

At December 31, 2015 and October 1, 2016, there were 105,000 options outstanding with a weighted average exercise price of \$15.38. At October 1, 2016, the weighted average remaining contractual life of all outstanding options was 0.58 years.

At October 1, 2016, there were no unvested options outstanding.

The pretax aggregate intrinsic value (the difference between the closing stock price on the last trading day of the third fiscal quarter of 2016 of \$14.09 per share and the exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their options on October 1, 2016 was \$33. This amount changes based on changes in the market value of the Company's common stock. During the nine fiscal months ended October 1, 2016, no options were exercised.

28

---

NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 11 – Segment Information

Vishay is a global manufacturer and supplier of electronic components. Vishay operates, and its chief operating decision maker makes strategic and operating decisions with regards to assessing performance and allocating resources based on, five reporting segments: MOSFETs, Diodes, Optoelectronic Components, Resistors & Inductors, and Capacitors. These segments represent groupings of product lines based on their functionality:

Metal oxide semiconductor field-effect transistors ("MOSFETs") function as solid-state switches to control power. Diodes route, regulate, and block radio frequency, analog, and power signals; protect systems from surges or electrostatic discharge damage; or provide electromagnetic interference filtering.

Optoelectronic components emit light, detect light, or do both.

Resistors and inductors both impede electric current. Resistors are basic components used in all forms of electronic circuitry to adjust and regulate levels of voltage and current. Inductors use an internal magnetic field to change alternating current phase and resist alternating current.

Capacitors store energy and discharge it when needed.

Vishay's reporting segments generate substantially all of their revenue from product sales to the industrial, automotive, telecommunications, computing, consumer products, power supplies, military and aerospace, and medical end markets. A small portion of revenues are from royalties.

The Company evaluates business segment performance on operating income, exclusive of certain items ("segment operating income"). Only dedicated, direct selling, general, and administrative expenses of the segments are included in the calculation of segment operating income. The Company's calculation of segment operating income excludes such selling, general, and administrative costs as global operations, sales and marketing, information systems, finance and administration groups, as well as restructuring and severance costs, goodwill and long-lived asset impairment charges, and other items. Management believes that evaluating segment performance excluding such items is meaningful because it provides insight with respect to intrinsic operating results of the Company. These items represent reconciling items between segment operating income and consolidated operating income. Business segment assets are the owned or allocated assets used by each business.

The Company also regularly evaluates gross profit by segment to assist in the analysis of consolidated gross profit. The Company considers segment operating income to be the more important metric because it more fully captures the business operations of the segments.

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

The following tables set forth business segment information:

	MOSFETs	Diodes	Optoelectronic Components	Resistors & Inductors	Capacitors	Total	
<u>Fiscal quarter ended October 1, 2016:</u>							
Product Sales	\$ 101,687	\$ 141,127	\$ 72,801	\$ 191,989	\$ 84,299	\$ 591,903	
Royalty Revenues	-	-	-	52	-	\$ 52	
Total Revenue	\$ 101,687	\$ 141,127	\$ 72,801	\$ 192,041	\$ 84,299	\$ 591,955	
Gross Profit	\$ 16,443	\$ 36,444	\$ 24,250	\$ 58,768	\$ 17,996	\$ 153,901	
Segment Operating Income	\$ 7,493	\$ 31,832	\$ 20,340	\$ 51,861	\$ 13,210	\$ 124,736	
<u>Fiscal quarter ended October 3, 2015:</u>							
Product Sales	\$ 109,446	\$ 123,922	\$ 70,008	\$ 172,995	\$ 83,547	\$ 559,918	
Royalty Revenues	-	-	-	736	-	\$ 736	
Total Revenue	\$ 109,446	\$ 123,922	\$ 70,008	\$ 173,731	\$ 83,547	\$ 560,654	
Gross Profit	\$ 16,795	\$ 27,508	\$ 22,969	\$ 49,843	\$ 13,029	\$ 130,144	
Segment Operating Income	\$ 6,839	\$ 21,628	\$ 17,673	\$ 41,404	\$ 7,618	\$ 95,162	
<u>Nine fiscal months ended October 1, 2016:</u>							
Product Sales	\$ 304,839	\$ 418,629	\$ 203,635	\$ 568,122	\$ 257,175	\$ 1,752,400	
Royalty Revenues	-	-	-	212	-	\$ 212	
Total Revenue	\$ 304,839	\$ 418,629	\$ 203,635	\$ 568,334	\$ 257,175	\$ 1,752,612	
Gross Profit	\$ 40,914	\$ 106,364	\$ 65,049	\$ 171,808	\$ 53,203	\$ 437,338	
Segment Operating Income	\$ 12,671	\$ 90,025	\$ 49,838	\$ 147,315	\$ 37,145	\$ 336,994	
<u>Nine fiscal months ended October 3, 2015:</u>							
Product Sales	\$ 322,553	\$ 399,155	\$ 211,610	\$ 538,173	\$ 270,474	\$ 1,741,965	
Royalty Revenues	11	-	-	2,584	-	\$ 2,595	
Total Revenue	\$ 322,564	\$ 399,155	\$ 211,610	\$ 540,757	\$ 270,474	\$ 1,744,560	
Gross Profit	\$ 45,261	\$ 88,998	\$ 69,483	\$ 162,034	\$ 50,888	\$ 416,664	
Segment Operating Income	\$ 16,506	\$ 70,641	\$ 53,923	\$ 135,399	\$ 33,968	\$ 310,437	
Reconciliation:							
Segment Operating Income				Fiscal quarters ended October 1, 2016	October 3, 2015	Nine fiscal months ended October 1, 2016	October 3, 2015
				\$ 124,736	\$ 95,162	\$ 336,994	\$ 310,437

Edgar Filing: VISHAY INTERTECHNOLOGY INC - Form 10-Q

Restructuring and Severance Costs	(1,197 )	(2,324 )	(12,139 )	(9,394 )
Impairment of intangible assets	(1,559 )	(57,600)	(1,559 )	(57,600 )
Impairment of goodwill	-	(5,380 )	-	(5,380 )
Unallocated Selling, General, and Administrative Expenses	(64,751 )	(54,013)	(176,111)	(170,490)
Consolidated Operating Income	\$57,229	\$(24,155)	\$147,185	\$67,573
Unallocated Other Income (Expense)	(6,545 )	(8,787 )	(11,649 )	(17,264 )
Consolidated Income (Loss) Before Taxes	\$50,684	\$(32,942)	\$135,536	\$50,309

30

---

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 12 – Earnings Per Share

The following table sets forth the computation of basic and diluted earnings (loss) per share attributable to Vishay stockholders (shares in thousands):

	Fiscal quarters ended		Nine fiscal months ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Numerator:				
Numerator for basic earnings (loss) per share:				
Net earnings (loss) attributable to Vishay stockholders	\$36,440	\$(27,666 )	\$97,540	\$29,301
Interest savings assuming conversion of dilutive convertible and exchangeable notes, net of tax	-	-	38	50
Numerator for diluted earnings (loss) per share:				
Net earnings (loss) attributable to Vishay stockholders - diluted	\$36,440	\$(27,666 )	\$97,578	\$29,351
Denominator:				
Denominator for basic earnings (loss) per share:				
Weighted average shares	146,781	147,570	147,327	147,570
Outstanding phantom stock units	143	131	143	130
Adjusted weighted average shares	146,924	147,701	147,470	147,700
Effect of dilutive securities:				
Convertible and exchangeable debt instruments	2,541	-	2,387	3,692
Restricted stock units	423	-	266	213
Other	6	-	2	2
Dilutive potential common shares	2,970	-	2,655	3,907
Denominator for diluted earnings (loss) per share:				
Adjusted weighted average shares - diluted	149,894	147,701	150,125	151,607
Basic earnings (loss) per share attributable to Vishay stockholders	\$0.25	\$(0.19 )	\$0.66	\$0.20
Diluted earnings (loss) per share attributable to Vishay stockholders	\$0.24	\$(0.19 )	\$0.65	\$0.19

31

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Diluted earnings (loss) per share for the periods presented do not reflect the following weighted average potential common shares that would have an antidilutive effect or have unsatisfied performance conditions (in thousands):

	Fiscal quarters ended		Nine fiscal months ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Convertible and exchangeable notes:				
Convertible Senior Debentures, due 2040	-	20,364	13,750	13,537
Convertible Senior Debentures, due 2041	8,268	8,106	8,229	8,063
Convertible Senior Debentures, due 2042	-	13,060	-	4,353
Exchangeable Unsecured Notes, due 2102	-	2,512	-	-
Weighted average employee stock options	77	105	96	96
Weighted average other	415	1,059	545	768

In periods in which they are dilutive, if the potential common shares related to the exchangeable notes are included in the computation, the related interest savings, net of tax, assuming conversion/exchange is added to the net earnings used to compute earnings per share.

The Company's convertible debt instruments are only convertible for specified periods upon the occurrence of certain events. None of the conversion criteria were met for the periods presented. In periods that the debentures are not convertible, the certain conditions which could trigger conversion of the remaining debentures have been deemed to be non-substantive, and accordingly, the Company assumes the conversion of these instruments in its diluted earnings per share computation during periods in which they are dilutive.

At the direction of its Board of Directors, the Company intends, upon conversion, to repay the principal amounts of the convertible senior debentures, due 2040, due 2041, and due 2042, in cash and settle any additional amounts in shares of Vishay common stock. Accordingly, the debentures are included in the diluted earnings per share computation using the "treasury stock method" (similar to options and warrants) rather than the "if converted method" otherwise required for convertible debt. Under the "treasury stock method," Vishay calculates the number of shares issuable under the terms of the debentures based on the average market price of Vishay common stock during the period, and that number is included in the total diluted shares figure for the period. If the average market price is less than \$13.19, no shares are included in the diluted earnings per share computation for the convertible senior debentures due 2040, if the average market price is less than \$18.08, no shares are included in the diluted earnings per share computation for the convertible senior debentures due 2041, and if the average market price is less than \$11.22, no shares are included in the diluted earnings per share computation for the convertible senior debentures due 2042.

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 13 – Fair Value Measurements

The fair value measurement accounting guidance establishes a valuation hierarchy of the inputs used to measure fair value. This hierarchy prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The following is a brief description of those three levels:

Level 1: Observable inputs such as quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: Inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active.

Level 3: Unobservable inputs that reflect the Company's own assumptions.

An asset or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement. There have been no changes in the classification of any financial instruments within the fair value hierarchy in the periods presented.

The following table provides the financial assets and liabilities carried at fair value measured on a recurring basis:

	Total Fair Value	Level 1	Level 2	Level 3
<u>October 1, 2016:</u>				
<u>Assets:</u>				
Assets held in rabbi trusts	\$42,178	\$27,663	\$14,515	\$-
Available for sale securities	\$4,280	4,280	-	-
	\$46,458	\$31,943	\$14,515	\$-
<u>Liabilities:</u>				
Embedded derivative - convertible debentures due 2040	\$(426 )	\$-	\$-	\$(426 )
Embedded derivative - convertible debentures due 2041	\$(302 )	-	-	(302 )
Embedded derivative - convertible debentures due 2042	\$(200 )	-	-	(200 )
	\$(928 )	\$-	\$-	\$(928 )
<u>December 31, 2015:</u>				
<u>Assets:</u>				
Assets held in rabbi trusts	\$39,849	\$25,906	13,943	\$-
Available for sale securities	\$3,604	3,604	-	-
	\$43,453	\$29,510	\$13,943	\$-
<u>Liabilities:</u>				
Embedded derivative - convertible debentures due 2040	\$(576 )	\$-	\$-	\$(576 )
Embedded derivative - convertible debentures due 2041	\$(438 )	-	-	(438 )
Embedded derivative - convertible debentures due 2042	\$(302 )	-	-	(302 )
	\$(1,316 )	\$-	\$-	\$(1,316 )

In accordance with ASC Subtopic 350-20, and as described in Note 3, the Company performed a nonrecurring fair value measurement of its indefinite-lived Siliconix tradenames. As a result of the fair value measurement, the Siliconix tradenames with a carrying value of \$20,359 were written down to their fair value of \$18,800, resulting in an impairment charge of \$1,559, recorded in the accompanying consolidated condensed statements of operations for the

fiscal quarter and nine fiscal months ended October 1, 2016.

The Company's nonrecurring fair value measurement of its Siliconix tradenames is considered a Level 3 measurement. See Note 3 for further information on the measurements and inputs.

The Company maintains non-qualified trusts, referred to as "rabbi" trusts, to fund payments under deferred compensation and non-qualified pension plans. Rabbi trust assets consist primarily of marketable securities, classified as available-for-sale and company-owned life insurance assets. The marketable securities held in the rabbi trusts are valued using quoted market prices on the last business day of the period. The company-owned life insurance assets are valued in consultation with the Company's insurance brokers using the value of underlying assets of the insurance contracts. The fair value measurement of the marketable securities held in the rabbi trust is considered a Level 1 measurement and the measurement of the company-owned life insurance assets is considered a Level 2 measurement within the fair value hierarchy.

33

---

NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

The Company holds available for sale investments in debt securities that are intended to fund a portion of its pension and other postretirement benefit obligations outside of the United States. The investments are valued based on quoted market prices on the last business day of the year. The fair value measurement of the investments is considered a Level 1 measurement within the fair value hierarchy.

The convertible senior debentures, due 2040, due 2041, and due 2042, issued by the Company on November 9, 2010, May 13, 2011, and May 31, 2012, respectively, contain embedded derivative features that GAAP requires to be bifurcated and remeasured each reporting period. Each quarter, the change in the fair value of the embedded derivative features, if any, is recorded in the consolidated condensed statements of operations. The Company uses a derivative valuation model to derive the value of the embedded derivative features. Key inputs into this valuation model are the Company's current stock price, risk-free interest rates, the stock dividend yield, the stock volatility, and the debentures' credit spread over LIBOR. The first three aforementioned inputs are based on observable market data and are considered Level 2 inputs while the last two aforementioned inputs are unobservable and thus require management's judgment and are considered Level 3 inputs. The fair value measurement is considered a Level 3 measurement within the fair value hierarchy.

The Company enters into forward contracts with highly-rated financial institutions to mitigate the foreign currency risk associated with intercompany loans denominated in a currency other than the legal entity's functional currency. The notional amount of the forward contracts was \$121,130 and \$29,000 as of October 1, 2016 and December 31, 2015, respectively. The forward contracts are short-term in nature and are expected to be renewed at the Company's discretion until the intercompany loans are repaid. We have not designated the forward contracts as hedges for accounting purposes, and as such the change in the fair value of the contracts is recognized in the consolidated condensed statements of operations as a component of other income (expense). The Company estimates the fair value of the forward contracts based on applicable and commonly used pricing models using current market information and is considered a Level 2 measurement within the fair value hierarchy. The value of the forward contracts was immaterial as of October 1, 2016. The Company does not utilize derivatives or other financial instruments for trading or other speculative purposes.

The fair value of the long-term debt, excluding the derivative liabilities and deferred financing costs, at October 1, 2016 and December 31, 2015 is approximately \$785,400 and \$756,900, respectively, compared to its carrying value, excluding the derivative liabilities and deferred financing costs, of \$371,864 and \$448,080, respectively. The Company estimates the fair value of its long-term debt using a combination of quoted market prices for similar financing arrangements and expected future payments discounted at risk-adjusted rates, which are considered Level 2 inputs.

At October 1, 2016 and December 31, 2015, the Company's short-term investments were comprised of time deposits with financial institutions that have maturities that exceed 90 days from the date of acquisition; however they all mature within one year from the respective balance sheet dates. The Company's short-term investments are accounted for as held-to-maturity debt instruments, at amortized cost, which approximates their fair value. The investments are funded with excess cash not expected to be needed for operations prior to maturity; therefore, the Company believes it has the intent and ability to hold the short-term investments until maturity. At each reporting date, the Company performs an evaluation to determine if any unrealized losses are other-than-temporary. No other-than-temporary impairments have been recognized on these securities, and there are no unrecognized holding gains or losses for these securities during the periods presented. There have been no transfers to or from the held-to-maturity classification. All decreases in the account balance are due to returns of principal at the securities' maturity dates. Interest on the securities is recognized as interest income when earned.

At October 1, 2016 and December 31, 2015, the Company's cash and cash equivalents were comprised of demand deposits, time deposits with maturities of three months or less when purchased, and money market funds. The Company estimates the fair value of its cash, cash equivalents, and short-term investments using level 2 inputs. Based on the current interest rates for similar investments with comparable credit risk and time to maturity, the fair value of the Company's cash, cash equivalents, and held-to-maturity short-term investments approximate the carrying amounts reported in the consolidated condensed balance sheets.

The Company's financial instruments also include accounts receivable, short-term notes payable, and accounts payable. The carrying amounts for these financial instruments reported in the consolidated condensed balance sheets approximate their fair values.

34

---

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

Overview

Vishay Intertechnology, Inc. ("Vishay," "we," "us," or "our") is a global manufacturer and supplier of discrete semiconductors and passive components, including power MOSFETs, power integrated circuits, transistors, diodes, optoelectronic components, resistors, capacitors, and inductors. Discrete semiconductors and passive components manufactured by Vishay are used in virtually all types of electronic products, including those in the industrial, computing, automotive, consumer electronic products, telecommunications, power supplies, military/aerospace, and medical industries.

We operate in five product segments: MOSFETs; Diodes; Optoelectronic Components; Resistors & Inductors; and Capacitors.

Since 1985, we have pursued a business strategy of growth through focused research and development and acquisitions. Through this strategy, we have grown to become one of the world's largest manufacturers of discrete semiconductors and passive components. We expect to continue our strategy of acquisitions while also maintaining a prudent capital structure.

We are focused on enhancing stockholder value and improving earnings per share. In addition to our growth plan, we also have opportunistically repurchased our stock. In 2014, our Board of Directors instituted a quarterly dividend payment program and declared the first cash dividend in the history of Vishay. In December 2015, we amended our credit facility to increase our ability to repurchase shares of stock or pay cash dividends. On May 2, 2016, our Board of Directors approved a stock repurchase plan, authorizing us to repurchase, in the aggregate, up to \$100 million of our outstanding common stock. The stock repurchase plan will expire on May 2, 2017. The stock repurchase plan does not obligate us to acquire any particular amount of common stock, and it may be terminated or suspended at the Company's direction in accordance with the plan. The Company repurchased 1,309,855 shares of stock for \$17.0 million since the inception of the plan. We will continue to evaluate attractive stock repurchase opportunities.

As part of the amendment and restatement of the revolving credit facility in December 2015, we completed an evaluation of our anticipated domestic cash needs over the next several years and our most efficient use of liquidity, with consideration of the amount of cash that can be repatriated to the U.S. efficiently with lesser withholding taxes in foreign jurisdictions. As a result of that evaluation, during the fourth quarter of 2015, we recognized income tax expense of \$164.0 million, including U.S. federal and state income taxes, incremental foreign income taxes, and withholding taxes payable to foreign jurisdictions, on \$300 million of foreign earnings which we expect to repatriate to the U.S. over the next several years.

Our business and operating results have been and will continue to be impacted by worldwide economic conditions. Our revenues are dependent on end markets that are impacted by consumer and industrial demand, and our operating results can be adversely affected by reduced demand in those global markets. For several years, we implemented aggressive cost reduction programs. We continue to monitor the current economic environment and its potential effects on our customers and the end markets that we serve. Additionally, we continue to closely monitor our costs, inventory, and capital resources to respond to changing conditions and to ensure we have the management, business processes, and resources to meet our future needs. In the first fiscal quarter of 2016, we substantially completed the implementation of targeted cost reduction programs that began in the fourth fiscal quarter of 2013. The cost reduction programs initiated in 2015 continue as planned. As a result of a review of recent financial results and outlook for our MOSFETs segment following the recent completion of production transfers, we determined to implement further cost reductions for the MOSFETs segment. In November 2016, we announced an extension of the MOSFETs Enhanced Competitiveness Program. Our cost reduction programs are more fully described in Note 4 to the consolidated condensed financial statements included in Item 1, and in "Cost Management" below. See additional information

regarding our competitive strengths and key challenges as disclosed in Part 1 of our Annual Report on Form 10-K for the year ended December 31, 2015, filed with the Securities and Exchange Commission (the "SEC") on February 17, 2016.

We recorded noncash intangible asset impairment charges of \$1.6 million and \$57.6 million in the third fiscal quarters of 2016 and 2015, respectively, and a noncash goodwill impairment charge of \$5.4 million in the third fiscal quarter of 2015. The goodwill and intangible assets impairment tests are more fully described in Note 3 to the consolidated condensed financial statements included in Item 1 and Note 3 to our consolidated financial statements included in its Annual Report on Form 10-K for the year ended December 31, 2015, filed with the Securities and Exchange Commission (the "SEC") on February 17, 2016.

On August 12, 2015, a major explosion occurred in the port of Tianjin, China. We own and operate a diodes manufacturing facility in Tianjin near the port. The shockwave of the explosion resulted in some damage to the facility and caused a temporary shutdown. As more fully described in Note 7 to our consolidated condensed financial statements included in Item 1, we recorded a loss of \$5.4 million related to this incident in the third fiscal quarter of 2015. The temporary shutdown adversely impacted revenues and margins of our Diodes segment (and total Vishay) for the third fiscal quarter of 2015. We received payments totaling \$3.3 million, primarily related to our inventory damage claim, in 2016. Our property damage and business interruption insurance claims remain open and continue as expected.

35

---

We utilize several financial metrics, including net revenues, gross profit margin, segment operating income, end-of-period backlog, book-to-bill ratio, inventory turnover, change in average selling prices, net cash and short-term investments (debt), and free cash generation to evaluate the performance and assess the future direction of our business. (See further discussion in "Financial Metrics" and "Financial Condition, Liquidity, and Capital Resources.") The recovery in our business that began in the first fiscal quarter of 2016 continued in the third fiscal quarter. Net revenues in the third fiscal quarter of 2016 increased versus the prior year and prior fiscal quarters. The continued recovery in orders resulted in an increase in key financial metrics compared to the prior fiscal quarters and the third fiscal quarter of 2015.

Net revenues for the fiscal quarter ended October 1, 2016 were \$592.0 million, compared to \$560.7 million for the fiscal quarter ended October 3, 2015. The net earnings attributable to Vishay stockholders for the fiscal quarter ended October 1, 2016 were \$36.4 million, or \$0.24 per diluted share, compared to net loss attributable to Vishay stockholders of \$(27.7) million, or \$(0.19) per share for the fiscal quarter ended October 3, 2015.

Net revenues for the nine fiscal months ended October 1, 2016 were \$1,752.6 million, compared to \$1,744.6 million for the nine fiscal months ended October 3, 2015. The net earnings attributable to Vishay stockholders for the nine fiscal months ended October 1, 2016 were \$97.5 million, or \$0.65 per diluted share, compared to \$29.3 million, or \$0.19 per diluted share for the nine fiscal months ended October 3, 2015.

We define adjusted net earnings as net earnings determined in accordance with GAAP adjusted for various items that management believes are not indicative of the intrinsic operating performance of our business. We define free cash as the cash flows generated from continuing operations less capital expenditures plus net proceeds from the sale of property and equipment. The reconciliations below include certain financial measures which are not recognized in accordance with GAAP, including adjusted net earnings, adjusted earnings per share, and free cash. These non-GAAP measures should not be viewed as alternatives to GAAP measures of performance or liquidity. Non-GAAP measures such as adjusted net earnings, adjusted earnings per share, and free cash do not have uniform definitions. These measures, as calculated by Vishay, may not be comparable to similarly titled measures used by other companies. Management believes that adjusted net earnings and adjusted earnings per share are meaningful because they provide insight with respect to our intrinsic operating results. Management believes that free cash is a meaningful measure of our ability to fund acquisitions, repay debt, and otherwise enhance stockholder value through stock repurchases or dividends.

Net earnings (loss) attributable to Vishay stockholders for the fiscal quarters and nine fiscal months ended October 1, 2016 and October 3, 2015 include items affecting comparability. The items affecting comparability are (in thousands, except per share amounts):

	Fiscal quarters ended		Nine fiscal months ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
GAAP net earnings (loss) attributable to Vishay stockholders	\$36,440	\$(27,666)	\$97,540	\$29,301
<u>Reconciling items affecting operating income (loss):</u>				
Restructuring and severance costs	\$1,197	\$2,324	\$12,139	\$9,394
Impairment of intangible assets	1,559	57,600	1,559	57,600
Impairment of goodwill	-	5,380	-	5,380
<u>Reconciling items affecting other income (expense):</u>				
Gain on early extinguishment of debt	\$-	\$-	\$(4,597)	\$-

Edgar Filing: VISHAY INTERTECHNOLOGY INC - Form 10-Q

Loss related to Tianjin explosion	-	5,350	-	5,350
<u>Reconciling items affecting tax expense:</u>				
Effects of cash repatriation program	\$(1,402 )	\$-	\$(3,388 )	\$-
Tax effects of pre-tax items above	(441 )	(16,831 )	(2,436 )	(19,327 )
Adjusted net earnings	\$37,353	\$26,157	\$100,817	\$87,698
Adjusted weighted average diluted shares outstanding	149,894	150,455	150,125	151,607
Adjusted earnings per diluted share *	\$0.25	\$0.17	\$0.67	\$0.58

\* Includes add-back of interest on exchangeable notes in periods where the notes are dilutive.

Although the term "free cash" is not defined in GAAP, each of the elements used to calculate free cash for the year-to-date period is presented as a line item on the face of our consolidated condensed statement of cash flows prepared in accordance with GAAP and the quarterly amounts are derived from the year-to-date GAAP statements as of the beginning and end of the respective quarters.

	Fiscal quarters ended		Nine fiscal months ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Net cash provided by continuing operating activities	\$117,657	\$61,207	\$212,628	\$153,569
Proceeds from sale of property and equipment	1,048	314	1,241	1,989
Less: Capital expenditures	(30,273 )	(37,217 )	(81,346 )	(86,767 )
Free cash	\$88,432	\$24,304	\$132,523	\$68,791

Our results for the fiscal quarter and nine fiscal months ended October 1, 2016 represent the effects of the continuation of a strong business environment, increasing order activity, our cost reduction programs, and our organic growth initiatives. Our percentage of euro-based sales approximates our percentage of euro-based expenses so the negative foreign currency impact on revenues from the euro was substantially offset by the positive impact on expenses. Our pre-tax results were consistent with expectations based on our business model.

37

---

## Financial Metrics

We utilize several financial metrics to evaluate the performance and assess the future direction of our business. These key financial measures and metrics include net revenues, gross profit margin, operating margin, segment operating income, end-of-period backlog, and the book-to-bill ratio. We also monitor changes in inventory turnover and our or publicly available average selling prices ("ASP").

Gross profit margin is computed as gross profit as a percentage of net revenues. Gross profit is generally net revenues less costs of products sold, but also deducts certain other period costs, particularly losses on purchase commitments and inventory write-downs. Losses on purchase commitments and inventory write-downs have the impact of reducing gross profit margin in the period of the charge, but result in improved gross profit margins in subsequent periods by reducing costs of products sold as inventory is used. Gross profit margin is clearly a function of net revenues, but also reflects our cost management programs and our ability to contain fixed costs.

Operating margin is computed as gross profit less operating expenses as a percentage of net revenues. We evaluate business segment performance on segment operating margin. Only dedicated, direct selling, general, and administrative expenses of the segments are included in the calculation of segment operating income. Segment operating margin is computed as operating income less items such as restructuring and severance costs, asset write-downs, goodwill and indefinite-lived intangible asset impairments, inventory write-downs, gains or losses on purchase commitments, global operations, sales and marketing, information systems, finance and administrative groups, and other items, expressed as a percentage of net revenues. We believe that evaluating segment performance excluding such items is meaningful because it provides insight with respect to intrinsic operating results of the segment. Operating margin is clearly a function of net revenues, but also reflects our cost management programs and our ability to contain fixed costs.

End-of-period backlog is one indicator of future revenues. We include in our backlog only open orders that we expect to ship in the next twelve months. If demand falls below customers' forecasts, or if customers do not control their inventory effectively, they may cancel or reschedule the shipments that are included in our backlog, in many instances without the payment of any penalty. Therefore, the backlog is not necessarily indicative of the results to be expected for future periods.

An important indicator of demand in our industry is the book-to-bill ratio, which is the ratio of the amount of product ordered during a period as compared with the product that we ship during that period. A book-to-bill ratio that is greater than one indicates that our backlog is building and that we are likely to see increasing revenues in future periods. Conversely, a book-to-bill ratio that is less than one is an indicator of declining demand and may foretell declining revenues.

We focus on our inventory turnover as a measure of how well we are managing our inventory. We define inventory turnover for a financial reporting period as our costs of products sold for the four fiscal quarters ending on the last day of the reporting period divided by our average inventory (computed using each fiscal quarter-end balance) for this same period. A higher level of inventory turnover reflects more efficient use of our capital.

Pricing in our industry can be volatile. We analyze trends and changes in average selling prices to evaluate likely future pricing. The erosion of average selling prices of established products is typical for semiconductor products. We attempt to offset this deterioration with ongoing cost reduction activities and new product introductions. Our specialty passive components are more resistant to average selling price erosion.

The quarter-to-quarter trends in these financial metrics can also be an important indicator of the likely direction of our business. The following table shows net revenues, gross profit margin, operating margin, end-of-period backlog, book-to-bill ratio, inventory turnover, and changes in ASP for our business as a whole during the five fiscal quarters beginning with the third fiscal quarter of 2015 through the third fiscal quarter of 2016 (dollars in thousands):

	3rd Quarter 2015	4th Quarter 2015	1st Quarter 2016	2nd Quarter 2016	3rd Quarter 2016
Net revenues	\$560,654	\$555,928	\$570,606	\$590,051	\$591,955
Gross profit margin	23.2 %	22.6 %	24.1 %	24.8 %	26.0 %
Operating margin <sup>(1)</sup>	-4.3 %	5.4 %	7.1 %	8.4 %	9.7 %
End-of-period backlog	\$535,500	\$514,500	\$571,600	\$579,800	\$608,100
Book-to-bill ratio	0.96	0.97	1.08	1.02	1.04
Inventory turnover	3.82	3.90	4.00	4.20	4.20
Change in ASP vs. prior quarter	-1.2 %	-0.7 %	-1.2 %	-0.7 %	-0.9 %

(1) Operating margin for the third and fourth fiscal quarters of 2015 and first, second, and third fiscal quarters of 2016 includes \$2.3 million, \$9.8 million, \$6.5 million, \$4.5 million, and \$1.2 million, respectively, of restructuring and severance expenses (see Note 4 to our consolidated condensed financial statements). Operating margin for the third fiscal quarters of 2016 and 2015 includes \$1.6 million and \$63.0 million, respectively, of goodwill, indefinite-lived intangible assets, and depreciable and amortizable long-lived asset impairment charges.

See "Financial Metrics by Segment" below for net revenues, book-to-bill ratio, and gross profit margin broken out by segment.

Revenues were slightly above the midpoint of our expected range and increased versus the third fiscal quarter of 2015 and slightly versus the prior fiscal quarter. The broad recovery in orders observed in the first half of 2016 continued. The continued strong order level increased the backlog and kept the book-to-bill ratio above 1.0. Our average selling prices continue to decline, although at a slower pace, primarily due to our commodity semiconductor products and the effects of growing our Resistors & Inductors business in Asia.

Gross profit margin increased versus the prior fiscal quarters and the third fiscal quarter of 2015. The increases are primarily due to volume, the effects of our cost reduction programs, manufacturing efficiencies, and lower metals and materials prices. Decreasing average selling prices continue to burden the gross profit margin. Gross profit margins for the periods prior to the second fiscal quarter of 2016 were negatively impacted by additional depreciation associated with our MOSFETs cost reduction program.

The book-to-bill ratio in the third fiscal quarter of 2016 increased to 1.04 from 1.02 in the second fiscal quarter of 2016. The book-to-bill ratios in the third fiscal quarter of 2016 for distributors and original equipment manufacturers ("OEM") were 1.10 and 0.98, respectively, versus ratios of 1.03 and 1.02, respectively, during the second fiscal quarter of 2016.

For the fourth fiscal quarter of 2016, we anticipate revenues between \$560 million and \$600 million and gross margins of 24% to 25%.

39

---

## Financial Metrics by Segment

The following table shows net revenues, book-to-bill ratio, gross profit margin, and segment operating margin broken out by segment for the five fiscal quarters beginning with the third fiscal quarter of 2015 through the third fiscal quarter of 2016 (dollars in thousands):

	3rd Quarter 2015	4th Quarter 2015	1st Quarter 2016	2nd Quarter 2016	3rd Quarter 2016
<b><u>MOSFETs</u></b>					
Net revenues	\$109,446	\$104,119	\$100,933	\$102,219	\$101,687
Book-to-bill ratio	0.91	0.90	1.14	0.94	1.03
Gross profit margin	15.3 %	12.8 %	12.5 %	11.6 %	16.2 %
Segment operating margin	6.2 %	4.7 %	2.6 %	2.5 %	7.4 %
<b><u>Diodes</u></b>					
Net revenues	\$123,922	\$134,776	\$135,384	\$142,118	\$141,127
Book-to-bill ratio	1.05	0.97	1.05	1.02	1.06
Gross profit margin	22.2 %	22.8 %	24.1 %	26.2 %	25.8 %
Segment operating margin	17.5 %	18.7 %	19.7 %	22.2 %	22.6 %
<b><u>Optoelectronic Components</u></b>					
Net revenues	\$70,008	\$67,943	\$62,775	\$68,059	\$72,801
Book-to-bill ratio	0.95	0.91	1.09	1.15	0.98
Gross profit margin	32.8 %	28.2 %	30.6 %	31.8 %	33.3 %
Segment operating margin	25.2 %	21.3 %	21.8 %	23.3 %	27.9 %
<b><u>Resistors &amp; Inductors</u></b>					
Net revenues	\$173,731	\$166,664	\$183,494	\$192,799	\$192,041
Book-to-bill ratio	0.95	1.03	1.10	1.02	0.99
Gross profit margin	28.7 %	27.8 %	30.4 %	29.7 %	30.6 %
Segment operating margin	23.8 %	23.0 %	25.6 %	25.2 %	27.0 %
<b><u>Capacitors</u></b>					
Net revenues	\$83,547	\$82,426	\$88,020	\$84,856	\$84,299
Book-to-bill ratio	0.93	0.99	1.01	1.03	1.20

Edgar Filing: VISHAY INTERTECHNOLOGY INC - Form 10-Q

Gross profit margin	15.6	%	19.3	%	19.4	%	21.3	%	21.3	%
Segment operating margin	9.1	%	13.2	%	12.8	%	14.9	%	15.7	%

40

---

## Acquisition Activity

As part of our growth strategy, we seek to expand through targeted acquisitions of other manufacturers of electronic components that have established positions in major markets, reputations for product quality and reliability, and product lines with which we have substantial marketing and technical expertise. This includes exploring opportunities to acquire targets to gain market share, penetrate different geographic markets, enhance new product development, round out our existing product lines, or grow our high margin niche market businesses. Acquisitions of passive components businesses would likely be made to strengthen and broaden our position as a specialty product supplier; acquisitions of discrete semiconductor businesses would be made to increase market share and to generate synergies. To limit our financial exposure, we have implemented a policy not to pursue acquisitions if our post-acquisition debt would exceed 2.5x our pro forma earnings before interest, taxes, depreciation, and amortization ("EBITDA"). For these purposes, we calculate pro forma EBITDA as the adjusted EBITDA of Vishay and the target for Vishay's four preceding fiscal quarters, with a pro forma adjustment for savings which management estimates would have been achieved had the target been acquired by Vishay at the beginning of the four fiscal quarter period.

Our growth plan targets adding, through acquisitions, an average of approximately \$100 million of revenues per year. Depending on the opportunities available, we might make several smaller acquisitions or a few larger acquisitions. We intend to make such acquisitions using mainly cash, rather than debt or equity, although we do have capacity on our revolving credit facility if necessary. We are not currently targeting acquisitions with a purchase price larger than \$500 million.

In the fourth fiscal quarter of 2015, we deposited the \$6.8 million purchase price of Sonntag Electronic GmbH ("Sonntag"). The acquisition was effective January 1, 2016. Sonntag is a distributor of electronic components in Germany.

There is no assurance that we will be able to identify and acquire suitable acquisition candidates at price levels and on terms and conditions we consider acceptable.

41

---

## Cost Management

We place a strong emphasis on controlling our costs, and use various measures and metrics to evaluate our cost structure.

We define variable costs as expenses that vary with respect to quantity produced. Fixed costs do not vary with respect to quantity produced over the relevant time period. Contributive margin is calculated as net revenue less variable costs. It may be expressed in dollars or as a percentage of net revenue. Management uses this measure to determine the amount of profit to be expected for any change in revenues. While these measures are typical cost accounting measures, none of these measures are recognized in accordance with GAAP. The classification of expenses as either variable or fixed is judgemental and other companies might classify such expenses differently. These measures, as calculated by Vishay, may not be comparable to similarly titled measures used by other companies.

We closely monitor variable costs and seek to achieve the contributive margin in our business model. Over a period of many years, we have generally maintained a contributive margin of between 45% - 47% of revenues. The erosion of average selling prices, particularly of our semiconductor products, that is typical of our industry and inflation negatively impact contributive margin and drive us to continually seek ways to reduce our variable costs. Our variable cost reduction efforts include increasing the efficiency in our production facilities by expending capital for automation, reducing materials costs, materials substitution, increasing wafer size and shrinking dies to maximize efficiency in our semiconductor production processes, and other yield improvement activities.

Our cost management strategy also includes a focus on controlling fixed costs recorded as costs of products sold or selling, general, and administrative expenses and maintaining our break-even point (adjusted for acquisitions). We seek to limit increases in selling, general, and administrative expenses to the rate of inflation, excluding foreign currency exchange effects and substantially independent of sales volume changes. At constant fixed costs, we would expect each \$1 million increase in revenues to increase our operating income by approximately \$450,000 to \$470,000. Sudden changes in the business conditions, however, may not allow us to quickly adapt our manufacturing capacity and cost structure.

Occasionally, our ongoing cost containment activities are not adequate and we must take actions to maintain our cost competitiveness. We incurred significant restructuring expenses in our past to reduce our cost structure. Historically, our primary cost reduction technique was through the transfer of production to the extent possible from high-labor-cost countries to lower-labor-cost countries. We believe that our manufacturing footprint is suitable to serve our customers and end markets, while maintaining lower manufacturing costs. Since 2013, our cost reduction programs have primarily focused on reducing fixed costs, including selling, general, and administrative expenses.

In the fourth fiscal quarter of 2013, we announced various cost reduction programs as part of our continuous efforts to improve efficiency and operating performance. We recorded \$0.2 million of restructuring and severance expenses in the third fiscal quarter of 2016 for the expenses that were recognizable under GAAP during the period and \$34.4 million of restructuring and severance expenses since these cost reduction programs were implemented.

The programs initiated in 2013 primarily focused on a plan to enhance the competitiveness of our MOSFETs segment and a voluntary separation / early retirement offer to certain employees Company-wide. We also implemented two other smaller cost reduction programs concerning the manufacturing of products within our Diodes segment. The programs in total were expected to lower costs by approximately \$36 million per year.

The voluntary separation / early retirement offer was made to employees worldwide who were eligible because they met job classification, age, and/or years-of-service criteria as of October 31, 2013. The program was substantially completed in 2014.

The total costs associated with the voluntary separation / early retirement program were approximately \$13.4 million. We will realize an annual reduction in fixed costs of approximately \$10 million, split approximately 35% in manufacturing and 65% in selling, general, and administrative expenses.

Two other smaller cost reduction programs relate to the transfer of production of certain products within our Diodes segment, which were initiated in the third fiscal quarter of 2014. Both programs are connected to production moves, in order to take advantage of lower labor costs in one program and from the consolidation of manufacturing locations in the other. We will realize annual cost savings of approximately \$3 million.

We completed the initially planned production transfer as part of the MOSFETs Enhanced Competitiveness Program in the first fiscal quarter of 2016. The production transfer occurred over a period of approximately two years. The manufacture of wafers for certain critical products has been transferred into a more cost-efficient fab. As a consequence, certain other wafer manufacturing previously occurring in-house has been transferred to third-party foundries. We have incurred and may continue to incur other exit costs associated with the production transfer, including certain contract termination costs.

The initially-planned production transfer achieved the expected improvement in contributive margin percentage and fixed cost reduction; however, as a result of a decrease in net revenues since the plan was first initiated, gross margin for the MOSFETs segment remains below 20%.

As a result of a review of recent financial results and outlook for our MOSFETs segment following the recent completion of production transfers, we determined to implement further cost reductions for the MOSFETs segment.

On November 7, 2016, we announced an extension of the MOSFETs Enhanced Competitiveness Program. The extended program includes various cost reduction initiatives, primarily the transfer of all remaining manufacturing operations at our Santa Clara, California facility to other Vishay facilities or third-party subcontractors.

The production transfers will be completed in steps by the end of 2017. We expect to incur cash charges of approximately \$4 million to \$8 million, primarily related to severance, to implement these steps. We expect to realize savings of approximately \$7 million to \$10 million as a result of these initiatives. We expect to maintain our R&D and management presence in the Silicon Valley area, even after the cessation of manufacturing operations there.

Programs were also initiated in 2015. The programs initiated in 2015 include a plan to reduce selling, general, and administrative costs company-wide, and targeted streamlining and consolidation of production for certain product lines within our Capacitors and Resistors & Inductors segments. The programs in total are expected to lower costs by approximately \$35 million annually (at current volumes) when fully implemented, at expected cash costs of approximately \$30 million. The implementation of these programs will not impact planned R&D activities, or our growth initiatives in Asian markets. We recorded \$1.0 million of restructuring and severance expenses in the third fiscal quarter of 2016 for expenses that were recognizable under GAAP during the period and \$20.7 million of restructuring and severance expenses since these programs were initiated. The remaining expenses associated with these programs will be recorded as they become recognizable under GAAP.

The programs announced in 2015 are expected to reduce selling, general, and administrative costs by approximately \$17 million annually. These selling, general, and administrative cost reductions should be fully achieved by the end of 2016. We are first soliciting volunteers to accept a voluntary separation / early retirement offer. The voluntary separation benefits vary by country and job classification, but generally offer a cash loyalty bonus. Additional involuntary terminations will likely be necessary to achieve the cost reduction targets.

The targeted plans to streamline and consolidate production of certain product lines are expected to decrease costs of products sold by approximately \$18 million annually (at current volumes). These plans include the Zwolle, Netherlands aluminum capacitors facility closure announced on June 30, 2015.

Except for the Zwolle and Santa Clara facilities described above, no other facility closures are currently expected pursuant to these programs.

Except for the distinct and targeted programs noted above, we do not anticipate any other material restructuring activities in 2016 or 2017. We believe that we can substantially maintain our trained workforce, even at lower manufacturing activity levels, by reducing hours and limiting the use of subcontractors and foundries. However, a continued sluggish business environment for the electronics industry or the recurrence of a significant economic downturn may require us to implement additional restructuring initiatives.

Our long-term strategy includes growth through the integration of acquired businesses, and GAAP requires plant closure and employee termination costs that we incur in connection with our acquisition activities to be recorded as expenses in our consolidated statement of operations, as such expenses are incurred. We have not incurred any material plant closure or employee termination costs related to any of the businesses acquired since 2011, but we expect to have some level of future restructuring expenses due to acquisitions.

Even as we seek to manage our costs, we continue to pursue our growth plans through investing in capacities for strategic product lines, and through increasing our resources for R&D, technical marketing, and field application engineering; supplemented by opportunistic acquisitions of specialty businesses.

43

---

## Pension and Other Postretirement Benefits

As more fully described in our Annual Report on Form 10-K for the year ended December 31, 2015 filed with the SEC on February 17, 2016, we continue to seek to de-risk our pension exposures, especially given the frozen status of the U.S. plans and the current funded status. Such actions could result in increased net periodic pension cost due to lower expected rates of return on plan assets and/or possible additional charges to recognize unamortized actuarial items if all or a portion of the obligations were to be settled.

In the second fiscal quarter of 2015, we began the process of terminating the Vishay Retirement Plan, our U.S. qualified pension plan. Plan participants will not be adversely affected by the plan termination, but rather will have their benefits either converted into a lump sum cash payment or an annuity contract placed with an insurance carrier.

The completion of this proposed termination and settlement was contingent upon the receipt of a favorable determination letter from the Internal Revenue Service ("IRS") and meeting certain IRS and Pension Benefit Guarantee Corporation ("PBGC") requirements. During the third fiscal quarter of 2016, we received a favorable determination letter from the IRS, and have met all other applicable IRS and PBGC requirements. We are in the final stages of completing the termination and settlement, which is expected to occur in December 2016. The settlement will result in a non-cash charge to recognize the unrecognized actuarial items related to the Vishay Retirement Plan recorded in accumulated other comprehensive income.

As of the last fiscal year-end measurement date (December 31, 2015), the Vishay Retirement Plan was fully-funded on a GAAP basis. In order to terminate the plan in accordance with IRS and PBGC requirements, we are required to fully fund the plan on a termination basis and will commit to contribute the additional assets necessary to do so. The amount necessary to do so is not yet known, but is currently estimated to be between zero and \$20 million.

We contributed \$17.0 million to our Taiwanese pension plans in 2016 to improve the funded status of those plans.

## Impairment of Long-Lived Assets and Indefinite-Lived Intangible Assets

See Note 3 to our consolidated condensed financial statements included in Item 1 for a description of our interim indefinite-lived intangible asset impairment test.

As a result of a review of recent financial results and outlook for the MOSFETs segment following the completion of production transfers, we determined that an interim indefinite-lived impairment test was required for our Siliconix tradenames as of the end of the third fiscal quarter of 2016.

As a result of this analysis, we determined that our Siliconix tradenames, with a carrying value of \$20.4 million, were impaired. We recorded an impairment charge of \$1.6 million to write-down the tradenames to their fair value. The tradenames are no longer considered indefinite-lived and the remaining value will be amortized over the 10 year estimated remaining useful life.

The recorded impairment charges are noncash in nature and do not affect our liquidity, cash flows from operating activities, or debt covenants, and will not have a material impact on future operations.

## Foreign Currency Translation

We are exposed to foreign currency exchange rate risks, particularly due to transactions in currencies other than the functional currencies of certain subsidiaries. We occasionally use forward exchange contracts to economically hedge a portion of these exposures.

GAAP requires that we identify the "functional currency" of each of our subsidiaries and measure all elements of the financial statements in that functional currency. A subsidiary's functional currency is the currency of the primary economic environment in which it operates. In cases where a subsidiary is relatively self-contained within a particular country, the local currency is generally deemed to be the functional currency. However, a foreign subsidiary that is a direct and integral component or extension of the parent company's operations generally would have the parent company's currency as its functional currency. We have both situations among our subsidiaries.

### Foreign Subsidiaries which use the Local Currency as the Functional Currency

We finance our operations in Europe and certain locations in Asia in local currencies, and accordingly, these subsidiaries utilize the local currency as their functional currency. For those subsidiaries where the local currency is the functional currency, assets and liabilities in the consolidated condensed balance sheets have been translated at the rate of exchange as of the balance sheet date. Translation adjustments do not impact the results of operations and are reported as a separate component of stockholders' equity.

For those subsidiaries where the local currency is the functional currency, revenues and expenses incurred in the local currency are translated at the average exchange rate for the year. While the translation of revenues and expenses incurred in the local currency into U.S. dollars does not directly impact the statements of operations, the translation effectively increases or decreases the U.S. dollar equivalent of revenues generated and expenses incurred in those foreign currencies. The dollar generally was slightly weaker during the third fiscal quarter and first nine fiscal months of 2016 compared to the prior year periods, with the translation of foreign currency revenues and expenses into U.S. dollars slightly increasing reported revenues and expenses versus the prior year periods.

### Foreign Subsidiaries which use the U.S. Dollar as the Functional Currency

Our operations in Israel and most significant locations in Asia are largely financed in U.S. dollars, and accordingly, these subsidiaries utilize the U.S. dollar as their functional currency. For those foreign subsidiaries where the U.S. dollar is the functional currency, all foreign currency financial statement amounts are remeasured into U.S. dollars. Exchange gains and losses arising from remeasurement of foreign currency-denominated monetary assets and liabilities are included in the results of operations. While these subsidiaries transact most business in U.S. dollars, they may have significant costs, particularly payroll-related, which are incurred in the local currency. The cost of products sold and selling, general, and administrative expense for the third fiscal quarter and first nine fiscal months of 2016 have been favorably impacted (compared to the prior year periods) by local currency transactions of subsidiaries which use the U.S. dollar as their functional currency.

We enter into forward contracts with a highly-rated financial institution to mitigate the foreign currency risk associated with intercompany loans denominated in a currency other than the legal entity's functional currency. The notional amount of the forward contracts was \$121.1 million as of October 1, 2016. The forward contracts are short-term in nature and are expected to be renewed at our discretion until the intercompany loans are repaid. The forward contracts are carried at fair value in our consolidated condensed balance sheets. We have not designated the forward contracts as hedges for accounting purposes, and as such the change in the fair value of the contracts is recognized in our consolidated condensed statements of operations as a component of other income (expense). We do not utilize derivatives or other financial instruments for trading or other speculative purposes.



## Results of Operations

Statements of operations' captions as a percentage of net revenues and the effective tax rates were as follows:

	Fiscal quarters ended		Nine fiscal months ended		
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015	
Cost of products sold	74.0%	76.8 %	75.0%	76.1 %	
Gross profit	26.0%	23.2 %	25.0%	23.9 %	
Selling, general & administrative expenses	15.9%	15.9 %	15.8%	15.9 %	
Operating income (loss)	9.7 %	-4.3 %	8.4 %	3.9 %	
Income (loss) before taxes and noncontrolling interest	8.6 %	-5.9 %	7.7 %	2.9 %	
Net earnings (loss) attributable to Vishay stockholders	6.2 %	-4.9 %	5.6 %	1.7 %	
<hr/> Effective tax rate	27.8%	16.4 %	27.7%	40.6 %	

## Net Revenues

Net revenues were as follows (dollars in thousands):

	Fiscal quarters ended		Nine fiscal months ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Net revenues	\$591,955	\$560,654	\$1,752,612	\$1,744,560
Change versus comparable prior year period	\$31,301		\$8,052	
Percentage change versus comparable prior year period	5.6 %		0.5 %	

Changes in net revenues were attributable to the following:

	vs. Prior Year		vs. Prior Year-to-Date	
	Quarter		Year-to-Date	
Change attributable to:				
Increase in volume	8.9 %		3.4 %	
Decrease in average selling prices	-3.1 %		-2.9 %	
Foreign currency effects	0.3 %		0.1 %	
Other	-0.5 %		-0.1 %	
Net change	5.6 %		0.5 %	

We experienced a broad increase in demand for our products in the first nine fiscal months of 2016 compared to the prior year periods and the third fiscal quarter of 2015.

We deduct, from the sales that we record to distributors, allowances for future credits that we expect to provide for returns, scrapped product, and price adjustments under various programs made available to the distributors. We make deductions corresponding to particular sales in the period in which the sales are made, although the corresponding credits may not be issued until future periods. We estimate the deductions based on sales levels to distributors, inventory levels at the distributors, current and projected market trends and conditions, recent and historical activity under the relevant programs, changes in program policies, and open requests for credits. We recorded deductions

from gross revenues under our distributor incentive programs of \$65.4 million and \$61.0 million for the nine fiscal months ended October 1, 2016 and October 3, 2015, respectively, or 3.6% and 3.4% of gross revenues, respectively. Actual credits issued under the programs during the nine fiscal months ended October 1, 2016 and October 3, 2015 were \$66.8 million and \$67.9 million, respectively. Increases and decreases in these incentives are largely attributable to the then-current business climate.

Royalty revenues, included in net revenues in the consolidated condensed statements of operations, were approximately \$0.2 million and \$2.6 million for the nine fiscal months ended October 1, 2016 and October 3, 2015, respectively. The decrease is due to the expiration of certain licensing arrangements.

#### Gross Profit and Margins

Gross profit margins for the fiscal quarter and nine fiscal months ended October 1, 2016 were 26.0% and 25.0%, respectively, versus 23.2% and 23.9%, respectively, for the comparable prior year periods. The increase is primarily due to higher volume, cost savings from our restructuring programs, and lower metals and materials prices.

## Segments

Analysis of revenues and gross profit margins for our segments is provided below.

MOSFETs

Net revenues of the MOSFETs segment were as follows (dollars in thousands):

	Fiscal quarters ended		Nine fiscal months ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Net revenues	\$101,687	\$109,446	\$304,839	\$322,564
Change versus comparable prior year period	\$(7,759 )		\$(17,725 )	
Percentage change versus comparable prior year period	-7.1	%	-5.5	%

Changes in MOSFETs segment net revenues were attributable to the following:

	vs. Prior Year Quarter		vs. Prior Year-to-Date	
Change attributable to:				
Change in volume	-0.3	%	0.1	%
Decrease in average selling prices	-7.0	%	-5.7	%
Foreign currency effects	0.2	%	0.1	%
Net change	-7.1	%	-5.5	%

Gross profit as a percentage of net revenues for the MOSFETs segment was as follows:

	Fiscal quarters ended		Nine fiscal months ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Gross profit margin	16.2%	15.3 %	13.4%	14.0 %

In the fiscal quarter and nine fiscal months ended October 1, 2016, the MOSFETs segment did not maintain the net revenue level of the corresponding prior year periods. Net revenues were negatively impacted by declining selling prices, with minimal to no offsetting volume increases. With the exception of the business with European and Asian distributors, we experienced a decrease in net revenue in all other regions and sales channels. The increase in business with Asian distributors is mostly attributable to our Integrated Circuit ("IC") products. Net revenues decreased slightly versus the prior fiscal quarter as volume increases could not fully offset the declining selling prices.

The gross profit margin in the second and third fiscal quarters of 2016 has been negatively impacted by the recognition of expenses incurred on inventory produced last year due to the restructuring program that was sold in the second and third fiscal quarters of 2016. Despite this negative impact and lower average selling prices, the gross profit margin for the third fiscal quarter of 2016 increased slightly versus the third fiscal quarter of 2015 and moderately versus the prior fiscal quarter primarily due to cost reductions from our restructuring program. The gross profit margin for the nine fiscal months ended October 1, 2016 decreased slightly versus the prior year period primarily due to lower average selling prices and the aforementioned recognition of expenses incurred on inventory produced last year, partially offset by cost reductions. Gross profit margins for the periods prior to the second fiscal

quarter of 2016 were negatively impacted by additional depreciation associated with the MOSFETs cost reduction program.

The pricing pressure for our established MOSFETs products continues. We have experienced a significant decline in average selling prices versus the prior year periods and a slight decline versus the prior fiscal quarter.

In 2013, we announced a cost reduction program to enhance the competitiveness of our MOSFETs segment. The planned production transfers were substantially implemented by the end of the first fiscal quarter of 2016 and began to provide improvement in the third fiscal quarter of 2016.

As a result of a review of recent financial results and outlook for the MOSFETs segment following the recent completion of production transfers, we have determined to implement further cost reductions. On November 7, 2016, we announced an extension of the MOSFETs Enhanced Competitiveness Program. The revised program includes various cost reduction initiatives, primarily the transfer of all remaining manufacturing operations at its Santa Clara, California facility to other Vishay facilities or third-party subcontractors. We expect to maintain our R&D and management presence in the Silicon Valley area, even after the cessation of manufacturing operations there.

The production transfers will be completed in steps by the end of 2017. We expect to incur cash charges of approximately \$4 to \$8 million, primarily related to severance, to implement these steps, and expects to realize annualized cost savings of approximately \$7 to \$10 million as a result of these new initiatives. See "Cost Management" above and Note 4 to our consolidated condensed financial statements included in Item I.

We also determined that an interim indefinite-lived impairment test was required as of the end of the third fiscal quarter of 2016. As a result of that assessment, we recorded an impairment charge of \$1.6 million to write-down our Siliconix tradenames to their fair value. See "Impairment of Long-Lived Assets and Indefinite-Lived Intangible Assets" above.

We continue to make capital and R&D investments in this business.

47

---

Diodes

Net revenues of the Diodes segment were as follows (dollars in thousands):

	Fiscal quarters ended		Nine fiscal months ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Net revenues	\$141,127	\$123,922	\$418,629	\$399,155
Change versus comparable prior year period	\$17,205		\$19,474	
Percentage change versus comparable prior year period	13.9	%	4.9	%

Changes in Diodes segment net revenues were attributable to the following:

Change attributable to:	vs. Prior Year		vs. Prior Year-to-Date	
	Quarter	Year	Quarter	Year
Increase in volume	18.4	%	8.7	%
Decrease in average selling prices	-3.6	%	-3.5	%
Foreign currency effects	0.4	%	0.3	%
Other	-1.3	%	-0.6	%
Net change	13.9	%	4.9	%

Gross profit as a percentage of net revenues for the Diodes segment was as follows:

	Fiscal quarters ended		Nine fiscal months ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Gross profit margin	25.8%	22.2 %	25.4%	22.3 %

On August 12, 2015, the shockwave from a major explosion in the port of Tianjin, China, resulted in some damage to our Diodes manufacturing facility near the port and caused a temporary shutdown. The temporary shutdown adversely impacted net revenues and margins of our Diodes segment (and total Vishay) for the third fiscal quarter of 2015.

Diodes net revenues for the fiscal quarter and nine fiscal months ended October 1, 2016 increased significantly versus the prior year quarter and moderately versus the nine fiscal months ended October 3, 2015. The net revenue increases are primarily due to volume increases versus the prior year periods, which were impacted by the aforementioned temporary shutdown. The volume increases were partially offset by a moderate decline in average selling prices. The net revenue increases were predominantly in Asia and Europe. Net revenues decreased slightly versus the prior fiscal quarter as a slight volume increase could not fully offset the impact from declining average selling prices.

The gross profit margin increased versus the corresponding prior year periods primarily due to increases in sales volume, the effects of our cost reduction programs, and positive foreign currency exchange rate impact on the Asian cost-of-sales, which were only partially offset by declining average selling prices and general cost inflation. The gross profit margin decreased slightly versus the prior fiscal quarter.

Typical pricing pressure for our established Diodes products continues. We have experienced a moderate price decline versus the prior year periods and a slight price decline versus the prior fiscal quarter.

Optoelectronic Components

Net revenues of the Optoelectronic Components segment were as follows (dollars in thousands):

	Fiscal quarters ended		Nine fiscal months ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Net revenues	\$72,801	\$70,008	\$203,635	\$211,610
Change versus comparable prior year period	\$2,793		\$(7,975)	
Percentage change versus comparable prior year period	4.0	%	-3.8	%

Changes in Optoelectronic Components segment net revenues were attributable to the following:

	vs. Prior Year		vs. Prior Year-to-Date	
	Quarter	Year	Quarter	Year
Change attributable to:				
Increase in volume	8.4	%	0.1	%
Decrease in average selling prices	-3.9	%	-3.9	%
Foreign currency effects	0.1	%	0.0	%
Other	-0.6	%	0.0	%
Net change	4.0	%	-3.8	%

Gross profit as a percentage of net revenues for the Optoelectronic Components segment was as follows:

	Fiscal quarters ended		Nine fiscal months ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Gross profit margin	33.3%	32.8%	31.9%	32.8%

The Optoelectronic Components segment net revenues for the third fiscal quarter of 2016 increased significantly versus the prior fiscal quarter and moderately versus the prior year quarter. The increases are primarily due to volume increases, which were partially offset by declining average selling prices. The increases were achieved in the business with our European and Asian distributors and our American customers. Net revenues decreased moderately versus the nine fiscal months ended October 3, 2015 due to declining average selling prices.

The gross profit margin increased slightly versus the prior year quarter and prior fiscal quarter primarily due to volume increases. The gross profit margin for the nine fiscal months of 2016 decreased as cost reductions and positive foreign currency exchange rate effects could not offset the lower average selling prices.

Typical pricing pressure for our established Optoelectronic Components products continues. We have experienced moderate declines in average selling prices versus the prior year periods and a slight decline versus the prior fiscal quarter.

Resistors & Inductors

Net revenues of the Resistors & Inductors segment were as follows (dollars in thousands):

	Fiscal quarters ended		Nine fiscal months ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Net revenues	\$192,041	\$173,731	\$568,334	\$540,757
Change versus comparable prior year period	\$18,310		\$27,577	
Percentage change versus comparable prior year period	10.5	%	5.1	%

Changes in Resistors & Inductors segment net revenues were attributable to the following:

	vs. Prior Year Quarter		vs. Prior Year-to-Date	
Change attributable to:				
Increase in volume	12.4	%	6.8	%
Decrease in average selling prices	-1.7	%	-1.7	%
Foreign currency effects	0.2	%	0.1	%
Other	-0.4	%	-0.1	%
Net change	10.5	%	5.1	%

Gross profit as a percentage of net revenues for the Resistors & Inductors segment was as follows:

	Fiscal quarters ended		Nine fiscal months ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Gross profit margin	30.6%	28.7 %	30.2%	30.0 %

Net revenues for the Resistors & Inductors segment continue to be strong and increased versus the corresponding prior year periods. All regions contributed to the increase. Distribution and the automotive end market reported the largest increases in net revenues. Net revenues for the third fiscal quarter of 2016 decreased slightly versus the prior quarter, with negative foreign currency exchange rate effects and lower average selling prices offsetting the increase in volume.

The gross profit margin increased versus the prior year periods and prior quarter. The increases were primarily due to higher volume and the benefits of the cost reduction programs.

Average selling prices decreased slightly compared to prior year periods and prior quarter.

In 2015, we announced global cost reduction programs which include targeted plans to streamline and consolidate certain product lines, including within our Resistors & Inductors segment. See "Cost Management" above and Note 4 to our consolidated condensed financial statements.

Capacitors

Net revenues of the Capacitors segment were as follows (dollars in thousands):

	Fiscal quarters ended		Nine fiscal months ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Net revenues	\$84,299	\$83,547	\$257,175	\$270,474
Change versus comparable prior year period	\$752		\$(13,299)	
Percentage change versus comparable prior year period	0.9	%	-4.9	%

Changes in Capacitors segment net revenues were attributable to the following:

	vs. Prior Year		vs. Prior Year-to-Date	
	Quarter	Year	Quarter	Year-to-Date
Change attributable to:				
Change in volume	0.0	%	-4.7	%
Change in average selling prices	0.4	%	-0.4	%
Foreign currency effects	0.5	%	0.1	%
Other	0.0	%	0.1	%
Net change	0.9	%	-4.9	%

Gross profit as a percentage of net revenues for the Capacitors segment was as follows:

	Fiscal quarters ended		Nine fiscal months ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Gross profit margin	21.3%	15.6 %	20.7%	18.8 %

Net revenues of the Capacitors segment for the third fiscal quarter increased slightly versus the the third fiscal quarter of 2015. Europe and the Americas regions experienced increases in net revenues, while the Asia region decreased versus the prior year quarter. Distribution sales contributed for the majority of the increase. Net revenues decreased versus the nine fiscal months ended October 3, 2015 and the prior fiscal quarter. Negative foreign currency exchange rates significantly contributed to the decrease versus the second fiscal quarter of 2016.

The gross profit margin improved significantly versus prior year periods and is unchanged from the second fiscal quarter of 2016. The gross profit margin improvement is mainly due to material price savings, a positive mix impact and the cost reduction program.

Average selling prices remained relatively stable versus the prior year periods and prior quarter.

The book-to-bill ratio of 1.20 in the third fiscal quarter of 2016 was substantially impacted by large orders of film power capacitors for power transmission projects in Asia to be delivered over the next four quarters.

In 2015, we announced global cost reduction programs which include targeted plans to streamline and consolidate certain product lines, including within our Capacitors segment. See "Cost Management" above and Note 4 to our

consolidated condensed financial statements.

51

---

## Selling, General, and Administrative Expenses

Selling, general, and administrative ("SG&A") expenses are summarized as follows (dollars in thousands):

	Fiscal quarters ended		Nine fiscal months ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Total SG&A expenses	\$93,916	\$88,995	\$276,455	\$276,717
as a percentage of revenues	15.9 %	15.9 %	15.8 %	15.9 %

The overall increase in SG&A expenses in the fiscal quarter ended October 1, 2016 is primarily attributable to increased environmental remediation expenses recognized in the quarter and increased revenues. SG&A expenses for the nine fiscal months ended October 1, 2016 are stable primarily due to lower amortization expense and the benefits of our restructuring programs (see "Cost Management" above), offset by increased R&D and environmental remediation expenses and additional compensation costs in general.

Several items included in SG&A expenses impact the comparability of these amounts, as summarized below (in thousands):

	Fiscal quarters ended		Nine fiscal months ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Amortization of intangible assets	\$3,594	\$5,888	\$10,834	\$18,260
Net loss (gain) on sales of assets	(1,449)	(1 )	(1,373 )	(116 )

We recognized indefinite-lived intangible asset impairment charges of \$1.6 in the third fiscal quarter of 2016 and amortizable intangible asset impairment charges of \$57.6 million in the third fiscal quarter of 2015. Additionally, the remaining value of our impaired Siliconix tradenames, which were previously considered indefinite-lived, will be amortized over their remaining useful life of 10 years. See "Impairment of Long-Lived Assets and Indefinite-Lived Intangible Assets" above and Note 3 to our consolidated condensed financial statements.

In 2013 and 2015, we announced restructuring programs targeting SG&A expenses. See "Cost Management" above and Note 4 to our consolidated condensed financial statements.

## Other Income (Expense)

Interest expense for the fiscal quarter ended October 1, 2016 decreased \$0.5 million versus the fiscal quarter ended October 3, 2015. Interest expense for the nine fiscal months ended October 1, 2016 decreased by \$0.9 million versus the nine fiscal months ended October 3, 2015. The decreases are primarily due to decreases in the estimated values of the embedded derivatives associated with our convertible senior debentures.

The following tables analyze the components of the line "Other" on the consolidated condensed statements of operations (in thousands):

	Fiscal quarters ended		Change
	October 1, 2016	October 3, 2015	

Edgar Filing: VISHAY INTERTECHNOLOGY INC - Form 10-Q

Foreign exchange gain (loss)	\$(1,516)	\$2,125	\$(3,641)
Interest income	1,033	1,115	(82 )
Other	103	-	103
	\$(380 )	\$3,240	\$(3,620)

Nine fiscal  
months ended

October

1, October

2016 3, 2015 Change

Foreign exchange gain (loss)	\$(597 )	\$3,873	\$(4,470)
Interest income	3,200	3,340	(140 )
Other	52	647	(595 )
	\$2,655	\$7,860	\$(5,205)

52

---

## Income Taxes

For the fiscal quarter and nine fiscal months ended October 1, 2016, our effective tax rate was 27.8% and 27.7%, respectively, as compared to 16.4% and 40.6%, respectively, for the fiscal quarter and nine fiscal months ended October 3, 2015. The effective tax rate is generally less than the U.S. statutory rate primarily because of earnings in foreign jurisdictions. While our effective tax rate is generally less than the U.S. statutory rate, the effective tax rates for the fiscal quarter and nine fiscal months ended October 3, 2015 are impacted by a write-off of non-deductible goodwill and an impairment charge in a lower tax rate jurisdiction.

Income tax expense for the fiscal quarter and nine fiscal months ended October 1, 2016 includes the remeasurement of the deferred tax liability recorded for the cash repatriation program announced in the fourth fiscal quarter of 2015 of \$1.4 million and \$3.4 million, respectively. During the second fiscal quarter of 2016, we repatriated \$46.0 million pursuant to this program.

We operate in a global environment with significant operations in various jurisdictions outside the United States. Accordingly, our consolidated income tax rate is a composite rate reflecting our earnings and the applicable tax rates in the various jurisdictions where we operate. Part of our strategy is to achieve cost savings by operating in countries where we can take advantage of lower labor costs and available tax and other government-sponsored incentives. Accordingly, our effective tax rate is generally less than the U.S. statutory tax rate. Changes in our effective tax rate are largely attributable to changes in the mix of pretax income among our various taxing jurisdictions.

During the nine fiscal months ended October 1, 2016, the liabilities for unrecognized tax benefits increased by \$1.3 million on a net basis, principally due to increases for tax positions taken in prior periods, interest, and foreign currency effects, partially offset by payments and settlements.

The expected termination and settlement of the Vishay Retirement Plan in December will result in significant non-cash pre-tax charges and tax-related effects which could result in a significant change in the effective tax rate for the year. We cannot make a reliable estimate of these items as of the end of the third fiscal quarter of 2016, given numerous uncertainties regarding the final settlement amount.

## Financial Condition, Liquidity, and Capital Resources

We focus on our ability to generate cash flows from operations. The cash generated from operations is used to fund our capital expenditure plans, and cash in excess of our capital expenditure needs is available to fund our acquisition strategy, to reduce debt levels, and to pay dividends and repurchase stock. We have generated cash flows from operations in excess of \$200 million in each of the past 14 years, and cash flows from operations in excess of \$100 million in each of the past 21 years.

Management uses a non-GAAP measure, "free cash," to evaluate our ability to fund acquisitions, repay debt, and otherwise enhance stockholder value through stock repurchases or dividends. See "Overview" above for "free cash" definition and reconciliation to GAAP. Vishay has generated positive "free cash" in each of the past 19 years, and "free cash" in excess of \$80 million in each of the past 14 years. In this volatile economic environment, we continue to focus on the generation of free cash, including an emphasis on cost controls.

We continued to generate positive cash flows from operations and free cash during the fiscal quarter ended October 1, 2016. Despite a slow start in terms of free cash generation and also partly due to the unusual pension contributions, we expect to generate free cash in 2016 in line with our history. There is no assurance, however, that we will be able to continue to generate cash flows from operations and free cash at the same levels, or at all, going forward if the current economic environment worsens.

Beginning in the fourth fiscal quarter of 2010, we have reacted to favorable market conditions to significantly reshape the company's capital structure. We have completed three issuances of low-coupon convertible debentures since the fourth fiscal quarter of 2010, each of which matures thirty years from the date of issuance. We utilized the proceeds of those debenture offerings to repurchase approximately 24% of our outstanding stock prior to implementing these initiatives.

On May 2, 2016, our Board of Directors approved a stock repurchase plan, authorizing us to repurchase, in the aggregate, up to \$100 million of our outstanding common stock. The stock repurchase plan will expire on May 2, 2017. The stock repurchase plan does not obligate us to acquire any particular amount of common stock, and it may be terminated or suspended at our direction in accordance with the plan. We have repurchased 1,309,855 shares of stock for \$17.0 million since the inception of the plan.

In 2016, we acquired, in two privately negotiated transactions, all of the outstanding exchangeable notes due 2102. The total purchase price for the two transactions was \$34.0 million. The exchangeable unsecured notes were issued in 2002 in connection with an acquisition, and were subject to a put and call agreement dated December 13, 2002. The repurchased notes had been exchangeable for approximately 2.5 million shares of our common stock.

We also entered into a new, larger, revolving credit facility in 2010, which was amended and restated on August 8, 2013, and further amended and restated on December 10, 2015. The amended and restated credit facility provides an aggregate commitment of \$640 million of revolving loans available until December 10, 2020, and we have the ability to request up to \$50 million of incremental revolving commitments, subject to the satisfaction of certain conditions. The previous credit agreement was scheduled to mature on August 8, 2018. At October 1, 2016 and December 31, 2015, \$149 million and \$190 million, respectively, were outstanding under our credit facility.

The amended and restated credit facility allows an unlimited amount of defined "Restricted Payments," which include cash dividends to stockholders and share repurchases, provided our pro forma leverage ratio is less than 2.25 to 1. If our leverage ratio is greater than 2.25 to 1, the credit facility allows such payments up to \$75 million per annum (subject to a cap of \$225 million for the term of the facility). The amended and restated credit facility provides us with significantly more flexibility to execute these transactions, and our ability to utilize some of our foreign-source income for these types of transactions provides even further financial flexibility.

Borrowings under the credit facility bear interest at LIBOR plus an interest margin. The applicable interest margin is based on our leverage ratio. Based on our current leverage ratio, borrowings bear interest at LIBOR plus 1.75%. The interest rate on our borrowings will increase to LIBOR plus 2.00% if our leverage ratio equals or exceeds 2.50 to 1 and will decrease to LIBOR plus 1.50% if our leverage ratio decreases below 1.50 to 1.

We also pay a fee, also based on our leverage ratio, on undrawn amounts. The undrawn commitment fee, based on our current leverage ratio, is 0.35% per annum. Such undrawn commitment fee will increase to 0.50% per annum if our leverage ratio equals or exceeds 2.50 to 1 and will decrease to 0.30% per annum if our leverage ratio decreases below 1.50 to 1. Prior to the December 10, 2015 amendment and restatement, the credit agreement required Vishay to pay facility fees on the entire commitment amount.

The borrowings under the credit facility are secured by a lien on substantially all assets, including accounts receivable, inventory, machinery and equipment, and general intangibles (but excluding real estate, intellectual property registered or licensed for use in, or arising under the laws of, any country other than the United States, assets located outside of the United States and deposit and securities accounts), of Vishay and certain significant subsidiaries located in the United States, and pledges of stock in certain significant domestic and foreign subsidiaries; and are guaranteed by certain significant subsidiaries. Certain of our subsidiaries are permitted to borrow under the credit facility, subject to the satisfaction of specified conditions. Any borrowings by these subsidiaries under the credit facility will be guaranteed by Vishay and certain subsidiaries.

The credit facility also limits or restricts us, from, among other things, incurring indebtedness, incurring liens on assets, making investments and acquisitions, and making asset sales, and making other restricted payments (assuming our leverage ratio is greater than 2.25 to 1), and requires us to comply with other covenants, including the maintenance of specific financial ratios.

The financial maintenance covenants include (a) an interest expense coverage ratio of not less than 2.00 to 1; and (b) a leverage ratio of not more than 3.25 to 1 (and a pro forma ratio of 2.75 to 1 on the date of incurrence of additional debt). The computation of these ratios is prescribed in Article VI of the Credit Agreement between Vishay Intertechnology, Inc. and JPMorgan Chase Bank, N.A., which has been filed with the SEC as Exhibit 10.1 to our current report on Form 8-K filed December 10, 2015.

We were in compliance with all financial covenants under the credit facility at October 1, 2016. Our interest expense coverage ratio and leverage ratio were 12.02 to 1 and 2.01 to 1, respectively. We expect to continue to be in compliance with these covenants based on current projections.

If we are not in compliance with all of the required financial covenants, the credit facility could be terminated by the lenders, and all amounts outstanding pursuant to the credit facility could become immediately payable. Additionally, our convertible senior debentures due 2040, due 2041, and due 2042 have cross-default provisions that could accelerate repayment in the event the indebtedness under the credit facility is accelerated.

The balance of our revolving credit facility was \$190 million at December 31, 2015. We borrowed \$262 million and repaid \$303 million on our credit facility during the nine fiscal months ended October 1, 2016. The average outstanding balance on our credit facility calculated at fiscal month-ends was \$196.2 million and the highest amount outstanding on our credit facility at a month end was \$244 million during the nine fiscal months ended October 1, 2016.

Prior to three months before the maturity date, our convertible senior debentures are convertible by the holders under certain circumstances. The convertible senior debentures are not currently convertible, but the conversion criteria of the debentures will continue to be evaluated and the debentures may become convertible in the future. At the direction of our Board of Directors, we intend, upon conversion, to repay the principal amount of the convertible debentures in cash and settle any additional amounts in shares of our common stock. We intend to finance the principal amount of any converted debentures using borrowings under our credit facility.

Management expects to periodically pay down the balance of our revolving credit facility with available cash or use the credit facility to meet short-term financing needs. We expect that cash on-hand and cash flows from operations will be sufficient to meet our longer-term financing needs related to normal operating requirements, regular dividend payments, and our research and development and capital expenditure plans. Additional acquisition activity, share repurchases, or conversion of our convertible debentures may require additional borrowing under our credit facility or may otherwise require us to incur additional debt. No principal payments on our outstanding debt are due before the maturity of our revolving credit facility in December 2020.

As of October 1, 2016, substantially all of our cash and cash equivalents and short-term investments were held in countries outside of the United States. Certain payments, such as cash dividends to stockholders, share repurchases, and interest payments on our debt instruments need to be paid by the U.S. parent company, Vishay Intertechnology, Inc. Our U.S. subsidiaries have other operating cash needs.

Our substantially undrawn credit facility provides us with significant liquidity in the United States.

As part of the amendment and restatement of the revolving credit facility in December 2015, we completed an evaluation of our anticipated domestic cash needs over the next several years and our most efficient use of liquidity, with consideration of the amount of cash that can be repatriated to the U.S. efficiently with lesser withholding taxes in foreign jurisdictions. As a result of that evaluation, during the fourth quarter of 2015, we recognized income tax expense, including U.S. federal and state income taxes, incremental foreign income taxes, and withholding taxes payable to foreign jurisdictions, on \$300 million of foreign earnings which we expect to repatriate to the U.S. over the next several years. During the second fiscal quarter of 2016, we repatriated \$46.0 million pursuant to this program.

Except as described above, earnings generated by foreign subsidiaries are expected to be reinvested outside of the United States indefinitely. If additional cash is needed to be repatriated to the United States, in addition to various foreign country laws regulating the exportation of the cash and profits, we would be subject to U.S. income taxes (subject to an adjustment for foreign tax credits), state income taxes, incremental foreign income taxes, and withholding taxes payable to various foreign jurisdictions.

We invest a portion of our excess cash in highly liquid, high-quality instruments with maturities greater than 90 days, but less than 1 year, which we classify as short-term investments on our consolidated balance sheets. As these investments were funded using a portion of excess cash and represent a significant aspect of our cash management strategy, we include the investments in the calculation of net cash and short-term investments (debt).

The interest rates on our short-term investments average 0.44% and are approximately 14 basis points higher than interest rates on our cash accounts. Transactions related to these investments are classified as investing activities on our consolidated statements of cash flows.

The following table summarizes the components of net cash and short-term investments (debt) at October 1, 2016 and December 31, 2015 (in thousands):

	October 1, 2016	December 31, 2015
Credit facility	\$ 149,000	\$ 190,000
Exchangeable unsecured notes, due 2102	-	38,642
Convertible senior debentures, due 2040*	107,563	106,011
Convertible senior debentures, due 2041*	55,157	54,424
Convertible senior debentures, due 2042*	61,072	60,320
Deferred financing costs	(11,325 )	(12,659 )
Total debt	361,467	436,738
Cash and cash equivalents	511,587	475,507
Short-term investments	608,314	619,040
Net cash and short-term investments (debt)	\$ 758,434	\$ 657,809

\*Represents the carrying amount of the convertible debentures, which is comprised of the principal amount of the debentures, net of the unamortized discount and the associated embedded derivative liability.

"Net cash and short-term investments (debt)" does not have a uniform definition and is not recognized in accordance with GAAP. This measure should not be viewed as an alternative to GAAP measures of performance or liquidity. However, management believes that an analysis of "net cash and short-term investments (debt)" assists investors in understanding aspects of our cash and debt management. The measure, as calculated by us, may not be comparable to similarly titled measures used by other companies.

Our financial condition as of October 1, 2016 continued to be strong, with a current ratio (current assets to current liabilities) of 4.1 to 1, unchanged from December 31, 2015. Increases in accounts receivable and cash and cash equivalents were offset by a decrease in inventory and an increase in accrued payroll and related expenses. Our ratio of total debt to Vishay stockholders' equity was 0.21 to 1 at October 1, 2016 as compared to a ratio of 0.27 to 1 at December 31, 2015. The decrease in the ratio is primarily due to the repurchase of exchangeable notes and credit facility repayments.

Cash flows provided by operating activities were \$212.6 million for the nine fiscal months ended October 1, 2016, as compared to cash flows provided by operations of \$153.6 million for the nine fiscal months ended October 3, 2015. The improvement in operating cash flows reflect an increase in net earnings and favorable working capital fluctuations. Cash flows provided by operating activities for the nine fiscal months ended October 1, 2016 were negatively impacted by \$17.0 million of cash contributions to our Taiwanese pension plans.

Cash paid for property and equipment for the nine fiscal months ended October 1, 2016 was \$81.3 million, as compared to \$86.8 million for the nine fiscal months ended October 3, 2015. We expect capital spending of approximately \$135 million in 2016.

Cash paid for dividends to our common and Class B common stockholders totalled \$27.6 million and \$26.6 million for the nine fiscal months ended October 1, 2016 and October 3, 2015, respectively. We expect dividend payments in 2016 to total approximately \$36.8 million. However, any future dividend declaration and payment remains subject to authorization by our Board of Directors.



## Contractual Commitments and Off-Balance Sheet Arrangements

Our Annual Report on Form 10-K for the year ended December 31, 2015 filed on February 17, 2016, includes a table of contractual commitments. There were no material changes to these commitments since the filing of our Annual Report on Form 10-K.

We do not participate in nor have we created any off-balance sheet variable interest entities or other off-balance sheet financing, other than the operating leases described in our Annual Report on Form 10-K for the year ended December 31, 2015.

## Dividends

In 2014, our Board of Directors approved the initiation of a quarterly cash dividend program. Cash dividends of \$0.06 per share of common stock and Class B common stock were paid in each quarter of 2014 and 2015. On February 16, 2016, our Board of Directors increased the quarterly cash dividend to \$0.0625 per share of common stock and Class B common stock. We expect to continue to pay quarterly dividends, although each dividend is subject to approval by our Board of Directors.

The following table summarizes the quarterly cash dividends declared (in thousands):

<u>Fiscal Period</u>	<u>Amount</u>	<u>Month of Payment</u>
Three fiscal months ended April 2, 2016	\$ 9,231	March
Three fiscal months ended July 2, 2016	9,209	June
Three fiscal months ended October 1, 2016	9,163	September

## Safe Harbor Statement

From time to time, information provided by us, including but not limited to statements in this report, or other statements made by or on our behalf, may contain "forward-looking" information within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "believe," "estimate," "will be," "will," "would," "expect," "anticipate," "plan," "project," "intend," "could," "should," or other similar words or expressions often identify forward-looking statements.

Such statements are based on current expectations only, and are subject to certain risks, uncertainties, and assumptions, many of which are beyond our control. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results, performance, or achievements may vary materially from those anticipated, estimated, or projected. Among the factors that could cause actual results to materially differ include: general business and economic conditions; difficulties in identifying suitable acquisition candidates, consummating a transaction on terms which we consider acceptable, and integration and performance of acquired businesses; difficulties in new product development; changes in competition and technology in the markets that we serve and the mix of our products required to address these changes; an inability to attract and retain highly qualified personnel, particularly in respect of our acquired businesses; uncertainty related to the effects of changes in foreign currency exchange rates; delays or difficulties in implementing our cost management strategies; and other factors affecting our operations, markets, products, services, and prices that are set forth in our filings with the SEC, including our annual reports on Form 10-K and our quarterly reports on Form 10-Q. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

Our 2015 Annual Report on Form 10-K listed various important factors that could cause actual results to differ materially from projected and historic results. We note these factors for investors as permitted by the Private Securities Litigation Reform Act of 1995. Readers can find them in Part I, Item 1A, of that filing under the heading

"Risk Factors." You should understand that it is not possible to predict or identify all such factors. Consequently, you should not consider any such list to be a complete set of all potential risks or uncertainties.

57

---

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Part II, Item 7A, "Quantitative and Qualitative Disclosures About Market Risk," of our Annual Report on Form 10-K for the year ended December 31, 2015, filed with the SEC on February 17, 2016, describes our exposure to market risks. There have been no material changes to our market risks since December 31, 2015.

Item 4. Controls and Procedures

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

An evaluation was performed under the supervision and with the participation of our management, including the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), of the effectiveness of the design and operation of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) and Rule 15d-15(e) promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Based on that evaluation, our CEO and CFO concluded that our disclosure controls and procedures were effective as of the end of the period covered by this quarterly report to ensure that information required to be disclosed in reports that we file or submit under the Exchange Act are: (1) recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms; and (2) accumulated and communicated to our management, including our CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during the period covered by this report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

58

---

## PART II - OTHER INFORMATION

Item 1. Legal Proceedings

Item 3 of Part I of our Annual Report on Form 10-K for the year ended December 31, 2015, filed with the SEC on February 17, 2016 and Item I of Part II of our quarterly report on Form 10-Q for the quarter ended July 2, 2016, filed with the SEC on August 2, 2016, describe certain of our legal proceedings. There have been no material developments to the legal proceedings previously disclosed.

On October 13, 2016, a Vishay subsidiary in Taiwan received a notice from the Taiwan Environmental Protection Bureau ("EPB") regarding its findings related to the facility's wastewater management systems. Vishay was fined approximately \$641,000. The Company believes it has successfully remediated the issue, though it remains subject to ongoing monitoring and testing by the EPB.

Item 1A. Risk Factors

There have been no material changes to the risk factors we previously disclosed under Item 1A of Part I of our Annual Report on Form 10-K for the year ended December 31, 2015, filed with the SEC on February 17, 2016.

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

On May 2, 2016, our Board of Directors approved a stock repurchase plan, authorizing us to repurchase, in the aggregate, up to \$100 million of our outstanding common stock. The stock repurchase plan will expire on May 2, 2017. The stock repurchase plan does not obligate us to acquire any particular amount of common stock, and it may be terminated or suspended at our direction in accordance with the plan. The following table provides information about repurchases of the Company's common stock during the three-month period ended October 1, 2016:

Period	Total Number of Shares Purchased	Average Price Paid per Share (including commisson)	Total Number of Shares Purchased as Part of Publicly Announced Program	Total Dollar Amount Purchased Under the Program	Maximum Dollar Value of Shares that May Yet Be Purchased Under the Program
July 3 - July 30	294,672	\$ 12.48	294,672	\$3,677,787	\$90,199,043
July 31 - August 27	250,721	\$ 13.79	250,721	\$3,457,664	\$86,741,379
August 28 - October 1	268,893	\$ 13.84	268,893	\$3,722,096	\$83,019,283
Total	814,286	\$ 13.33	814,286	\$10,857,547	\$83,019,283

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

Not applicable.

Item 6. Exhibits

- 31.1 Certification pursuant to Rule 13a-14(a) or 15d-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 - Dr. Gerald Paul, Chief Executive Officer.
- 31.2 Certification pursuant to Rule 13a-14(a) or 15d-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 - Lori Lipcaman, Chief Financial Officer.
- 32.1 Certification Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 – Dr. Gerald Paul, Chief Executive Officer.
- 32.2 Certification Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 – Lori Lipcaman, Chief Financial Officer.
- 101 Interactive Data File (Quarterly Report on Form 10-Q, for the quarterly period ended October 1, 2016, furnished in XBRL (eXtensible Business Reporting Language)).

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.

VISHAY  
INTERTECHNOLOGY,  
INC.

/s/ Lori Lipcaman  
Lori Lipcaman  
Executive Vice President  
and Chief Financial  
Officer  
(as a duly authorized  
officer and principal  
financial and  
accounting officer)

Date: November 7, 2016