

VISHAY INTERTECHNOLOGY INC  
Form 10-Q  
May 08, 2018  
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 March 31, 2018

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

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

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

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

Yes  No

As of May 4, 2018, the registrant had 132,117,715 shares of its common stock and 12,097,427 shares of its Class B common stock outstanding.

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VISHAY INTERTECHNOLOGY, INC.  
 FORM 10-Q  
 March 31, 2018  
 CONTENTS

	Page Number
<u>PART I. FINANCIAL INFORMATION</u>	
<u>Item 1. Financial Statements</u>	
<u>Consolidated Condensed Balance Sheets (Unaudited) – March 31, 2018 and December 31, 2017</u>	4
<u>Consolidated Condensed Statements of Operations (Unaudited) – Fiscal Quarters Ended March 31, 2018 and April 1, 2017</u>	6
<u>Consolidated Condensed Statements of Comprehensive Income (Unaudited) – Fiscal Quarters Ended March 31, 2018 and April 1, 2017</u>	7
<u>Consolidated Condensed Statements of Cash Flows (Unaudited) – Fiscal Quarters Ended March 31, 2018 and April 1, 2017</u>	8
<u>Consolidated Condensed Statement of Equity (Unaudited)</u>	9
<u>Notes to Consolidated Condensed Financial Statements (Unaudited)</u>	10
<u>Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	32
<u>Item 3. Quantitative and Qualitative Disclosures About Market Risk</u>	54
<u>Item 4. Controls and Procedures</u>	54
<u>PART II. OTHER INFORMATION</u>	
<u>Item 1. Legal Proceedings</u>	55
<u>Item 1A. Risk Factors</u>	55
<u>Item 2. Unregistered Sales of Equity Securities and Use of Proceeds</u>	55
<u>Item 3. Defaults Upon Senior Securities</u>	55
<u>Item 4. Mine Safety Disclosures</u>	55
<u>Item 5. Other Information</u>	55
<u>Item 6. Exhibits</u>	56

SIGNATURES

57

3

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## PART I - FINANCIAL INFORMATION

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

	March 31, 2018	December 31, 2017 (recast - see Note 1)
Assets		
Current assets:		
Cash and cash equivalents	\$839,591	\$748,032
Short-term investments	501,221	547,136
Accounts receivable, net	376,537	340,027
Inventories:		
Finished goods	132,996	127,272
Work in process	184,613	170,319
Raw materials	143,039	132,068
Total inventories	460,648	429,659
Prepaid expenses and other current assets	116,948	130,336
Total current assets	2,294,945	2,195,190
Property and equipment, at cost:		
Land	92,929	92,285
Buildings and improvements	617,071	606,168
Machinery and equipment	2,461,857	2,415,769
Construction in progress	94,027	103,058
Allowance for depreciation	(2,358,549)	(2,311,522)
Property and equipment, net	907,335	905,758
Goodwill	147,047	142,742
Other intangible assets, net	73,072	69,754
Other assets	148,111	148,645
Total assets	\$3,570,510	\$3,462,089

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4

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

	March 31, 2018	December 31, 2017 (recast - see Note 1)
Liabilities and equity		
Current liabilities:		
Notes payable to banks	\$56	\$4
Trade accounts payable	191,935	222,373
Payroll and related expenses	136,386	135,702
Other accrued expenses	161,990	154,230
Income taxes	38,676	50,226
Total current liabilities	529,043	562,535
Long-term debt less current portion	406,385	370,470
U.S. transition tax payable	165,600	151,200
Deferred income taxes	342,207	336,465
Other liabilities	77,425	75,249
Accrued pension and other postretirement costs	283,754	281,701
Total liabilities	1,804,414	1,777,620
Redeemable convertible debentures	250,990	252,070
Stockholders' equity:		
Vishay stockholders' equity		
Common stock	13,212	13,188
Class B convertible common stock	1,210	1,213
Capital in excess of par value	1,753,762	1,752,506
(Accumulated deficit) retained earnings	(307,833 )	(362,254 )
Accumulated other comprehensive income (loss)	52,544	25,714
Total Vishay stockholders' equity	1,512,895	1,430,367
Noncontrolling interests	2,211	2,032
Total equity	1,515,106	1,432,399
Total liabilities, temporary equity, and equity	\$3,570,510	\$3,462,089

See accompanying notes.

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

	Fiscal quarters ended	
	March 31, 2018	April 1, 2017 (recast - see Note 1)
Net revenues	\$716,795	\$604,801
Costs of products sold	511,495	443,052
Gross profit	205,300	161,749
Selling, general, and administrative expenses	101,238	92,702
Restructuring and severance costs	-	1,469
Operating income	104,062	67,578
Other income (expense):		
Interest expense	(7,677 )	(6,790 )
Other components of net periodic pension cost	(3,519 )	(2,890 )
Other	(847 )	(396 )
Loss on disposal of equity affiliate	-	(7,060 )
Total other income (expense)	(12,043 )	(17,136 )
Income before taxes	92,019	50,442
Income tax expense	29,474	13,493
Net earnings	62,545	36,949
Less: net earnings attributable to noncontrolling interests	179	230
Net earnings attributable to Vishay stockholders	\$62,366	\$36,719
Basic earnings per share attributable to Vishay stockholders	\$0.43	\$0.25
Diluted earnings per share attributable to Vishay stockholders	\$0.39	\$0.24
Weighted average shares outstanding - basic	144,327	146,274
Weighted average shares outstanding - diluted	159,502	154,876
Cash dividends per share	\$0.0675	\$0.0625

See accompanying notes.

6



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

	Fiscal quarters ended	
	March 31, 2018	April 1, 2017
Net earnings	\$62,545	\$36,949
Other comprehensive income, net of tax		
Pension and other post-retirement actuarial items	1,607	2,335
Foreign currency translation adjustment	27,024	17,293
Unrealized gain on available-for-sale securities	-	271
Other comprehensive income	28,631	19,899
Comprehensive income	91,176	56,848
Less: comprehensive income attributable to noncontrolling interests	179	230
Comprehensive income attributable to Vishay stockholders	\$90,997	\$56,618

See accompanying notes.

7

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

	Fiscal quarters ended March 31, 2018	April 1, 2017
Operating activities		
Net earnings	\$ 62,545	\$ 36,949
Adjustments to reconcile net earnings to net cash provided by operating activities:		
Depreciation and amortization	40,558	40,212
(Gain) loss on disposal of property and equipment	(176 )	60
Accretion of interest on convertible debentures	1,309	1,211
Inventory write-offs for obsolescence	5,457	4,834
Loss on disposal of equity affiliate	-	7,060
Deferred income taxes	7,014	4,307
Other	2,908	2,026
Net change in operating assets and liabilities, net of effects of businesses acquired	(72,756 )	(52,985 )
Net cash provided by operating activities	46,859	43,674
Investing activities		
Capital expenditures	(28,273 )	(16,668 )
Proceeds from sale of property and equipment	184	943
Purchase of businesses, net of cash received	(12,072 )	-
Purchase of short-term investments	(39,243 )	(151,886 )
Maturity of short-term	93,194	147,530

investments				
Other investing activities	(935	)	(5,971	)
Net cash provided by (used in) investing activities	12,855		(26,052	)
Financing activities				
Net proceeds (payments) on revolving credit lines	34,000		20,000	
Net changes in short-term borrowings	52		8	
Dividends paid to common stockholders	(8,918	)	(8,378	)
Dividends paid to Class B common stockholders	(817	)	(758	)
Cash withholding taxes paid when shares withheld for vested equity awards	(2,297	)	(1,971	)
Other financing activities	-		(1,255	)
Net cash provided by financing activities	22,020		7,646	
Effect of exchange rate changes on cash and cash equivalents	9,825		2,337	
Net increase in cash and cash equivalents	91,559		27,605	
Cash and cash equivalents at beginning of period	748,032		471,781	
Cash and cash equivalents at end of period	\$ 839,591		\$ 499,386	

See accompanying notes.

8

## 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	Noncontrol- ling Interests	Total Equity
Balance at December 31, 2015	\$ 13,546	\$ 1,213	\$ 2,058,492	\$ (319,448 )	\$ (131,327 )	\$ 1,622,476	\$ 5,567	\$ 1,628,043
Cumulative effect of accounting change for adoption of ASU 2014-09 (see Notes 1 and 2)	-	-	-	2,210	-	2,210	-	2,210
Net earnings	-	-	-	48,792	-	48,792	581	49,373
Other comprehensive income	-	-	-	-	36,675	36,675	-	36,675
Distributions to noncontrolling interests	-	-	-	-	-	-	(707 )	(707 )
Common stock repurchase (1,752,454 shares)	(175 )	-	(22,984 )	-	-	(23,159 )	-	(23,159 )
Temporary equity reclassification	-	-	(88,659 )	-	-	(88,659 )	-	(88,659 )
Issuance of stock and related tax withholdings for vested restricted stock units (110,825 shares)	11	-	(553 )	-	-	(542 )	-	(542 )
Dividends declared (\$0.2500 per share)	-	-	36	(36,761 )	-	(36,725 )	-	(36,725 )
Stock compensation expense	-	-	6,380	-	-	6,380	-	6,380
Stock options exercised (27,619 shares)	3	-	353	-	-	356	-	356

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Tax effects of stock plan	-	-	(77 )	-	-	(77 )	-	(77 )
Balance at December 31, 2016 (recast - see Note 1)	\$ 13,385	\$ 1,213	\$ 1,952,988	\$ (305,207 )	\$ (94,652 )	\$ 1,567,727	\$ 5,441	\$ 1,573,168
Cumulative effect of accounting change for adoption of ASU 2016-09	-	-	-	386	-	386	-	386
Net earnings (loss)	-	-	-	(20,344 )	-	(20,344 )	784	(19,560 )
Other comprehensive income	-	-	-	-	120,366	120,366	-	120,366
Distributions to noncontrolling interests	-	-	-	-	-	-	(1,140 )	(1,140 )
Acquisition of noncontrolling interests	-	-	(1,047 )	-	-	(1,047 )	(3,053 )	(4,100 )
Common stock repurchase (2,250,236 shares)	(225 )	-	(39,719 )	-	-	(39,944 )	-	(39,944 )
Temporary equity reclassification	-	-	(163,411 )	-	-	(163,411 )	-	(163,411 )
Issuance of stock and related tax withholdings for vested restricted stock units (200,688 shares)	20	-	(1,991 )	-	-	(1,971 )	-	(1,971 )
Dividends declared (\$0.2550 per share)	-	-	40	(37,089 )	-	(37,049 )	-	(37,049 )
Stock compensation expense	-	-	4,394	-	-	4,394	-	4,394
Stock options exercised (77,334 shares)	8	-	1,252	-	-	1,260	-	1,260
Balance at December 31, 2017 (recast - see Note 1)	\$ 13,188	\$ 1,213	\$ 1,752,506	\$ (362,254 )	\$ 25,714	\$ 1,430,367	\$ 2,032	\$ 1,432,399
	-	-	-	1,801	(1,801 )	-	-	-

Cumulative effect of accounting change for adoption of ASU 2016-01 (see Notes 1 and 6)								
Net earnings	-	-	-	62,366	-	62,366	179	62,545
Other comprehensive income	-	-	-	-	28,631	28,631	-	28,631
Conversion of Class B shares (31,800 shares)	3	(3 )	-	-	-	-	-	-
Temporary equity reclassification	-	-	1,080	-	-	1,080	-	1,080
Issuance of stock and related tax withholdings for vested restricted stock units (211,328 shares)	21	-	(2,318 )	-	-	(2,297 )	-	(2,297 )
Dividends declared (\$0.0675 per share)	-	-	11	(9,746 )	-	(9,735 )	-	(9,735 )
Stock compensation expense	-	-	2,483	-	-	2,483	-	2,483
Balance at March 31, 2018	\$ 13,212	\$ 1,210	\$ 1,753,762	\$ (307,833 )	\$ 52,544	\$ 1,512,895	\$ 2,211	\$ 1,515,106

See accompanying notes.

9

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, 2017. The results of operations for the fiscal quarter ended March 31, 2018 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 2018 end on March 31, 2018, June 30, 2018, September 29, 2018, and December 31, 2018, respectively. The four fiscal quarters in 2017 ended on April 1, 2017, July 1, 2017, September 30, 2017, and December 31, 2017, respectively.

Recently Adopted Accounting Guidance

In May 2014, the Financial Accounting Standards Board ("FASB") issued 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 Company retrospectively adopted the ASU on January 1, 2018. The adoption of the ASU did not have a material impact on the Company's results of operations. See Note 2 and "Changes in Accounting Policies" below.

In January 2016, the FASB issued ASU No. 2016-01, Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities. The ASU enhances the reporting model for financial instruments by addressing certain aspects, including requiring equity investments to be measured at fair value with changes in fair value recognized in net income; simplifying the impairment assessment of equity investments without readily determinable fair values; eliminating the requirement to disclose the method and significant assumptions used to estimate the disclosed fair value of financial instruments measured at amortized cost; and requiring the use of the exit price notion for fair value measurements of financial instruments for disclosure purposes. The Company adopted the ASU on January 1, 2018. The Company recognized a cumulative-effect adjustment to January 1, 2018 retained earnings (accumulated deficit) of \$1,801 for the cumulative change in fair value of available-for-sale equity investments previously recognized in other comprehensive income. The adoption of the ASU did not have a material impact on the Company's results of operations.

In March 2017, the FASB issued ASU No. 2017-07, Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost. The ASU amends the income statement presentation requirements of net periodic benefit cost of defined benefit pension and other postretirement plans. The Company retrospectively adopted the ASU on January 1, 2018. The adoption of the ASU did not have a material impact on the Company's results of operations. See "Changes in Accounting Policies" below.

#### Recently Issued Accounting Guidance

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 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.



## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

### Changes in Accounting Policies

Except for the changes described in "Recently Adopted Accounting Guidance" above and in this section below, the Company has consistently applied the accounting policies described in its Note 1 to its audited consolidated financial statement included in its annual report on Form 10-K for the year ended December 31, 2017, to all periods presented in these consolidated condensed financial statements.

### Revenue Recognition

The Company adopted ASU 2014-09 as of January 1, 2018 using the full retrospective method. As a result, the Company has changed its accounting policy for revenue recognition. The details of significant changes and quantitative impact of the changes are disclosed below.

#### Service-type warranty performance obligations

ASU 2014-09 introduces the concept of service-type warranties, which represent separate performance obligations. Upon adoption of ASU No. 2014-09, the Company considers its warranty obligations as service-type warranties and allocates a portion of the estimated consideration to be received from the related contract to the service-type warranty performance obligation and recognizes the related revenue over the warranty period. The impact of accounting for service-type warranties as separate performance obligations was not significant in the retrospective adoption period and is included in the tables below. See further discussion of the warranty obligations in Note 2.

#### Custom products

The Company previously recognized revenue when the sales process was completed, which generally occurred when the product was delivered and risk of loss was transferred to the customer. Upon adoption of ASU 2014-09, the Company analyzes its contractual arrangements to determine whether the promise in the contract to construct and transfer goods to the customer is a performance obligation that will be satisfied over time or at a point in time. When the Company's performance does not create an asset with an alternative use to the Company and the Company has an enforceable right to payment for performance completed to date, the Company transfers control of a good or service over time and, therefore, satisfies a performance obligation and recognizes revenue over time. The Company has a limited number of contracts for custom products that meet the criteria to recognize revenue over time. The dollar amount of these custom products did not materially change during the retrospective adoption period. The Company recorded a cumulative-effect adjustment of \$2,210 to January 1, 2016 retained earnings (accumulated deficit) and recorded adjustments to its consolidated balance sheets due to the impact of recognizing revenue for certain custom products over time rather than at a point in time.

ASU 2014-09 provides several transition practical expedients. The Company has not restated completed contracts that begin and end in the same annual reporting period; used the transaction price at the date the contract was completed rather than estimating variable consideration amounts in the comparative reporting periods; has not disclosed the amount of the transaction price allocated to the remaining performance obligations and an explanation of when the Company expects to recognize the amount as revenue for the reporting periods presented prior to January 1, 2016; and has not retrospectively restated the contract for modifications made prior to January 1, 2016 and instead reflected the aggregate effect of all modifications when identifying the satisfied and unsatisfied performance obligations, determining the transaction price and allocating the transaction price pursuant to the transition practical expedients available.

### Pension and Other Postretirement Benefits

The Company retrospectively adopted ASU 2017-07 as of January 1, 2018. As a result, the Company has changed its accounting policy for pension and other postretirement benefits costs as detailed below.

ASU 2017-07 amends the income statement presentation requirements of net periodic benefit cost of defined benefit pension and other postretirement plans. The service cost component of net periodic pension cost is recorded in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period, and other components of net periodic pension cost are included on a separate line within other income (expense). The Company reclassified net benefit costs other than the current service component previously reported as cost of goods sold and selling, general, and administrative expenses to other expenses for each quarter in the retrospective adoption period in the table below. The Company also reclassified the \$79,321 U.S. pension settlement charges recorded for the year ended December 31, 2016 to other expenses. See the impact of this change in the tables below.

11

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## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

The retrospective adoption of ASUs 2014-09 and 2017-07 did not impact net earnings (loss) attributed to Vishay stockholders. See the combined impact of the retrospective adoption in the tables below:

	Fiscal quarters ended									
	April 1, 2017			July 1, 2017			September 30, 2017			December 31, 2017
	As Reported	Adjustments	Recast	As Reported	Adjustments	Recast	As Reported	Adjustments	Recast	As Reported
Net revenues	\$606,258	\$(1,457)	\$604,801	\$644,892	\$(1,728)	\$643,164	\$677,883	\$58	\$677,941	\$674,480
Costs of products sold	445,383	(2,331)	443,052	471,929	(2,602)	469,327	488,610	(816)	487,794	497,980
Gross profit	160,875	874	161,749	172,963	874	173,837	189,273	874	190,147	176,500
Operating income	64,688	2,890	67,578	82,036	2,969	85,005	92,328	3,088	95,416	72,536
Total other income (expense)	(14,246)	(2,890)	(17,136)	(6,327)	(2,969)	(9,296)	(6,140)	(3,088)	(9,228)	(5,511)
Income before taxes	50,442	-	50,442	75,709	-	75,709	86,188	-	86,188	67,025
Income tax expense	13,493	-	13,493	19,300	-	19,300	21,605	-	21,605	244,520
Net earnings (loss)	36,949	-	36,949	56,409	-	56,409	64,583	-	64,583	(177,500)
Less: net earnings attributable to noncontrolling interests	230	-	230	219	-	219	179	-	179	156
Net earnings (loss) attributable to Vishay stockholders	\$36,719	\$-	\$36,719	\$56,190	\$-	\$56,190	\$64,404	\$-	\$64,404	\$(177,656)

	Years ended					
	December 31, 2016			December 31, 2017		
	As Reported	Adjustments	Recast	As Reported	Adjustments	Recast
Net revenues	\$2,323,431	\$(6,103)	\$2,317,328	\$2,603,522	\$(4,154)	\$2,599,368
Costs of products sold	1,753,648	(10,142)	1,743,506	1,903,910	(7,651)	1,896,259
Gross profit	569,783	4,039	573,822	699,612	3,497	703,109
Operating income	101,717	95,341	197,058	311,588	12,417	324,005
Total other income (expense)	(7,501)	(95,341)	(102,842)	(32,224)	(12,417)	(44,641)
Income before taxes	94,216	-	94,216	279,364	-	279,364
Income tax expense	44,843	-	44,843	298,924	-	298,924
Net earnings (loss)	49,373	-	49,373	(19,560)	-	(19,560)
	581	-	581	784	-	784

Less: net earnings attributable to  
noncontrolling interests

Net earnings (loss) attributable to

Vishay stockholders	\$48,792	\$ -	\$48,792	\$(20,344 )	\$ -	\$(20,344 )
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Reclassifications

In addition to the changes due to the retrospective adoption of certain aspects of new accounting guidance described above, certain prior period amounts have been reclassified to conform to the current financial statement presentation.

12

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NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 2 – Revenue Recognition

As of January 1, 2018, the Company recognizes revenue from contracts with customers in accordance with ASU 2014-09. The Company has framework agreements with many of its customers that contain the terms and conditions of future sales, but do not create enforceable rights or obligations. Per ASU 2014-09, the Company's contracts are the combined purchase orders and the terms and conditions contained within such framework agreements.

Payment terms for the Company's sales are generally less than sixty days. Substantially all of the Company's receivables are collected within twelve months of the transfer of products to the customer and the Company expects this to continue going forward. The Company applies the practical expedient within ASU 2014-09 to all of its contracts with payment terms less than or equal to twelve months and does not recognize a financing component of the transaction price.

Revenue is measured based on the consideration specified in contracts with customers, and excludes any sales incentives and amounts collected on behalf of third parties. The Company recognizes revenue when it satisfies its performance obligations.

The Company's contracts contain two performance obligations: delivery of products and warranty protection. The Company does not sell separate, enhanced, or extended warranty coverage, but through its customary business practices, the Company has created implied service-type warranties, which are accounted for as separate performance obligations. Revenue is allocated between these two performance obligations and recognized as the obligations are satisfied. The allocation of revenue to warranty protection is based on an estimate of expected cost plus margin. The delivery of products performance obligation is satisfied and product sales revenue is recognized when the customer takes control of the products. Warranty revenue is deferred and the warranty protection performance obligation is satisfied and revenue is recognized over the warranty period, which is typically less than twenty-four months from sale to end customer. The warranty deferred revenue liability is recorded within Other Accrued Expenses and Other Liabilities on the accompanying consolidated condensed balance sheets. The deferred revenue balance associated with the service-type warranty performance obligations and the components that comprise the change in the deferred revenue balance are not significant.

The Company has a broad line of products that it sells to original equipment manufacturers ("OEMs"), electronic manufacturing services ("EMS") companies, which manufacture for OEMs on an outsourcing basis, and independent distributors that maintain large inventories of electronic components for resale to OEMs and EMS companies.

The Company has and will continue to recognize revenue on sales to distributors when the distributor takes control of the products ("sold-to" model). The Company has agreements with distributors that allow distributors a limited credit for unsaleable products, which it terms a "scrap allowance." Consistent with industry practice, the Company also has a "stock, ship and debit" program whereby it considers requests by distributors for credits on previously purchased products that remain in distributors' inventory, to enable the distributors to offer more competitive pricing. In addition, the Company has contractual arrangements whereby it provides distributors with protection against price reductions initiated by the Company after product is sold by the Company to the distributor and prior to resale by the distributor.

The Company recognizes the estimated variable consideration to be received as revenue and records a related accrued expense for the consideration not expected to be received, based upon its estimate of product returns, scrap allowances, "stock, ship and debit" credits, and price protection credits that will be attributable to sales recorded through the end of the period. The Company makes these estimates based upon sales levels to its distributors during the period, inventory levels at the distributors, current and projected market conditions, and historical experience under the programs. While the Company utilizes a number of different methodologies to estimate the accruals, all of

the methodologies take into account sales levels to distributors during the relevant period, 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. These procedures require the exercise of significant judgments. The Company believes that it has a reasonable basis to estimate future credits under the programs.

13

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## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Distributor sales accrual activity is shown below:

	Fiscal quarters ended		Years Ended December 31,	
	March 31, 2018	April 1, 2017	2017	2016
Beginning balance	\$36,680	\$34,479	\$34,479	\$32,487
Sales allowances	24,188	21,520	89,009	86,896
Credits issued	(28,450)	(23,471)	(87,403)	(85,341)
Foreign currency	288	(576 )	595	437
Ending balance	\$32,706	\$31,952	\$36,680	\$34,479

The Company pays commissions to external sales representatives on a per-sale basis. The Company applies the practical expedient available within ASU 2014-09 to all commissions paid as the future amortization period of the asset that the Company otherwise would have recognized is one year or less. Accordingly, these commissions are expensed as incurred. Internal staff are not paid commissions.

The Company has elected to account for shipping and handling as activities to fulfill the promise to transfer the product even if the shipping and handling activities are performed after the customer obtains control. The Company does not evaluate whether shipping and handling activities are promised services to its customers. If control transfers and revenue is recognized for the related products before the shipping and handling activities occur, the related costs of those shipping and handling activities is accrued. The Company applies this accounting policy election consistently to similar types of transactions.

See disaggregated revenue information in Note 10.

NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 3 – 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.

On February 8, 2018, the Company acquired substantially all of the assets and liabilities of UltraSource, Inc., a U.S.-based, privately-held thin film circuit and thin film interconnect manufacturer, for \$13,372, subject to customary post-closing adjustments. Based on an estimate of their fair values, the Company allocated \$6,500 of the purchase price to definite-lived intangible assets. 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 \$4,003 related to this acquisition. The results and operations of this acquisition have been included in the Resistors & Inductors segment since February 8, 2018. The inclusion of this acquisition did not have a material impact on the Company's consolidated results for the fiscal quarter ended March 31, 2018. The goodwill related to this acquisition is included in the Resistors & Inductors reporting unit for goodwill impairment testing. The preliminary allocation is pending finalization of a working capital adjustment. There can be no assurance that the estimated amounts recorded represent the final purchase allocation.

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.

15

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## 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. As of December 31, 2017, the Company's restructuring programs were substantially completed.

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 quarter ended April 1, 2017
MOSFETs Enhanced Competitiveness Program	\$420
Global Cost Reduction Programs	1,049
Total	\$1,469

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 previously 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.

As a result of a review of the financial results and outlook for the Company's MOSFETs segment following the completion of production transfers, the Company determined to implement further cost reductions for the MOSFETs segment. In November 2016, the Company announced an extension of the MOSFETs Enhanced Competitiveness Program. The revised program included 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 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	9,744
Cash paid	(15,686)
Foreign currency translation	2
Balance at December 31, 2016	\$6,232
Expense recorded in 2017	3,204
Cash paid	(7,173 )
Balance at December 31, 2017	\$2,263
Cash paid	(283 )
Balance at March 31, 2018	\$1,980

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

16

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## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Global Cost Reduction Programs

The global cost reduction programs announced in 2015 included 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. These programs were substantially implemented as of December 31, 2017.

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	9,918
Cash paid	(16,237)
Foreign currency translation	(34 )
Balance at December 31, 2016	\$6,264
Expense recorded in 2017	8,069
Cash paid	(7,168 )
Foreign currency translation	500
Balance at December 31, 2017	\$7,665
Cash paid	(1,027 )
Foreign currency translation	148
Balance at March 31, 2018	\$6,786

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

	Fiscal quarter ended April 1, 2017
Resistors & Inductors	\$ 851
Capacitors	161
Unallocated Selling, General, and Administrative Expenses	37
Total	\$ 1,049

Severance benefits are generally paid in a lump sum at cessation of employment, though some are being paid in installments. The current portion of the liability is \$4,222 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 condensed balance sheets.

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 March 31, 2018 and April 1, 2017 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.

On December 22, 2017, the Tax Cuts and Jobs Act (the "TCJA") was enacted in the United States. The TCJA represents sweeping changes in U.S. tax law. Among the numerous changes in tax law, the TCJA permanently reduced the U.S. corporate income tax rate to 21% beginning in 2018; imposed a one-time transition tax on deferred foreign earnings; established a partial territorial tax system by allowing a 100% dividends received deduction on qualifying dividends paid by foreign subsidiaries; limited deductions for net interest expense; and expanded the U.S. taxation of foreign earned income to include "global intangible low-taxed income" ("GILTI") of foreign subsidiaries.

The TCJA represents the first significant change in U.S. tax law in over 30 years. As permitted by SAB No. 118, the tax expense recorded in the fourth fiscal quarter of 2017 due to the enactment of the TCJA was considered "provisional," based on reasonable estimates. The Company is continuing to collect and analyze detailed information about the earnings and profits of its non-U.S. subsidiaries, the related taxes paid, the amounts which could be repatriated, the foreign taxes which may be incurred on repatriation, and the associated impact of these items under the TCJA. The Company may record adjustments to refine those estimates during the measurement period, as additional analysis is completed. No adjustments were recorded during the first fiscal quarter of 2018.

Furthermore, the Company is continuing to evaluate the TCJA's provisions and may prospectively adjust its financial and capital structure and business practices accordingly.

The TCJA transitions the U.S. from a worldwide tax system to a partial territorial tax system. Under previous law, companies could indefinitely defer U.S. income taxation on unremitted foreign earnings. The TCJA imposes a one-time transition tax on deferred foreign earnings of 15.5% for liquid assets and 8% for illiquid assets, payable in defined increments over eight years. As a result of this requirement, the Company recognized provisional tax expense of \$215,558 in 2017, and provisionally expects to pay \$180,000, net of estimated applicable foreign tax credits, and after utilization of net operating loss, R&D credits, and foreign tax credit carryforwards. These previously deferred foreign earnings may now be repatriated to the United States without additional U.S. federal taxation. However, any such repatriation could incur withholding and other foreign taxes in the source and intervening foreign jurisdictions, and certain U.S. state taxes.

Due to the changes in taxation of dividends received from foreign subsidiaries, and also because of the need to finance the payment of the transition tax, the Company made the determination during the fourth fiscal quarter of 2017 that certain unremitted foreign earnings in Israel, Germany, Austria, and France are no longer permanently reinvested, and recorded provisional tax expense of \$213,000 to accrue the incremental foreign income taxes and withholding taxes payable to foreign jurisdictions assuming the hypothetical repatriation to the United States of these approximately \$1,100,000 of available foreign earnings. Due to the existence of the foreign cash taxes payable at the source, the Company expects to actually repatriate these amounts at a measured pace over several years, and may decide to ultimately not repatriate some of these amounts. The Company terminated its previous cash repatriation program and recorded a provisional income tax benefit to reverse the associated deferred tax liability as a result of this planned repatriation. No amounts were repatriated pursuant to this program in the first fiscal quarter of 2018.

The Company's effective tax rate for the period ended March 31, 2018 was negatively impacted by certain provisions of the TCJA. The provisions of the TCJA are interrelated and the impact of any specific provision cannot be isolated. The Company operates at a pre-tax loss in the U.S. and the reduction in the federal tax rate reduces the tax benefit recorded. In addition, the inclusion of GILTI income and the limitation and the deductibility of interest expense increased the effective tax rate. The Company has elected to account for GILTI tax in the period in which it is incurred, and therefore did not provide any deferred taxes in the consolidated financial statements at December 31, 2017.

Income tax expense for the fiscal quarter ended March 31, 2018, includes tax expense of \$1,316 for the periodic remeasurement of the deferred tax liability recorded for the foreign taxes associated with the cash repatriation program described above, primarily due to the foreign currency effects.

Income tax expense for the fiscal quarter ended April 1, 2017 included a tax benefit of \$968 for the periodic remeasurement of the deferred tax liability recorded for the cash repatriation program that was terminated as a result of the enactment of the TCJA.

During the three fiscal months ended March 31, 2018, the liabilities for unrecognized tax benefits increased by \$568 on a net basis, due to increases for tax positions taken in the current period, interest, and foreign currency effects.

18

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## 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:

	March 31, 2018	December 31, 2017
Credit facility	\$184,000	\$150,000
Convertible senior debentures, due 2040	111,157	110,412
Convertible senior debentures, due 2041	57,031	56,641
Convertible senior debentures, due 2042	62,853	62,518
Deferred financing costs	(8,656 )	(9,101 )
	406,385	370,470
Less current portion	-	-
	\$406,385	\$370,470

## 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 March 29, 2018 dividend payment:

	Due 2040	Due 2041	Due 2042
Issuance date	November 9, 2010	May 13, 2011	May 31, 2012
Maturity date	November 15, 2040	May 15, 2041	June 1, 2042
Principal amount	\$275,000	\$150,000	\$150,000
Cash coupon rate (per annum)	2.25 %	2.25 %	2.25 %
Nonconvertible debt borrowing rate at issuance (per annum)	8.00 %	8.375 %	7.50 %
Conversion rate effective March 14, 2018 (per \$1 principal amount)	77.4680	56.5321	91.0838
Effective conversion price effective March 14, 2018 (per share)	\$12.91	\$17.69	\$10.98
130% of the conversion price (per share)	\$16.78	\$23.00	\$14.27
Call date	November 20, 2020	May 20, 2021	June 7, 2022

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.

The convertible debentures due 2042 became convertible subsequent to the December 31, 2016 evaluation of the conversion criteria, and have remained convertible for each subsequent quarterly evaluation through the March 31, 2018 evaluation, due to the sale price of Vishay's common stock exceeding 130% of the conversion price for the applicable periods. The convertible debentures due 2040 became convertible subsequent to the September 30, 2017 evaluation of the conversion criteria, and have remained convertible for each subsequent quarterly evaluation through the March 31, 2018 evaluation, due to the sale price of Vishay's common stock exceeding 130% of the conversion price for the applicable periods. The debentures due 2040 and due 2042 will remain convertible until June 30, 2018, at which time the conversion criteria will be reevaluated. At the direction of its Board of Directors, the Company intends, upon future conversion of any of the convertible senior debentures, to repay the principal amounts of the convertible senior debentures in cash and settle any additional amounts in shares of Vishay common stock. The excess of the amount that the Company would pay to the holders of the debentures due 2040 and due 2042 upon conversion over the carrying value of the liability component of the debentures currently convertible has been reclassified as temporary equity on the consolidated condensed financial statements. The Company intends to finance the principal amount of any converted debentures using borrowings under its credit facility. Accordingly, the debt component of the convertible debentures due 2040 and due 2042 continues to be classified as a non-current liability on the consolidated condensed balance sheets.

19

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## 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 (including temporary equity) - net carrying value
<u>March 31, 2018</u>					
Due 2040	\$ 275,000	(164,143 )	300	\$ 111,157	\$ 110,094
Due 2041	\$ 150,000	(93,239 )	270	\$ 57,031	\$ 62,246
Due 2042	\$ 150,000	(87,276 )	129	\$ 62,853	\$ 57,874
Total	\$ 575,000	\$ (344,658 )	\$ 699	\$ 231,041	\$ 230,214
<u>December 31, 2017</u>					
Due 2040	\$ 275,000	(164,794 )	206	\$ 110,412	\$ 110,094
Due 2041	\$ 150,000	(93,573 )	214	\$ 56,641	\$ 62,246
Due 2042	\$ 150,000	(87,600 )	118	\$ 62,518	\$ 57,874
Total	\$ 575,000	\$ (345,967 )	\$ 538	\$ 229,571	\$ 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>March 31, 2018</u>					
Due 2040	\$ 1,547	651	22	94	\$ 2,314
Due 2041	\$ 844	334	12	56	\$ 1,246
Due 2042	\$ 844	324	13	11	\$ 1,192
Total	\$ 3,235	\$ 1,309	\$ 47	\$ 161	\$ 4,752



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April 1, 2017

Due 2040	\$ 1,547	602	22	(25	) \$ 2,146
Due 2041	\$ 844	308	12	2	\$ 1,166
Due 2042	\$ 844	301	13	(4	) \$ 1,154
Total	\$ 3,235	\$ 1,211	\$ 47	\$ (27	) \$ 4,466

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20

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 7 – 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, 2018	\$ (69,041 )	\$ 92,954	\$ 1,801	\$25,714
Cumulative effect of accounting for adoption of ASU 2016-01	-	-	(1,801 )	\$(1,801 )
Other comprehensive income before reclassifications	-	27,024	-	\$27,024
Tax effect	-	-	-	\$-
Other comprehensive income before reclassifications, net of tax	-	27,024	-	\$27,024
Amounts reclassified out of AOCI	2,296	-	-	\$2,296
Tax effect	(689 )	-	-	\$(689 )
Amounts reclassified out of AOCI, net of tax	1,607	-	-	\$1,607
Net other comprehensive income	\$ 1,607	\$ 27,024	\$ -	\$28,631
Balance at March 31, 2018	\$ (67,434 )	\$ 119,978	\$ -	\$52,544

The Company recognized a cumulative-effect adjustment to retained earnings (accumulated deficit) of \$1,801 for the cumulative change in fair value of available-for-sale equity investments previously recognized in other comprehensive income due to the adoption of ASU 2016-01. See Note 1 for further information.

Reclassifications of pension and other post-retirement actuarial items out of AOCI are included in the computation of net periodic benefit cost. See Note 8 for further information.

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 8 – 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 first fiscal quarters of 2018 and 2017 for the Company's defined benefit pension plans:

	Fiscal quarter ended		Fiscal quarter ended	
	March 31, 2018		April 1, 2017	
	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans
Net service cost	\$-	\$ 948	\$-	\$ 903
Interest cost	371	1,242	410	1,167
Expected return on plan assets	-	(488 )	-	(506 )
Amortization of prior service cost	36	55	36	18
Amortization of losses	159	1,604	82	1,478
Curtailment and settlement losses	-	462	-	322
Net periodic benefit cost	\$566	\$ 3,823	\$528	\$ 3,382

## Other Postretirement Benefits

The following table shows the components of the net periodic benefit cost for the first fiscal quarters of 2018 and 2017 for the Company's other postretirement benefit plans:

	Fiscal quarter ended		Fiscal quarter ended	
	March 31, 2018		April 1, 2017	
	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans
Service cost	\$34	\$ 75	\$33	\$ 64
Interest cost	68	30	77	24
Amortization of prior service (credit)	(37)	-	(209)	-
Amortization of losses (gains)	(10)	27	(23 )	14
Net periodic benefit cost	\$55	\$ 132	\$(122)	\$ 102

22

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 9 – 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 Company determines compensation cost for restricted stock units ("RSUs") and phantom stock units 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	
	March 31, 2018	April 1, 2017
Restricted stock units	\$2,269	\$2,204
Phantom stock units	214	163
Total	\$2,483	\$2,367

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 March 31, 2018 (amortization periods in years):

	Unrecognized Compensation Cost	Weighted Average Remaining Amortization Periods
Restricted stock units	\$ 5,394	1.7
Phantom stock units	-	0.0
Total	\$ 5,394	

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 March 31, 2018 and changes during the three 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, 2018	986	\$ 13.34
Granted	252	18.90
Vested*	(334 )	13.67
Cancelled or forfeited	-	-
Outstanding at March 31, 2018	904	\$ 14.77

Expected to vest at March 31, 2018 904

\* 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, 2019	213	-	213
January 1, 2020	167	-	167
January 1, 2021	141	-	141

## 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.

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Phantom stock unit activity under the phantom stock plan as of March 31, 2018 and changes during the three 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, 2018	157	
Granted	10	\$ 21.35
Dividend equivalents issued	1	
Outstanding at March 31, 2018	168	

---

24

NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 10 – 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 is 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 March 31, 2018:</u>						
Product Sales	\$ 127,494	\$ 167,017	\$ 71,958	\$ 244,019	\$ 106,268	\$ 716,756
Royalty Revenues	12	-	-	27	-	\$ 39
Total Revenue	\$ 127,506	\$ 167,017	\$ 71,958	\$ 244,046	\$ 106,268	\$ 716,795
Gross Profit	\$ 32,022	\$ 43,200	\$ 27,233	\$ 78,530	\$ 24,315	\$ 205,300
Segment Operating Income	\$ 22,558	\$ 37,931	\$ 22,794	\$ 70,002	\$ 18,893	\$ 172,178
<u>Fiscal quarter ended April 1, 2017:*</u>						
Product Sales	\$ 104,842	\$ 144,585	\$ 65,262	\$ 200,246	\$ 89,860	\$ 604,795
Royalty Revenues	-	-	-	6	-	\$ 6
Total Revenue	\$ 104,842	\$ 144,585	\$ 65,262	\$ 200,252	\$ 89,860	\$ 604,801
Gross Profit	\$ 20,717	\$ 38,162	\$ 22,442	\$ 61,215	\$ 19,213	\$ 161,749
Segment Operating Income	\$ 11,803	\$ 33,442	\$ 17,117	\$ 53,958	\$ 14,190	\$ 130,510

\*Recast for the retrospective adoption of ASUs 2014-09 and 2017-07. See Note 1.

	Fiscal quarters ended	
	March 31, 2018	April 1, 2017***
Reconciliation:		
Segment Operating Income	\$ 172,178	\$ 130,510
Restructuring and Severance Costs	-	(1,469 )
Unallocated Selling, General, and Administrative Expenses	(68,116 )	(61,463 )
Consolidated Operating Income	104,062	\$ 67,578
Unallocated Other Income (Expense)	(12,043 )	(17,136 )
Consolidated Income Before Taxes	\$ 92,019	50,442

\*\*\*Recast for the adoption of ASU 2017-07. See Note 1.



## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

The Company has a broad line of products that it sells to OEMs, EMS companies, and independent distributors. The distribution of sales by customer type is shown below:

	Years Ended December			
	Fiscal quarters ended 31,		2017	2016
	March 31, 2018	April 1, 2017		
Distributors	\$404,060	\$345,703	\$1,484,276	\$1,280,060
OEMs	264,050	214,647	931,291	861,322
EMS companies	48,685	44,451	183,801	175,946
Total Revenue	\$716,795	\$604,801	\$2,599,368	\$2,317,328

Net revenues were attributable to customers in the following regions:

	Years Ended December			
	Fiscal quarters ended 31,		2017	2016
	March 31, 2018	April 1, 2017		
Asia	\$285,478	\$257,058	\$1,091,107	\$948,195
Europe	267,382	206,025	902,357	810,543
Americas	163,935	141,718	605,904	558,590
Total Revenue	\$716,795	\$604,801	\$2,599,368	\$2,317,328

The Company generates substantially all of its revenue from product sales to end customers in the industrial, automotive, telecommunications, computing, consumer products, power supplies, military and aerospace, and medical end markets. Sales by end market are presented below:

	Years Ended December			
	Fiscal quarters ended 31,		2017	2016
	March 31, 2018	April 1, 2017		
Industrial	\$280,212	\$216,766	\$934,631	\$796,031
Automotive	208,394	175,343	727,220	640,767
Telecommunications	45,924	45,835	190,682	193,456
Computing	47,431	41,070	198,850	172,481
Consumer Products	37,259	29,607	145,243	150,741
Power Supplies	34,243	34,858	160,038	132,555
Military and Aerospace	35,214	33,176	132,898	128,523
Medical	28,118	28,146	109,806	102,774
Total revenue	\$716,795	\$604,801	\$2,599,368	\$2,317,328

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Note 11 – Earnings Per Share

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

	Fiscal quarters ended	
	March 31, 2018	April 1, 2017
Numerator:		
Net earnings attributable to Vishay stockholders	\$62,366	\$36,719
Denominator:		
Denominator for basic earnings per share:		
Weighted average shares	144,160	146,120
Outstanding phantom stock units	167	154
Adjusted weighted average shares - basic	144,327	146,274
Effect of dilutive securities:		
Convertible and exchangeable debt instruments	14,610	8,349
Restricted stock units	565	253
Dilutive potential common shares	15,175	8,602
Denominator for diluted earnings per share:		
Adjusted weighted average shares - diluted	159,502	154,876
Basic earnings per share attributable to Vishay stockholders	\$0.43	\$0.25
Diluted earnings per share attributable to Vishay stockholders	\$0.39	\$0.24

28

## NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

Diluted earnings 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 March/April 31, 1, 2018 2017	
Convertible and exchangeable notes:		
Convertible Senior Debentures, due 2041	-	8,340
Weighted average other	307	581

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. The convertible debentures due 2042 became convertible subsequent to the December 31, 2016 evaluation of the conversion criteria, and have remained convertible for each subsequent quarterly evaluation through the March 31, 2018 evaluation. The convertible debentures due 2040 became convertible subsequent to the September 30, 2017 evaluation of the conversion criteria, and have remained convertible for each subsequent quarterly evaluation through the March 31, 2018 evaluation. 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 \$12.91, 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 \$17.69, 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 \$10.98, 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 12 – 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>March 31, 2018</u>				
<u>Assets:</u>				
Assets held in rabbi trusts	\$43,756	\$27,199	\$16,557	\$-
Available for sale securities	\$4,702	4,702	-	-
	\$48,458	\$31,901	\$16,557	\$-
<u>Liabilities:</u>				
Embedded derivative - convertible debentures due 2040	\$(300 )	\$-	\$-	\$(300)
Embedded derivative - convertible debentures due 2041	\$(270 )	-	-	(270)
Embedded derivative - convertible debentures due 2042	\$(129 )	-	-	(129)
	\$(699 )	\$-	\$-	\$(699)
<u>December 31, 2017</u>				
<u>Assets:</u>				
Assets held in rabbi trusts	\$45,252	\$28,589	16,663	\$-
Available for sale securities	\$4,621	4,621	-	-
	\$49,873	\$33,210	\$16,663	\$-
<u>Liabilities:</u>				
Embedded derivative - convertible debentures due 2040	\$(206 )	\$-	\$-	\$(206)
Embedded derivative - convertible debentures due 2041	\$(214 )	-	-	(214)
Embedded derivative - convertible debentures due 2042	\$(118 )	-	-	(118)
	\$(538 )	\$-	\$-	\$(538)

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.

30

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NOTES TO THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

(dollars in thousands, except per share amounts)

The Company holds investments in equity 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 period. 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 \$100,000 and \$100,000 as of March 31, 2018 and December 31, 2017, 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 March 31, 2018. 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 March 31, 2018 and December 31, 2017 is approximately \$1,015,400 and \$1,071,200, respectively, compared to its carrying value, excluding the derivative liabilities and deferred financing costs, of \$414,342 and \$379,033, 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 March 31, 2018 and December 31, 2017, 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 March 31, 2018 and December 31, 2017, 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.

31

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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 August 2, 2017, our Board of Directors approved a stock repurchase plan, authorizing us to repurchase, in the aggregate, up to \$150 million of our outstanding common stock. The stock repurchase plan will expire on June 1, 2018. The stock repurchase plan does not obligate us to acquire any particular amount of common stock, and it may be terminated or suspended at any time at the Company's direction in accordance with the plan. The Company repurchased 2,250,236 shares of stock for \$39.9 million since the inception of this plan. No repurchases were made in the first fiscal quarter of 2018.

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. We repatriated \$38 million and \$46 million to the U.S. pursuant to this plan in 2017 and 2016, respectively.

As a result of the enactment of the Tax Cuts and Jobs Act ("TCJA") in December 2017, we terminated the aforementioned existing cash repatriation plan and replaced it with a plan to repatriate approximately \$1.1 billion of unremitted foreign earnings in Israel, Germany, Austria, and France in the fourth fiscal quarter of 2017. Due to the existence of the foreign cash taxes payable at the source, we expect to actually repatriate these amounts at a measured pace over several years, and may decide to ultimately not repatriate some of these amounts. The provisional tax expense to accrue the incremental foreign taxes and withholding taxes payable to foreign jurisdictions is included in the provisional \$234.9 million net tax expense recorded in the fourth fiscal quarter of 2017. As permitted by Securities and Exchange Commission ("SEC") Staff Accounting Bulletin ("SAB") No. 118, the net tax expense recorded in our financial statements for the fourth fiscal quarter of 2017 due to the enactment of the TCJA is considered "provisional," based on reasonable estimates. We are continuing to collect and analyze detailed information that could impact this amount, and may record adjustments to refine those estimates during the



measurement period defined in SAB No. 118, as additional analysis is completed. See further information in "U.S. Tax Reform: Tax Cuts and Jobs Act" below.

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 fourth fiscal quarter of 2017, we substantially completed our cost reduction programs, which had been ongoing since 2013. 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, 2017, filed with the SEC on February 16, 2018.

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" below. In the first fiscal quarter of 2018, we retrospectively adopted two new accounting standards, which impacted previously reported net revenues, gross profit margin, and segment operating income. The amounts previously reported for these metrics have been recast. See additional information in Note 1 to the consolidated condensed financial statements included in Item 1. We experienced a continued high level of demand in virtually all end-markets in the first fiscal quarter of 2018. Net revenues increased significantly versus the prior fiscal quarter and the prior year quarter. The strong order levels of 2017 continued in the first fiscal quarter of 2018 and resulted in continued strong metrics and an increase in nearly all key financial metrics compared to the prior quarter and prior year quarter.

Net revenues for the fiscal quarter ended March 31, 2018 were \$716.8 million, compared to \$673.5 million and \$604.8 million for the fiscal quarters ended December 31, 2017 and April 1, 2017, respectively. The net earnings attributable to Vishay stockholders for the fiscal quarter ended March 31, 2018 were \$62.4 million, or \$0.39 per diluted share, compared to net loss attributable to Vishay stockholders of \$(177.7) million, or \$(1.23) per share for the fiscal quarter ended December 31, 2017, and net earnings attributable to Vishay stockholders of \$36.7 million, or \$0.24 per diluted share for the fiscal quarter ended April 1, 2017.

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 attributable to Vishay stockholders for the fiscal quarters ended March 31, 2018, December 31, 2017, and April 1, 2017 include items affecting comparability. The items affecting comparability are (in thousands, except per share amounts):

	Fiscal quarters ended		
	March 31, 2018	December 31, 2017	April 1, 2017
GAAP net earnings (loss) attributable to Vishay stockholders	\$62,366	\$(177,657)	\$36,719
<u>Reconciling items affecting operating income (loss):</u>			
Restructuring and severance costs	\$-	\$6,079	\$1,469
<u>Reconciling items affecting other income (expense):</u>			
Loss (gain) on disposal of equity affiliate	\$-	\$(948 )	\$7,060
<u>Reconciling items affecting tax expense:</u>			
Enactment of TCJA	\$-	\$234,855	\$-
Effects of cash repatriation programs	1,316	(2,702 )	(968 )
Effects of changes in uncertain tax positions	-	2,369	-
Tax effects of pre-tax items above	-	(2,060 )	(441 )
Adjusted net earnings	\$63,682	\$59,936	\$43,839
Adjusted weighted average diluted shares outstanding	159,502	161,177	154,876
Adjusted earnings per diluted share	\$0.40	\$0.37	\$0.28

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 quarter.

	Fiscal quarters ended		
	March 31, 2018	December 31, 2017	April 1, 2017
Net cash provided by continuing operating activities	\$46,859	\$122,932	\$43,674

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Proceeds from sale of property and equipment	184	201	943
Less: Capital expenditures	(28,273)	(85,642 )	(16,668)
Free cash	\$18,770	\$37,491	\$27,949

Our results for the fiscal quarters ended March 31, 2018, December 31, 2017, and April 1, 2017 represent the effects of a strong business environment and order activity, our cost reduction programs, and our organic growth initiatives. We experienced a relatively sharp upturn in demand beginning in the first quarter of 2017 that has continued through first fiscal quarter of 2018 and further improved results. Our percentage of euro-based sales approximates our percentage of euro-based expenses so the foreign currency impact on revenues was substantially offset by the impact on expenses. Our pre-tax results were consistent with expectations based on our business model.

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## 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. Using our and publicly available data, 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. All pricing is subject to governing market conditions and is independently set by us.

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 first fiscal quarter of 2017 through the first fiscal quarter of 2018 (dollars in thousands):

	1st Quarter 2017*		2nd Quarter 2017*		3rd Quarter 2017*		4th Quarter 2017*		1st Quarter 2018	
Net revenues	\$604,801		\$643,164		\$677,941		\$673,462		\$716,795	
Gross profit margin	26.7	%	27.0	%	28.0	%	26.3	%	28.6	%
Operating margin <sup>(1)</sup>	11.2	%	13.2	%	14.1	%	11.3	%	14.5	%
End-of-period backlog	\$836,500		\$1,034,000		\$1,122,200		\$1,320,200		\$1,498,700	
Book-to-bill ratio	1.29		1.27		1.11		1.28		1.22	
Inventory turnover	4.5		4.6		4.5		4.5		4.6	
Change in ASP vs. prior quarter	-1.3	%	-0.7	%	-0.1	%	-0.2	%	-0.2	%

\* Recast for the retrospective adoption of ASUs 2014-09 and 2017-07. See Note 1 to the consolidated condensed financial statements included in Item 1.

(1) Operating margin for the first, second, third, and fourth fiscal quarters of 2017 includes \$1.5 million, \$0.5 million, \$3.2 million, and \$6.1 million, respectively, of restructuring and severance expenses (see Note 4 to our consolidated condensed financial statements).

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

Revenues increased versus the prior fiscal quarter and first fiscal quarter of 2017. The continued strong demand further increased the backlog while the book-to-bill ratio remains high. Distributors continue to drive the high order rate. Many of our product lines are operating at or near capacity, but the high order rates have increased product delivery leadtimes and even caused some shortages of supply. We continue to raise critical capacities ambitiously while remaining careful in adding operational fixed costs. Sequentially, average selling prices were virtually stable, reflective of the strong business environment.

Gross profit margin increased versus the prior fiscal quarter and the first fiscal quarter of 2017. The increases are primarily volume-driven with decreasing average selling prices burdening each period.

The book-to-bill ratio in the first fiscal quarter of 2018 remained strong at 1.22 versus 1.28 in the fourth fiscal quarter of 2017. The book-to-bill ratios in the first fiscal quarter of 2018 for distributors and original equipment manufacturers ("OEM") were 1.28 and 1.16, respectively, versus ratios of 1.40 and 1.13, respectively, during the fourth fiscal quarter of 2017.

For the second fiscal quarter of 2018, we anticipate revenues between \$740 million and \$780 million and gross margins of 28.5% to 29.5% at the exchange rates of the first fiscal quarter.



## 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 first fiscal quarter of 2017 through the first fiscal quarter of 2018 (dollars in thousands):

	1st Quarter 2017*	2nd Quarter 2017*	3rd Quarter 2017*	4th Quarter 2017*	1st Quarter 2018
<b><u>MOSFETs</u></b>					
Net revenues	\$104,842	\$114,035	\$126,522	\$122,077	\$127,506
Book-to-bill ratio	1.37	1.37	1.19	1.59	1.23
Gross profit margin	19.8 %	22.2 %	25.6 %	25.5 %	25.1 %
Segment operating margin	11.3 %	14.6 %	18.5 %	18.2 %	17.7 %
<b><u>Diodes</u></b>					
Net revenues	\$144,585	\$155,345	\$160,562	\$159,466	\$167,017
Book-to-bill ratio	1.44	1.41	1.18	1.34	1.30
Gross profit margin	26.4 %	26.9 %	27.1 %	26.1 %	25.9 %
Segment operating margin	23.1 %	23.7 %	24.1 %	23.0 %	22.7 %
<b><u>Optoelectronic Components</u></b>					
Net revenues	\$65,262	\$72,633	\$77,145	\$69,389	\$71,958
Book-to-bill ratio	1.16	1.11	0.94	1.21	1.24
Gross profit margin	34.4 %	35.3 %	37.6 %	30.1 %	37.8 %
Segment operating margin	26.2 %	29.8 %	32.7 %	23.8 %	31.7 %
<b><u>Resistors &amp; Inductors</u></b>					
Net revenues	\$200,252	\$208,985	\$217,497	\$216,795	\$244,046
Book-to-bill ratio	1.22	1.23	1.15	1.19	1.15
Gross profit margin	30.6 %	29.7 %	30.2 %	29.0 %	32.2 %
Segment operating margin	26.9 %	26.2 %	26.8 %	25.8 %	28.7 %
<b><u>Capacitors</u></b>					
Net revenues	\$89,860	\$92,166	\$96,215	\$105,735	\$106,268
Book-to-bill ratio	1.25	1.14	0.97	1.08	1.26

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Gross profit margin	21.4	%	20.6	%	20.4	%	19.5	%	22.9	%
Segment operating margin	15.8	%	15.3	%	15.3	%	14.7	%	17.8	%

\*Recast for the retrospective adoption of ASU 2014-09 and 2017-07. See Note 1 of the consolidated condensed financial statements included in Item 1.

36

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U.S. Tax Reform: Tax Cuts and Jobs Act

On December 22, 2017, the Tax Cuts and Jobs Act (the "TCJA") was enacted in the United States. The TCJA represents sweeping changes in U.S. tax law. Among the numerous changes in tax law, the TCJA permanently reduces the U.S. corporate income tax rate to 21% beginning in 2018; imposes a one-time transition tax on deferred foreign earnings; establishes a partial territorial tax system by allowing a 100% dividends received deduction on qualifying dividends paid by foreign subsidiaries; limits deductions for net interest expense; and expands the U.S. taxation of foreign earned income to include "global intangible low-taxed income" of foreign subsidiaries.

Under U.S. GAAP (specifically, ASC Topic 740), the effects of changes in tax rates and laws on deferred tax balances are recognized in the period in which the new legislation is enacted. The total effect of tax law changes on deferred tax balances was recorded as a component of income tax expense in the fourth fiscal quarter of 2017.

In response to the TCJA, the Staff of the U.S. Securities and Exchange Commission issued Staff Accounting Bulletin No. 118 ("SAB No. 118") to provide guidance to registrants in applying ASC Topic 740 in connection with the TCJA. SAB No. 118 provides that in the period of enactment, the income tax effects of the TCJA may be reported as a provisional amount based on a reasonable estimate (to the extent a reasonable estimate can be determined), which would be subject to adjustment during a "measurement period". The measurement period begins in the reporting period of the TCJA's enactment and ends when a registrant has obtained, prepared, and analyzed the information that was needed in order to complete the accounting requirements under ASC Topic 740. SAB No. 118 also describes supplemental disclosures that should accompany the provisional amounts.

The TCJA represents the first significant change in U.S. tax law in over 30 years. As permitted by SAB No. 118, the net tax expense recorded in our financial statements for the fourth fiscal quarter of 2017 due to the enactment of the TCJA is considered "provisional," based on reasonable estimates. We are continuing to collect and analyze detailed information about the earnings and profits of our non-U.S. subsidiaries, the related taxes paid, the amounts which could be repatriated, the foreign taxes which may be incurred on repatriation, and the associated impact of these items under the TCJA. We may record adjustments to refine those estimates during the measurement period, as additional analysis is completed, but have not recorded any adjustments in the first fiscal quarter of 2018. Furthermore, we are continuing to evaluate the TCJA's provisions and may prospectively adjust our financial and capital structure and business practices accordingly.

The provisional amount of net tax expense recorded in the fourth fiscal quarter of 2017 that is directly and indirectly related to the TCJA is summarized as follows (amounts in thousands):

Remeasurement of net deferred tax liabilities	\$(74,816 )
Transition tax on unremitted foreign earnings	215,558
Incremental foreign taxes on assumed repatriation	213,000
Reversal of deferred taxes due to cancellation of 2015 repatriation plan	(118,887)
Total tax expense related to the enactment of the TCJA	\$234,855

As a result of the TCJA, we recognized a provisional tax benefit of \$74.8 million to remeasure our net deferred tax liabilities at the lower, 21% rate.

The TCJA transitions the U.S. from a worldwide tax system to a partial territorial tax system. Under previous law, companies could indefinitely defer U.S. income taxation on unremitted foreign earnings. The TCJA imposes a one-time transition tax on deferred foreign earnings of 15.5% for liquid assets and 8% for illiquid assets, payable in defined increments over eight years. As a result of this requirement, we recognized provisional tax expense of \$215.6 million, and provisionally expect to pay \$180.0 million, net of estimated applicable foreign tax credits, and after utilization of net operating loss, R&D credit, and foreign tax credit carryforwards. These previously deferred foreign

earnings may now be repatriated to the United States without additional U.S. federal taxation. However, any such repatriation could incur withholding and other foreign taxes in the source and intervening foreign jurisdictions, and certain U.S. state taxes.

Due to the changes in taxation of dividends received from foreign subsidiaries, and also because of the need to finance the payment of the transition tax, we made the determination during the fourth fiscal quarter of 2017 that certain unremitted foreign earnings in Israel, Germany, Austria, and France are no longer permanently reinvested, and have recorded provisional tax expense of \$213.0 million to accrue the incremental foreign income taxes and withholding taxes payable to foreign jurisdictions assuming the hypothetical repatriation to the United States of these approximately \$1.1 billion of available foreign earnings. Due to the existence of the foreign cash taxes payable at the source, we expect to actually repatriate these amounts at a measured pace over several years, and may decide to ultimately not repatriate some of these amounts.

There are additional amounts of unremitted foreign earnings in other countries, which continue to be reinvested indefinitely, and we have made no provision for incremental foreign income taxes and withholding taxes payable to foreign jurisdictions related to these amounts. Determination of the amount of the unrecognized deferred foreign tax liability for these amounts is not practicable because of the complexities associated with its hypothetical calculation.

37

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During the fourth fiscal quarter of 2015, we recognized income tax, 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. This tax expense was recognized in 2015 following an evaluation of our anticipated domestic cash needs over the next several years and our most efficient use of liquidity, and with consideration of the amount of cash that could be repatriated to the U.S. efficiently with lesser withholding taxes in foreign jurisdictions. We repatriated \$38.0 million and \$46.0 million pursuant to this program in 2017 and 2016, respectively. Prior to the enactment of the TCJA, the related deferred tax liability for the 2015 repatriation plan was \$118.9 million. We have terminated the 2015 cash repatriation plan and recorded a provisional income tax benefit to reverse this deferred tax liability, which was replaced by the liability for the transition tax and foreign income and withholding taxes described above.

The deferred tax liability related to these unremitted foreign earnings is based on the available sources of cash, applicable tax rates, foreign currency exchange rates, and other factors and circumstances, as of each balance sheet date. Changes in these underlying facts and circumstances result in changes in the deferred tax liability balance, which are recorded as tax benefit or expense. During the first fiscal quarter of 2018, we recorded additional tax expense of \$1.3 million due to the remeasurement of this deferred tax liability, primarily due to foreign currency effects.

We expect to continue to generate a significant amount of cash and profits from our non-U.S. subsidiaries, and our provision for income taxes will continue to be based on various assertions regarding the future use of that cash and profits. Such assertions require us to consider a wide variety of U.S. federal and foreign tax laws, and the application of such laws to our operational and strategic needs.

Our GAAP interest expense generally exceeds our U.S.-based operating income, resulting in pre-tax losses in the U.S. We have historically recorded U.S. federal tax benefits on these losses, at 35%, which had the effect of reducing our consolidated GAAP tax rate. Accordingly, the reduction in the statutory U.S. tax rate will generally increase our consolidated GAAP tax rate due to the lower tax benefits recognized on a GAAP basis.

The TCJA expands the U.S. current taxation of foreign earned income beginning in 2018. Global intangible low-taxed income ("GILTI") is income of our non-U.S. subsidiaries that exceeds an allowable return and which will then be included in U.S. current taxable income, subject to certain adjustments, and possibly reduced by indirect foreign tax credits. We have elected to account for GILTI tax in the period in which it is incurred, and therefore have not provided any deferred tax impacts of GILTI in our consolidated financial statements for the year ended December 31, 2017. We expect to recognize a significant amount of GILTI income in 2018, and have included an estimate of such amounts in our provision for income taxes for the first fiscal quarter of 2018. Because of the complexity of the new GILTI provisions, the rules around its implementation are not yet clear and as such, this estimate could change. The TCJA also imposes a base erosion and anti-abuse minimum tax ("BEAT"). BEAT could potentially increase our U.S. federal income tax by disallowing certain otherwise deductible payments from the U.S. to non-U.S. subsidiaries and imposing a minimum tax if greater than the regular tax. BEAT did not have a material impact on our provision for income taxes for the first fiscal quarter of 2018. We are still evaluating the potential impacts of the new GILTI and BEAT tax rules.

We historically derived significant cash tax savings from our convertible debentures. For U.S. federal income tax purposes, the interest deduction for the convertible debentures is computed based on the comparable yield of a hypothetical fixed rate debt instrument with similar terms and conditions but no conversion feature. Accordingly, annual interest deductions are calculated at 8.0%, 8.375%, and 7.5% of the adjusted issue price. The adjusted issue price, and consequently the interest deduction for income tax purposes, grows over the term of the debt due to the difference between the interest deduction using a comparable yield applied to the adjusted issue price, and the coupon rate of 2.5% on the principal amount. Interest expense recognized in accordance with GAAP is calculated at the comparable yield multiplied by the carrying amount of the liability component of convertible debentures, which is substantially lower than the adjusted issue price for tax purposes. The difference between the tax and GAAP interest

computations resulted in substantially greater interest deductions for tax purposes than GAAP interest expense. The TCJA limits deduction for net interest expense, which makes the convertible debentures less attractive financial instruments. While the convertible debentures due 2040 and 2042 are currently convertible at the option of the holders, none of the convertible debentures are currently callable by us. We are evaluating financing alternatives, which might include the modification or replacement of such instruments, as a result of the TCJA.

The effects of the various TCJA provisions are all interrelated and the impact of any specific item on our effective tax rate is difficult to isolate.

## 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.

On February 8, 2018, we acquired substantially all of the assets and liabilities of UltraSource, Inc., a U.S.-based, privately-held thin film circuit and thin film interconnect manufacturer, for \$13.4 million, subject to customary post-closing adjustments. The results and operations of this acquisition have been included in the Resistors & Inductors segment since February 8, 2018. UltraSource contributed \$2.7 million of net revenues to our first fiscal quarter.

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

## 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 judgmental 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. The programs 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. These programs, including the extension of the MOSFET Enhanced Competitiveness Program, were substantially completed as of December 31, 2017.

Programs were also initiated in 2015. The programs initiated in 2015 included 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 implementation of these programs did not impact planned R&D activities, or our growth initiatives in Asian markets. As of December 31, 2017, these programs were substantially implemented.

We do not anticipate any material restructuring activities in 2018. We continue to monitor the economic environment and its potential effects on our customers and the end markets that we serve. We also continue to closely monitor our

costs and may be required to implement additional restructuring activities if we were to experience a significant economic downturn.

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.

40

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## 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 weaker during the first fiscal quarter of 2018 compared to the prior quarter and prior year quarter, with the translation of foreign currency revenues and expenses into U.S. dollars increasing reported revenues and expenses versus the prior quarter and prior year quarter.

### 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 first fiscal quarter of 2018 have been unfavorably impacted (compared to the prior quarter and prior year quarter) by local currency transactions of subsidiaries which use the U.S. dollar as their functional currency.

We enter 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 \$100.0 million as of March 31, 2018. 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			
	March 31, 2018	December 31, 2017*	April 1, 2017*	
Cost of products sold	71.4%	73.7	%	73.3 %
Gross profit	28.6%	26.3	%	26.7 %
Selling, general & administrative expenses	14.1%	14.1	%	15.3 %
Operating income (loss)	14.5%	11.3	%	11.2 %
Income (loss) before taxes and noncontrolling interest	12.8%	10.0	%	8.3 %
Net earnings (loss) attributable to Vishay stockholders	8.7 %	-26.4	%	6.1 %
<hr/> Effective tax rate	32.0%	364.8	%	26.7 %

\*Recast for the retrospective adoption of ASUs 2014-09 and 2017-07. See Note 1 to our consolidated condensed financial statement included in Item 1.

Net Revenues

Net revenues were as follows (dollars in thousands):

	Fiscal quarters ended		
	March 31, 2018	December 31, 2017**	April 1, 2017**
Net revenues	\$716,795	\$673,462	\$604,801

\*\*Recast for the retrospective adoption of ASU 2014-09. See Note 1 to our consolidated condensed financial statements included in Item 1.

The change in net revenues versus the comparable prior periods was as follows (dollars in thousands):

	Fiscal quarter ended	
	March 31, 2018	Change in net revenues
December 31, 2017	\$43,333	6.4 %
April 1, 2017	\$111,994	18.5 %

Changes in net revenues were attributable to the following:

Change attributable to:	vs. Prior	
	Quarter	Year
Increase in volume	4.6 %	13.3 %

Decrease in average selling prices	-0.2	%	-0.9	%
Foreign currency effects	1.5	%	5.3	%
Acquisition	0.4	%	0.4	%
Other	0.1	%	0.4	%
Net change	6.4	%	18.5	%

We experienced a substantial, broad-based increase in demand for our products beginning in the first fiscal quarter of 2017 that continued through the first fiscal quarter of 2018, which resulted in increased net revenues compared to the prior fiscal quarter and first fiscal quarter of 2017.

#### Gross Profit Margins

Gross profit margins for the fiscal quarter ended March 31, 2018 were 28.6%, versus 26.3% and 26.7%, for the comparable prior quarter and prior year period, respectively. The increase is due primarily to increased sales volume. We were able to offset the negative impacts of inflation and average selling price decline by cost reductions and innovation, and maintain our contributive margin.

42

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## Segments

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

MOSFETs

Net revenues and gross profit margin of the MOSFETs segment were as follows (dollars in thousands):

	Fiscal quarters ended		
	March 31, 2018	December 31, 2017*	April 1, 2017*
Net revenues	\$127,506	\$122,077	\$104,842
Gross profit margin	25.1 %	25.5 %	19.8 %

\*Recast for the retrospective adoption of ASUs 2014-09 and 2017-07. See Note 1 to our consolidated condensed financial statements included in Item 1.

The change in net revenues versus the comparable prior periods was as follows (dollars in thousands):

	Fiscal quarter ended March 31, 2018	
	Change in net revenues	% change
December 31, 2017	\$5,429	4.4 %
April 1, 2017	\$22,664	21.6 %

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

	vs. Prior Quarter		vs. Prior Year Quarter	
Change attributable to:				
Increase in volume	4.1 %		21.9 %	
Change in average selling prices	0.2 %		-1.5 %	
Foreign currency effects	0.6 %		2.2 %	
Other	-0.5 %		-1.0 %	
Net change	4.4 %		21.6 %	

In the first fiscal quarter of 2018, the MOSFETs segment experienced significant growth in net revenues versus the prior year quarter and moderate growth versus the prior quarter. All regions and sales channels contributed to the significant increase versus the prior year quarter with Americas and European distributors experiencing above average growth. Our IC products business contributed strongly to the increase in Asia. The moderate increase versus the prior quarter was primarily due to significant growth in Europe.

Gross profit margin increased versus the prior year quarter due to the significant increase in net revenues, a more profitable product mix, and the impact of the cost reduction program, which were partially offset by declining average selling prices and cost inflation. Gross profit margin decreased versus the prior quarter despite the increase in net revenues due to increased materials costs, particularly silicon, a reduction of inventory, and foreign currency impacts,

particularly in China.

Due to the continuing positive business climate in the first fiscal quarter of 2018, the reduction in the pricing pressure from last year continued for our established MOSFETs products. Price increases for select products and ongoing price reductions for other products resulted in a slight increase of average selling prices versus the prior quarter and a slight decline versus the prior year quarter.

We recently completed major cost reduction activities, which had been ongoing since 2013, to improve the operating results of the MOSFETs segment. See Note 4 to our consolidated condensed financial statements included in Item 1.

We continue to make capital and R&D investments in this business. We will maintain our R&D and management presence in the Silicon Valley area, and expect to move into a new R&D facility in San Jose in the second fiscal quarter of 2018. We are in the process of increasing manufacturing volume at third-party foundries and maximizing the output of our internal fab to meet the increased demand.

43

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Diodes

Net revenues and gross profit margins of the Diodes segment were as follows (dollars in thousands):

	Fiscal quarters ended		
	March 31, 2018	December 31, 2017*	April 1, 2017*
Net revenues	\$167,017	\$159,466	\$144,585
Gross profit margin	25.9 %	26.1 %	26.4 %

\*Recast for the retrospective adoption of ASUs 2014-09 and 2017-07. See Note 1 to our consolidated condensed financial statements included in Item 1.

The change in net revenues versus the comparable prior periods was as follows (dollars in thousands):

	Fiscal quarter ended March 31, 2018	
	Change in net revenues	% change
December 31, 2017	\$7,551	4.7 %
April 1, 2017	\$22,432	15.5 %

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

	vs. Prior Quarter		vs. Prior Year Quarter	
Change attributable to:				
Increase in volume	3.3 %		10.6 %	
Increase in average selling prices	0.1 %		0.3 %	
Foreign currency effects	1.2 %		3.9 %	
Other	0.1 %		0.7 %	
Net change	4.7 %		15.5 %	

The Diodes segment achieved significant growth in net revenues in the first fiscal quarter of 2018 versus the prior year quarter and moderate growth versus the prior quarter. The increase versus the prior year quarter was achieved in all regions, particularly Europe, which benefited from the strengthening of the euro. The increase versus the prior quarter was mainly in the Europe and Americas regions, which was partially offset by a decline in Asia. The stronger euro also contributed to the growth.

While gross profit increased generally in line with the increased volume, the gross profit margin slightly decreased versus the prior quarter and prior year quarter. Increasing materials prices and other general cost inflation were partially offset by increases in net revenues and the impact of our cost reduction efforts. Costs were negatively impacted by foreign currencies, particularly in China, which exceeded the positive impact of the stronger euro.

The positive business climate mostly eliminated the pricing pressure for our established Diodes products. The slight increases in average selling prices is primarily due to a more favorable customer mix.



Optoelectronic Components

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

	Fiscal quarters ended		
	March 31, 2018	December 31, 2017*	April 1, 2017*
Net revenues	\$71,958	\$69,389	\$65,262
Gross profit margin	37.8 %	30.1 %	34.4 %

\*Recast for the retrospective adoption of ASUs 2014-09 and 2017-07. See Note 1 to our consolidated condensed financial statements included in Item 1.

The change in net revenues versus the comparable prior periods was as follows (dollars in thousands):

	Fiscal quarter ended March 31, 2018	
	Change in net revenues	% change
December 31, 2017	\$2,569	3.7 %
April 1, 2017	\$6,696	10.3 %

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

	vs. Prior Quarter	%	vs. Prior Year Quarter	%
Change attributable to:				
Increase in volume	1.7	%	6.3	%
Decrease in average selling prices	-0.7	%	-2.4	%
Foreign currency effects	1.7	%	5.8	%
Other	1.0	%	0.6	%
Net change	3.7	%	10.3	%

In the first fiscal quarter of 2018, the Optoelectronic Components segment experienced a moderate increase in net revenues versus the prior quarter and a significant increase versus the prior year quarter. The increase versus the prior quarter was primarily achieved with distribution customers in all regions and European end customers, partially offset by decreases with Asian and American end customers. The increase versus the prior year quarter is primarily due to a stronger euro and increases with distribution customers in Americas and Europe and end customers in Europe, partially offset by decreases with distribution customers in Asia and Asian and American end customers.

The gross profit margin increased versus the prior quarter and prior year quarter. The increase versus the prior year quarter is primarily due to increased net revenues, the currency impacts of a stronger euro, which impacted revenues more than expenses, and increased efficiencies. The increase versus the prior quarter is primarily due to increased net revenues, the positive impact of an inventory increase, increased efficiencies, as well as cost reduction measures that exceeded the impacts of cost inflation and lower average selling prices.



The pricing pressure for our established Optoelectronic Components products was slightly reduced versus prior years, but continues. We experienced a slight decline in average selling prices versus the prior quarter and prior year quarter.

45

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Resistors & Inductors

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

	Fiscal quarters ended		
	March 31, 2018	December 31, 2017*	April 1, 2017*
Net revenues	\$244,046	\$216,795	\$200,252
Gross profit margin	32.2 %	29.0 %	30.6 %

\*Recast for the retrospective adoption of ASUs 2014-09 and 2017-07. See Note 1 to our consolidated condensed financial statements included in Item 1.

The change in net revenues versus the comparable prior periods was as follows (dollars in thousands):

	Fiscal quarter ended March 31, 2018	
	Change in net revenues	% change
December 31, 2017	\$27,251	12.6 %
April 1, 2017	\$43,794	21.9 %

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

	vs. Prior Quarter		vs. Prior Year Quarter	
Change attributable to:				
Increase in volume	11.3 %		15.2 %	
Decrease in average selling prices	-0.8 %		-1.1 %	
Foreign currency effects	2.1 %		7.0 %	
Acquisition	1.2 %		1.3 %	
Other	-1.2 %		-0.5 %	
Net change	12.6 %		21.9 %	

Net revenues of the Resistors & Inductors segment increased significantly in the first fiscal quarter of 2018 versus the prior quarter and prior year quarter. All regions contributed to the increase in net revenues. Distribution and the industrial and automotive end markets contributed the most to the revenue increase. The acquisition of UltraSource, Inc. in the first fiscal quarter of 2018 also contributed to the increase. See further information in "Acquisition Activity" above and Note 3 to our consolidated condensed financial statements included in Item 1.

The gross profit margin improved versus the prior quarter and the prior year quarter. The increased net revenues, favorable foreign currency impacts, cost reduction, and volume efficiencies are the main contributors to the improvement.

Average selling prices decreased slightly versus the prior quarter and prior year quarter, consistent with our historical experience.

Market demand currently exceeds our capacity for certain product lines. Capital spending projects to expand capacity are underway to meet the increased demand.

46

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Capacitors

Net revenues and gross profit margins of the Capacitors segment were as follows (dollars in thousands):

	Fiscal quarters ended		
	March 31, 2018	December 31, 2017*	April 1, 2017*
Net revenues	\$106,268	\$105,735	\$89,860
Gross profit margin	22.9 %	19.5 %	21.4 %

\*Recast for the retrospective adoption of ASUs 2014-09 and 2017-07. See Note 1 to our consolidated condensed financial statements included in Item 1.

The change in net revenues versus the comparable prior periods was as follows (dollars in thousands):

	Fiscal quarter ended March 31, 2018	
	Change in net revenues	% change
December 31, 2017	\$533	0.5 %
April 1, 2017	\$16,408	18.3 %

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

	vs. Prior Quarter		vs. Prior Year Quarter	
Change attributable to:				
Change in volume	-2.2 %		11.2 %	
Change in average selling prices	0.8 %		-0.6 %	
Foreign currency effects	1.9 %		7.1 %	
Other	0.0 %		0.6 %	
Net change	0.5 %		18.3 %	

Net revenues of the Capacitors segment for the first fiscal quarter of 2018 increased significantly versus the prior year quarter and slightly versus the prior quarter. The Europe region contributed most to the growth in net revenues versus the prior year quarter, while revenues for the Asia and Americas regions remained relatively constant. The industrial and automotive end markets were main contributors to the sales growth versus the prior year quarter.

The gross profit margin in the first fiscal quarter of 2018 increased versus the prior quarter and the prior year quarter. The increase versus the prior quarter is primarily due to a more favorable product mix and manufacturing efficiencies. The increase versus the prior year quarter is primarily due to increased net revenues and manufacturing efficiencies.

Due to the continuing positive business climate in the first fiscal quarter of 2018, average selling prices increased slightly versus the prior quarter and decreased slightly versus the prior year quarter.

## Selling, General, and Administrative Expenses

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

	Fiscal quarters ended		
	March 31, 2018	December 31, 2017*	April 1, 2017*
Total SG&A expenses	\$101,238	\$95,291	\$92,702
as a percentage of revenues	14.1 %	14.1 %	15.3 %

\*Recast for the retrospective adoption of ASUs 2014-09 and 2017-07. See Note 1 to our consolidated condensed financial statements included in Item 1.

The overall increase in SG&A expenses is primarily attributable to general salary and cost inflation and exchange rate impacts, partially offset by the benefits of our restructuring programs (see "Cost Management" above).

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

	Fiscal quarters ended		
	March 31, 2018	December 31, 2017	April 1, 2017
Amortization of intangible assets	\$3,201	\$3,430	\$3,968

Certain intangible assets became fully amortized in the second fiscal quarter of 2017.

## Other Income (Expense)

Interest expense for the fiscal quarter ended March 31, 2018 increased by \$0.6 million and \$0.9 million versus the fiscal quarters ended December 31, 2017 and April 1, 2017, respectively. The increases are primarily due to higher average outstanding balances and higher interest rates on our revolving credit facility and increases in the estimated values of the embedded derivatives associated with our convertible debentures.

We now classify pension costs other than the current service component within other income (expense). These amounts were previously reported as cost of goods sold and selling, general, and administrative expenses. Prior periods have been recast due to the adoption of ASU 2017-07 on January 1, 2018. See Note 1 to our consolidated condensed financial statements included in Item 1.

In 2017, we sold our 50% interest in an investment accounted for using the equity method, and recorded a loss aggregating to \$6.1 million. The loss recorded in March 2017 included our proportionate share of the investee's accumulated other comprehensive loss of \$1.1 million, recognized upon discontinuation of the equity investment, and the estimated cost of certain contingencies pending resolution related to the investee. In December 2017, the contingencies were favorably settled and we reduced the loss by \$0.9 million. The loss on disposal is not deductible for income tax purposes.

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

	Fiscal quarters ended March 31,      December 2018      31, 2017      Change		
Foreign exchange gain (loss)	\$(1,925)	\$(1,211 )	\$(714 )
Interest income	2,036	1,883	153
Investment income (expense)†	(904 )	-	(904 )
Other	(54 )	(85 )	31
	\$(847 )	\$ 587	\$(1,434)

†Recognized in "Other" subsequent to the prospective adoption of ASU 2016-01. Previously recorded in accumulated other comprehensive income until realized. See Note 1 to our consolidated condensed financial statements included in Item 1.

	Fiscal quarters ended March 31,      April 1, 2018      2017      Change		
Foreign exchange gain (loss)	\$(1,925)	\$(1,661)	\$(264 )
Interest income	2,036	1,263	773
Investment income (expense)†	(904 )	-	(904 )
Other	(54 )	2	(56 )
	\$(847 )	\$(396 )	\$(451 )

†Recognized in "Other" subsequent to the prospective adoption of ASU 2016-01. Previously recorded in accumulated other comprehensive income until realized. See Note 1 to our consolidated condensed financial statements included in Item 1.

## Income Taxes

For the fiscal quarter ended March 31, 2018, our effective tax rate was 32.0%, as compared to 364.8% and 26.7% for the fiscal quarters ended December 31, 2017 and April 1, 2017, respectively. Historically, the effective tax rates were generally less than the pre-2018 U.S. statutory rate primarily because of earnings in foreign jurisdictions. With the reduction in the U.S. statutory rate to 21% beginning January 1, 2018, we expect that our effective tax rate will now be higher than the U.S. statutory rate. The effective tax rate for the fiscal quarter ended December 31, 2017 is higher than the U.S. statutory rate, primarily due to certain discrete items recorded in the period.

The effective tax rate for the fiscal quarter ended December 31, 2017 was significantly impacted by the effect of the TCJA (see "U.S. Tax Reform: Tax Cuts and Jobs Act" above). As permitted by SAB No. 118, the net tax expense recorded in our financial statements for the fourth fiscal quarter of 2017 due to the enactment of the TCJA is considered "provisional," based on reasonable estimates. The net tax expense recorded was \$234.9 million. We are continuing to collect and analyze detailed information that could impact this amount, and may record adjustments to refine those estimates during the measurement period defined in SAB No. 118, as additional analysis is completed. No adjustments to the charge related to the enactment of the TCJA were recorded in the first fiscal quarter of 2018.

During the first fiscal quarter of 2018, we recorded additional tax expense of \$1.3 million due to the remeasurement of the deferred tax liability related to our cash repatriation program, primarily due to foreign currency effects. These types of remeasurement adjustments will continue until the amounts are repatriated.

We operate in a global environment with significant operations in various locations outside the United States. Accordingly, the consolidated income tax rate is a composite rate reflecting our earnings and the applicable tax rates in the various locations where we operate. Part of our historical strategy has been to achieve cost savings through the transfer and expansion of manufacturing operations to countries where we can take advantage of lower labor costs and available tax and other government-sponsored incentives. Accordingly, our effective tax rate has historically been less than the U.S. statutory rate, except in years where there are material discrete items.

The TCJA significantly reduces the U.S. statutory tax rate, to a rate that is less than the applicable tax rates of many of the jurisdictions in which we operate. Furthermore, our GAAP interest expense generally exceeds our U.S.-based operating income, resulting in pre-tax losses in the U.S. We have historically recorded U.S. federal tax benefits, at 35%, which had the effect of reducing our consolidated GAAP tax rate. Accordingly, the reduction in the statutory U.S. tax rate generally has the effect of increasing our consolidated GAAP tax rate due to the lower tax benefits recognized on a GAAP basis. Our consolidated GAAP tax rate is negatively impacted by other provisions of the TCJA, including GILTI and the limitation on the deductibility of interest expense.

During the three fiscal months ended March 31, 2018, the liabilities for unrecognized tax benefits increased by \$0.6 million on a net basis, due to increases for tax positions taken in the current period, interest, and foreign currency effects.

Additional information about income taxes is included in Note 5 to our consolidated condensed financial statements included in Item 1.

## 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 16 years, and cash flows from operations in excess of \$100 million in each of the past 23 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 21 years, and "free cash" in excess of \$80 million in each of the past 16 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 March 31, 2018. We expect to generate free cash in 2018 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. The payment of any cash taxes associated with the TCJA transition tax and related foreign taxes on repatriated cash will generally be recorded as operating cash flows.

We maintain a revolving credit facility, first entered into in 2010, which was amended and restated on August 8, 2013, and further amended and restated on December 10, 2015. The 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. At March 31, 2018 and December 31, 2017, \$184 million and \$150 million, respectively, were outstanding under our credit facility.

The 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 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 leverage ratio for the first fiscal quarter of 2018, borrowings bore 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. Based on our leverage ratio as of the end of the first fiscal quarter of 2018, new borrowings will bear interest at LIBOR plus 1.50%.

We also pay a fee, also based on our leverage ratio, on undrawn amounts. The undrawn commitment fee, based on our leverage ratio for the first fiscal quarter of 2018, was 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. Based on our leverage ratio as of the end of the first fiscal quarter of 2018, our undrawn commitment fee will be 0.30% per annum.

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 March 31, 2018. Our interest expense coverage ratio and leverage ratio were 15.70 to 1 and 1.46 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 \$150 million at December 31, 2017. We borrowed \$147 million and repaid \$113 million on our credit facility during the three fiscal months ended March 31, 2018. The average outstanding balance on our credit facility calculated at fiscal month-ends was \$238 million and the highest amount outstanding on our credit facility at a month end was \$279 million during the three fiscal months ended March 31, 2018.

Prior to three months before the maturity date, our convertible senior debentures are convertible by the holders under certain circumstances. The convertible debentures due 2042 became convertible subsequent to the December 31, 2016 evaluation of the conversion criteria, and have remained convertible for each subsequent quarterly evaluation through the March 31, 2018 evaluation, due to the sale price of our common stock exceeding 130% of the conversion price for the applicable periods. The convertible debentures due 2040 became convertible subsequent to the September 30, 2017 evaluation of the conversion criteria, and have remained convertible for each subsequent quarterly evaluation through the March 31, 2018 evaluation, due to the sale price of our common stock exceeding 130% of the conversion price for the applicable periods. Such debentures will remain convertible until June 30, 2018, at which time the conversion criteria will be reevaluated. 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. Accordingly, the debt component of the convertible debentures due 2040 and due 2042 continues to be classified as a noncurrent liability on the consolidated condensed balance sheets. No conversions have occurred to date. The convertible debentures due 2041 are not currently convertible.

As of March 31, 2018, substantially all of our cash and cash equivalents and short-term investments were held in countries outside of the United States.

The TCJA imposes a one-time transition tax on deferred foreign earnings of 15.5% for liquid assets and 8% for illiquid assets, payable in defined increments over eight years. As a result of this requirement, we provisionally expect to pay \$180.0 million, net of estimated applicable foreign tax credits, and after utilization of net operating loss and R&D and FTC Credit carryforwards. Based on our U.S. cash position, we expect that we will be required to repatriate amounts from our non-U.S. subsidiaries to the United States to satisfy this tax obligation.

These previously deferred foreign earnings may now be repatriated to the United States without additional U.S. federal taxation. However, any such repatriation could incur withholding and other foreign taxes in the source jurisdiction, and certain U.S. state taxes.

Additionally, cash dividends to stockholders, share repurchases, and principal 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 operating liquidity in the United States.

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 debt are due before the maturity of our revolving credit facility in December 2020. As described above, we plan to repatriate cash to the U.S. to satisfy the TCJA transition tax, which is payable in increments over eight years.

51

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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 vary by location, but can be up to 150 bps higher than the interest rates on our cash accounts. The average interest rate on our short-term investments was 0.7% due to the low interest rate environment in Europe. Transactions related to these investments are classified as investing activities on our consolidated condensed statements of cash flows.

The following table summarizes the components of net cash and short-term investments (debt) at March 31, 2018 and December 31, 2017 (in thousands):

	March 31, 2018	December 31, 2017
Credit facility	\$ 184,000	\$ 150,000
Convertible senior debentures, due 2040*	111,157	110,412
Convertible senior debentures, due 2041*	57,031	56,641
Convertible senior debentures, due 2042*	62,853	62,518
Deferred financing costs	(8,656 )	(9,101 )
Total debt	406,385	370,470
Cash and cash equivalents	839,591	748,032
Short-term investments	501,221	547,136
Net cash and short-term investments (debt)	\$ 934,427	\$ 924,698

\*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 March 31, 2018 continued to be strong, with a current ratio (current assets to current liabilities) of 4.3 to 1, as compared to 3.9 to 1 as of December 31, 2017. The increase in the ratio is primarily due to increases in accounts receivable, inventory, cash and cash equivalents, and short-term investments and a decrease in trade accounts payable. Our ratio of total debt to Vishay stockholders' equity was 0.27 to 1 at March 31, 2018, as compared to 0.26 at December 31, 2017. The increase in the ratio is primarily due to increases in long-term debt.

Cash flows provided by operating activities were \$46.9 million for the three fiscal months ended March 31, 2018, as compared to cash flows provided by operations of \$43.7 million for the three fiscal months ended April 1, 2017. The improvement in operating cash flows reflects an increase in net earnings, partially offset by larger increases in net working capital. Cash flows provided by operating activities for the three fiscal months ended April 1, 2017 were negatively impacted by \$4.4 million of cash contributions to our Taiwanese pension plans.

Cash paid for property and equipment for the three fiscal months ended March 31, 2018 was \$28.3 million, as compared to \$16.7 million for the three fiscal months ended April 1, 2017. We expect capital spending of approximately \$225 million in 2018. The increase versus prior expectations is due to foreign currency exchange rate impacts and some customer specific requirements. Some of this 2018 capital spending represents an acceleration of expected expansion from later years of our long-range plan.

Cash paid for dividends to our common and Class B common stockholders totalled \$9.7 million and \$9.1 million for the three fiscal months ended March 31, 2018 and April 1, 2017, respectively. On May 7, 2018, our Board of Directors declared a dividend of \$0.085 per share, representing a 26% increase over the previous quarterly dividend. We expect dividend payments in 2018 to total approximately \$46.5 million. However, any future dividend declaration and payment remains subject to authorization by our Board of Directors.

On August 2, 2017, our Board of Directors approved a stock repurchase plan, authorizing us to repurchase, in the aggregate, up to \$150 million of our outstanding common stock. The stock repurchase plan will expire on June 1, 2018. The stock repurchase plan does not obligate us to acquire any particular amount of common stock, and it may be terminated or suspended at any time at the Company's direction in accordance with the plan. We repurchased 2,250,236 shares of stock for \$39.9 million since the inception of this plan. We did not repurchase any shares of stock in the first fiscal quarter of 2018.

### Contractual Commitments and Off-Balance Sheet Arrangements

Our Annual Report on Form 10-K for the year ended December 31, 2017 filed on February 16, 2018, 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 other than a \$14.4 million increase to the non-current portion of the U.S. transition tax payable due to a reclassification from current liabilities based on guidance from the United States Internal Revenue Service on quarterly estimated payments on the transition tax.

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, 2017.

### Dividends

In 2014, our Board of Directors approved the initiation of a quarterly cash dividend program. Cash dividends of \$0.0625 per share of common stock and Class B common stock were paid in the first three fiscal quarters of 2017. The quarterly cash dividend was increased to \$0.0675 per share of common stock and Class B common stock in the fourth fiscal quarter of 2017. The quarterly cash dividend was increased to \$0.085 per share of common stock and Class B common stock in the second fiscal quarter of 2018. 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 March 31, 2018	\$9,735	March

### 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, capacity to meet demand, 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 2017 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.

53

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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, 2017, filed with the SEC on February 16, 2018, describes our exposure to market risks. There have been no material changes to our market risks since December 31, 2017.

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.

54

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## 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, 2017, filed with the SEC on February 16, 2018, describe certain of our legal proceedings. Except as described below, there have been no material developments to the legal proceedings previously disclosed.

On March 21, 2018, the European Commission announced a fine of approximately €782,000 against Vishay Polytech Co., Ltd. ("VPC"), Holy Stone Holdings Co., Ltd. and Holy Stone Enterprise Co., Ltd., and concluded that those companies, along with other capacitor manufacturers, participated in meetings and had bilateral communications in which sensitive business information had been exchanged in violation of European Competition Law. The conduct attributable to VPC occurred prior to the acquisition of that entity by Vishay in 2014.

Holy Stone has agreed to indemnify Vishay and VPC for losses, including penalties and expenses associated with the investigation described above.

### 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, 2017, filed with the SEC on February 16, 2018.

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

Not applicable.

### Item 3. Defaults Upon Senior Securities

Not applicable.

### Item 4. Mine Safety Disclosures

Not applicable.

### Item 5. Other Information

Not applicable.

Item 6. Exhibits

- 10.1 Employment Agreement, dated February 15, 2018, between Vishay Europe GmbH (an indirect wholly owned subsidiary of Vishay Intertechnology, Inc.), Vishay Intertechnology, Inc., and Lori Lipcaman. Incorporated by reference to Exhibit 10.1 to our current report on Form 8-K, filed on February 16, 2018.
- 10.2 Third Amendment to Terms and Conditions of Johan Vandoorn Employment Agreement, dated February 15, 2018. Incorporated by reference to Exhibit 10.2 to our current report on Form 8-K, filed on February 16, 2018.
- 10.3 Employment Agreement, dated February 15, 2018, between Vishay Americas, Inc. (a wholly owned subsidiary of Vishay Intertechnology, Inc.), Vishay Intertechnology, Inc., and David Valletta. Incorporated by reference to Exhibit 10.3 to our current report on Form 8-K, filed on February 16, 2018.
- 10.4 Employment Agreement, dated February 15, 2018, between Vishay Singapore Pte. Ltd. (an indirect wholly owned subsidiary of Vishay Intertechnology, Inc.), Vishay Intertechnology, Inc., and Clarence Tse. Incorporated by reference to Exhibit 10.4 to our current report on Form 8-K, filed on February 16, 2018.
- 10.5 Employment Agreement, dated February 15, 2018, between Vishay Americas, Inc. (a wholly owned subsidiary of Vishay Intertechnology, Inc.), Vishay Intertechnology, Inc., and Joel Smejkal. Incorporated by reference to Exhibit 10.5 to our current report on Form 8-K, filed on February 16, 2018.
- 10.6 Employment Agreement, dated February 15, 2018, between Vishay Electronic GmbH (an indirect wholly owned subsidiary of Vishay Intertechnology, Inc.), Vishay Intertechnology, Inc., and Werner Gebhardt. Incorporated by reference to Exhibit 10.6 to our current report on Form 8-K, filed on February 16, 2018.
- 10.7 Vishay Intertechnology, Inc. Form of Executive Officer Restricted Stock Unit Agreement. Incorporated by reference to Exhibit 10.1 to our current report on Form 8-K, filed on March 6, 2018.
- 10.8 Vishay Intertechnology, Inc. Form of Restricted Stock Unit Agreement. Incorporated by reference to Exhibit 10.2 to our current report on Form 8-K, filed on March 6, 2018.
- 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 March 31, 2018, 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: May 8, 2018