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 September 30, 2023

☐ **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 011-07416

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 **Malvern, Pennsylvania 19355-2143**	**610-644-1300**
(Address of Principal Executive Offices)	(Registrant's Area Code and Telephone Number)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading symbol	Name of exchange on which registered
Common stock, par value $0.10 per share	VSH	New York Stock Exchange LLC

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files.)
☒Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

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

As of November 6, 2023 the registrant had 126,238,599 shares of its common stock (excluding treasury shares) and 12,097,148 shares of its Class B common stock outstanding.

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FORM 10-Q
September 30, 2023
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PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

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

	September 30, 2023 (Unaudited)	December 31, 2022
Assets		
Current assets:		
Cash and cash equivalents	$ **1,095,119**	$ 610,825
Short-term investments	**78,994**	305,272
Accounts receivable, net	**442,646**	416,178
Inventories:		
Finished goods	**165,936**	156,234
Work in process	**271,107**	261,345
Raw materials	**206,499**	201,300
Total inventories	**643,542**	618,879
Prepaid expenses and other current assets	**179,825**	170,056
Total current assets	**2,440,126**	2,121,210
Property and equipment, at cost:		
Land	**76,139**	75,907
Buildings and improvements	**692,037**	658,829
Machinery and equipment	**2,973,943**	2,857,636
Construction in progress	**226,460**	243,038
Allowance for depreciation	**(2,788,393)**	(2,704,951)
Property and equipment, net	**1,180,186**	1,130,459
Right of use assets	**127,992**	131,193
Deferred income taxes	**128,109**	104,667
Goodwill	**200,895**	201,432
Other intangible assets, net	**72,126**	77,896
Other assets	**91,773**	98,796
Total assets	$ **4,241,207**	$ 3,865,653

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

	September 30, 2023 (Unaudited)	December 31, 2022
Liabilities and equity		
Current liabilities:		
Trade accounts payable	**$ 207,440**	$ 189,099
Payroll and related expenses	**162,113**	166,079
Lease liabilities	**26,097**	25,319
Other accrued expenses	**238,565**	261,606
Income taxes	**82,734**	84,155
Total current liabilities	**716,949**	726,258
Long-term debt less current portion	**817,257**	500,937
U.S. transition tax payable	**47,027**	83,010
Deferred income taxes	**138,628**	117,183
Long-term lease liabilities	**103,223**	108,493
Other liabilities	**92,896**	92,530
Accrued pension and other postretirement costs	**182,704**	187,092
Total liabilities	**2,098,684**	1,815,503
Equity:		
Vishay stockholders' equity		
Common stock	**13,318**	13,291
Class B convertible common stock	**1,210**	1,210
Capital in excess of par value	**1,286,568**	1,352,321
Retained earnings	**1,003,700**	773,228
Treasury stock (at cost)	**(140,633)**	(82,972)
Accumulated other comprehensive income (loss)	**(25,883)**	(10,827)
Total Vishay stockholders' equity	**2,138,280**	2,046,251
Noncontrolling interests	**4,243**	3,899
Total equity	**2,142,523**	2,050,150
Total liabilities and equity	**$ 4,241,207**	$ 3,865,653

See accompanying notes.

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

	Fiscal quarters ended September 30, 2023	Fiscal quarters ended October 1, 2022
Net revenues	**$ 853,653**	$ 924,798
Costs of products sold	**616,010**	635,260
Gross profit	**237,643**	289,538
Selling, general, and administrative expenses	**122,513**	106,436
Operating income	**115,130**	183,102
Other income (expense):		
Interest expense	**(7,153)**	(4,110)
Loss on early extinguishment of debt	**(18,874)**	-
Other	**7,409**	2,137
Total other income (expense)	**(18,618)**	(1,973)
Income before taxes	**96,512**	181,129
Income tax expense	**30,557**	40,566
Net earnings	**65,955**	140,563
Less: net earnings attributable to noncontrolling interests	**426**	502
Net earnings attributable to Vishay stockholders	**$ 65,529**	$ 140,061
Basic earnings per share attributable to Vishay stockholders	**$ 0.47**	$ 0.98
Diluted earnings per share attributable to Vishay stockholders	**$ 0.47**	$ 0.98
Weighted average shares outstanding - basic	**139,083**	142,887
Weighted average shares outstanding - diluted	**140,001**	143,447
Cash dividends per share	**$ 0.10**	$ 0.10

See accompanying notes.

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

	Fiscal quarters ended September 30, 2023	Fiscal quarters ended October 1, 2022
Net earnings	**$ 65,955**	$ 140,563
Other comprehensive income (loss), net of tax		
Pension and other post-retirement actuarial items	**363**	1,321
Foreign currency translation adjustment	**(38,901)**	(50,070)
Other comprehensive income (loss)	**(38,538)**	(48,749)
Comprehensive income	**27,417**	91,814
Less: comprehensive income attributable to noncontrolling interests	**426**	502
Comprehensive income attributable to Vishay stockholders	**$ 26,991**	$ 91,312

See accompanying notes.

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

	Nine fiscal months ended September 30, 2023	Nine fiscal months ended October 1, 2022
Net revenues	**$ 2,616,809**	$ 2,642,103
Costs of products sold	**1,842,980**	1,832,234
Gross profit	**773,829**	809,869
Selling, general, and administrative expenses	**365,515**	329,691
Operating income	**408,314**	480,178
Other income (expense):		
Interest expense	**(18,677)**	(12,639)
Loss on early extinguishment of debt	**(18,874)**	-
Other	**15,995**	(2,234)
Total other income (expense)	**(21,556)**	(14,873)
Income before taxes	**386,758**	465,305
Income tax expense	**113,199**	108,023
Net earnings	**273,559**	357,282
Less: net earnings attributable to noncontrolling interests	**1,211**	1,260
Net earnings attributable to Vishay stockholders	**$ 272,348**	$ 356,022
Basic earnings per share attributable to Vishay stockholders	**$ 1.95**	$ 2.47
Diluted earnings per share attributable to Vishay stockholders	**$ 1.94**	$ 2.46
Weighted average shares outstanding - basic	**139,828**	143,983
Weighted average shares outstanding - diluted	**140,577**	144,470
Cash dividends per share	**$ 0.30**	$ 0.30

See accompanying notes.

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

	Nine fiscal months ended	
	September 30, 2023	**October 1, 2022**
Net earnings	**$ 273,559**	$ 357,282
Other comprehensive income (loss), net of tax		
Pension and other post-retirement actuarial items	**647**	4,245
Foreign currency translation adjustment	**(15,703)**	(113,086)
Other comprehensive income (loss)	**(15,056)**	(108,841)
Comprehensive income	**258,503**	248,441
Less: comprehensive income attributable to noncontrolling interests	**1,211**	1,260
Comprehensive income attributable to Vishay stockholders	**$ 257,292**	$ 247,181

See accompanying notes.

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

	Nine fiscal months ended September 30, 2023	Nine fiscal months ended October 1, 2022
Operating activities		
Net earnings	**$ 273,559**	$ 357,282
Adjustments to reconcile net earnings to net cash provided by operating activities:		
Depreciation and amortization	**133,910**	121,301
(Gain) loss on disposal of property and equipment	**(495)**	(372)
Inventory write-offs for obsolescence	**27,469**	18,197
Deferred income taxes	**20,654**	8,843
Stock compensation expense	**11,610**	5,717
Loss on early extinguishment of debt	**18,874**	-
Other	**7,574**	(1,445)
Change in U.S. transition tax liability	**(27,670)**	(14,757)
Change in repatriation tax liability	**-**	(25,201)
Net change in operating assets and liabilities	**(106,050)**	(151,773)
Net cash provided by operating activities	**359,435**	317,792
Investing activities		
Capital expenditures	**(184,079)**	(172,175)
Proceeds from sale of property and equipment	**1,034**	472
Purchase of business, net of cash acquired	**(5,003)**	-
Purchase of short-term investments	**(82,166)**	(182,079)
Maturity of short-term investments	**308,021**	132,892
Other investing activities	**(1,219)**	(199)
Net cash provided by (used in) investing activities	**36,588**	(221,089)
Financing activities		
Proceeds from long-term borrowings	**750,000**	-
Repurchase of convertible senior notes due 2025	**(386,745)**	-
Net payments on revolving credit facility	**(42,000)**	-
Debt issuance costs	**(26,547)**	-
Cash paid for capped call	**(94,200)**	-
Dividends paid to common stockholders	**(38,207)**	(39,433)
Dividends paid to Class B common stockholders	**(3,629)**	(3,629)
Repurchase of common stock held in treasury	**(57,661)**	(54,671)
Distributions to noncontrolling interests	**(867)**	(741)
Cash withholding taxes paid when shares withheld for vested equity awards	**(3,994)**	(2,123)
Net cash provided by (used in) financing activities	**96,150**	(100,597)
Effect of exchange rate changes on cash and cash equivalents	**(7,879)**	(35,222)
Net increase (decrease) in cash and cash equivalents	**484,294**	(39,116)
Cash and cash equivalents at beginning of period	**610,825**	774,108
Cash and cash equivalents at end of period	**$ 1,095,119**	$ 734,992

See accompanying notes.

VISHAY INTERTECHNOLOGY, INC.
Consolidated Condensed Statements 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)	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Vishay Stockholders' Equity	Noncontrolling Interests	Total Equity
Balance at December 31, 2021	$ 13,271	$ 1,210	$1,347,830	$ 401,694	$ -	$ (20,252)	$ 1,743,753	$ 2,967	$1,746,720
Net earnings	-	-	-	103,573	-	-	103,573	377	103,950
Other comprehensive income (loss)	-	-	-	-	-	(11,925)	(11,925)	-	(11,925)
Issuance of stock and related tax withholdings for vested restricted stock units (189,731 shares)	19	-	(2,142)	-	-	-	(2,123)	-	(2,123)
Dividends declared ($0.10 per share)	-	-	22	(14,491)	-	-	(14,469)	-	(14,469)
Stock compensation expense	-	-	3,842	-	-	-	3,842	-	3,842
Repurchase of common stock held in treasury (513,227 shares)	-	-	-	-	(9,873)	-	(9,873)	-	(9,873)
Balance at April 2, 2022	$ 13,290	$ 1,210	$1,349,552	$ 490,776	$ (9,873)	$ (32,177)	$ 1,812,778	$ 3,344	$1,816,122
Net earnings	-	-	-	112,388	-	-	112,388	381	112,769
Other comprehensive income	-	-	-	-	-	(48,167)	(48,167)	-	(48,167)
Distributions to noncontrolling interests	-	-	-	-	-	-	-	(733)	(733)
Issuance of stock and related tax withholdings for vested restricted stock units (11,308 shares)	1	-	(1)	-	-	-	-	-	-
Dividends declared ($0.10 per share)	-	-	22	(14,361)	-	-	(14,339)	-	(14,339)
Stock compensation expense	-	-	1,047	-	-	-	1,047	-	1,047
Repurchase of common stock held in treasury (1,400,039 shares)	-	-	-	-	(26,288)	-	(26,288)	-	(26,288)
Balance at July 2, 2022	$ 13,291	$ 1,210	$1,350,620	$ 588,803	$ (36,161)	$ (80,344)	$ 1,837,419	$ 2,992	$1,840,411
Net earnings	-	-	-	140,061	-	-	140,061	502	140,563
Other comprehensive income (loss)	-	-	-	-	-	(48,749)	(48,749)	-	(48,749)
Distributions to noncontrolling interests	-	-	-	-	-	-	-	(8)	(8)
Dividends declared ($0.10 per share)	-	-	22	(14,276)	-	-	(14,254)	-	(14,254)

Stock compensation expense	-	-	828	-	-	-	828	-	828
Repurchase of common stock held in treasury (978,338 shares)	-	-	-	-	(18,510)	-	(18,510)	-	(18,510)
Balance at October 1, 2022	$ 13,291	$ 1,210	$1,351,470	$ 714,588	$ (54,671)	$ (129,093)	$ 1,896,795	$ 3,486	$1,900,281

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VISHAY INTERTECHNOLOGY, INC.
Consolidated Condensed Statements of Equity (continued)
(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)	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Vishay Stockholders' Equity	Noncontrolling Interests	Total Equity
Balance at December 31, 2022	$ 13,291	$ 1,210	$1,352,321	$ 773,228	$ (82,972)	$ (10,827)	$ 2,046,251	$ 3,899	$2,050,150
Net earnings	-	-	-	111,781	-	-	111,781	408	112,189
Other comprehensive income (loss)	-	-	-	-	-	19,859	19,859	-	19,859
Issuance of stock and related tax withholdings for vested restricted stock units (254,513 shares)	25	-	(3,678)	-	-	-	(3,653)	-	(3,653)
Dividends declared ($0.10 per share)	-	-	14	(14,034)	-	-	(14,020)	-	(14,020)
Stock compensation expense	-	-	2,965	-	-	-	2,965	-	2,965
Repurchase of common stock held in treasury (916,221 shares)	-	-	-	-	(20,173)	-	(20,173)	-	(20,173)
Balance at April 1, 2023	$ 13,316	1,210	1,351,622	870,975	(103,145)	9,032	2,143,010	4,307	2,147,317
Net earnings	-	-	-	95,038	-	-	95,038	377	95,415
Other comprehensive income (loss)	-	-	-	-	-	3,623	3,623	-	3,623
Distributions to noncontrolling interests	-	-	-	-	-	-	-	(867)	(867)
Dividends declared ($0.10 per share)	-	-	14	(13,951)	-	-	(13,937)	-	(13,937)
Stock compensation expense	-	-	3,117	-	-	-	3,117	-	3,117
Repurchase of common stock held in treasury (847,202 shares)	-	-	-	-	(20,226)	-	(20,226)	-	(20,226)
Balance at July 1, 2023	$ 13,316	1,210	1,354,753	952,062	(123,371)	12,655	2,210,625	3,817	2,214,442
Net earnings	**-**	**-**	**-**	**65,529**	**-**	**-**	**65,529**	**426**	**65,955**
Other comprehensive income (loss)	**-**	**-**	**-**	**-**	**-**	**(38,538)**	**(38,538)**	**-**	**(38,538)**
Issuance of stock and related tax withholdings for vested restricted stock units (21,617 shares)	**2**	**-**	**(343)**	**-**	**-**	**-**	**(341)**	**-**	**(341)**
Dividends declared ($0.10 per share)	**-**	**-**	**12**	**(13,891)**	**-**	**-**	**(13,879)**	**-**	**(13,879)**
Stock compensation expense	**-**	**-**	**5,528**	**-**	**-**	**-**	**5,528**	**-**	**5,528**

Repurchase of common stock held in treasury (630,446 shares)	-	-	-	-	(17,262)	-	(17,262)	-	(17,262)
Capped call transactions, net of tax	-	-	(73,382)	-	-	-	(73,382)	-	(73,382)
Balance at September 30, 2023	$ 13,318	1,210	1,286,568	1,003,700	(140,633)	(25,883)	2,138,280	4,243	2,142,523

See accompanying notes.

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, 2022. The results of operations for the fiscal quarter and nine fiscal months ended September 30, 2023 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 2023 end on April 1, 2023, July 1, 2023, September 30, 2023, and December 31, 2023, respectively. The four fiscal quarters in 2022 ended on April 2, 2022, July 2, 2022, October 1, 2022, and December 31, 2022, respectively.

Reclassifications

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

Note 2 – Acquisition Activities

As part of its growth strategy, the Company seeks to expand through targeted acquisitions of other manufacturers of electronic components. These acquisition targets include businesses 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. It also includes certain businesses that possess technologies which the Company expects to further develop and commercialize.

MaxPower Semiconductor, Inc.

On October 28, 2022, the Company acquired all of the outstanding equity interests of MaxPower Semiconductor, Inc. ("MaxPower"), a San Jose, California-based fabless power semiconductor provider dedicated to delivering innovative and cost-effective technologies that optimize power management solutions. The acquisition of MaxPower will enhance the Company's current and future silicon carbide ("SiC") offerings for fast-growing markets such as electric vehicles.

The Company paid cash of $50,000, net of cash acquired, at closing. Related to the transaction, Vishay may also be required to make certain contingent payments of up to $57,500, which would be payable upon the achievement of certain technology milestones, upon favorable resolution of certain technology licensing matters with a third party, and upon the disposition of MaxPower's investment in an equity affiliate. The purchase price for U.S. GAAP purposes includes the fair value, as of the acquisition date, of certain future contingent payments to non-employee equity holders of MaxPower. The estimated fair value of this contingent consideration as of the acquisition date was $6,851. The contingent consideration liability is included in other accrued expenses and other liabilities in the accompanying balance sheet and is remeasured each reporting period, with changes reported as selling, general, and administrative expenses on the consolidated condensed statement of operations. See Note 13 for further discussion on the fair value measurement.

Based on an estimate of their fair values, the Company allocated $18,600 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 $34,246 related to this acquisition. The goodwill related to this acquisition is included in the MOSFETs reporting unit for goodwill impairment testing.

The results and operations of this acquisition have been included in the MOSFETs segment since October 28, 2022.

Centerline Technologies, LLC

On June 30, 2023, the Company acquired substantially all of the assets of Centerline Technologies, LLC ("Centerline"), a Massachusetts-based, privately held manufacturer of ceramic components used in many custom parts manufactured by certain of Vishay's Resistors businesses, for $5,003. Based on an estimate of fair values, the Company allocated $1,500 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 $2,213 related to this acquisition. The acquired business will be vertically integrated into the Company's Resistors segment, and the goodwill related to this acquisition is included in the Resistors reporting unit for goodwill impairment testing. The results and operations of this acquisition have been included in the Resistors segment since June 30, 2023.

(dollars in thousands, except per share amounts)

Note 3 – Leases

The net right of use assets and lease liabilities recognized on the consolidated condensed balance sheets for the Company's operating leases were as follows:

	September 30, 2023	December 31, 2022
Right of use assets		
Operating Leases		
Buildings and improvements	**$ 122,781**	$ 126,933
Machinery and equipment	**5,211**	4,260
Total	**$ 127,992**	$ 131,193
Current lease liabilities		
Operating Leases		
Buildings and improvements	**$ 23,405**	$ 22,926
Machinery and equipment	**2,692**	2,393
Total	**$ 26,097**	$ 25,319
Long-term lease liabilities		
Operating Leases		
Buildings and improvements	**$ 100,789**	$ 106,693
Machinery and equipment	**2,434**	1,800
Total	**$ 103,223**	$ 108,493
Total lease liabilities	**$ 129,320**	$ 133,812

Lease expense is classified in the statements of operations based on asset use. Total lease cost recognized on the consolidated condensed statements of operations is as follows:

	Fiscal quarters ended		Nine fiscal months ended	
	September 30, 2023	October 1, 2022	September 30, 2023	October 1, 2022
Lease expense				
Operating lease expense	**$ 7,035**	$ 6,258	**$ 20,803**	$ 19,014
Short-term lease expense	**248**	212	**756**	752
Variable lease expense	**101**	119	**412**	219
Total lease expense	**$ 7,384**	$ 6,589	**$ 21,971**	$ 19,985

The Company paid $20,912 and $18,062 for its operating leases in the nine fiscal months ended September 30, 2023 and October 1, 2022, respectively, which are included in operating cash flows on the consolidated condensed statements of cash flows. The weighted-average remaining lease term for the Company's operating leases is 9.4 years and the weighted-average discount rate is 6.2% as of September 30, 2023.

The undiscounted future lease payments for the Company's operating lease liabilities are as follows:

	September 30, 2023
2023 (excluding the nine fiscal months ended September 30, 2023)	$ 6,872
2024	26,705
2025	23,627
2026	19,195
2027	17,485
Thereafter	79,852

The undiscounted future lease payments presented in the table above include payments through the term of the lease, which may include periods beyond the noncancellable term. The difference between the total payments above and the lease liability balance is due to the discount rate used to calculate lease liabilities.

Note 4 – 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 September 30, 2023 and October 1, 2022 reflect the Company’s expected tax rate on reported income 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.

During the nine fiscal months ended September 30, 2023, the liabilities for unrecognized tax benefits decreased by $4,483 on a net basis, primarily due to decreases for settlements, partially offset by increases for current accruals and interest.

(dollars in thousands, except per share amounts)

Note 5 – Long-Term Debt

Long-term debt consists of the following:

	September 30, 2023	December 31, 2022
Credit facility	**$ -**	$ 42,000
Convertible senior notes, due 2025	**95,102**	465,344
Convertible senior notes, due 2030	**750,000**	-
Deferred financing costs	**(27,845)**	(6,407)
	817,257	500,937
Less current portion	**-**	-
	$ 817,257	$ 500,937

Credit Facility

The Company maintains a credit facility with a consortium of banks led by JPMorgan Chase Bank, N.A., as administrative agent, and the lenders, which was scheduled to mature on June 5, 2024 (the "Previous Credit Facility"). On May 8, 2023, the Company entered into an Amendment and Restatement Agreement, which provides an aggregate commitment of $750,000 of revolving loans available until May 8, 2028 (the "Amended and Restated Credit Facility"). The maturity date of the Amended and Restated Credit Facility will accelerate if within ninety-one days prior to the maturity of the Company's convertible senior notes due 2025, the outstanding principal amount of such notes exceeds a defined liquidity measure as set forth in the Amended and Restated Credit Facility.

U.S. Dollar borrowings under the Amended and Restated Credit Facility bear interest at the Secured Overnight Financing Rate ("SOFR") plus a credit spread and an interest margin. The Amended and Restated Credit Facility also allows for borrowings in euro, British sterling, and Japanese yen, subject to a $250,000 limit. Borrowings in foreign currency bear interest at a local reference rate plus an interest margin. The applicable interest margin is based on Vishay's total leverage ratio. Based on Vishay's current total leverage ratio, borrowings bear interest at SOFR plus 1.60%, including the applicable credit spread. Vishay also pays a commitment fee, also based on its total leverage ratio, on undrawn amounts. The undrawn commitment fee, based on Vishay's current total leverage ratio, is 0.25% per annum.

Similar to the Previous Credit Facility, the Amended and Restated Credit Facility requires the maintenance of financial covenant ratios. For compliance purposes, pursuant to the Amended and Restated Credit Facility, the leverage ratio is computed on a net basis, reducing the measure of outstanding debt by up to $250,000 of unrestricted cash. The Company must maintain a net leverage ratio of at least 3.25 to 1.00. Permitted investments and restricted payments are also subject to a pro forma net leverage ratio (2.75 to 1.00 and 2.50 to 1.00, respectively).

Other terms and conditions of the Amended and Restated Credit Facility are substantially similar to the Previous Credit Facility.

Convertible Debt Instruments

Convertible Senior Notes due 2030

In September 2023, the Company issued $750,000 aggregate principal amount of 2.25% convertible senior notes due 2030 (the "2030 Notes") to qualified institutional buyers pursuant to an exemption from registration provided by Rule 144A under the Securities Act. The Company used the net proceeds from this offering to repurchase $370,242 principal amount of its outstanding 2.25% convertible senior notes due 2025 (the "2025 Notes") (as further described below), to reduce the outstanding balance of its Amended and Restated Credit Facility, to enter into capped call transactions (as further described below), and for other general corporate purposes.

The 2030 Notes bear interest at a rate of 2.25% per year payable semi-annually in arrears on March 15 and September 15 of each year, beginning March 15, 2024. The 2030 Notes mature on September 15, 2030, unless earlier repurchased or converted.

The 2030 Notes are convertible into shares of Vishay common stock at an initial conversion rate of 33.1609 shares of common stock per $1 principal amount of the notes, subject to adjustment. This initial conversion price represents a premium of 20% to the closing price of Vishay's common stock on September 7, 2023, which was $25.13 per share. This represents an initial effective conversion price of approximately $30.16 per share. The conversion rate of the 2030 Notes is not adjusted for quarterly cash dividends equal to or less than $0.10 per share of common stock. Pursuant to the indenture governing the 2030 Notes, the Company is required to satisfy its conversion obligations by paying cash equal to the principal amount of notes and settle any additional value in cash and/or shares at its discretion. Vishay must provide additional shares upon conversion if there is a "fundamental change" in the business as defined in the indenture governing the notes.

(dollars in thousands, except per share amounts)

The Company may not redeem the 2030 Notes prior to September 20, 2027. The Company may redeem for cash all or part of the 2030 Notes, at its option, on or after September 20, 2027, if the sale price of Vishay's common stock has been at least 130% of the conversion price for a specified period at a redemption price equal to 100% of the principal amount of the notes to be redeemed, plus accrued and unpaid interest. If the Company elects to redeem fewer than all of the outstanding 2030 Notes, at least $100,000 aggregate principal amount of 2030 Notes must be outstanding and not subject to redemption.

Prior to March 15, 2030, the holders of the 2030 Notes may convert their notes only under the following conditions: (1) the sale price of Vishay common stock reaches 130% of the applicable conversion price for a specified period during any fiscal quarter commencing after the fiscal quarter ending on December 31, 2023; (2) the trading price of the notes falls below 98% of the product of the last reported sale price of Vishay's common stock and the conversion rate for a specified period; (3) the Company calls any or all of the 2030 Notes for redemption; or (4) upon the occurrence of specified corporate transactions.

Capped Call Transactions

In September 2023, in connection with the pricing and initial purchasers' exercise in full of their option to purchase additional 2030 Notes, the Company entered into separate base and additional privately negotiated capped call transactions with an affiliate of an initial purchaser and certain other financial institutions. The capped call will initially cover, subject to customary anti-dilution adjustments, the aggregate number of shares of the Company's common stock that initially underlie the 2030 Notes. The Company used $94,200 of the net proceeds from the 2030 Notes to pay the cost of the capped call transactions. The cap price of the capped call will initially be $43.98 per share, which represents a premium of approximately 75% over the last reported sale price of the Company's common stock on September 7, 2023, and is subject to certain adjustments under the terms of the capped call.

The capped call transactions are separate transactions entered into by the Company with each of the capped call counterparties, are not part of the terms of the 2030 Notes, and do not affect any holder's rights under the 2030 Notes. Holders of the 2030 Notes do not have any rights with respect to the capped call. The capped call is classified within stockholders' equity on the consolidated condensed balance sheet.

Convertible Senior Notes due 2025

The Company used $386,745 of the net proceeds from the offering of the 2030 Notes to repurchase $370,242 principal amount of its outstanding 2025 Notes. As a result, the Company recognized a loss on early extinguishment of the 2025 Notes of $18,874, including the write-off of a portion of unamortized debt issuance costs.

Prior to December 15, 2024, the holders of the convertible senior notes due 2025 may convert their notes only under the following circumstances: (1) the sale price of Vishay common stock reaches 130% of the conversion price for a specified period; (2) the trading price of the notes falls below 98% of the product of the sale price of Vishay's common stock and the conversion rate for a specified period; or (3) upon the occurrence of specified corporate transactions. The convertible senior notes due 2025 are not currently convertible.

Upon conversion of the convertible senior notes due 2025, Vishay will satisfy its conversion obligations by paying $1 cash per $1 principal amount of converted notes and settle any additional amounts due in common stock.

The quarterly cash dividend program of the Company results in adjustments to the conversion rate and effective conversion price for the convertible senior notes due 2025 effective as of the ex-dividend date of each cash dividend. The conversion rate and effective conversion price for the convertible senior notes due 2025 is adjusted for quarterly cash dividends to the extent such dividends exceed $0.085 per share of common stock.

The following table summarizes some key facts and terms regarding the outstanding convertible senior notes as of September 30, 2023:

	2025 Notes	**2030 Notes**
Issuance date	June 12, 2018	September 12, 2023
Maturity date	June 15, 2025	September 15, 2030
Principal amount as of September 30, 2023	$ 95,102	$ 750,000
Cash coupon rate (per annum)	2.25%	2.25%
Conversion rate (per $1 principal amount)	32.1062	33.1609
Effective conversion price (per share)	$ 31.15	$ 30.16
130% of the current effective conversion price (per share)	$ 40.50	$ 39.21

(dollars in thousands, except per share amounts)

Note 6 – Stockholders' Equity

In 2022, the Company's Board of Directors adopted a Stockholder Return Policy that will remain in effect until such time as the Board votes to amend or rescind the policy. The Stockholder Return Policy calls for the Company to return a prescribed amount of cash flows on an annual basis. The Company intends to return such amounts directly, in the form of dividends, or indirectly, in the form of stock repurchases.

The following table summarizes activity pursuant to this policy:

	Fiscal quarters ended		Nine fiscal months ended	
	September 30, 2023	**October 1, 2022**	**September 30, 2023**	**October 1, 2022**
Dividends paid to stockholders	**$ 13,879**	$ 14,254	**$ 41,836**	$ 43,062
Stock repurchases	**17,262**	18,510	**57,661**	54,671
Total	**$ 31,141**	$ 32,764	**$ 99,497**	$ 97,733

The repurchased shares are being held as treasury stock. The number of shares of common stock being held as treasury stock was 6,634,442 and 4,240,573 as of September 30, 2023 and December 31, 2022, respectively.

Note 7 – Revenue Recognition

Sales returns and allowances accrual activity is shown below:

	Fiscal quarters ended		Nine fiscal months ended	
	September 30, 2023	**October 1, 2022**	**September 30, 2023**	**October 1, 2022**
Beginning balance	**$ 49,350**	$ 40,775	**$ 46,979**	$ 39,759
Sales allowances	**27,554**	33,015	**79,688**	79,432
Credits issued	**(31,034)**	(32,202)	**(81,162)**	(76,497)
Foreign currency	**(696)**	(849)	**(331)**	(1,955)
Ending balance	**$ 45,174**	$ 40,739	**$ 45,174**	$ 40,739

Note 8 – Accumulated Other Comprehensive Income (Loss)

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

	Pension and other post-retirement actuarial items	**Currency translation adjustment**	**Total**
Balance at January 1, 2023	$ (7,598)	$ (3,229)	**$ (10,827)**
Other comprehensive income (loss) before reclassifications	-	(15,703)	**$ (15,703)**
Tax effect	-	-	**$ -**
Other comprehensive income before reclassifications, net of tax	-	(15,703)	**$ (15,703)**
Amounts reclassified out of AOCI	1,017	-	**$ 1,017**
Tax effect	(370)	-	**$ (370)**
Amounts reclassified out of AOCI, net of tax	647	-	**$ 647**
Net other comprehensive income (loss)	$ 647	$ (15,703)	**$ (15,056)**
Balance at September 30, 2023	**$ (6,951)**	**$ (18,932)**	**$ (25,883)**

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

(dollars in thousands, except per share amounts)

Note 9 – Pensions and Other Postretirement Benefits

The Company maintains various retirement benefit plans. The service cost component of net periodic pension cost is classified in costs of products sold or selling, general, and administrative expenses on the consolidated condensed statements of operations based on the respective employee's function. The other components of net periodic pension cost are classified as other expense on the consolidated condensed statements of operations.

Defined Benefit Pension Plans

The following table shows the components of the net periodic pension cost for the third fiscal quarters of 2023 and 2022 for the Company's defined benefit pension plans:

	Fiscal quarter ended September 30, 2023		Fiscal quarter ended October 1, 2022	
	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans
Net service cost	$ -	$ 717	$ -	$ 1,010
Interest cost	499	1,708	280	768
Expected return on plan assets	-	(568)	-	(418)
Amortization of prior service cost	36	56	36	50
Amortization of losses (gains)	(30)	575	427	1,140
Curtailment and settlement losses	-	102	-	257
Net periodic benefit cost	$ 505	$ 2,590	$ 743	$ 2,807

The following table shows the components of the net periodic pension cost for the nine fiscal months ended September 30, 2023 and October 1, 2022 for the Company's defined benefit pension plans:

	Nine fiscal months ended September 30, 2023		Nine fiscal months ended October 1, 2022	
	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans
Net service cost	$ -	$ 2,164	$ -	$ 3,195
Interest cost	1,498	5,114	841	2,433
Expected return on plan assets	-	(1,708)	-	(1,318)
Amortization of prior service cost	108	167	108	159
Amortization of losses (gains)	(90)	748	1,280	3,616
Curtailment and settlement losses	-	315	-	801
Net periodic benefit cost	$ 1,516	$ 6,800	$ 2,229	$ 8,886

(dollars in thousands, except per share amounts)

Other Postretirement Benefits

The following table shows the components of the net periodic benefit cost for the third fiscal quarters of 2023 and 2022 for the Company's other postretirement benefit plans:

	Fiscal quarter ended September 30, 2023		**Fiscal quarter ended October 1, 2022**	
	U.S. Plans	**Non-U.S. Plans**	**U.S. Plans**	**Non-U.S. Plans**
Service cost	**$ 5**	**$ 34**	$ 10	$ 57
Interest cost	**56**	**32**	45	13
Amortization of losses (gains)	**(80)**	**3**	86	20
Net periodic benefit cost	**$ (19)**	**$ 69**	$ 141	$ 90

The following table shows the components of the net periodic pension cost for the nine fiscal months ended September 30, 2023 and October 1, 2022 for the Company's other postretirement benefit plans:

	Nine fiscal months ended September 30, 2023		**Nine fiscal months ended October 1, 2022**	
	U.S. Plans	**Non-U.S. Plans**	**U.S. Plans**	**Non-U.S. Plans**
Service cost	**$ 16**	**$ 102**	$ 29	$ 180
Interest cost	**168**	**94**	134	42
Amortization of losses (gains)	**(241)**	**10**	257	64
Net periodic benefit cost	**$ (57)**	**$ 206**	$ 420	$ 286

(dollars in thousands, except per share amounts)

Note 10 – Stock-Based Compensation

2023 Long-Term Incentive Plan

The Company implemented the Vishay Intertechnology, Inc. 2023 Long-Term Incentive Plan (the "2023 Plan") after receiving stockholder approval at its 2023 Annual Meeting of Stockholders on May 23, 2023. The 2023 Plan allows the Company to grant up to 6,000,000 shares (subject to certain adjustments described in the 2023 Plan) of stock options, stock appreciation rights, restricted stock, restricted stock units, other stock-based awards, phantom stock units, and other cash-based awards to employees, directors, consultants, and other service providers of the Company and its affiliates. Such instruments are available for grant until March 24, 2033. The Company has granted approximately 740,000 time-vested restricted stock units to employees pursuant to the 2023 Plan.

2007 Stock Incentive Program

Under the Company's 2007 Stock Incentive Program (the "2007 Program"), as amended and restated, certain executive officers and board members of the Company were granted restricted stock units. No further awards will be granted pursuant to the 2007 Program. Pursuant to the terms of the 2023 Plan, any shares of common stock that are subject to outstanding awards granted pursuant to the 2007 Program that subsequently cease to be subject to such awards as a result of the termination, expiration, cancellation, or forfeiture of such awards and any shares of common stock withheld in settlement of tax withholding obligations associated with outstanding awards granted pursuant to the 2007 Program may become available for issuance under the 2023 Plan. A total of 1,294,546 shares of common stock were subject to awards granted pursuant to the 2007 Program as of May 23, 2023.

The following table summarizes stock-based compensation expense recognized:

	Fiscal quarters ended		**Nine fiscal months ended**	
	September 30, 2023	**October 1, 2022**	**September 30, 2023**	**October 1, 2022**
Restricted stock units	**$ 5,528**	$ 828	**$ 11,503**	5,495
Phantom stock units	**-**	-	**107**	222
Total	**$ 5,528**	$ 828	**$ 11,610**	5,717

The following table summarizes unrecognized compensation cost and the weighted average remaining amortization periods at September 30, 2023 *(amortization periods in years)*:

	Unrecognized Compensation Cost	**Weighted Average Remaining Amortization Periods**
Restricted stock units	**$ 19,929**	**1.6**
Phantom stock units	**-**	**n/a**
Total	**$ 19,929**	

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.

Restricted Stock Units

RSU activity under the Company's stock incentive programs as of September 30, 2023 and changes during the nine fiscal months then ended are presented below *(number of RSUs in thousands)*:

	Number of RSUs	Weighted Average Grant-date Fair Value per Unit
Outstanding:		
January 1, 2023	**894**	**$ 19.73**
Granted*	**1,159**	**24.35**
Vested**	**(342)**	**18.86**
Cancelled or forfeited	**(1)**	**24.83**
Outstanding at September 30, 2023	**1,710**	**$ 23.03**
Expected to vest at September 30, 2023	**1,759**	

* Employees in certain countries are granted equity-linked awards that will be settled in cash and are accounted for as liability awards. The liability awards are not material. The number of RSUs granted excludes these awards.
** The number of RSUs vested includes shares that the Company withheld on behalf of employees to satisfy the statutory tax withholding requirements.

In addition to RSUs that vest based upon satisfaction of service or performance conditions, in 2023, the Company granted RSUs that vest based upon achievement of market conditions to certain executive officers. For RSUs with market conditions, the Company estimates the grant date fair value using a Monte Carlo valuation model and recognizes the expense for the awards over the period in which the condition is assessed regardless of whether the market condition is ultimately achieved. The number of performance-based RSUs that are scheduled to vest increases ratably based on the achievement of defined performance and market criteria between the established target and maximum levels. RSUs with performance-based and market-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, 2024	165	-	165
January 1, 2025	168	-	168
January 1, 2026	221	-	221

Phantom Stock Units

Phantom stock unit activity as of September 30, 2023 and changes during the nine fiscal months then ended are presented below *(number of phantom stock units in thousands)*:

	Number of units	Grant-date Fair Value per Unit
Outstanding:		
January 1, 2023	**226**	
Granted	**5**	**$ 21.48**
Dividend equivalents issued	**2**	
Redeemed for common stock*	**(113)**	
Outstanding at September 30, 2023	**120**	

***** The number of phantom stock units redeemed for common stock includes shares that the Company withheld on behalf of employees to satisfy the statutory tax withholding requirements.

(dollars in thousands, except per share amounts)

Note 11 – Segment Information

The following tables set forth business segment information:

	MOSFETs	Diodes	Optoelectronic Components	Resistors	Inductors	Capacitors	Corporate / Other*	Total
Fiscal quarter ended September 30, 2023:								
Net revenues	**$ 205,027**	**$ 176,788**	**$ 64,441**	**$ 199,877**	**$ 89,947**	**$ 117,573**	**$ -**	**$ 853,653**
Segment Operating Income	**$ 52,755**	**$ 41,552**	**$ 13,087**	**$ 41,849**	**$ 25,078**	**$ 20,533**	**$ -**	**$ 194,854**
Fiscal quarter ended October 1, 2022:								
Net revenues	$ 225,186	$ 209,012	$ 73,447	$ 207,437	$ 83,503	$ 126,213	$ -	$ 924,798
Segment Operating Income	$ 71,867	$ 51,368	$ 22,021	$ 61,621	$ 22,585	$ 25,310	$ -	$ 254,772
Nine fiscal months ended September 30, 2023:								
Net revenues	**$ 610,596**	**$ 527,216**	**$ 189,293**	**$ 645,450**	**$ 259,524**	**$ 384,730**	**$ -**	**$ 2,616,809**
Segment Operating Income	**$ 167,544**	**$ 119,348**	**$ 41,136**	**$ 165,911**	**$ 73,642**	**$ 81,706**	**$ -**	**$ 649,287**
Nine fiscal months ended October 1, 2022:								
Net revenues	$ 556,255	$ 583,429	$ 232,399	$ 627,645	$ 255,888	$ 386,487	$ -	$ 2,642,103
Segment Operating Income	$ 164,993	$ 140,307	$ 72,575	$ 183,414	$ 71,698	$ 80,330	$ (6,661)	$ 706,656

***Amounts reported in Corporate/Other above represent unallocated costs directly related to the COVID-19 pandemic, which are reported as costs of products sold on the consolidated condensed statement of operations.

	Fiscal quarters ended		Nine fiscal months ended	
	September 30, 2023	October 1, 2022	September 30, 2023	October 1, 2022
Reconciliation:				
Segment Operating Income	**$ 194,854**	$ 254,772	**$ 649,287**	$ 706,656
Impact of the COVID-19 Pandemic on Selling, General, and Administrative Expenses	**-**	-	**-**	(546)
Unallocated Selling, General, and Administrative Expenses	**(79,724)**	(71,670)	**(240,973)**	(225,932)
Consolidated Operating Income	**$ 115,130**	$ 183,102	**$ 408,314**	$ 480,178
Unallocated Other Income (Expense)	**(18,618)**	(1,973)	**(21,556)**	(14,873)
Consolidated Income Before Taxes	**$ 96,512**	$ 181,129	**$ 386,758**	$ 465,305

(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:

	Fiscal quarters ended		Nine fiscal months ended	
	September 30, 2023	**October 1, 2022**	**September 30, 2023**	**October 1, 2022**
Distributors	**$ 438,126**	$ 536,289	**$ 1,396,021**	$ 1,549,872
OEMs	**358,791**	322,260	**1,044,039**	908,384
EMS companies	**56,736**	66,249	**176,749**	183,847
Total Revenue	**$ 853,653**	$ 924,798	**$ 2,616,809**	$ 2,642,103

Net revenues were attributable to customers in the following regions:

	Fiscal quarters ended		Nine fiscal months ended	
	September 30, 2023	**October 1, 2022**	**September 30, 2023**	**October 1, 2022**
Asia	**$ 323,750**	$ 352,160	**$ 957,706**	$ 1,040,942
Europe	**315,264**	296,779	**968,286**	862,728
Americas	**214,639**	275,859	**690,817**	738,433
Total Revenue	**$ 853,653**	$ 924,798	**$ 2,616,809**	$ 2,642,103

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:

	Fiscal quarters ended		Nine fiscal months ended	
	September 30, 2023	**October 1, 2022**	**September 30, 2023**	**October 1, 2022**
Industrial	**$ 297,506**	$ 362,380	**$ 951,422**	$ 1,050,704
Automotive	**316,043**	286,331	**910,775**	799,504
Computing	**40,816**	52,206	**125,068**	177,172
Military and Aerospace	**67,623**	56,861	**198,489**	159,062
Consumer Products	**42,155**	50,235	**130,305**	132,090
Power Supplies	**38,897**	50,822	**127,684**	132,248
Medical	**34,447**	33,675	**116,688**	99,139
Telecommunications	**16,166**	32,288	**56,378**	92,184
Total Revenue	**$ 853,653**	$ 924,798	**$ 2,616,809**	$ 2,642,103

Note 12 – 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		Nine fiscal months ended	
	September 30, 2023	**October 1, 2022**	**September 30, 2023**	**October 1, 2022**
Numerator:				
Net earnings attributable to Vishay stockholders	**$ 65,529**	$ 140,061	**$ 272,348**	$ 356,022
Denominator:				
Denominator for basic earnings per share:				
Weighted average shares	**138,964**	142,663	**139,696**	143,760
Outstanding phantom stock units	**119**	224	**132**	223
Adjusted weighted average shares	**139,083**	142,887	**139,828**	143,983
Effect of dilutive securities:				
Restricted stock units	**918**	560	**749**	487
Dilutive potential common shares	**918**	560	**749**	487
Denominator for diluted earnings per share:				
Adjusted weighted average shares - diluted	**140,001**	143,447	**140,577**	144,470
Basic earnings per share attributable to Vishay stockholders	**$ 0.47**	$ 0.98	**$ 1.95**	$ 2.47
Diluted earnings per share attributable to Vishay stockholders	**$ 0.47**	$ 0.98	**$ 1.94**	$ 2.46

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		Nine fiscal months ended	
	September 30, 2023	**October 1, 2022**	**September 30, 2023**	**October 1, 2022**
Restricted stock units	**3**	168	**107**	278

If the average market price of Vishay common stock is less than the effective conversion prices of the convertible senior notes due 2025 and due 2030, respectively, no shares are included in the diluted earnings per share computation for the convertible senior notes due 2025 and due 2030. Upon Vishay exercising its existing right to legally amend the indenture governing the convertible senior notes due 2025, Vishay will satisfy its conversion obligations by paying $1 cash per $1 principal amount of converted notes and settle any additional amounts due in common stock. Pursuant to the indenture governing the convertible senior notes due 2030, Vishay will satisfy its conversion obligations by paying $1 cash per $1 principal amount of converted notes and settle any additional amounts due in cash and/or common stock. Accordingly, the convertible senior notes due 2025 and due 2030 are not anti-dilutive when the average market price of Vishay common stock is less than the respective effective conversion prices of the convertible senior notes due 2025 and due 2030.

In connection with the issuance of the convertible senior notes due 2030, the Company entered into capped call transactions (see Note 5), which were not included in the calculation of diluted earnings per share as their effect would have been anti-dilutive. The capped calls are intended to reduce the potential dilution to the Company's common stock in the event that at the time of conversion of the convertible senior notes due 2030 the Company's common stock price exceeds the conversion price of the convertible senior notes due 2030.

(dollars in thousands, except per share amounts)

Note 13 – Fair Value Measurements

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
September 30, 2023				
Assets:				
Assets held in rabbi trusts	**$ 46,240**	$ 22,250	$ 23,990	$ -
Available for sale securities	**$ 3,674**	3,674	-	-
	$ 49,914	**$ 25,924**	**$ 23,990**	**$ -**
Liability:				
MaxPower acquisition contingent consideration	**$ 6,955**	**$ -**	**$ -**	**$ 6,955**
December 31, 2022				
Assets:				
Assets held in rabbi trusts	$ 50,173	$ 27,168	$ 23,005	$ -
Available for sale securities	$ 3,677	3,677	-	-
Precious metals	$ 1,252	1,252	-	-
	$ 55,102	$ 32,097	$ 23,005	$ -
Liability:				
MaxPower acquisition contingent consideration	$ 6,870	$ -	$ -	$ 6,870

There have been no changes in the classification of any financial instruments within the fair value hierarchy in the periods presented.

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.

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

From time to time, the Company purchases precious metals bullion in excess of its immediate manufacturing needs to mitigate the risk of supply shortages or volatile price fluctuations. The metals are valued based on quoted market prices on the last business day of the period. The fair value measurement of the metals is considered a Level 1 measurement within the fair value hierarchy. The inventory of precious metals bullion in excess of its immediate manufacturing needs was not material at September 30, 2023.

The Company may be required to make certain contingent payments to non-employee equity holders of MaxPower pursuant to the acquisition agreement, which would be payable upon the achievement of certain technology milestones, upon favorable resolution of certain technology licensing matters with a third party, and upon the disposition of MaxPower's investment in an equity affiliate. The fair value of these contingent consideration payments is determined by estimating the net present value of the expected cash flows based on the probability of expected payments. The fair value measurement of the contingent consideration is considered a Level 3 measurement within the fair value hierarchy.

The fair value of the long-term debt, excluding the derivative liabilities and deferred financing costs, at September 30, 2023 and December 31, 2022 is approximately $831,400 and $491,100, respectively, compared to its carrying value, excluding the deferred financing costs, of $845,102 and $507,344, 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 September 30, 2023 and December 31, 2022, 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 September 30, 2023 and December 31, 2022, 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 and accounts payable. The carrying amounts for these financial instruments reported in the consolidated condensed balance sheets approximate their fair values.

Note 14 - Subsequent Events

On November 8, 2023, Vishay and Nexperia BV announced that they have entered into an agreement whereby Vishay will acquire Nexperia's wafer fabrication facility and operations located in Newport, South Wales, U.K. for approximately $177,000 in cash, subject to customary post-closing adjustments.

To effect the transaction, Vishay will acquire a 100% interest in the legal entity Neptune 6 Limited, and its wholly-owned operating subsidiary, Nexperia Newport Limited, which owns and operates the Newport facility.

The closing of the transaction is subject to U.K. government review, the purchase rights of a third party, and customary closing conditions, and is expected to occur in the first quarter of 2024.

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

This Management's Discussion and Analysis ("MD&A") is intended to provide an understanding of Vishay's financial condition, results of operations and cash flows by focusing on changes in certain key measures from period to period. The MD&A should be read in conjunction with our Consolidated Condensed Financial Statements and accompanying Notes included in Item 1. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those discussed in our Annual Report on Form 10-K, particularly in Item 1A. "Risk Factors," filed with the Securities and Exchange Commission on February 22, 2023.

Overview

Vishay Intertechnology, Inc. ("Vishay," "we," "us," or "our") manufactures one of the world's largest portfolios of discrete semiconductors and passive electronic components that are essential to innovative designs in the automotive, industrial, computing, consumer, telecommunications, military, aerospace, and medical markets.

We operate in six segments based on product functionality: MOSFETs, Diodes, Optoelectronic Components, Resistors, Inductors, and Capacitors.

We are focused on enhancing stockholder value by growing our business and improving earnings per share. Since 1985, we have pursued a business strategy of growth through focused research and development and acquisitions. We plan to continue to grow our business through intensified internal growth supplemented by opportunistic acquisitions, while maintaining a prudent capital structure. To drive growth and optimize stockholder value, we plan to capitalize on the mega trends of electrification, data storage, and wireless communications by developing go-to-market strategies and investing in and expanding the thirty key product lines for growth that we have identified, increasing our capacity internally by investing approximately $350 million in 2023 and approximately $1.2 billion over the next three years primarily for capital expansion projects outside of China and externally by outsourcing production of commodity products to subcontractors, enhancing channel management, investing in internal resources by adding customer-facing engineers and filling gaps in technology and market coverage, promoting the full breadth of our portfolio through solution selling, and instituting a Think Customer First organizational culture.

On November 8, 2023, we and Nexperia BV announced that we have entered into an agreement whereby we will acquire Nexperia's wafer fabrication facility and operations located in Newport, South Wales, U.K. for approximately $177 million in cash, subject to customary post-closing adjustments. The closing of the transaction is subject to U.K. government review, the purchase rights of a third party, and customary closing conditions, and is expected to occur in the first quarter of 2024.

In addition to enhancing stockholder value through growing our business, in 2022, our Board of Directors adopted a Stockholder Return Policy, which calls for us to return at least 70% of free cash flow, net of scheduled principal payments of long-term debt, on an annual basis. See further discussion in "Stockholder Value" below.

On September 12, 2023, we issued $750 million convertible senior notes due 2030. We used the net proceeds from the issuance of these notes to repurchase $370.2 million principal amount of convertible senior notes due 2025, $94.2 million to enter into capped call transactions intended to mitigate the dilution risk of convertible senior notes due 2030 by synthetically increasing the conversion price of the notes to approximately $43.98 per share, to repay amounts outstanding on our amended and restated credit facility, and for other general corporate purposes. We recognized a loss of $18.9 million due to the early extinguishment of the repurchased convertible senior notes due 2025.

On May 8, 2023, we amended and restated our $750 million revolving credit agreement, which replaced our credit agreement that was scheduled to mature in June 2024. The amendment and restatement extended the maturity date of the revolving credit agreement until May 8, 2028, replaced the previous total leverage ratio used for financial covenant compliance measurement with a net leverage ratio, and replaced the LIBOR-based interest rate and related LIBOR-based mechanics applicable to U.S. dollar borrowings under the revolving credit agreement with an interest rate based on the Secured Overnight Financing Rate ("SOFR") (including a customary spread adjustment) and related SOFR-based mechanics. The maturity date of the amended and restated facility will accelerate if within ninety-one days prior to the maturity of our convertible senior notes due 2025, the outstanding principal amount of such notes exceeds a defined liquidity measure as set forth in the Amended and Restated Credit Facility. Other terms and conditions are substantially unchanged.

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. In this volatile economic environment, we continue to closely monitor our fixed costs, capital expenditure plans, 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. We will react quickly and professionally to changes in demand to minimize manufacturing inefficiencies and excess inventory build in periods of decline and maximize opportunities in periods of growth. We have significant liquidity to withstand temporary disruptions in the economic environment.

We utilize several financial metrics, including net revenues, gross profit margin, operating margin, segment operating margin, 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. The key financial metrics decreased in the third fiscal quarter of 2023 primarily due to the negative impacts of an on-going distributor inventory correction that resulted in lower orders. Gross profit was negatively impacted by lower volume.

Net revenues for the fiscal quarter ended September 30, 2023 were $853.7 million, compared to $892.1 million and $924.8 million for the fiscal quarters ended July 1, 2023 and October 1, 2022, respectively. The net earnings attributable to Vishay stockholders for the fiscal quarter ended September 30, 2023 were $65.5 million, or $0.47 per diluted share, compared to $95.0 million, or $0.68 per diluted share for the fiscal quarter ended July 1, 2023, and $140.1 million, or $0.98 per diluted share for the fiscal quarter ended October 1, 2022.

Net revenues for the nine fiscal months ended September 30, 2023 were $2,616.8 million, compared to $2,642.1 million for the nine fiscal months ended October 1, 2022. The net earnings attributable to Vishay stockholders for the nine fiscal months ended September 30, 2023 were $272.3 million, or $1.94 per diluted share, compared to $356.0 million, or $2.46 per diluted share for the nine fiscal months ended October 1, 2022.

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. We utilize the free cash metric in defining our Stockholder Return Policy.

The items affecting comparability are (*in thousands, except per share amounts*):

	Fiscal quarters ended			Nine fiscal months ended	
	September 30, 2023	**July 1, 2023**	**October 1, 2022**	**September 30, 2023**	**October 1, 2022**
GAAP net earnings attributable to Vishay stockholders	**$ 65,529**	$ 95,038	$ 140,061	**$ 272,348**	$ 356,022
Reconciling items affecting gross income:					
Impact of COVID-19 pandemic	**$ -**	$ -	$ -	**$ -**	$ 6,661
Other reconciling items affecting operating income:					
Impact of COVID-19 pandemic	**$ -**	$ -	$ -	**$ -**	$ 546
Reconciling items affecting other income (expense):					
Loss on early extinguishment of debt	**$ 18,874**	$ -	$ -	**$ 18,874**	$ -
Reconciling items affecting tax expense:					
Effects of changes in uncertain tax positions	**$ -**	$ -	$ (5,941)	**$ -**	$ (5,941)
Tax effects of pre-tax items above	**(498)**	-	-	**(498)**	(1,802)
Adjusted net earnings	**$ 83,905**	$ 95,038	$ 134,120	**$ 290,724**	$ 355,486
Adjusted weighted average diluted shares outstanding	**140,001**	140,478	143,447	**140,577**	144,470
Adjusted earnings per diluted share	**$ 0.60**	$ 0.68	$ 0.93	**$ 2.07**	$ 2.46

The following table reconciles gross profit by segment to consolidated gross profit (*in thousands*). Direct costs of the COVID-19 pandemic are not allocated to the segments as the chief operating decision maker's evaluation of segment performance does not include these costs.

	Fiscal quarters ended			Nine fiscal months ended	
	September 30, 2023	**July 1, 2023**	**October 1, 2022**	**September 30, 2023**	**October 1, 2022**
MOSFETs	**$ 68,665**	$ 71,954	$ 83,121	**$ 213,477**	$ 197,305
Diodes	**47,194**	40,877	56,339	**136,200**	155,495
Optoelectronic Components	**18,140**	15,609	25,959	**55,689**	84,820
Resistors	**49,156**	64,634	68,461	**187,826**	204,015
Inductors	**28,493**	30,808	25,692	**83,024**	80,231
Capacitors	**25,995**	33,591	29,966	**97,613**	94,664
Unallocated gross profit (loss)	**-**	-	-	**-**	(6,661)
Gross profit	**$ 237,643**	$ 257,473	$ 289,538	**$ 773,829**	$ 809,869

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. Free cash results are as follows (*in thousands*):

	Fiscal quarters ended			Nine fiscal months ended	
	September 30, 2023	**July 1, 2023**	**October 1, 2022**	**September 30, 2023**	**October 1, 2022**
Net cash provided by continuing operating activities	**$ 122,303**	$ 107,239	$ 209,480	**$ 359,435**	$ 317,792
Proceeds from sale of property and equipment	**21**	687	95	**1,034**	472
Less: Capital expenditures	**(66,829)**	(71,676)	(76,475)	**(184,079)**	(172,175)
Free cash	**$ 55,495**	$ 36,250	$ 133,100	**$ 176,390**	$ 146,089

Orders are lower due to a distributor inventory correction that began in the fourth fiscal quarter of 2022 and continues in 2023. Our results for the fiscal quarters ended September 30, 2023 and July 1, 2023 remain strong, although weaker than our October 1, 2022 results.

Our free cash results were significantly impacted by the installment payments of the U.S. transition tax of $27.7 million and $14.8 million in the second fiscal quarters of 2023 and 2022, respectively, and $25.2 million of payments of foreign, withholding, and claw-back cash taxes on foreign earnings in Israel for the net $81.2 million that was repatriated to the U.S. in the second fiscal quarter of 2022.

Stockholder Value

We are focused on enhancing stockholder value by growing our business and improving earnings per share. Over the next few years, we expect to experience higher internal growth rates than over the last decade. This expectation is based upon accelerated electrification, such as factory automation, electrical vehicles, and 5G infrastructures. To meet this expected increase in demand and to fully participate in growing markets, we intend to increase our capital expenditures for expansion outside of China in the mid-term. The increased capital expenditures will be primarily used to increase manufacturing capacity for the thirty key product lines for growth that we identified. The most significant expansion projects include building a 12-inch wafer fab in Itzehoe, Germany adjacent to our existing 8-inch fab, expanding our Inductors manufacturing, and expanding our GaAs fab in Heilbronn, Germany.

In 2022, our Board of Directors adopted a Stockholder Return Policy, which calls for us to return at least 70% of free cash flow, net of scheduled principal payments of long-term debt, on an annual basis. We intend to return such amounts to stockholders directly, in the form of dividends, or indirectly, in the form of stock repurchases.

The following table summarizes activity pursuant to this policy *(in thousands):*

	Fiscal quarters ended		**Nine fiscal months ended**	
	September 30, 2023	**October 1, 2022**	**September 30, 2023**	**October 1, 2022**
Dividends paid to stockholders	**$ 13,879**	$ 14,254	**$ 41,836**	$ 43,062
Stock repurchases	**17,262**	18,510	**57,661**	54,671
Total	**$ 31,141**	$ 32,764	**$ 99,497**	$ 97,733

During the fourth quarters of 2022 and 2021, we determined that substantially all unremitted foreign earnings in Israel and Germany, respectively, are no longer indefinitely reinvested. The changes in these indefinite reinvestment assertions will provide greater access to our worldwide cash balances to fund our growth plan and our Stockholder Return Policy, but also increased our effective tax rate.

The structure of our Stockholder Return Policy enables us to allocate capital responsibly among our business, our lenders, and our stockholders. We will continue to invest in growth initiatives including key product line expansions, targeted R&D, and synergistic acquisitions.

We have paid dividends each quarter since the first quarter of 2014, and the Stockholder Return Policy will remain in effect until such time as the Board votes to amend or rescind the policy. Implementation of the Stockholder Return Policy is subject to future declarations of dividends by the Board of Directors, market and business conditions, legal requirements, and other factors. The policy sets forth our intention, but does not obligate us to acquire any shares of common stock or declare any dividends, and the policy may be terminated or suspended at any time at our discretion, in accordance with applicable laws and regulations.

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, segment operating margin, 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. We also regularly evaluate gross profit by segment to assist in the analysis of consolidated gross profit. Gross profit margin and gross profit margin by segment are clearly a function of net revenues, but also reflect our cost management programs and our ability to contain fixed costs.

Operating margin is computed as gross profit less operating expenses, expressed as a percentage of net revenues. Operating margin is clearly a function of net revenues, but also reflects our cost management programs and our ability to contain fixed costs.

Our chief operating decision maker makes decisions, allocates resources, and evaluates business segment performance based on segment operating income. Only dedicated, direct selling, general, and administrative ("SG&A") expenses of the segments are included in the calculation of segment operating income. We do not allocate certain SG&A expenses that are managed at the regional or corporate global level to our segments. Accordingly, segment operating income excludes these SG&A expenses that are not directly traceable to the segments. Segment operating income would also exclude costs not routinely used in the management of the segments in periods when those items are present, such as restructuring and severance costs, the direct impact of the COVID-19 pandemic, and other items affecting comparability. Segment operating income is clearly a function of net revenues, but also reflects our cost management programs and our ability to contain fixed costs. Segment operating margin is segment operating income expressed as a percentage of net revenues.

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 third fiscal quarter of 2022 through the third fiscal quarter of 2023 *(dollars in thousands)*:

	3rd Quarter 2022	4th Quarter 2022	1st Quarter 2023	2nd Quarter 2023	3rd Quarter 2023
Net revenues	$ 924,798	$ 855,298	$ 871,046	$ 892,110	$ 853,653
Gross profit margin	31.3%	29.1%	32.0%	28.9%	27.8%
Operating margin	19.8%	15.8%	18.2%	15.1%	13.5%
End-of-period backlog	$ 2,261,400	$ 2,292,700	$ 2,169,400	$ 1,895,100	$ 1,552,400
Book-to-bill ratio	0.88	0.94	0.84	0.69	0.63
Inventory turnover	4.1	3.9	3.7	3.9	3.7
Change in ASP vs. prior quarter	0.0%	0.6%	1.2%	(0.7)%	(0.8)%

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

Revenues decreased versus the prior fiscal quarter and the third fiscal quarter of 2022 primarily due to lower sales volume. The book-to-bill ratio and backlog were negatively impacted by the distributor inventory correction that continued in the third fiscal quarter of 2023. We continue to increase manufacturing capacity for critical product lines. Average selling prices decreased versus the prior fiscal quarter.

Gross profit margin decreased versus the prior fiscal quarter and the third fiscal quarter of 2022. The decrease versus the prior fiscal quarter is primarily due to lower sales volume and decreased average selling prices. The decrease versus the third fiscal quarter of 2022 is primarily due to lower sales volume, cost inflation, and manufacturing inefficiencies, partially offset by higher average selling prices and positive foreign currency impacts.

The book-to-bill ratio in the third fiscal quarter of 2023 decreased to 0.63 versus 0.69 in the second fiscal quarter of 2023. The book-to-bill ratio continues to be negatively impacted by the distributor inventory correction that continued in the third fiscal quarter of 2023.

Financial Metrics by Segment

The following table shows net revenues, book-to-bill ratio, gross profit margin, and segment operating margin broken out by segment for the five fiscal quarters beginning with the third fiscal quarter of 2022 through the third fiscal quarter of 2023 *(dollars in thousands)*:

	3rd Quarter 2022	4th Quarter 2022	1st Quarter 2023	2nd Quarter 2023	3rd Quarter 2023
MOSFETs					
Net revenues	$ 225,186	$ 206,005	$ 198,181	$ 207,388	$ 205,027
Book-to-bill ratio	0.78	1.15	0.95	0.68	0.50
Gross profit margin	36.9%	37.5%	36.8%	34.7%	33.5%
Segment operating margin	31.9%	30.9%	29.3%	27.4%	25.7%
Diodes					
Net revenues	$ 209,012	$ 181,791	$ 175,693	$ 174,735	$ 176,788
Book-to-bill ratio	0.79	0.88	0.71	0.54	0.58
Gross profit margin	27.0%	23.4%	27.4%	23.4%	26.7%
Segment operating margin	24.6%	19.9%	24.3%	20.1%	23.5%
Optoelectronic Components					
Net revenues	$ 73,447	$ 63,985	$ 60,403	$ 64,449	$ 64,441
Book-to-bill ratio	0.57	0.78	0.72	0.70	0.57
Gross profit margin	35.3%	28.1%	36.3%	24.2%	28.1%
Segment operating margin	30.0%	20.1%	28.6%	16.7%	20.3%
Resistors					
Net revenues	$ 207,437	$ 205,161	$ 223,140	$ 222,433	$ 199,877
Book-to-bill ratio	1.08	0.85	0.88	0.74	0.65
Gross profit margin	33.0%	28.3%	33.2%	29.1%	24.6%
Segment operating margin	29.7%	25.3%	29.9%	25.8%	20.9%
Inductors					
Net revenues	$ 83,503	$ 75,198	$ 80,338	$ 89,239	$ 89,947
Book-to-bill ratio	1.02	0.83	1.04	0.84	0.85
Gross profit margin	30.8%	32.1%	29.5%	34.5%	31.7%
Segment operating margin	27.0%	28.9%	26.1%	30.9%	27.9%
Capacitors					
Net revenues	$ 126,213	$ 123,158	$ 133,291	$ 133,866	$ 117,573
Book-to-bill ratio	0.95	0.99	0.70	0.70	0.75
Gross profit margin	23.7%	23.7%	28.5%	25.1%	22.1%
Segment operating margin	20.1%	19.9%	24.8%	21.0%	17.5%

Results of Operations

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

	Fiscal quarters ended			Nine fiscal months ended	
	September 30, 2023	July 1, 2023	October 1, 2022	September 30, 2023	October 1, 2022
Cost of products sold	72.2%	71.1%	68.7%	70.4%	69.3%
Gross profit	27.8%	28.9%	31.3%	29.6%	30.7%
Selling, general & administrative expenses	14.4%	13.8%	11.5%	14.0%	12.5%
Operating income	13.5%	15.1%	19.8%	15.6%	18.2%
Income before taxes and noncontrolling interest	11.3%	15.0%	19.6%	14.8%	17.6%
Net earnings attributable to Vishay stockholders	7.7%	10.7%	15.1%	10.4%	13.5%
Effective tax rate	31.7%	28.5%	22.4%	29.3%	23.2%

Net Revenues

Net revenues were as follows *(dollars in thousands)*:

	Fiscal quarters ended			Nine fiscal months ended	
	September 30, 2023	July 1, 2023	October 1, 2022	September 30, 2023	October 1, 2022
Net revenues	$ 853,653	$ 892,110	$ 924,798	$ 2,616,809	$ 2,642,103

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

	Fiscal quarter ended September 30, 2023		Nine fiscal months ended September 30, 2023	
	Change in net revenues	% change	Change in net revenues	% change
July 1, 2023	$ (38,457)	(4.3)%	n/a	n/a
October 1, 2022	$ (71,145)	(7.7)%	$ (25,294)	(1.0)%

Changes in net revenues were attributable to the following:

	vs. Prior Quarter	vs. Prior Year Quarter	vs. Prior Year-to-Date
Change attributable to:			
Decrease in volume	(3.2)%	(10.7)%	(3.8)%
Change in average selling prices	(0.8)%	0.9%	2.3%
Foreign currency effects	0.0%	2.1%	0.4%
Acquisition	0.0%	0.5%	0.3%
Other	(0.3)%	(0.5)%	(0.2)%
Net change	(4.3)%	(7.7)%	(1.0)%

Despite the distributor inventory correction that we are experiencing, the long-term prospects for our business remain favorable, and we continue to increase manufacturing capacities for critical product lines. The decreases in net revenues are primarily sales volume-driven with increased average selling prices and positive foreign currency impacts partially offsetting the sales volume decrease in the prior year periods.

Gross Profit Margins

Gross profit margins for the fiscal quarter ended September 30, 2023 were 27.8%, versus 28.9% and 31.3%, for the comparable prior quarter and prior year period, respectively. Gross profit margins for the nine fiscal months ended September 30, 2023 were 29.6%, versus 30.7% for the comparable prior year period. The decreases are primarily sales volume-driven with increased average selling prices and positive foreign currency impacts partially offsetting the sales volume decrease and cost inflation in the prior year periods.

Segments

Analysis of revenues and margins for our segments is provided below. Direct costs of the COVID-19 pandemic are not allocated to the segments.

<u>MOSFETs</u>

Net revenues, gross profit margins, and segment operating margins of the MOSFETs segment were as follows *(dollars in thousands):*

	Fiscal quarters ended			Nine fiscal months ended	
	September 30, 2023	July 1, 2023	October 1, 2022	September 30, 2023	October 1, 2022
Net revenues	$ 205,027	$ 207,388	$ 225,186	$ 610,596	$ 556,255
Gross profit margin	33.5%	34.7%	36.9%	35.0%	35.5%
Segment operating margin	25.7%	27.4%	31.9%	27.4%	29.7%

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

	Fiscal quarter ended September 30, 2023		Nine fiscal months ended September 30, 2023	
	Change in net revenues	% change	Change in net revenues	% change
July 1, 2023	$ (2,361)	(1.1)%	n/a	n/a
October 1, 2022	$ (20,159)	(9.0)%	$ 54,341	9.8%

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

	vs. Prior Quarter	vs. Prior Year Quarter	vs. Prior Year-to-Date
Change attributable to:			
Change in volume	1.1%	(12.1)%	4.0%
Change in average selling prices	(2.0)%	(0.3)%	3.6%
Foreign currency effects	0.0%	1.2%	0.3%
Acquisition	0.0%	1.9%	1.2%
Other	(0.2)%	0.3%	0.7%
Net change	(1.1)%	(9.0)%	9.8%

The net revenues of the MOSFETs segment decreased slightly versus the prior fiscal quarter and decreased significantly versus the prior year quarter, but increased significantly versus the prior year-to-date period. The decrease versus the prior fiscal quarter is primarily due to decreased sales to distribution customers and customers in the Europe and Americas regions. The decrease versus the prior year quarter is primarily due to decreased sales to distribution and EMS customers, computing end market customers, and customers in all regions, particularly the Americas region. The increase versus the prior year-to-date period is primarily due to increased sales to automotive, power supply, and industrial end market customers and customers in the Europe and Americas regions, partially offset by decreased sales to computing and telecommunications end market customers.

Gross profit margin decreased versus the prior fiscal quarter and the prior year periods. The decrease versus the prior fiscal quarter is primarily due to decreased average selling prices and unfavorable product mix. The decrease versus the prior year quarter is primarily due to lower sales volume, unfavorable product mix, higher utilities and material prices, increased depreciation, and higher personnel costs. Gross profit increased versus the prior year-to-date period due to higher volume, but gross profit margin decreased slightly due to increased costs.

The segment operating margin decreased versus the prior fiscal quarter and the prior year periods. The fluctuations are primarily due to gross profit fluctuations. Increased segment SG&A expenses as a percentage of sales also impacted all comparison periods.

Average selling prices decreased versus the prior fiscal quarter and the prior year quarter, but increased versus the prior year-to-date period.

We continue to invest to expand mid- and long-term manufacturing capacity for strategic product lines. We have begun building a 12-inch wafer fab in Itzehoe, Germany adjacent to our existing 8-inch wafer fab, which we expect will increase our in-house wafer capacity by approximately 70% within 3-4 years and allow us to balance our in-house and foundry wafer supply.

We acquired leading edge silicon and silicon carbide MOSFETs products with our acquisition of MaxPower in the fourth fiscal quarter of 2022.

Diodes

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

	Fiscal quarters ended			Nine fiscal months ended	
	September 30, 2023	July 1, 2023	October 1, 2022	September 30, 2023	October 1, 2022
Net revenues	$ 176,788	$ 174,735	$ 209,012	$ 527,216	$ 583,429
Gross profit margin	26.7%	23.4%	27.0%	25.8%	26.7%
Segment operating margin	23.5%	20.1%	24.6%	22.6%	24.0%

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

	Fiscal quarter ended September 30, 2023		Nine fiscal months ended September 30, 2023	
	Change in net revenues	% change	Change in net revenues	% change
July 1, 2023	$ 2,053	1.2%	n/a	n/a
October 1, 2022	$ (32,224)	(15.4)%	$ (56,213)	(9.6)%

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

	vs. Prior Quarter	vs. Prior Year Quarter	vs. Prior Year-to-Date
Change attributable to:			
Change in volume	1.3%	(16.7)%	(11.3)%
Increase in average selling prices	0.1%	0.2%	1.8%
Foreign currency effects	(0.1)%	1.4%	0.2%
Other	(0.1)%	(0.3)%	(0.3)%
Net change	1.2%	(15.4)%	(9.6)%

Net revenues of the Diodes segment increased versus the prior fiscal quarter, but decreased versus the prior year periods. The increase versus the prior fiscal quarter is primarily due to increased sales to automotive end market customers and customers in the Americas and Asia regions. The decrease versus the prior year quarter is primarily due to decreased sales to customers in all regions, particularly the Americas region, and all end market customers except for automotive end market customers. The decrease versus the prior year quarter is partially attributable to the prior year quarter including increased volume as operations and sales resumed following extended government-mandated shut-downs of our manufacturing facilities in the People's Republic of China. The decrease versus the prior year-to-date period is primarily due to decreased sales to distribution and EMS customers, power supply end market customers, and customers in the Americas and Asia regions.

Gross profit margin increased versus the prior fiscal quarter, but decreased versus the prior year periods. The increase versus the prior fiscal quarter is primarily due to higher sales volume, decreased material costs, and manufacturing efficiencies. The decrease versus the prior year quarter is primarily due to lower sales volume, partially offset by decreased metal prices. The decrease versus the prior year-to-date period is primarily due to lower sales volume, manufacturing inefficiencies, and higher material and labor costs, partially offset by increased average selling prices.

The segment operating margin increased versus the prior fiscal quarter, but decreased versus the prior year periods. The fluctuations are primarily due to gross profit fluctuations.

Average selling prices increased versus the prior fiscal quarter and the prior year periods.

Optoelectronic Components

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

	Fiscal quarters ended			Nine fiscal months ended	
	September 30, 2023	July 1, 2023	October 1, 2022	September 30, 2023	October 1, 2022
Net revenues	$ 64,441	$ 64,449	$ 73,447	$ 189,293	$ 232,399
Gross profit margin	28.1%	24.2%	35.3%	29.4%	36.5%
Segment operating margin	20.3%	16.7%	30.0%	21.7%	31.2%

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

	Fiscal quarter ended September 30, 2023		Nine fiscal months ended September 30, 2023	
	Change in net revenues	% change	Change in net revenues	% change
July 1, 2023	$ (8)	0.0%	n/a	n/a
October 1, 2022	$ (9,006)	(12.3)%	(43,106)	(18.5)%

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

	vs. Prior Quarter	vs. Prior Year Quarter	vs. Prior Year-to-Date
Change attributable to:			
Change in volume	0.5%	(15.0)%	(19.7)%
Change in average selling prices	(0.3)%	(0.2)%	0.7%
Foreign currency effects	0.0%	2.9%	0.6%
Other	(0.2)%	0.0%	(0.1)%
Net change	0.0%	(12.3)%	(18.5)%

Net revenues of the Optoelectronic Components segment were flat versus the prior fiscal quarter, but decreased significantly versus the prior year periods. Sales to EMS customers, automotive and industrial end market customers, and customers in the Europe and Americas regions increased versus the prior fiscal quarter, but were offset by decreased sales to distribution customers and customers in the Asia region. The decrease versus the prior year quarter is due to decreased sales to distribution customers, customers in all regions, particularly the Americas region, and all end market customers other than automotive and telecommunications end market customers. The decrease versus the prior year-to-date period is primarily due to decreased sales to distribution customers and customers in all regions, partially offset by increased sales to automotive end market customers.

Gross profit margin increased versus the prior fiscal quarter, but decreased versus the prior year periods. The increase versus the prior fiscal quarter is primarily due to favorable product mix, manufacturing efficiencies, and lower utility costs due to government subsidies. The decrease versus the prior year quarter is primarily due to lower sales volume, manufacturing inefficiencies, and higher material, subcontractor service, and utility costs. The decrease versus the prior year-to-date period is primarily due to lower sales volume, manufacturing inefficiencies, and higher material and labor costs, partially offset by increased average selling prices.

The segment operating margin increased versus the prior fiscal quarter, but decreased versus the prior year periods. The fluctuations are primarily due to gross profit fluctuations.

Average selling prices decreased versus the prior fiscal quarter and prior year quarter, but increased versus the prior year-to-date period.

We are now using our recently modernized and expanded wafer fab in Heilbronn, Germany.

Resistors

Net revenues, gross profit margins, and segment operating margins of the Resistors segment were as follows *(dollars in thousands):*

	Fiscal quarters ended			Nine fiscal months ended	
	September 30, 2023	July 1, 2023	October 1, 2022	September 30, 2023	October 1, 2022
Net revenues	$ 199,877	$ 222,433	$ 207,437	$ 645,450	$ 627,645
Gross profit margin	24.6%	29.1%	33.0%	29.1%	32.5%
Segment operating margin	20.9%	25.8%	29.7%	25.7%	29.2%

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

	Fiscal quarter ended September 30, 2023		Nine fiscal months ended September 30, 2023	
	Change in net revenues	% change	Change in net revenues	% change
July 1, 2023	$ (22,556)	(10.1)%	n/a	n/a
October 1, 2022	$ (7,560)	(3.6)%	$ 17,805	2.8%

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

	vs. Prior Quarter	vs. Prior Year Quarter	vs. Prior Year-to-Date
Change attributable to:			
Change in volume	(8.2)%	(6.7)%	0.5%
Change in average selling prices	(1.1)%	1.2%	2.0%
Foreign currency effects	0.0%	3.0%	0.6%
Other	(0.8)%	(1.1)%	(0.3)%
Net change	(10.1)%	(3.6)%	2.8%

Net revenues of the Resistors segment decreased versus the prior fiscal quarter and prior year quarter, but increased versus the prior year-to-date period. The decrease versus the prior fiscal quarter is primarily due to decreased sales to distribution and EMS customers, industrial end market customers, and customers in all regions, particularly the Americas region, partially offset by increased sales to automotive end market customers. The decrease versus the prior year quarter is primarily due to decreased sales to distribution customers and customers in the Americas and Asia regions, partially offset by increased sales to military and aerospace, automotive, and industrial end market customers, and customers in the Europe region. The increase versus the prior year-to-date period is primarily due to increased sales to military and aerospace, automotive, and industrial end market customers and customers in the Europe region.

The gross profit margin decreased versus the prior fiscal quarter and the prior year periods. The decrease versus the prior fiscal quarter is primarily due to lower volume, decreased average selling prices, manufacturing inefficiencies, and higher labor costs. The decrease versus the prior year quarter is primarily due to decreased volume, higher labor and utility costs, and manufacturing inefficiencies, partially offset by increased average selling prices. The decrease versus the prior year-to-date period is primarily due to higher labor and material costs and manufacturing inefficiencies, partially offset by higher sales volume and increased average selling prices.

The segment operating margin decreased versus the prior fiscal quarter and the prior year periods. The decreases are primarily due to decreased gross profit.

Average selling prices decreased versus the prior fiscal quarter, but increased versus the prior year periods.

We are increasing critical manufacturing capacities for certain product lines. We continue to broaden our business with targeted acquisitions of specialty resistors businesses.

Inductors

Net revenues, gross profit margins, and segment operating margins of the Inductors segment were as follows *(dollars in thousands):*

	Fiscal quarters ended			Nine fiscal months ended	
	September 30, 2023	July 1, 2023	October 1, 2022	September 30, 2023	October 1, 2022
Net revenues	$ 89,947	$ 89,239	$ 83,503	$ 259,524	$ 255,888
Gross profit margin	31.7%	34.5%	30.8%	32.0%	31.4%
Segment operating margin	27.9%	30.9%	27.0%	28.4%	28.0%

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

	Fiscal quarter ended September 30, 2023		Nine fiscal months ended September 30, 2023	
	Change in net revenues	% change	Change in net revenues	% change
July 1, 2023	$ 708	0.8%	n/a	n/a
October 1, 2022	$ 6,444	7.7%	$ 3,636	1.4%

Changes in net revenues were attributable to the following:

	vs. Prior Quarter	vs. Prior Year Quarter	vs. Prior Year-to-Date
Change attributable to:			
Change in volume	0.8%	4.0%	(0.9)%
Change in average selling prices	0.0%	2.2%	2.0%
Foreign currency effects	0.0%	1.2%	0.3%
Other	0.0%	0.3%	0.0%
Net change	0.8%	7.7%	1.4%

Net revenues of the Inductors segment increased slightly versus the prior fiscal quarter and prior year-to-date period and increased significantly versus the prior year quarter. The increase versus the prior fiscal quarter is primarily due to increased sales to automotive and power supply end market customers and customers in the Asia region. The increase versus the prior year quarter is primarily due to increased sales to EMS customers, medical, automotive, and aerospace and military end market customers, and customers in the Americas region, partially offset by decreased sales to distribution customers and industrial and telecommunications end market customers. The increase versus the prior year-to-date period is primarily due to increased sales to EMS customers, medical, automotive, and aerospace and military end market customers, and customers in the Americas region, partially offset by decreased sales to distribution customers and industrial and telecommunications end market customers, and customers in the Asia region.

The gross profit margin decreased versus the prior fiscal quarter, but increased versus the prior year periods. The decrease versus the prior fiscal quarter is primarily due to higher labor costs and manufacturing inefficiencies. The increase versus the prior year quarter is primarily due to higher volume and increased average selling prices, partially offset by higher labor costs and manufacturing inefficiencies. The increase versus the prior year-to-date period is primarily due to increased average selling prices, lower metals prices, and positive foreign currency impacts, partially offset by lower sales volume, higher labor and materials costs, manufacturing inefficiencies, and start-up costs of a new manufacturing facility.

The segment operating margin decreased versus the prior fiscal quarter, but increased versus the prior year periods. The fluctuations are primarily due to gross profit fluctuations.

Average selling prices were flat versus the prior fiscal quarter, but increased versus the prior year periods.

We expect long-term growth in this segment, and are continuously expanding manufacturing capacity for certain product lines and evaluating acquisition opportunities, particularly of specialty businesses. We have greatly increased our manufacturing capacity for power inductors in the past year.

Capacitors

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

	Fiscal quarters ended			Nine fiscal months ended	
	September 30, 2023	July 1, 2023	October 1, 2022	September 30, 2023	October 1, 2022
Net revenues	$ 117,573	$ 133,866	$ 126,213	$ 384,730	$ 386,487
Gross profit margin	22.1%	25.1%	23.7%	25.4%	24.5%
Segment operating margin	17.5%	21.0%	20.1%	21.2%	20.8%

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

	Fiscal quarter ended September 30, 2023		Nine fiscal months ended September 30, 2023	
	Change in net revenues	% change	Change in net revenues	% change
July 1, 2023	$ (16,293)	(12.2)%	n/a	n/a
October 1, 2022	$ (8,640)	(6.8)%	$ (1,757)	(0.5)%

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

	vs. Prior Quarter	vs. Prior Year Quarter	vs. Prior Year-to-Date
Change attributable to:			
Decrease in volume	(12.2)%	(12.1)%	(3.2)%
Change in average selling prices	(0.6)%	3.3%	2.4%
Foreign currency effects	0.0%	3.1%	0.4%
Other	0.6%	(1.1)%	(0.1)%
Net change	(12.2)%	(6.8)%	(0.5)%

Net revenues of the Capacitors segment decreased significantly versus the prior fiscal quarter and the prior year quarter and decreased slightly versus the prior year-to-date period. The decrease versus the prior fiscal quarter is primarily due to decreased sales to distribution customers and customers in the Americas and Asia regions. The decrease versus the prior year quarter is primarily due to decreased sales to distribution customers and customers in the Americas and Asia regions, partially offset by increased sales to industrial end market customers. The decrease versus the prior year-to-date period is primarily due to decreased sales to distribution and EMS customers and customers in the Asia and Europe regions, mostly offset by increased sales to industrial end market customers and customers in the Europe region.

The gross profit margin decreased versus the prior fiscal quarter and the prior year quarter, but increased versus the prior year-to-date period. The decrease versus the prior fiscal quarter is primarily due to lower sales volume and manufacturing inefficiencies, partially offset by favorable product mix and lower metals prices. The decrease versus the prior year quarter is primarily due to lower sales volume, manufacturing inefficiencies, higher labor and metals costs, partially offset by increased average selling prices. The increase versus the prior year-to-date period is primarily due to increased average selling prices, favorable product mix, and positive foreign currency impact, partially offset by lower sales volume, manufacturing inefficiencies, higher labor and material costs, and negative impact from decreased inventory.

The segment operating margin decreased versus the prior fiscal quarter and the prior year quarter, but increased versus the prior year-to-date period. The fluctuations are primarily due to gross profit fluctuations.

Average selling prices decreased versus the prior fiscal quarter, but increased versus the prior year periods.

Selling, General, and Administrative Expenses

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

	Fiscal quarters ended			Nine fiscal months ended	
	September 30, 2023	July 1, 2023	October 1, 2022	September 30, 2023	October 1, 2022
Total SG&A expenses	$ 122,513	$ 122,857	$ 106,436	$ 365,515	$ 329,691
as a percentage of revenues	14.4%	13.8%	11.5%	14.0%	12.5%

SG&A expenses increased versus the prior year periods as expected. The increases are due to general inflation and higher compensation costs, including the implementation of the 2023 Long-Term Incentive Plan in the second fiscal quarter of 2023.

Other Income (Expense)

Interest expense for the fiscal quarter ended September 30, 2023 increased $0.7 million versus the fiscal quarter ended July 1, 2023 and increased $3.0 million versus the fiscal quarter ended October 1, 2022. Interest expense for the nine fiscal months ended September 30, 2023 increased by $6.0 million versus the nine fiscal months ended October 1, 2022. The increases are due to higher interest rates and higher average balances outstanding on the revolving credit facility prior to September 2023 when it was paid down to $0.

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

	Fiscal quarters ended		
	September 30, 2023	October 1, 2022	Change
Foreign exchange gain (loss)	$ 1,407	$ 4,462	$ (3,055)
Interest income	9,183	1,836	7,347
Other components of net periodic pension expense	(2,389)	(2,704)	315
Investment income (expense)	(1,419)	(1,462)	43
Other	627	5	622
	$ 7,409	$ 2,137	$ 5,272

	Fiscal quarters ended		
	September 30, 2023	July 1, 2023	Change
Foreign exchange gain (loss)	$ 1,407	$ 1,203	$ 204
Interest income	9,183	6,292	2,891
Other components of net periodic pension expense	(2,389)	(1,906)	(483)
Investment income (expense)	(1,419)	(193)	(1,226)
Other	627	(139)	766
	$ 7,409	$ 5,257	$ 2,152

	Nine fiscal months ended		
	September 30, 2023	October 1, 2022	Change
Foreign exchange gain (loss)	$ 1,120	$ 10,695	$ (9,575)
Interest income	21,419	3,186	18,233
Other components of net periodic pension expense	(6,183)	(8,417)	2,234
Investment income (expense)	(868)	(7,436)	6,568
Other	507	(262)	769
	$ 15,995	$ (2,234)	$ 18,229

Income Taxes

For the fiscal quarter ended September 30, 2023, our effective tax rate was 31.7%, as compared to 28.5% and 22.4% for the fiscal quarters ended July 1, 2023 and October 1, 2022, respectively. For the nine fiscal months ended September 30, 2023, our effective tax rate was 29.3%, as compared to 23.2% for the nine fiscal months ended October 1, 2022. We expect that our effective tax rate will be higher than the U.S. statutory rate, excluding unusual transactions.

During the nine fiscal months ended September 30, 2023, the liabilities for unrecognized tax benefits decreased by $4.5 million on a net basis, primarily due to decreases for settlements, partially offset by increases for current accruals and interest.

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.

Additional information about income taxes is included in Note 4 to our consolidated condensed financial statements.

Financial Condition, Liquidity, and Capital Resources

Our financial condition as of September 30, 2023 continued to be strong. Cash and short-term investments exceed our long-term debt balances, and we have historically been a strong generator of operating cash flows. 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.

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.

Cash flows provided by operating activities were $359.4 million for the nine fiscal months ended September 30, 2023, as compared to cash flows provided by operations of $317.8 million for the nine fiscal months ended October 1, 2022.

In order to manage our working capital and operating cash needs, we monitor our cash conversion cycle. The following table presents the components of our cash conversion cycle:

	Fiscal quarters ended		
	September 30, 2023	**July 1, 2023**	**October 1, 2022**
Days sales outstanding ("DSO") [(a)]	48	46	42
Days inventory outstanding ("DIO") [(b)]	96	94	90
Days payable outstanding ("DPO") [(c)]	(33)	(32)	(33)
Cash conversion cycle	111	108	99

a) DSO measures the average collection period of our receivables. DSO is calculated by dividing the average accounts receivable by the average net revenue per day for the respective fiscal quarter.
b) DIO measures the average number of days from procurement to sale of our product. DIO is calculated by dividing the average inventory by average cost of goods sold per day for the respective fiscal quarter.
c) DPO measures the average number of days our payables remain outstanding before payment. DPO is calculated by dividing the average accounts payable by the average cost of goods sold per day for the respective fiscal quarter.

Cash paid for property and equipment for the nine fiscal months ended September 30, 2023 was $184.1 million, as compared to $172.2 million for the nine fiscal months ended October 1, 2022. To be well positioned to service our customers and to fully participate in growing markets, we intend to increase our capital expenditures for expansion in the mid-term. We expect to invest approximately $350 million in 2023 and approximately $1.2 billion over the next three years primarily for capital expansion projects outside of China.

Free cash flow for the nine fiscal months ended September 30, 2023 increased versus the nine fiscal months ended October 1, 2022 primarily due to a smaller increase in working capital. We expect our business to continue to be a reliable generator of free cash. There is no assurance, however, that we will be able to continue to generate cash flows from operations and free cash at our historical levels, or at all, going forward if the economic environment worsens.

In 2022, our Board of Directors adopted a Stockholder Return Policy that will remain in effect until such time as the Board votes to amend or rescind the policy. See “Stockholder Value” above for additional information.

The following table summarizes the components of net cash and short-term investments (debt) at September 30, 2023 and December 31, 2022 *(in thousands)*:

	September 30, 2023	**December 31, 2022**
Credit facility	**$ -**	$ 42,000
Convertible senior notes, due 2025	**95,102**	465,344
Convertible senior notes, due 2030	**750,000**	-
Deferred financing costs	**(27,845)**	(6,407)
Total debt	**817,257**	500,937
Cash and cash equivalents	**1,095,119**	610,825
Short-term investments	**78,994**	305,272
Net cash and short-term investments (debt)	**$ 356,856**	$ 415,160

"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.

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. Transactions related to these investments are classified as investing activities on our consolidated condensed statements of cash flows. We aligned the maturity dates of our cash equivalents and short-terms investments in preparation of a planned cash repatriation that resulted in a decrease in our short-term investment balance.

As of September 30, 2023, 94% of our cash and cash equivalents and short-term investments were held in countries outside of the United States. 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 also have cash operating needs. The distribution of earnings from Israel and Germany to the United States will be used, in part, to fund our Stockholder Return Policy. 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, share repurchases pursuant to our Stockholder Return Policy, and our research and development and capital expenditure plans. Our substantially undrawn credit facility provides us with significant operating liquidity in the United States.

On May 8, 2023, we amended and restated our $750 million revolving credit agreement, which replaced our credit agreement that was scheduled to mature in June 2024. The amendment and restatement extended the maturity date of the revolving credit agreement until May 8, 2028.

The maximum amount available on the revolving credit facility is restricted by the financial covenants described below. The credit facility also provides us the ability to request up to $300 million of incremental facilities, subject to the satisfaction of certain conditions, which could take the form of additional revolving commitments, incremental “term loan A” or “term loan B” facilities, or incremental equivalent debt.

We had $42 million outstanding on our revolving credit facility at December 31, 2022 and no amount outstanding at September 30, 2023. We borrowed $501 million and repaid $543 million on the revolving credit facility during the nine fiscal months ended September 30, 2023. The average outstanding balance on our revolving credit facility calculated at fiscal month-ends was $124.4 million and the highest amount outstanding on our revolving credit facility at a fiscal month end was $185 million during the nine fiscal months ended September 30, 2023. We used $185 million of the net proceeds from the convertible senior notes due 2030 to repay amounts outstanding on the revolving credit facility in the third fiscal quarter of 2023.

The amendment and restatement of the facility replaced the leverage ratio used for compliance measurement with a net leverage ratio, reducing the measure of outstanding debt by up to $250 million of unrestricted cash. Measurements prior to the amendment and restatement were based on a total leverage ratio.

Pursuant to the amended and restated credit facility, the financial maintenance covenants include (a) an interest coverage ratio of not less than 2.00 to 1; and (b) a net leverage ratio of not more than 3.25 to 1 (and a pro forma ratio of 3.00 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 was filed with the SEC as Exhibit 10.1 to our current report on Form 8-K filed May 8, 2023.

The revolving credit facility limits or restricts us from, among other things, incurring indebtedness, incurring liens on its respective assets, making investments and acquisitions (assuming our pro forma net leverage ratio is greater than 2.75 to 1.00), making asset sales, and paying cash dividends and making other restricted payments (assuming our pro forma net leverage ratio is greater than 2.50 to 1.00).

We were in compliance with all financial covenants under the credit facility at September 30, 2023. Our interest coverage ratio and net leverage ratio were 20.55 to 1 and 0.80 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 any amounts then outstanding pursuant to the credit facility could become immediately payable. Additionally, our convertible senior notes due 2025 and due 2030 have cross-default provisions that could accelerate repayment in the event the indebtedness under the credit facility is accelerated. The maturity date of the amended and restated credit facility will accelerate if within ninety-one days prior to the maturity of our convertible senior notes due 2025, the outstanding principal amount of such notes exceeds a defined liquidity measure as set forth in the Amended and Restated Credit Facility. The repurchase of $370.2 million principal amount of convertible senior notes due 2025 in the third fiscal quarter of 2023 reduces the risk that the maturity date of the amended and restated credit facility will accelerate.

Prior to the amendment and restatement, borrowings under the credit facility bore interest at LIBOR plus an interest margin. The applicable interest margin is based on our total leverage ratio. We also pay a commitment fee, also based on our total leverage ratio, on undrawn amounts. The amended and restated credit facility replaced the LIBOR-based interest rate and related LIBOR-based mechanics applicable to U.S. dollar borrowings under the revolving credit agreement with an interest rate based on SOFR (including a customary spread adjustment) and related SOFR-based mechanics. Borrowings in foreign currency bear interest at a local reference rate plus an interest margin. Based on our current total leverage ratio of 1.14 to 1, any new borrowings will bear interest at SOFR plus 1.60% (including the applicable credit spread), and the undrawn commitment fee is 0.25% 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 solely for use in, or arising solely under the laws of, any country other than the United States, assets located solely 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 subsidiaries; and are guaranteed by certain significant subsidiaries.

We expect, at least initially, to fund certain future obligations required to be paid by the U.S. parent company by borrowing under our revolving credit facility. We also expect to continue to use the credit facility from time-to-time to meet certain short-term financing needs. Additional acquisition activity, convertible debt repurchases, or conversion of our convertible debt instruments 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 2025.

On September 12, 2023, we issued $750 million convertible senior notes due 2030. We used the net proceeds from the issuance of these notes to repurchase $370.2 million principal amount of convertible senior notes due 2025, to pay $94.2 million to enter into capped call transactions intended to mitigate the dilution risk of convertible senior notes due 2030 by synthetically increasing the conversion price of the notes to approximately $43.98 per share, to repay amounts outstanding on our amended and restated credit facility, and for other general corporate purposes.

Prior to six months before the maturity date, our convertible senior notes due 2030 are convertible by the holders under certain circumstances. The convertible senior notes due 2030 are not convertible as of September 30, 2023 and will not be contingently convertible before the first fiscal quarter of 2024. Pursuant to the indenture governing the convertible senior notes due 2030, we will cash-settle the principal amount of $1,000 per note and settle any additional amounts in cash or shares of our common stock. We intend to finance the principal amount of any converted senior notes due 2030 using borrowings under our credit facility.

The transactions effectively refinanced the majority of the convertible senior notes due 2025 for five additional years at the same coupon interest rate, reduced future interest expense due to the paydown of the revolving credit facility, and enhanced our U.S. liquidity position to execute our growth initiatives.

The remaining convertible senior notes due 2025 are not currently convertible. Pursuant to the indenture governing the convertible senior notes due 2025 and the amendments thereto incorporated in the Supplemental Indenture dated December 23, 2020, we will cash-settle the principal amount of $1,000 per note and settle any additional amounts in shares of our common stock. We intend to finance the principal amount of any converted notes using borrowings under our credit facility. No conversions have occurred to date.

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; delays or difficulties in implementing our cost reduction strategies; delays or difficulties in expanding our manufacturing capacities; manufacturing or supply chain interruptions or changes in customer demand because of COVID-19 or otherwise (including due to political, economic, and health instability and military conflicts and hostilities); an inability to attract and retain highly qualified personnel; changes in foreign currency exchange rates; uncertainty related to the effects of changes in foreign currency exchange rates; competition and technological changes in our industries; difficulties in new product development; difficulties in identifying suitable acquisition candidates, consummating a transaction on terms which we consider acceptable, and integration and performance of acquired businesses; changes in applicable domestic and foreign tax regulations and uncertainty regarding the same; changes in U.S. and foreign trade regulations and tariffs and uncertainty regarding the same; changes in applicable accounting standards 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 2022 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.

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, 2022, filed with the SEC on February 22, 2023, describes our exposure to market risks. There have been no material changes to our market risks since December 31, 2022.

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.

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, 2022, filed with the SEC on February 22, 2023 describes certain of our legal proceedings. Except as described below, there have been no material developments to the legal proceedings previously disclosed.

Environmental Matters

Vishay is involved in environmental remediation programs at various sites currently or formerly owned by Vishay and its subsidiaries both within and outside of the U.S., in addition to involvement as a potentially responsible party ("PRP") at Superfund sites. Certain obligations as a PRP have arisen in connection with business acquisitions. The remediation programs are on-going and the ultimate cost of site cleanup is difficult to predict given the uncertainties regarding the extent of the required cleanup, the interpretation of applicable laws and regulations, and alternative cleanup methods. See also Note 13 to our consolidated financial statements.

Vishay GSI, Inc. ("VGSI"), a wholly owned subsidiary of the Company, was served in August 2023 with a complaint brought by the Hicksville Water District against multiple defendants. The matter, *Hicksville Water District v. Alsy Manufacturing, Inc.*, is pending in the Supreme Court of the State of New York, County of Nassau. As with two other previously reported cases pending in the United States District Court for the Eastern District of New York, the newest case contains claims for recovery of response costs under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), and alleges that a predecessor's manufacturing operations in Hicksville, New York (the "Site"), between 1960 and 1993, impacted groundwater beneath and downgradient of the Site. The groundwater beneath and downgradient of the Site is part of the New Cassel/Hicksville Groundwater Contamination Site, which was added to the National Priorities List pursuant to CERCLA on September 15, 2011. VGSI is vigorously contesting plaintiff's claims and will aggressively prosecute its affirmative claims.

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, 2022, filed with the SEC on February 22, 2023, except for the following:

Conversion of our outstanding 2025 Notes and 2030 Notes may dilute the ownership interest of our existing stockholders, including holders who had previously converted their notes.

The conversion of some or all of the our outstanding 2025 Notes or 2030 Notes may dilute the ownership interests of our existing stockholders. Any sales in the public market of the common stock issuable upon such conversion could adversely affect prevailing market prices of our common stock.

We may not have the ability to raise the funds necessary to settle conversions of our outstanding 2025 Notes and 2030 Notes in cash or to repurchase the notes upon a fundamental change or on a repurchase date, as applicable, and our current debt contains, and our future debt may contain, limitations on our ability to pay cash upon conversion or repurchase of the 2025 Notes or 2030 Notes.

Holders of our outstanding 2025 Notes and 2030 Notes have the right to require us to repurchase all or a portion of their 2025 Notes or 2030 Notes, as the case may be, upon the occurrence of a fundamental change at a fundamental change repurchase price equal to 100% of the principal amount of the 2025 Notes or 2030 Notes, as the case may be, to be repurchased, plus accrued and unpaid interest, if any. In addition, upon conversion of the 2030 Notes, we will be required to make cash payments for each $1,000 in principal amount of 2030 Notes converted of at least the lesser of $1,000 and the sum of the daily conversion values as described in the indenture governing the 2030 Notes. Our outstanding 2025 Notes contain similar provisions concerning the holders' rights to require us to repurchase their 2025 Notes upon a fundamental change and to pay cash to settle conversions of their 2025 Notes. However, we may not have enough available cash or be able to obtain financing at the time we are required to make repurchases of the 2030 Notes or the 2025 Notes surrendered therefor or notes being converted. In addition, our ability to repurchase the 2025 Notes or the 2030 Notes or to pay cash upon conversions of the 2025 Notes or 2030 Notes may be limited by law, by regulatory authority or by agreements governing our existing and future indebtedness, as described below.

For example, our senior secured credit facility in effect from time to time may prohibit us from making any cash payments on the conversion or repurchase of the 2025 Notes or the 2030 Notes, as the case may be, upon a fundamental change repurchase if, after giving effect to such conversion or repurchase (and any additional indebtedness incurred in connection with such conversion or a repurchase), we would not be in pro forma compliance with the applicable financial covenants under that facility. Any new credit facility into which we may enter may have similar restrictions unless certain conditions are met. Our failure to make cash payments upon the conversion or repurchase of the 2025 Notes or the 2030 Notes, as the case may be, as required under the terms of the applicable indenture governing such notes would permit holders of the 2025 Notes or the 2030 Notes, as the case may be, to accelerate our obligations under the 2025 Notes or the 2030 Notes, as the case may be.

Our failure to repurchase the 2025 Notes or 2030 Notes at a time when the repurchase is required by the applicable indenture or to pay any cash payable on future conversions of the 2025 Notes or the 2030 Notes as required by the applicable indenture would constitute a default under such indenture. A default under such indenture or the fundamental change itself could also lead to a default under agreements governing our existing and future indebtedness, including our senior secured credit facility. If the repayment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness and repurchase the notes or make cash payments upon conversions thereof.

The conditional conversion feature of our outstanding 2025 Notes and 2030 Notes, if triggered, may adversely affect our financial condition and operating results.

In the event the conditional conversion feature of the 2025 Notes or 2030 Notes is triggered, holders of such notes will be entitled to convert the notes at any time during specified periods at their option. If one or more holders elect to convert their notes, we would be required to settle any converted principal through the payment of cash, which could adversely affect our liquidity. In addition, even if holders do not elect to convert their notes, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the notes as a current rather than long-term liability, which would result in a material reduction of our net working capital.

Certain provisions in the indentures governing the 2025 Notes and 2030 Notes could delay or prevent an otherwise beneficial takeover or takeover attempt of us.

Certain provisions in the 2025 Notes and 2030 Notes and the applicable indenture could make it more difficult or more expensive for a third party to acquire us. For example, if a takeover would constitute a fundamental change, holders of the notes will have the right to require us to repurchase their notes in cash. In addition, if a takeover constitutes a make-whole fundamental change, we may be required to increase the conversion rate for holders who convert their notes in connection with such takeover. In either case, and in other cases, our obligations under the notes and the applicable indenture could increase the cost of acquiring us or otherwise discourage a third party from acquiring us or removing incumbent management, including in a transaction that holders of the notes or holders of our common stock may view as favorable.

The capped call transactions may affect the market price of our common stock.

In connection with the pricing of, and the initial purchasers' exercise in full of their option to purchase additional, 2030 Notes, we entered into capped call transactions with the option counterparties. The capped call transactions are expected generally to reduce potential dilution to our common stock upon conversion of any 2030 Notes and to offset any cash payments made in excess of the principal amount of converted 2030 Notes, as the case may be, with such reduction and/or offset subject to a cap.

In connection with establishing their initial hedges of the capped call transactions, we expect the option counterparties or their respective affiliates to have purchased shares of our common stock and/or entered into various derivative transactions with respect to our common stock concurrently with or shortly after the pricing of the 2030 Notes. In addition, the option counterparties and/or their respective affiliates may modify their hedge positions by entering into or unwinding various derivatives with respect to our common stock and/or purchasing or selling our common stock or other securities of ours in secondary market transactions following the pricing of the 2030 Notes and prior to the maturity of the 2030 Notes (and are likely to do so on each exercise date for the capped call transactions or following any termination of any portion of the capped call transactions in connection with any repurchase, redemption or early conversion of the 2030 Notes). This activity could cause or avoid an increase or decrease in the market price of our common stock.

In addition, if any such capped call transactions fail to become effective, the option counterparties or their respective affiliates may unwind their hedge positions with respect to our common stock, which could adversely affect the value of our common stock.

We do not make any representation or prediction as to the direction or magnitude of any potential effect that the transactions described above may have on the price of our common stock. In addition, we do not make any representation that the option counterparties will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

We are subject to counterparty risk with respect to the capped call transactions.

The option counterparties are financial institutions, and we will be subject to the risk that any or all of them might default under the capped call transactions. Our exposure to the credit risk of the option counterparties will not be secured by any collateral. Past global economic conditions have resulted in the actual or perceived failure or financial difficulties of many financial institutions. If an option counterparty becomes subject to insolvency proceedings, we will become an unsecured creditor in those proceedings with a claim equal to our exposure at that time under the capped call transactions with such option counterparty. Our exposure will depend on many factors but, generally, an increase in our exposure will be correlated to an increase in the market price and in the volatility of our common stock. In addition, upon a default by an option counterparty, we may suffer more dilution than we currently anticipate with respect to our common stock. We can provide no assurance as to the financial stability or viability of the option counterparties.

Item 2. Unregistered Sales of Equity Securities, Use of Proceeds, and Issuer Purchases of Equity Securities

In September 2023, the Company issued $750 million principal amount of 2.25% senior convertible notes due 2030 to qualified institutional buyers pursuant to an exemption from registration provided by Rule 144A under the Securities Act. The Company used the net proceeds from this offering to repurchase $370.2 million principal amount of its outstanding convertible senior notes due 2025 for approximately $386.7 million. The notes that Vishay repurchased had been convertible for 11,887,063 shares of Vishay common stock, assuming physical settlement.

Vishay offered and sold the convertible notes to the initial purchasers in reliance on the exemption from registration provided by Section 4(a)(2) of the Securities Act. The initial purchasers initially offered the convertible notes to "qualified institutional buyers" pursuant to an exemption from registration provided by Rule 144A under the Securities Act. Vishay relied on this exemption from registration based in part on representations made by the initial purchasers.

The convertible notes and common stock issuable upon conversion of the convertible notes have not been registered under the Securities Act and may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements.

As a result of the principal obligations under the convertible notes upon conversion being payable in cash and any additional value being payable in cash, shares of Vishay common stock, or a combination thereof, at the Company's option, as described in Note 6 to the consolidated condensed financial statements included Item 1, the number of shares of common stock issuable upon conversion of the convertible notes may constitute less than 1% of the number of shares of common stock outstanding.

The following table provides information regarding repurchases of our common stock during the fiscal quarter ended September 30, 2023:

Period	Total Number of Shares Purchased	Average Price Paid per Share (including commission)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Total Dollar Amount Purchased Under the Program	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
July 2 - 29	194,485	$ 29.14	194,485	$ 5,667,698	1,714,785
July 30 - August 27	221,383	$ 27.27	221,383	$ 6,036,603	1,493,402
August 28 - September 30	214,578	$ 25.90	214,578	$ 5,557,853	1,278,824
Total	**630,446**	**$ 27.38**	**630,446**	**$ 17,262,154**	**1,278,824**

In 2022, our Board of Directors adopted a Stockholder Return Policy, which calls for us to return at least 70% of free cash flow, net of scheduled principal payments of long-term debt, on an annual basis. We intend to return such amounts to stockholders directly, in the form of cash dividends, and/or indirectly, in the form of stock repurchases. The policy sets forth our intention, but does not obligate us to acquire any shares of common stock or declare any dividends, and the policy may be terminated or suspended at any time at our direction, in accordance with applicable laws and regulations.

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

During the fiscal quarter ended September 30, 2023, the individual listed below serving as a director and officer (as defined in Rule 16a-1(f) of the Exchange Act) of the Company adopted a trading arrangement for the sale of the Company's securities as described in Item 408 of Regulation S-K of the Securities Act. The material terms of the plan which are intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) of the Exchange Act ("Rule 10b5-1 Plan"), are as follows:

- Marc Zandman, Executive Chair of the Board of Directors and Chief Business Development Officer of the Company, adopted a Rule 10b5-1 Plan on September 14, 2023. Under this plan, up to 69,743 shares of Vishay common stock may be sold from January 15, 2024 until the plan expires on June 30, 2024.

Item 6. Exhibits

4.1	Indenture, dated as of September 12, 2023, by and between Vishay Intertechnology, Inc. and HSBC Bank USA, National Association, as Trustee. Incorporated by reference to Exhibit 4.1 in our current report on Form 8-K filed September 12, 2023.
4.2	Form of Global Note, representing Vishay Intertechnology, Inc.'s 2.25% Senior Convertible Notes due 2030 (included as Exhibit A to the Indenture filed as Exhibit 4.1). Incorporated by reference to Exhibit 4.2 in our current report on Form 8-K filed September 12, 2023.
10.1	Form of Base Capped Call Confirmation. Incorporated by reference to Exhibit 10.1 in our current report on Form 8-K filed September 12, 2023.
10.2	Form of Additional Capped Call Confirmation. Incorporated by reference to Exhibit 10.2 in our current report on Form 8-K filed September 12, 2023.
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 - Joel Smejkal, 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 – Joel Smejkal, 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 September 30, 2023, furnished in iXBRL (Inline eXtensible Business Reporting Language)).
104	Cover Page Interactive Data File (formatted as Inline eXtensible Business Reporting Language and contained in Exhibit 101)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

VISHAY INTERTECHNOLOGY, INC.

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

Date: November 8, 2023

Exhibit 31.1

CERTIFICATIONS

I, Joel Smejkal, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: November 8, 2023

/s/ Joel Smejkal
Joel Smejkal
Chief Executive Officer

Exhibit 31.2

CERTIFICATIONS

I, Lori Lipcaman, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: November 8, 2023

/s/ Lori Lipcaman
Lori Lipcaman
Chief Financial Officer

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

In connection with the Quarterly Report of Vishay Intertechnology, Inc. (the "Company") on Form 10-Q for the fiscal quarter ended September 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Joel Smejkal, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

/s/ Joel Smejkal
Joel Smejkal
Chief Executive Officer
November 8, 2023

Exhibit 32.1

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

In connection with the Quarterly Report of Vishay Intertechnology, Inc. (the "Company") on Form 10-Q for the fiscal quarter ended September 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Lori Lipcaman, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

/s/ Lori Lipcaman
Lori Lipcaman
Chief Financial Officer
November 8, 2023