

COHERENT INC  
Form 10-Q  
February 09, 2017  
Table of Contents

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

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FORM 10-Q

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(Mark One)

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

For the Quarterly Period Ended December 31, 2016

or

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

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

Commission File Number: 001-33962

COHERENT, INC.

Delaware 94-1622541

(State or other jurisdiction of (I.R.S. Employer  
incorporation or organization) Identification No.)

5100 Patrick Henry Drive, Santa Clara, California 95054

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (408) 764-4000

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

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

Large accelerated filer  Accelerated filer

Non-accelerated filer  Smaller reporting company

(do not check if a smaller reporting company)

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

The number of shares outstanding of registrant's common stock, par value \$.01 per share, on February 7, 2017 was 24,553,828.

Table of Contents

COHERENT, INC.

INDEX

	Page
<u>Part I. Financial Information</u>	
<u>Item 1. Financial Statements (unaudited)</u>	
<u>Condensed Consolidated Statements of Operations</u> <u>Three months ended December 31, 2016 and January 2, 2016</u>	4
<u>Condensed Consolidated Statements of Comprehensive Income</u> <u>Three months ended December 31, 2016 and January 2, 2016</u>	5
<u>Condensed Consolidated Balance Sheets</u> <u>December 31, 2016 and October 1, 2016</u>	6
<u>Condensed Consolidated Statements of Cash Flows</u> <u>Three months ended December 31, 2016 and January 2, 2016</u>	7
<u>Notes to Condensed Consolidated Financial Statements</u>	8
<u>Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	29
<u>Item 3. Quantitative and Qualitative Disclosures About Market Risk</u>	44
<u>Item 4. Controls and Procedures</u>	46
<u>Part II. Other Information</u>	
<u>Item 1. Legal Proceedings</u>	47
<u>Item 1A. Risk Factors</u>	47
<u>Item 6. Exhibits</u>	65
<u>Signatures</u>	67

Table of Contents

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This quarterly report contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. All statements included in or incorporated by reference in this quarterly report, other than statements of historical fact, are forward-looking statements. These statements are generally accompanied by words such as “trend,” “may,” “will,” “could,” “would,” “should,” “expect,” “plan,” “anticipate,” “rely,” “believe,” “estimate,” “predict,” “intend,” “potential,” “continue,” “outlook,” “forecast” or the negative of or other comparable terminology, including without limitation statements made under “Our Strategy,” discussions regarding our bookings and in “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” Forward-looking statements also include the assumptions underlying or relating to any of the foregoing statements. Actual results of Coherent, Inc. (referred to herein as the Company, we, our or Coherent) may differ significantly from those anticipated in these forward-looking statements as a result of various factors, including those discussed in the sections captioned “Our Strategy,” “Risk Factors,” “Key Performance Indicators,” as well as any other cautionary language in this quarterly report. All forward-looking statements included in the document are based on information available to us on the date hereof. We undertake no obligation to update these forward-looking statements as a result of events or circumstances or to reflect the occurrence of unanticipated events or non-occurrence of anticipated events.

Table of Contents

## PART I. FINANCIAL INFORMATION

## ITEM 1. FINANCIAL STATEMENTS

## COHERENT, INC. AND SUBSIDIARIES

## CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(Unaudited; in thousands, except per share data)

	Three Months Ended	
	December 31,	January 2,
	2016	2016
Net sales	\$346,073	\$190,275
Cost of sales	204,559	106,377
Gross profit	141,514	83,898
Operating expenses:		
Research and development	27,084	19,140
Selling, general and administrative	73,768	36,774
Gain from business combination	(5,416)	—
Amortization of intangible assets	3,878	701
Total operating expenses	99,314	56,615
Income from operations	42,200	27,283
Other income (expense):		
Interest income	143	240
Interest expense	(7,964)	(15)
Other—net	12,993	(447)
Total other income (expense), net	5,172	(222)
Income from continuing operations before income taxes	47,372	27,061
Provision for income taxes	16,674	6,775
Net income from continuing operations	30,698	20,286
Loss from discontinued operations, net of income taxes	(290)	—
Net income	\$30,408	\$20,286
Basic net income per share:		
Income per share from continuing operations	\$1.26	\$0.85
Loss per share from discontinued operations, net of income taxes	\$(0.01)	\$—
Net income per share	\$1.25	\$0.85
Diluted net income per share:		
Income per share from continuing operations	\$1.25	\$0.84
Loss per share from discontinued operations, net of income taxes	\$(0.01)	\$—
Net income per share	\$1.23	\$0.84
Shares used in computation:		
Basic	24,347	23,996
Diluted	24,644	24,236

See Accompanying Notes to Condensed Consolidated Financial Statements.



Table of Contents

COHERENT, INC. AND SUBSIDIARIES  
 CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME  
 (Unaudited; in thousands)

	Three Months Ended	
	December 31, 2016	January 2, 2016
Net income	\$30,408	\$20,286
Other comprehensive income (loss): <sup>(1)</sup>		
Translation adjustment, net of taxes <sup>(2)</sup>	(5,495 )	(8,506 )
Net gain (loss) on derivative instruments, net of taxes <sup>(3)</sup>	—	(30 )
Changes in unrealized gains (losses) on available-for-sale securities, net of taxes <sup>(4)</sup>	(3,334 )	138
Defined benefit pension plans, net of taxes <sup>(5)</sup>	376	—
Other comprehensive loss, net of tax	(8,453 )	(8,398 )
Comprehensive income	\$21,955	\$11,888

(1) Reclassification adjustments were not significant during the three months ended December 31, 2016 and January 2, 2016.

(2) Tax benefit of \$1,266 and \$346 was provided on translation adjustments during the three months ended December 31, 2016 and January 2, 2016, respectively.

(3) Tax expense (benefit) of \$0 and \$(18) was provided on net gain (loss) on derivative instruments during the three months ended December 31, 2016 and January 2, 2016, respectively.

(4) Tax expense (benefit) of \$(1,878) and \$80 was provided on changes in unrealized gains (losses) on available-for-sale securities for the three months ended December 31, 2016 and January 2, 2016, respectively.

(5) Tax expense of \$21 and \$0 was provided on changes in defined benefit pension plans for the three months ended December 31, 2016 and January 2, 2016, respectively.

See Accompanying Notes to Condensed Consolidated Financial Statements.

Table of Contents

COHERENT, INC. AND SUBSIDIARIES  
 CONDENSED CONSOLIDATED BALANCE SHEETS  
 (Unaudited; in thousands, except par value)

	December 31, 2016	October 1, 2016
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 360,217	\$ 354,347
Restricted cash	2,232	—
Short-term investments	125	45,606
Accounts receivable—net of allowances of \$6,932 and \$2,420, respectively	241,112	165,715
Inventories	386,013	212,898
Prepaid expenses and other assets	66,981	37,073
Assets held-for-sale	65,484	—
Total current assets	1,122,164	815,639
Property and equipment, net	251,090	127,443
Goodwill	351,311	101,458
Intangible assets, net	233,634	13,874
Non-current restricted cash	11,543	—
Other assets	119,829	102,734
Total assets	\$ 2,089,571	\$ 1,161,148
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Short-term borrowings and current-portion of long-term obligations	\$ 7,183	\$ 20,000
Accounts payable	66,439	45,182
Income taxes payable	41,191	19,870
Other current liabilities	198,281	116,442
Total current liabilities	313,094	201,494
Long-term obligations	677,323	—
Other long-term liabilities	172,173	48,826
Commitments and contingencies (Note 11)		
Stockholders' equity:		
Common stock, Authorized—500,000 shares, par value \$.01 per share:		
Outstanding—24,553 shares and 24,324 shares, respectively	244	242
Additional paid-in capital	145,494	151,298
Accumulated other comprehensive loss	(13,753	) (5,300 )
Retained earnings	794,996	764,588
Total stockholders' equity	926,981	910,828
Total liabilities and stockholders' equity	\$ 2,089,571	\$ 1,161,148

See Accompanying Notes to Condensed Consolidated Financial Statements.



Table of Contents

COHERENT, INC. AND SUBSIDIARIES  
 CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS  
 (Unaudited; in thousands)

	Three Months Ended	
	December 31,	January 2,
	2016	2016
Cash flows from operating activities:		
Net income	\$ 30,408	\$ 20,286
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	8,995	6,385
Amortization of intangible assets	12,088	2,092
Gain on business combination	(5,416 )	—
Deferred income taxes	1,291	(3,492 )
Amortization of debt issuance cost	600	—
Stock-based compensation	5,503	3,745
Non-cash restructuring charges	4,359	—
Other non-cash expenses	456	165
Changes in assets and liabilities, net of effect of acquisitions:		
Accounts receivable	4,417	(3,646 )
Inventories	6,613	(3,713 )
Prepaid expenses and other assets	(3,559 )	(3,551 )
Other long-term assets	(1,083 )	(1,047 )
Accounts payable	1,439	(4,252 )
Income taxes payable/receivable	(1,428 )	4,575
Other current liabilities	17,911	(5,128 )
Other long-term liabilities	1,330	1,843
Cash flows from discontinued operations	(1,283 )	—
Net cash provided by operating activities	82,641	14,262
Cash flows from investing activities:		
Purchases of property and equipment	(15,390 )	(4,765 )
Proceeds from dispositions of property and equipment	123	50
Purchases of available-for-sale securities	—	(50,151 )
Proceeds from sales and maturities of available-for-sale securities	25,108	51,254
Acquisition of businesses, net of cash acquired	(740,481 )	—
Cash flows from discontinued operations	(153 )	—
Net cash used in investing activities	(730,793 )	(3,612 )
Cash flows from financing activities:		
Short-term borrowings	3,920	17,160
Repayments of short-term borrowings	(23,920 )	(12,160 )
Proceeds from long-term borrowings	740,685	—
Repayments of long-term borrowings	(2,171 )	—
Issuance of common stock under employee stock option and purchase plans	3,866	3,521
Net settlement of restricted common stock	(15,255 )	(5,317 )
Debt issuance costs	(25,824 )	—
Net cash provided by financing activities	681,301	3,204
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(13,504 )	(2,118 )
Net increase in cash, cash equivalents and restricted cash	19,645	11,736

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Cash, cash equivalents and restricted cash, beginning of period	354,347	130,607
Cash, cash equivalents and restricted cash, end of period	\$373,992	\$142,343

Noncash investing and financing activities:

Unpaid property and equipment purchases	\$4,084	\$1,499
Use of previously owned equity shares in acquisition	\$20,685	\$—

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the condensed consolidated balance sheets that sum to the total of the same amounts shown in the condensed consolidated statements of cash flows.

	Three Months Ended	
	December 2016	January 2, 2016
Cash and cash equivalents	\$360,217	\$142,343
Restricted cash, current	2,232	—
Restricted cash, non-current	11,543	—
Total Cash, Cash equivalents, and restricted cash shown in the condensed consolidated statement of cash flows	\$373,992	\$142,343

See Accompanying Notes to Condensed Consolidated Financial Statements.

Table of Contents

COHERENT, INC. AND SUBSIDIARIES  
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS  
(Unaudited)

1. BASIS OF PRESENTATION

The accompanying unaudited condensed consolidated financial statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC"). Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") have been condensed or omitted pursuant to such rules and regulations. These interim condensed consolidated financial statements and notes thereto should be read in conjunction with the Coherent, Inc. (referred to herein as the "Company," "we," "our," "us" or "Coherent") condensed consolidated financial statements and notes thereto filed on Form 10-K for the fiscal year ended October 1, 2016. In the opinion of management, all adjustments necessary for a fair presentation of financial condition and results of operation as of and for the periods presented have been made and include only normal recurring adjustments. Interim results of operations are not necessarily indicative of results to be expected for the year or any other interim periods. Our fiscal year ends on the Saturday closest to September 30 and our first fiscal quarters include 13 weeks of operations in each fiscal year presented. Fiscal year 2017 and 2016 both include 52 weeks.

The consolidated financial statements include the accounts of Coherent, Inc. and its majority-owned subsidiaries (collectively, the "Company", "we", "our", or "Coherent"). Intercompany balances and transactions have been eliminated.

On November 7, 2016, we acquired Rofin-Sinar Technologies, Inc. ("Rofin"). The significant accounting policies of Rofin have been aligned to conform to those of Coherent, and the consolidated financial statements include the results of Rofin as of the acquisition date.

The preparation of consolidated financial statements in conformity with Generally Accepted Accounting Principles ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

As a result of the acquisition of Rofin in the first quarter of fiscal 2017, we reorganized our prior two reporting segments (Specialty Laser Systems and Commercial Lasers and Components) into two new reporting segments for the combined company based upon the organizational structure of the combined company and how the chief operating decision maker ("CODM") receives and utilizes information provided to allocate resources and make decisions: OEM Laser Sources ("OLS") and Industrial Lasers & Systems ("ILS"). Accordingly, our segment information was restated retroactively in the first quarter of fiscal 2017. Rofin has primarily been included in our Industrial Lasers & Systems segment.

2. RECENT ACCOUNTING STANDARDS

Adoption of New Accounting Pronouncement

In November 2016, the FASB issued amended guidance that require a statement of cash flows to explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts

shown on the statement of cash flows. The new standard will become effective for our fiscal year beginning September 30, 2018. We elected to early adopt the standard in the first quarter of fiscal 2017 on a retrospective basis with no impact on our condensed consolidated financial statements and disclosures.

In April 2015, the FASB issued amended guidance that simplifies the presentation of debt issuance costs by requiring that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. The recognition and measurement guidance for debt issuance costs are not affected by the amended guidance. The new standard will become effective for our fiscal year beginning October 2, 2016. We elected to early adopt the standard in the second quarter of fiscal 2016 and had recorded debt issuance costs of \$5.2 million in other assets for the debt commitment we entered into in the second quarter of fiscal 2016 because the debt was not outstanding as of October 1, 2016. The debt issuance costs related to the term loan facility were reclassified to debt in the first quarter of fiscal 2017 when we drew down the debt.

#### Recently Issued Accounting Pronouncements

8

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Table of Contents

In October 2016, the FASB issued amended guidance that improves the accounting for the income tax consequences of intra-entity transfers of assets other than inventory. Under the new guidance, an entity should recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. The new standard will become effective for our fiscal year beginning September 30, 2018. We are currently assessing the impact of this amended guidance and the timing of adoption.

In March 2016, the FASB issued amended guidance that simplifies several aspects of the accounting for employee share-based payment transactions, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. Under the new guidance, an entity recognizes all excess tax benefits and tax deficiencies as income tax expense or benefit in the income statement. This change eliminates the notion of the APIC pool and significantly reduces the complexity and cost of accounting for excess tax benefits and tax deficiencies. The new standard will become effective for our fiscal year beginning October 1, 2017. We are currently assessing the impact of this amended guidance.

In May 2014, the FASB amended the Accounting Standards Codification and created a new Topic 606, "Revenue from Contracts with Customers". In May 2016, accounting guidance was issued to clarify the not yet effective revenue recognition guidance issued in May 2014. This additional guidance does not change the core principle of the revenue recognition guidance issued in May 2014, rather, it provides clarification of accounting for collections of sales taxes as well as recognition of revenue (i) associated with contract modifications, (ii) for noncash consideration, and (iii) based on the collectability of the consideration from the customer. The guidance also specifies when a contract should be considered "completed" for purposes of applying the transition guidance. The effective date and transition requirements for this guidance are the same as the effective date and transition requirements for the guidance previously issued in 2014, which is effective for our fiscal year beginning September 30, 2018. We are currently evaluating the new guidance and do not expect the guidance to have a material impact on our financial statements. We have not decided upon the method of adoption.

### 3. BUSINESS COMBINATIONS

#### Fiscal 2017 Acquisitions

##### Rofin-Sinar Technologies, Inc. ("Rofin")

On November 7, 2016, we completed our previously announced acquisition of Rofin pursuant to the Merger Agreement dated March 16, 2016. Rofin is one of the world's leading developers and manufacturers of high-performance industrial laser sources and laser-based solutions and components. Rofin has primarily been included in our Industrial Lasers & Systems segment.

As a condition of the acquisition, we are required to divest ourselves of Rofin's low power CO2 laser business based in Hull, United Kingdom, and will report this business separately as a discontinued operation until it is divested (See Note 18).

Due to the timing of the acquisition, the total purchase consideration has been allocated to the tangible and identifiable intangible assets acquired and liabilities assumed based on a preliminary valuation analysis. These preliminary values may change in future reporting periods upon finalization of the valuation, which will occur no later than the third quarter of fiscal 2017.

The total preliminary purchase consideration allocated to net assets acquired was approximately \$936.3 million and consisted of the following (in thousands):

Cash consideration to Rofin's shareholders	\$904,491
Cash settlement paid for Rofin employee stock options	15,290
Total cash payments to Rofin shareholders and option holders	919,781
Add: fair value of previously owned Rofin shares	20,685
Less: post-merger stock compensation expense	(4,152 )
Total purchase price to allocate	\$936,314



Table of Contents

The acquisition was an all-cash transaction at a price of \$32.50 per share of Rofin common stock. We funded the payment of the aggregate consideration with a combination of our available cash on hand and the proceeds from the Euro Term Loan described in Note 9. The total payment of \$15.3 million due to the cancellation of options held by employees of Rofin was allocated between total estimated merger consideration of \$11.1 million and post-merger stock-based compensation expense of \$4.2 million based on the portion of the total service period of the underlying options that have not been completed by the merger date.

We recognized a gain of \$5.4 million in the first quarter of fiscal 2017 on the increase in fair value from the date of purchase for the shares we already owned.

Under the acquisition method of accounting, the total estimated acquisition consideration is allocated to the acquired tangible and intangible assets and assumed liabilities of Rofin based on their fair values as of the acquisition date. Any excess of the acquisition consideration over the fair value of assets acquired and liabilities assumed is allocated to goodwill. We expect that all such goodwill will not be deductible for tax purposes.

Our preliminary allocation of the purchase price is as follows (in thousands):

Cash, cash equivalents and short-term investments	\$ 163,425
Accounts receivable	90,877
Inventory	197,442
Prepaid expenses and other assets	10,367
Assets held-for-sale, current	63,666
Property and equipment	126,507
Other assets	27,760
Intangible assets:	
Existing technology	169,029
In-process research and development	12,800
Backlog	5,600
Customer relationships	39,209
Trademarks	5,699
Patents	300
Goodwill	254,042
Current portion of long-term obligations	(3,633 )
Current liabilities held for sale	(7,186 )
Accounts payable	(21,603 )
Other current liabilities	(59,245 )
Long-term debt	(11,641 )
Other long-term liabilities	(127,101 )
Total	\$936,314

The fair value write-up of acquired finished goods and work-in-process inventory was \$26.8 million, which will be amortized over the expected period during which the acquired inventory is sold, or 6 months. Accordingly, for the three months ended December 31, 2016, we recorded an \$8.9 million incremental cost of sales charge associated with the fair value write-up of inventory acquired in the merger with Rofin.

The fair value write-up of acquired property, plant and equipment of \$36.8 million will be amortized over the useful lives of the assets. Property, plant and equipment is valued at its value-in-use, unless there was a known plan to dispose of the asset.

The acquired existing technology, backlog, trademarks and patents are being amortized on a straight-line basis, which approximates the economic use of the asset, over their estimated useful lives of 3 to 5 years, 6 months, 3 years, and 5 years, respectively. Customer relationships are being amortized on an accelerated basis utilizing free cash flows over periods ranging from 5 to 10 years. The useful lives of in-process research and development will be defined in the future upon further evaluation of the status of these applications. The fair value of the acquired intangibles was determined using the income approach. In performing these valuations, the key underlying probability-adjusted assumptions of the





Table of Contents

discounted cash flows were projected revenues, gross margin expectations and operating cost estimates. The valuations were based on the information that was available as of the acquisition date and the expectations and assumptions that have been deemed reasonable by our management. There are inherent uncertainties and management judgment required in these determinations. This acquisition resulted in a purchase price that exceeded the estimated fair value of tangible and intangible assets, which was allocated to goodwill.

We believe the amount of goodwill relative to identifiable intangible assets relates to several factors including: (1) potential buyer-specific synergies related to market opportunities for a combined product offering and (2) potential to leverage our sales force to attract new customers and revenue and cross sell to existing customers.

In-process research and development (“IPR&D”) consists of three projects that have not yet reached technological feasibility. Acquired IPR&D assets are initially recognized at fair value and are classified as indefinite-lived assets until the successful completion or abandonment of the associated research and development efforts. The value assigned to IPR&D was determined by considering the value of the products under development to the overall development plan, estimating the resulting net cash flows from the projects when completed and discounting the net cash flows to their present value. During the development period, these assets will not be amortized as charges to earnings; instead these assets will be subject to periodic impairment testing. Upon successful completion of the development process for the acquired IPR&D projects, the assets would then be considered finite-lived intangible assets and amortization of the assets will commence. The projects have not been completed as of December 31, 2016. We expensed \$14.2 million of acquisition-related costs as selling, general and administrative expenses in our consolidated statements of operations in the first quarter of fiscal 2017.

The results of this acquisition were included in our consolidated operations beginning on November 7, 2016. The amount of continuing Rofin net sales and net loss from continuing operations included in our condensed consolidated statements of operations for the three months ended December 31, 2016 was approximately \$74.4 million and \$12.0 million, respectively.

#### Unaudited Pro Forma Information

The following unaudited pro forma financial information presents our combined results of operations as if the acquisition of Rofin and the related issuance of our Euro Term Loan had occurred on October 4, 2015. The unaudited pro forma financial information is not necessarily indicative of what our condensed consolidated results of operations actually would have been had the acquisition been completed on October 4, 2015. In addition, the unaudited pro forma financial information does not attempt to project the future results of operations of the combined company. The actual results may differ significantly from the pro forma results presented here due to many factors.

	Three Months Ended December 31, 2016	Three Months Ended January 2, 2016
Total net sales	\$ 389,816	\$ 300,439
Net income (loss)	\$ 39,183	\$(32,047 )
Net income (loss) per share:		
Basic	\$1.61	\$(1.34 )
Diluted	\$1.59	\$(1.32 )

The unaudited pro forma financial information above includes the net income of Rofin’s low power CO2 laser business based in Hull, United Kingdom, which is recorded as a discontinued operation in the first quarter of fiscal 2017.

The unaudited pro forma financial information above reflects the following material adjustments:

• Incremental amortization and depreciation expense related to the estimated fair value of identifiable intangible assets and property, plant and equipment from the purchase price allocation.

• The exclusion of amortization of inventory step-up to its estimated fair value from the three months ended December 31, 2016 and the addition of the amortization to the three months ended January 2, 2016.

• The exclusion of revenue adjustments as a result of the reduction in customer deposits and deferred revenue related to its estimated fair value from the three months ended December 31, 2016 and the addition of these adjustments to the

three months ended January 2, 2016.

Incremental interest expense and amortization of debt issuance costs related to our Euro Term Loan and Revolving Credit Agreement.

The exclusion of acquisition costs incurred by both Coherent and Rofin from the three months ended December 31, 2016 and the addition of these costs to the three months ended January 2, 2016.

11

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Table of Contents

• The exclusion of a stock-based compensation charge related to the acceleration of Rofin options from the three months ended December 31, 2016 and the addition of this charge to the three months ended January 2, 2016.

• The exclusion of a gain on business combination for our previously owned shares of Rofin from the three months ended December 31, 2016 and the addition of this gain to the three months ended January 2, 2016.

• The exclusion of a foreign exchange gain on forward contracts related to our debt commitment and debt issuance from the three months ended December 31, 2016 and the addition of this gain to the three months ended January 2, 2016.

• The estimated tax impact of the above adjustments.

## Fiscal 2015 Acquisitions

## Raydiance, Inc.

On July 24, 2015, we acquired certain assets of Raydiance, Inc. ("Raydiance") for approximately \$5.0 million, excluding transaction costs. Raydiance manufactured complete tools and lasers for ultrafast processing systems and subsystems in the precision micromachining processing market. The Raydiance assets have been included in our OEM Laser Sources segment.

Our allocation of the purchase price is as follows (in thousands):

Tangible assets	\$1,048
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Goodwill	1,552
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## Intangible assets:

Existing technology	800
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Customer lists	1,600
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Total	\$5,000
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The purchase price allocated to goodwill was finalized in the first quarter of fiscal 2016 with an increase of \$0.4 million and has been updated from the preliminary allocation in the fourth quarter of fiscal 2015.

Results of operations for the business have been included in our consolidated financial statements subsequent to the date of acquisition and pro forma results of operations in accordance with authoritative guidance for prior periods have not been presented because the effect of the acquisition was not material to our prior period consolidated financial results.

The identifiable intangible assets are being amortized over their respective useful lives of three to five years.

None of the goodwill from this purchase is deductible for tax purposes.

We expensed \$0.1 million of acquisition-related costs as selling, general and administrative expenses in our consolidated statements of operations for our fiscal year 2015.

## Tinsley Optics

On July 27, 2015, we acquired the assets and certain liabilities of the Tinsley Optics ("Tinsley") business from L-3 Communications Corporation for approximately \$4.3 million, excluding transaction costs. Tinsley is a specialized manufacturer of high precision optical components and subsystems sold primarily in the aerospace and defense industry. Tinsley manufactures the large form factor optics for our excimer laser annealing systems. Tinsley has been included in our OEM Laser Sources segment.

Our allocation of the purchase price is as follows (in thousands):

## Tangible assets:

Inventories	\$2,263
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Accounts receivable	2,240
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Prepaid expenses and other assets	1,132
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Property and equipment	2,451
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Liabilities assumed	(1,702 )
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Deferred tax liabilities	(768 )
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Gain on business combination	(1,316 )
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Total	\$4,300
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Table of Contents

The purchase price was lower than the fair value of net assets purchased, resulting in a gain of \$1.3 million recorded as a separate line item in our consolidated statements of operations for our fiscal year 2015. The Company reassessed the recognition and measurement of identifiable assets acquired and liabilities assumed and concluded that all acquired assets and assumed liabilities were recognized and that the valuation procedures and resulting measures were appropriate.

Results of operations for the business have been included in our consolidated financial statements subsequent to the date of acquisition and pro forma results of operations in accordance with authoritative guidance for prior periods have not been presented because the effect of the acquisition was not material to our prior period consolidated financial results.

The gain from the bargain purchase is not subject to income taxation.

We expensed \$0.4 million of acquisition-related costs as selling, general and administrative expenses in our consolidated statements of operations for our fiscal year 2015.

## 4. FAIR VALUES

We have not changed our valuation techniques in measuring the fair value of any financial assets and liabilities during the period. We recognize transfers between levels within the fair value hierarchy, if any, at the end of each quarter. There were no transfers between levels during the periods presented. As of December 31, 2016 and October 1, 2016, we did not have any assets or liabilities valued based on Level 3 valuations.

Financial assets and liabilities measured at fair value as of December 31, 2016 and October 1, 2016 are summarized below (in thousands):

	Aggregate Fair Value	Quoted Prices in Active Markets for Identical Assets December 31, 2016 (Level 1)	Significant Other Observable Inputs (Level 2)	Aggregate Fair Value October 1, 2016	Quoted Prices in Active Markets for Identical Assets October 1, 2016 (Level 1)	Significant Other Observable Inputs (Level 2)
<b>Assets:</b>						
<b>Cash equivalents:</b>						
Money market fund deposits	\$68,213	\$ 68,213	\$ —	\$237,142	\$ 237,142	\$ —
<b>Short-term investments:</b>						
U.S. Treasury and agency obligations <sup>(2)</sup>	125	—	125	125	—	125
Commercial paper <sup>(2)</sup>	—	—	—	24,999	—	24,999
Equity securities <sup>(1)</sup>	—	—	—	20,482	20,482	—
<b>Prepaid and other assets:</b>						
Foreign currency contracts <sup>(3)</sup>	1,693	—	1,693	889	—	889
Mutual funds — Deferred comp and supplemental plan <sup>(4)</sup>	16,143	16,143	—	14,399	14,399	—
<b>Total</b>	<b>\$86,174</b>	<b>\$ 84,356</b>	<b>\$ 1,818</b>	<b>\$298,036</b>	<b>\$ 272,023</b>	<b>\$ 26,013</b>
<b>Liabilities:</b>						
<b>Other current liabilities:</b>						
Foreign currency contracts <sup>(3)</sup>	(3,099 )	—	(3,099 )	(3,100 )	—	(3,100 )
<b>Total</b>	<b>\$83,075</b>	<b>\$ 84,356</b>	<b>\$ (1,281 )</b>	<b>\$294,936</b>	<b>\$ 272,023</b>	<b>\$ 22,913</b>

(1) Valuations are based upon quoted market prices.

13

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Table of Contents

Valuations are based upon quoted market prices in active markets involving similar assets. The market inputs used to value these instruments generally consist of market yields, reported trades, broker/dealer quotes or alternative pricing sources with reasonable levels of price transparency. Pricing sources include industry standard data providers, security master files from large financial institutions, and other third party sources which are input into a distribution-curve-based algorithm to determine a daily market value. This creates a “consensus price” or a weighted average price for each security.

The principal market in which we execute our foreign currency contracts is the institutional market in an over-the-counter environment with a relatively high level of price transparency. The market participants usually are large commercial banks. Our foreign currency contracts’ valuation inputs are based on quoted prices and quoted pricing intervals from public data sources and do not involve management judgment. At December 31, 2016, prepaid expenses and other assets include \$1,693 non-designated forward contracts; other current liabilities include \$3,099 non-designated forward contracts. At October 1, 2016, prepaid expenses and other assets include \$889 non-designated forward contracts; other current liabilities include \$3,100 non-designated forward contracts. See Note 6, "Derivative Instruments and Hedging Activities".

The fair value of mutual funds is determined based on quoted market prices. Securities traded on a national exchange are stated at the last reported sales price on the day of valuation; other securities traded in over-the-counter markets and listed securities for which no sale was reported on that date are stated as the last quoted bid price.

## 5. SHORT-TERM INVESTMENTS

We consider all highly liquid investments with maturities of three months or less at the time of purchase to be cash equivalents. Investments classified as available-for-sale are reported at fair value with unrealized gains and losses, net of related income taxes, recorded as a separate component of other comprehensive income (“OCI”) in stockholders’ equity until realized. Interest and amortization of premiums and discounts for debt securities are included in interest income. Gains and losses on securities sold are determined based on the specific identification method and are included in other income (expense).

Cash, cash equivalents and short-term investments consist of the following (in thousands):

	December 31, 2016			
	Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Cash and cash equivalents	\$360,217	\$ —	—\$	—\$360,217
Short-term investments:				
Available-for-sale securities:				
U.S. Treasury and agency obligations	\$125	\$ —	—\$	—\$125
Total short-term investments	\$125	\$ —	—\$	—\$125
	October 1, 2016			
	Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Cash and cash equivalents	\$354,347	\$ —	\$	—\$354,347

Short-term investments:  
Available-for-sale securities:

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Commercial paper	\$24,999	\$ —	\$	—\$24,999
U.S. Treasury and agency obligations	125	—	—	125
Equity Securities	15,269	5,213	—	20,482
Total short-term investments	\$40,393	\$ 5,213	\$	—\$45,606

14

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Table of Contents

None of the unrealized losses as of December 31, 2016 or October 1, 2016 were considered to be other-than-temporary impairments.

The amortized cost and estimated fair value of available-for-sale investments in debt securities as of December 31, 2016 and October 1, 2016 classified as short-term investments on our condensed consolidated balance sheet were as follows (in thousands):

	December 31, 2016		October 1, 2016	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Investments in available-for-sale debt securities due in less than one year	\$ 125	\$ 125	\$25,124	\$ 25,124

During the three months ended December 31, 2016, we received proceeds totaling \$0.1 million from the sale of available-for-sale securities and realized no gross gains or losses. During the three months ended January 2, 2016, we received proceeds totaling \$15.1 million from the sale of available-for-sale securities and realized gross gains of less than \$0.1 million.

## 6. DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

We maintain operations in various countries outside of the United States and have foreign subsidiaries that manufacture and sell our products in various global markets. The majority of our sales are transacted in U.S. dollars. However, we do generate revenues in other currencies, primarily the Euro, Japanese Yen, South Korean Won and Chinese Renminbi (RMB). As a result, our earnings, cash flows and cash balances are exposed to fluctuations in foreign currency exchange rates. We attempt to limit these exposures through financial market instruments. We utilize derivative instruments, primarily forward contracts with maturities of four months or less, to manage our exposure associated with anticipated cash flows and net asset and liability positions denominated in foreign currencies. Gains and losses on the forward contracts are mitigated by gains and losses on the underlying instruments. We do not use derivative financial instruments for speculative or trading purposes. The credit risk amounts represent the Company's gross exposure to potential accounting loss on derivative instruments that are outstanding or unsettled if all counterparties failed to perform according to the terms of the contract, based on then-current currency rates at each respective date.

### Non-Designated Derivatives

The outstanding notional contract and fair value asset (liability) amounts of non-designated hedge contracts, with maximum maturity of four months, are as follows (in thousands):



Table of Contents

	U.S. Notional Contract Value		U.S. Fair Value	
	December 31, 2016	October 1, 2016	December 31, 2016	October 1, 2016
Euro currency hedge contracts				
Purchase	\$ 96,092	\$ 91,108	\$(1,546)	\$ 162
Sell	\$(13,155 )	\$(750,454 )	\$365	\$(2,234 )
Japanese Yen currency hedge contracts				
Purchase	\$ 623	\$ —	\$(18 )	\$ —
Sell	\$(18,700 )	\$(36,450 )	\$751	\$(343 )
South Korean Won currency hedge contracts				
Purchase	\$ 15,744	\$ 31,248	\$(1,437)	\$ 413
Sell	\$(19,612 )	\$(37,929 )	\$493	\$(152 )
Chinese RMB currency hedge contracts				
Sell	\$(8,141 )	\$(25,237 )	\$35	\$(91 )
Other foreign currency hedge contracts				
Purchase	\$ 4,306	\$ 6,033	\$(53 )	\$(4 )
Sell	\$(3,031 )	\$(1,775 )	\$4	\$38

The fair value of our derivative instruments is included in prepaid expenses and other assets and in other current liabilities in our Condensed Consolidated Balance Sheets (See Note 4).

During the three months ended December 31, 2016 and the three months ended January 2, 2016 we recognized a gain of \$9.5 million and a loss of \$2.3 million, respectively, in other income (expense) for derivative instruments not designated as hedging instruments.

**Designated Derivatives**

Cash flow hedges related to anticipated transactions are designated and documented at the inception of the hedge when we enter into contracts for specific future transactions. Cash flow hedges are evaluated for effectiveness quarterly. The effective portion of the gain or loss on these hedges is reported as a component of OCI in stockholder's equity and is reclassified into earnings when the underlying transaction affects earnings. We had no cash flow hedges outstanding at December 31, 2016 or October 1, 2016. Changes in the fair value of currency forward contracts due to changes in time value are excluded from the assessment of effectiveness and recognized in other income (expense) as incurred. We classify the cash flows from the foreign exchange forward contracts that are accounted for as cash flow hedges in the same section as the underlying item, primarily within cash flows from operating activities since we do not designate our cash flow hedges as investing or financing activities.

During the three months ended January 2, 2016, we recorded losses in OCI and in other income (expense) related to the accounting for derivatives designated as cash flow hedges. These losses were not material. During the three months ended December 31, 2016, we did not have any activity related to designated cash flow hedges.

**Master Netting Arrangements**

To mitigate credit risk in derivative transactions, we enter into master netting arrangements that allow each counterparty in the arrangements to net settle amounts of multiple and separate derivative transactions under certain

conditions. We present the fair value of derivative assets and liabilities within our condensed consolidated balance sheet on a gross basis even when derivative transactions are subject to master netting arrangements and may otherwise qualify for net presentation. The impact of netting derivative assets and liabilities is not material to our financial position for any of the periods presented. Our derivative contracts do not contain any credit risk related contingent features and do not require collateral or other security to be furnished by us or the counterparties.

Table of Contents

## 7. GOODWILL AND INTANGIBLE ASSETS

During the three months ended December 31, 2016, we noted no indications of impairment or triggering events to cause us to review goodwill for potential impairment. We will conduct our annual goodwill testing during the fourth fiscal quarter.

The changes in the carrying amount of goodwill by segment for the period from October 1, 2016 to December 31, 2016 are as follows (in thousands):

	OEM Laser Sources	Industrial Lasers & Systems	Total
Balance as of October 1, 2016	\$97,015	\$4,443	\$101,458
Additions (see Note 3)	—	254,042	254,042
Translation adjustments and other	(4,726 )	537	(4,189 )
Balance as of December 31, 2016	\$92,289	\$259,022	\$351,311

Components of our amortizable intangible assets are as follows (in thousands):

	December 31, 2016			October 1, 2016		
	Gross Carrying Amount	Accumulated Amortization	Net	Gross Carrying Amount	Accumulated Amortization	Net
Existing technology	\$195,710	\$ (25,935 )	\$169,775	\$70,664	\$ (61,133 )	\$9,531
Patents	302	(10 )	292	—	—	—
Customer relationships	48,157	(6,533 )	41,624	15,968	(11,658 )	4,310
Trade Name	5,768	(358 )	5,410	384	(351 )	33
Order backlog	5,600	(1,867 )	3,733	—	—	—
In-process research & development	12,800	—	12,800	—	—	—
Total	\$268,337	\$ (34,703 )	\$233,634	\$87,016	\$ (73,142 )	\$13,874

For accounting purposes, when an intangible asset is fully amortized, it is removed from the disclosure schedule.

Amortization expense for intangible assets for the three months ended December 31, 2016 and January 2, 2016 was \$12.1 million and \$2.1 million, respectively. The change in the accumulated amortization also includes \$2.1 million and \$0.7 million of foreign exchange impact for the three months ended December 31, 2016 and January 2, 2016, respectively.

At December 31, 2016, estimated amortization expense for the remainder of fiscal 2017, the next five succeeding fiscal years and all fiscal years thereafter are as follows (in thousands):

	Estimated Amortization Expense
2017 (remainder)	\$ 46,905
2018	53,714
2019	50,654
2020	43,989
2021	13,066

2022	3,241
Thereafter	22,065
Total	\$ 233,634

8. BALANCE SHEET DETAILS

17

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Table of Contents

Inventories consist of the following (in thousands):

	December 31, October 1, 2016 2016	
Purchased parts and assemblies	\$ 116,405	\$ 56,824
Work-in-process	119,031	88,391
Finished goods	150,577	67,683
Total inventories	\$ 386,013	\$ 212,898

Prepaid expenses and other assets consist of the following (in thousands):

	December 31, October 1, 2016 2016	
Prepaid and refundable income taxes	\$ 27,851	\$ 12,415
Other taxes receivable	10,691	10,538
Prepaid expenses and other assets	28,439	14,120
Total prepaid expenses and other assets	\$ 66,981	\$ 37,073

Other assets consist of the following (in thousands):

	December 31, October 1, 2016 2016	
Assets related to deferred compensation arrangements	\$ 27,528	\$ 26,356
Deferred tax assets	79,262	67,157
Other assets	13,039	9,221
Total other assets	\$ 119,829	\$ 102,734

Other current liabilities consist of the following (in thousands):

	December 31, October 1, 2016 2016	
Accrued payroll and benefits	\$ 46,931	\$ 47,506
Deferred revenue	62,772	33,034
Warranty reserve	28,600	15,949
Accrued expenses and other	36,952	18,356
Current liabilities held for sale	7,386	—
Customer deposits	15,640	1,597
Total other current liabilities	\$ 198,281	\$ 116,442

Components of the reserve for warranty costs during the first three months of fiscal 2017 and 2016 were as follows (in thousands):

	Three Months Ended	
	December 31, 2016	January 2, 2016
Beginning balance	\$ 15,949	\$ 15,308
Additions related to current period sales	8,814	4,954
Warranty costs incurred in the current period	(6,399 )	(5,390 )
Accruals resulting from acquisitions	12,593	—
Adjustments to accruals related to foreign exchange and other	(2,357 )	(227 )
Ending balance	\$ 28,600	\$ 14,645

Other long-term liabilities consist of the following (in thousands):



Table of Contents

	December 31, 2016	October 1, 2016
Long-term taxes payable	\$ 25,041	\$ 2,951
Deferred compensation	29,500	28,313
Deferred tax liabilities	67,603	1,468
Deferred revenue	3,717	4,069
Asset retirement obligations liability	4,761	2,796
Defined benefit plan liabilities	38,621	8,123
Other long-term liabilities	2,930	1,106
Total other long-term liabilities	\$ 172,173	\$ 48,826

## 9. BORROWINGS

On November 4, 2016, we repaid the outstanding balance, plus accrued interest, on our former domestic line of credit and terminated the \$50.0 million credit facility with Union Bank of California. We assumed two term loans having an aggregated principal amount of \$15.3 million as of November 7, 2016 and several lines of credit totaling approximately \$18.1 million with the completion of the Rofin acquisition.

On November 7, 2016, we entered into the Credit Agreement by and among us, Coherent Holding GmbH, as borrower (the "Borrower"), and certain of our direct and indirect subsidiaries from time to time party thereto, as guarantors, the lenders from time to time party thereto, Barclays Bank PLC, as administrative agent and an L/C Issuer, Bank of America, N.A., as an L/C Issuer, and MUFG Union Bank, N.A., as an L/C Issuer. The Credit Agreement provides for a 670.0 million Euro senior secured term loan facility (the "Euro Term Loan") and a \$100.0 million senior secured revolving credit facility ("Revolving Credit Facility") with a \$30.0 million letter of credit sublimit and a \$10.0 million swing line sublimit. The Borrower may increase the aggregate revolving commitments or borrow incremental term loans in an aggregate principal amount not to exceed the sum of \$150.0 million and an amount that would not cause the senior secured net leverage ratio to be greater than 2.75 to 1.00, subject to certain conditions, including obtaining additional commitments from the lenders then party to the Credit Agreement or new lenders. On November 7, 2016, the Borrower borrowed the full 670.0 million Euros under the Euro Term Loan and its proceeds were used to finance the acquisition of Rofin and pay related fees and expenses. On November 7, 2016, we also used 10.0 million Euro of the capacity under the Revolving Credit Facility for the issuance of a letter of credit.

The terms of the Credit Agreement require Borrower to prepay the term loans in certain circumstances, including from excess cash flow beyond a threshold amount, from the receipt of proceeds from certain dispositions or from the incurrence of certain indebtedness, and from extraordinary receipts resulting in net cash proceeds in excess of \$10.0 million in any fiscal year. The Borrower has the right to prepay loans under the Credit Agreement in whole or in part at any time without premium or penalty, subject to customary breakage costs. Revolving loans may be borrowed, repaid and reborrowed until the fifth anniversary of the Closing Date, at which time all outstanding revolving loans must be repaid. The Euro Term Loan matures on the seventh anniversary of the Closing Date, at which time all outstanding principal and accrued and unpaid interest on the Euro Term Loan must be repaid.

Loans under the Credit Agreement bear interest, at the Borrower's option, at a rate equal to either (i)(x) in the case of calculations with respect to U.S. Dollars or certain other alternative currencies, the London interbank offered rate (the "LIBOR") or (y) in the case of calculations with respect to the Euro, the euro interbank offered rate ("EURIBOR" and, together with LIBOR, the "Eurocurrency Rate") or (ii) a base rate (the "Base Rate") equal to the highest of (x) the federal funds rate, plus 0.50%, (y) the prime rate then in effect and (z) the Eurocurrency Rate for loans denominated in U.S. dollars applicable to a one-month interest period, plus 1.0%, in each case, plus an applicable margin. The applicable margin for Euro Term Loan borrowed as Eurocurrency Rate loans, is 3.50% initially, and following the first anniversary of the Closing Date ranges from 3.00% to 3.50% depending on the consolidated total gross leverage

ratio at the time of determination. For Euro Term Loan borrowed as Base Rate Loans, the applicable margin initially is 2.50%, and following the first anniversary of the Closing Date ranges from 2.00% to 2.50% depending upon the consolidated total gross leverage ratio at the time of determination. The applicable margin for revolving loans borrowed as Eurocurrency Rate Loans, ranges from 3.75% to 4.25%, and for revolving loans borrowed as Base Rate Loans, ranges from 2.75% to 3.25%, in each case, based on the consolidated total gross leverage ratio at the time of determination. Interest on Base Rate Loans is payable quarterly in arrears. Interest on Eurocurrency Rate Loans is payable at the end of the applicable interest period (or at three



Table of Contents

month intervals if the interest period exceeds three months). Interest periods for Eurocurrency Rate loans may be, at the Borrower's option, one, two, three or six months.

The Credit Agreement requires the Borrower to make scheduled quarterly payments on the Euro Term Loan of 0.25% of the original principal amount of the Euro Term Loan, with any remaining principal payable at maturity. A commitment fee accrues on any unused portion of the revolving loan commitments under the Credit Agreement at a rate of 0.375% or 0.5% depending on the consolidated total gross leverage ratio at any time of determination. The Borrower is also obligated to pay other customary fees for a credit facility of this size and type.

On the Closing Date, we and certain of our direct and indirect subsidiaries, as guarantors, provided an unconditional guaranty of all obligations of the Borrower and the other loan parties arising under the Credit Agreement, the other loan documents and under swap contracts and treasury management agreements with the lenders or their affiliates (with certain limited exceptions). The Borrower and the guarantors have also granted security interests in substantially all of their assets to secure such obligations.

The Credit Agreement contains customary affirmative covenants, including covenants regarding the payment of taxes and other obligations, maintenance of insurance, reporting requirements and compliance with applicable laws and regulations, and negative covenants, including covenants limiting the ability of us and our subsidiaries to, among other things, incur debt, grant liens, make investments, make certain restricted payments, transact with affiliates, and sell assets. The Credit Agreement also requires us and our subsidiaries to maintain a senior secured net leverage ratio as of the last day of each fiscal quarter of less than or equal to 3.50 to 1.00. The Credit Agreement contains customary events of default that include, among other things, payment defaults, cross defaults with certain other indebtedness, violation of covenants, inaccuracy of representations and warranties in any material respect, change in control of us and the Borrower, judgment defaults, and bankruptcy and insolvency events. If an event of default exists, the lenders may require the immediate payment of all Obligations, as defined in the Credit Agreement, and may exercise certain other rights and remedies provided for under the Credit Agreement, the other loan documents and applicable law. The acceleration of such obligations is automatic upon the occurrence of a bankruptcy and insolvency event of default. We were in compliance with all covenants at December 31, 2016.

We incurred \$27.6 million of debt issuance costs related to the Euro Term Loan, which are included in short-term borrowings and current portion of long-term obligations and long-term obligations in the condensed consolidated balance sheets and will be amortized to interest expense over the seven year life of the Euro Term Loan using the effective interest method. We incurred \$2.3 million of debt issuance costs in connection with the Revolving Credit Facility which were capitalized and included in prepaid expenses and other assets and other assets in the condensed consolidated balance sheets and will be amortized to interest expense using the straight-line method over the contractual term of five years of the Revolving Credit Facility.

For the three months ended December 31, 2016, we recognized interest expense of \$4.6 million in relation to the Euro Term Loan and \$0.6 million amortization of debt issuance costs.

Additional sources of cash available to us were international currency lines of credit and bank credit facilities totaling \$29.3 million as of December 31, 2016, of which \$21.7 million was unused and available. These unsecured international credit facilities were used in Europe and Japan during the first three months of fiscal 2017. As of December 31, 2016, we had utilized \$5.9 million of the international credit facilities as guarantees in Europe and \$1.7 million as short-term borrowings in Japan.

Short-term borrowings and current portion of long-term obligations consist of the following (in thousands):

December 31, 2016	October 1, 2016
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Current portion of Euro Term Loan (1)	\$ 3,806	\$ —
1.3% Term loan due 2024	1,305	—
1.0% State of Connecticut term loan due 2023	368	—
Line of credit borrowings	1,704	20,000
Total short-term borrowings and current portion of long-term obligations	\$ 7,183	\$ 20,000

(1) Net of debt issuance costs of \$3.2 million.

Long-term obligations consist of the following (in thousands):

20

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Table of Contents

	December 31, 2016	October 1, 2016
Euro Term Loan due 2024 (1)	\$666,488	\$ —
1.3% Term loan due 2024	8,808	—
1.0% State of Connecticut term loan due 2023	2,027	—
Total long-term obligations	\$677,323	\$ —

(1) Net of debt issuance costs of \$24.2 million.

Contractual maturities of our debt obligations as of December 31, 2016 are as follows (in thousands):

	Amount
2017 (remainder)	\$6,499
2018	8,670
2019	8,674
2020	8,677
2021	8,681
2022	8,685
Thereafter	660,287
Total	\$710,173

## 10. STOCK-BASED COMPENSATION

## Fair Value of Stock Compensation

We recognize compensation expense for all share based payment awards based on the fair value of such awards. The expense is recognized on a straight-line basis over the respective requisite service period of the awards.

## Determining Fair Value

The fair values of shares purchased under the Employee Stock Purchase Plan (“ESPP”) for the three months ended December 31, 2016 and January 2, 2016, respectively, were estimated using the following weighted-average assumptions:

	Employee Stock Purchase Plan Three Months Ended			
	December 31, 2016		January 2, 2016	
Expected life in years	0.5		0.5	
Expected volatility	31.6	%	28.7	%
Risk-free interest rate	0.47	%	0.19	%
Expected dividend yield	—	%	—	%
Weighted average fair value per share	\$ 23.37		\$ 13.27	

There were no stock options granted during the three months ended December 31, 2016 and January 2, 2016.

We grant performance restricted stock units to officers and certain employees. The performance restricted stock unit agreements provide for the award of performance restricted stock units with each unit representing the right to receive one share of our common stock to be issued after the applicable award vesting period. The final number of units awarded, if any, for these performance grants will be determined as of the vesting dates, based upon our total shareholder return over the performance period compared to the Russell 2000 Index and could range from no units to

a maximum of twice the initial award units. The weighted average fair value for these performance units was determined using a Monte Carlo simulation model incorporating the following weighted average assumptions:

21

---

Table of Contents

	Three Months Ended December 31, 2016		January 2, 2016	
Risk-free interest rate	1.3 %	1.2 %		
Volatility	31.0 %	27.0 %		
Weighted average fair value	\$163.17	\$74.48		

We recognize the estimated cost of these awards, as determined under the simulation model, over the related service period of approximately 3 years, with no adjustment in future periods based upon the actual shareholder return over the performance period.

## Stock Compensation Expense

The following table shows total stock-based compensation expense and related tax benefits included in the condensed consolidated statements of operations for the three months ended December 31, 2016 and January 2, 2016 (in thousands):

	Three Months Ended December 31, 2016		January 2, 2016	
Cost of sales	\$960	\$ 605		
Research and development	1,053	426		
Selling, general and administrative	7,642	2,714		
Income tax benefit	(1,489 )	(351 )		
	\$8,166	\$ 3,394		

As a result of our acquisition of Rofin on November 7, 2016, we made a payment of \$15.3 million due to the cancellation of options held by employees of Rofin. The payment was allocated between total estimated merger consideration of \$11.1 million and post-merger stock-based compensation expense of \$4.2 million, recorded in the three months ended December 31, 2016, based on the portion of the total service period of the underlying options that have not been completed by the merger date.

During the three months ended December 31, 2016, \$0.8 million was capitalized into inventory for all stock plans, \$0.7 million was amortized to cost of sales and \$1.0 million remained in inventory at December 31, 2016. During the three months ended January 2, 2016, \$0.6 million was capitalized into inventory for all stock plans, \$0.6 million was amortized to cost of sales and \$0.7 million remained in inventory at January 2, 2016.

At December 31, 2016, the total compensation cost related to unvested stock-based awards granted to employees under our stock plans but not yet recognized was approximately \$47.6 million, net of estimated forfeitures of \$1.5 million. This cost will be amortized on a straight-line basis over a weighted-average period of approximately 2.2 years and will be adjusted for subsequent changes in estimated forfeitures.

At December 31, 2016, total compensation cost related to options to purchase common shares under the ESPP but not yet vested was approximately \$0.7 million, which will be recognized over the six month offering period.

## Stock Awards Activity

The following table summarizes the activity of our time-based and performance restricted stock units for the first three months of fiscal 2017 (in thousands, except per share amounts):

22

---

Table of Contents

	Time Based Restricted Stock Units		Performance Restricted Stock Units	
	Number of Shares	Weighted Average Grant Date Fair Value	Number of Shares	Weighted Average Grant Date Fair Value
Nonvested stock at October 1, 2016	459	\$ 66.47	169	\$ 74.10
Granted	175	127.76	69	163.17
Vested <sup>(1)</sup>	(202)	63.65	(104)	77.10
Forfeited	(6 )	63.43	(4 )	70.57
Nonvested stock at December 31, 2016	426	\$ 114.07	130	\$ 84.90

(1)Service-based restricted stock units vested during each fiscal year. Performance-based awards and units included at 100% of target goal; under the terms of the awards, the recipient may earn between 0% and 200% of the award.

## 11. COMMITMENTS AND CONTINGENCIES

We are subject to legal claims and litigation arising in the ordinary course of business, such as product liability, employment or intellectual property claims, including, but not limited to, the matters described below. On May 14, 2013, IMRA America (“Imra”) filed a complaint for patent infringement against two of our subsidiaries in the Regional Court of Düsseldorf, Germany, captioned In re IMRA America Inc. versus Coherent Kaiserslautern GmbH et. al. 4b O 38/13. The complaint alleges that the use of certain of the Company’s lasers infringes upon EP Patent No. 754,103, entitled “Method For Controlling Configuration of Laser Induced Breakdown and Ablation,” issued November 5, 1997. The patent, now expired in all jurisdictions, is owned by the University of Michigan and licensed to Imra. The complaint seeks unspecified compensatory damages, the cost of court proceedings and seeks to permanently enjoin the Company from infringing the patent in the future. Following the filing of the infringement suit, our subsidiaries filed a separate nullity action with the Federal Patent Court in Munich, Germany requesting that the court hold that the Patent was invalid based on prior art. On October 1, 2015, the Federal Patent Court ruled that the German portion of the Patent was invalid. Imra has appealed this decision to the Federal Court of Justice, the highest civil jurisdiction court in Germany. The infringement action is currently stayed pending the outcome of such appeal. Management has made an accrual with respect to this matter and has determined, based on its current knowledge, that the amount or range of reasonably possible losses in excess of the amounts already accrued is not reasonably estimable. Although we do not expect that such legal claims and litigation will ultimately have a material adverse effect on our consolidated financial position, results of operations or cash flows, an adverse result in one or more matters could negatively affect our results in the period in which they occur.

The United States and many foreign governments impose tariffs and duties on the import and export of certain products we sell. From time to time our duty calculations and payments are audited by government agencies. During the second quarter of fiscal 2016, we concluded an audit in South Korea for customs duties and value added tax for the period March 2009 to March 2014. We paid \$1.6 million related to this matter in the second quarter of fiscal 2016 and have no remaining accrual at October 1, 2016.

On November 7, 2016, we entered into a Credit Agreement with Barclays, BAML and MUFG. See Note 9 "Borrowings" for further discussion of the issuance of the financing.

## 12. EARNINGS PER SHARE

Basic earnings per share is computed based on the weighted average number of shares outstanding during the period, excluding unvested restricted stock. Diluted earnings per share is computed based on the weighted average number of shares outstanding during the period increased by the effect of dilutive employee stock awards, including stock options, restricted stock awards and stock purchase plan contracts, using the treasury stock method.

The following table presents information necessary to calculate basic and diluted earnings per share (in thousands, except per share data):

23

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Table of Contents

	Three Months Ended	
	December 31, 2016	January 2, 2016
Weighted average shares outstanding—basic	24,347	23,996
Dilutive effect of employee stock awards	297	240
Weighted average shares outstanding—diluted	24,644	24,236
Net income from continuing operations	\$ 30,698	\$ 20,286
Loss from discontinued operations, net of income taxes	(290 )	—
Net income	\$ 30,408	\$ 20,286

A total of 110,737 and 32,213 potentially dilutive securities have been excluded from the diluted share calculation for the three months ended December 31, 2016 and January 2, 2016, respectively as their effect was anti-dilutive.

## 13. OTHER INCOME (EXPENSE)

Other income (expense) is as follows (in thousands):

	Three Months Ended	
	December 31, 2016	January 2, 2016
Foreign exchange gain (loss)	\$ 13,099	\$ (1,322 )
Gain (loss) on deferred compensation investments, net	(52 )	875
Other	(54 )	—
Other - net	\$ 12,993	\$ (447 )

## 14. INCOME TAXES

Income tax expense includes a provision for federal, state and foreign taxes based on the annual estimated effective tax rate applicable to us and our subsidiaries, adjusted for items which are considered discrete to the period. Our effective tax rate for the three months ended December 31, 2016 was 35.2%. Our effective tax rate for the three months ended December 31, 2016 was higher than the statutory rate of 35% primarily due to Rofin transaction costs not deductible for tax purposes, tax costs of Rofin restructuring, ASC 740-10 (formerly FIN48) tax liabilities for transfer pricing, stock-based compensation not deductible for tax purposes and limitations on the deductibility of compensation under IRC Section 162(m). These amounts are partially offset by differences related to the benefit of income subject to foreign tax rates that are lower than U.S. tax rates including the Singapore tax exemption and the benefit of federal research and development tax credits.

The effective tax rate on income before income taxes for the first quarter of fiscal 2016 of 25.0% was lower than the statutory rate of 35.0% primarily due to differences related to the benefit of income subject to foreign tax rates that are lower than U.S. tax rates including the Singapore tax exemption, the benefit of foreign tax credits and the benefit of federal research and development tax credits including renewal of the federal research and development tax credits for fiscal 2015. These amounts are partially offset by deemed dividend inclusions under the Subpart F tax rules, stock-based compensation not deductible for tax purposes and limitations on the deductibility of compensation under IRC Section 162(m).

Determining the consolidated provision for income taxes, income tax liabilities and deferred tax assets and liabilities involves judgment. We calculate and provide for income taxes in each of the tax jurisdictions in which we operate,

which involves estimating current tax exposures as well as making judgments regarding the recoverability of deferred tax assets in each jurisdiction. The estimates used could differ from actual results, which may have a significant impact on operating results in future periods.

We had U.S. federal deferred tax assets related to research and development credits, foreign tax credits and other tax attributes that can be used to offset federal taxable income in future periods. These credit carryforwards will expire if they

24

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Table of Contents

are not used within certain time periods. As of December 31, 2016, management determined that there is sufficient positive evidence to conclude that it is more likely than not sufficient taxable income will exist in the future allowing us to recognize these deferred tax assets. It is possible that some or all these attributes could ultimately expire unused. If facts and circumstances change in the future, management may determine at that time a valuation allowance is necessary. A valuation allowance would materially increase our tax expense in the period applied and would adversely affect our results of operations and statement of financial condition. Changes in our underlying facts or circumstances, such as the impact of the Rofin acquisition, will be continually assessed and we will re-evaluate its position accordingly.

We are subject to taxation and file income tax returns in the U.S. federal jurisdiction and in many state and foreign jurisdictions. For U.S. federal income tax purposes, all years prior to 2011 are closed. We agreed to extend the statutes of limitations for its fiscal 2011 and 2012 U.S. federal tax returns to June 30, 2018 due to an ongoing Advanced Pricing Agreement (“APA”) between the U.S. and Korea. In March 2016, the Internal Revenue Service (IRS) issued an audit notice and Information Documentation Requests (IDRs) for fiscal 2013. The audit is currently in progress and the statute of limitation was extended to December 31, 2017. In our major foreign jurisdictions and our major state jurisdictions, the years prior to 2011 and 2012, respectively, are closed to examination. Earlier years in our various jurisdictions may remain open for adjustment to the extent that we have tax attribute carryforwards from those years. In July 2015 and March 2016, Coherent Kaiserslautern GmbH (formerly Lumera Laser GmbH) received tax audit notices for the fiscal years 2010 to 2014. The audit began in August 2015. We acquired the shares of Lumera Laser GmbH in December 2012 and, pursuant to the terms of the acquisition agreement, we should not have responsibility for any assessments related to the pre-acquisition period. In June, 2016, Coherent Holding GmbH and Coherent Deutschland GmbH each received a tax audit notice for the fiscal years 2011 to 2014. The audit began in the fourth quarter of fiscal 2016. Coherent GmbH, Coherent LaserSystems GmbH & Co. KG and Coherent Germany GmbH received audit notices for the period that they were in existence during the fiscal years 2011 through 2014 and the audit work is scheduled to commence in January 2017.

We regularly engage in discussions and negotiations with tax authorities regarding tax matters in various jurisdictions and management believes that it has adequately provided reserves for any adjustments that may result from tax examinations.

The following table summarizes the activity related to the Company's gross unrecognized tax benefits for the three months ended December 31, 2016 (amounts in thousands):

	Three Months Ended December 31, 2016
Balance as of the beginning of the year	\$20,442
Increase related to acquisitions	21,659
Tax positions related to current year:	
Additions	815
Reductions	—
Tax positions related to prior year:	
Additions	3,018
Reductions	—
Settlements	—
Lapses in statutes of limitations	—
Foreign currency revaluation adjustment (1,002 )	

Balance as of end of period                      \$44,932

As of December 31, 2016, the total amount of gross interest and penalties accrued was approximately \$1.0 million, mostly due to the Rofin acquisition, and it is classified as long-term taxes payable in the consolidated balance sheet.

#### 15. DEFINED BENEFIT PLANS

As a result of the Rofin acquisition, we have assumed all assets and liabilities of Rofin's defined benefit plans for the Rofin-Sinar Laser, GmbH ("RSL") and Rofin-Sinar Inc. ("RS Inc.") employees. The U.S. plan began in fiscal year 1995 and is funded. Any new employees hired after January 1, 2007, are not eligible for the RS Inc. pension plan. As is the

25

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Table of Contents

customary practice with German companies, the German pension plan is unfunded. Any new employees hired after the acquisition of Rofin-Baasel Lasertechnik in 2000 are not eligible for the RSL pension plan. The measurement date of these pension plans is September 30.

Effective January 1, 2012, the RS Inc. defined benefit plan was amended to exclude highly compensated employees, as defined by the Internal Revenue Service, from receiving future years of service under the RS Inc. defined benefit plan. A non-qualified defined benefit plan was created to replace the benefits lost by the employees that were otherwise excluded from the qualified defined benefit plan.

In addition, we have defined benefit plans in Coherent Korea, Coherent Japan, and Coherent Italy, covering all full-time employees with at least one year of service, and a defined benefit plan in Coherent Germany covering two individuals. As is the customary practice with European and Asian companies, the plans are unfunded. We have elected to recognize all actuarial gains and losses on these plans immediately, as incurred. The measurement date of these defined benefit plans is September 30.

For financial reporting purposes, the calculation of net periodic pension costs is based upon a number of actuarial assumptions including a discount rate for plan obligations, an assumed rate of return on pension assets and an assumed rate of compensation increase for employees covered by the plan. All of these assumptions were based upon management's judgment, considering all known trends and uncertainties. Actual results that differ from these assumptions would impact future expense recognition and the cash funding requirements of our defined benefit plans.

Components of net periodic cost were as follows for the three month periods ended December 31, 2016 and January 2, 2016:

	Three Months Ended	
	December 31, 2016	January 2, 2016
Service cost	\$385	\$ 142
Interest cost	189	15
Expected return on plan assets	(123 )	—
Amortization of prior net (gain) loss	93	—
Amortization of prior service cost	13	—
Recognized net actuarial loss	230	122
Net periodic pension cost	\$787	\$ 279

## 16. SEGMENT INFORMATION

As a result of the acquisition of Rofin in the first quarter of fiscal 2017, we reorganized our prior two reporting segments (Specialty Laser Systems and Commercial Lasers and Components) into two new reporting segments for the combined company based upon the organizational structure of the combined company and how the chief operating decision maker ("CODM") receives and utilizes information provided to allocate resources and make decisions: OEM Laser Sources ("OLS") and Industrial Lasers & Systems ("ILS"). Accordingly, our segment information was restated retroactively in the first quarter of fiscal 2017. This segmentation reflects the go-to-market strategies and synergies for our broad portfolio of laser technologies and products. While both segments deliver cost-effective, highly reliable photonics solutions, the OLS business segment is focused on high performance laser sources and complex optical sub-systems, typically used in microelectronics manufacturing, medical diagnostics and therapeutic medical

applications, as well as in scientific research. Our ILS business segment delivers high performance laser sources, sub-systems and tools primarily used for industrial laser materials processing, serving important end markets like automotive, machine tool, consumer goods and medical device manufacturing. RoFin has primarily been included in our Industrial Lasers & Systems segment.

We have identified OLS and ILS as operating segments for which discrete financial information is available. Both units have dedicated engineering, manufacturing, product business management and product line management functions. A small portion of our outside revenue is attributable to projects and recently developed products for which

Table of Contents

a segment has not yet been determined. The associated direct and indirect costs are presented in the category of Corporate and other, along with other corporate costs as described below.

Our Chief Executive Officer has been identified as the CODM as he assesses the performance of the segments and decides how to allocate resources to the segments. Income from operations is the measure of profit and loss that our CODM uses to assess performance and make decisions. As assets are not a measure used to assess the performance of the company by the CODM, asset information is not tracked or compiled by segment and is not available to be reported in our disclosures. Income from operations represents the net sales less the cost of sales and direct operating expenses incurred within the operating segments as well as allocated expenses such as shared sales and manufacturing costs. We do not allocate to our operating segments certain operating expenses which we manage separately at the corporate level. These unallocated costs include stock-based compensation and corporate functions (certain research and development, management, finance, legal and human resources) and are included in the results below under Corporate and other in the reconciliation of operating results. Management does not consider unallocated Corporate and other costs in its measurement of segment performance.

The following table provides net sales and income from continuing operations for our operating segments and a reconciliation of our total income from continuing operations to income from continuing operations before income taxes (in thousands):

	Three Months Ended	
	December 31, 2016	January 2, 2016
Net sales:		
OEM Laser Sources	\$238,736	\$158,830
Industrial Lasers & Systems	107,337	31,445
Total net sales	\$346,073	\$190,275
Income from continuing operations:		
OEM Laser Sources	\$83,590	\$40,920
Industrial Lasers & Systems	(16,508 )	1,825(3,310 )
Corporate and other	(24,882 )	(10,327 )
Total income from continuing operations	42,200	27,283
Total other income (expense), net	5,172	(222 )
Income from continuing operations before income taxes	\$47,372	\$27,061

#### Major Customers

We had one major customer during the three months ended December 31, 2016 and January 2, 2016 who accounted for 23.0% and 10.6%, respectively, of net sales. We had another major customer who accounted for 17.6% of net sales for the three months ended January 2, 2016. The customers purchased primarily from our OLS segment.

We had one major customer who accounted for 17.6% and 18.0% of accounts receivable at December 31, 2016 and October 1, 2016, respectively. We had another major customer who accounted for 18.7% of accounts receivable at October 1, 2016. The customers purchased primarily from our OLS segment.

#### 17. RESTRUCTURING CHARGES

In the first quarter of fiscal 2017, we began the implementation of planned restructuring activities in connection with the acquisition of Rofin. These activities primarily relate to the exit from our high power fiber laser product line, change of control payments to Rofin officers and re-grouping of our production lines due to segment reorganization, resulting in charges primarily for employee termination and other exit related costs associated with the write-off of property and equipment and inventory.



Table of Contents

The following table presents our current liability as accrued on our balance sheets for restructuring charges. The table sets forth an analysis of the components of the restructuring charges and payments and other deductions made against the accrual for the first quarter of fiscal 2017 (in thousands):

	Severance Related	Asset Write Offs	Total
Balances, Oct 1, 2016	\$ —	\$ —	\$ —
Provision	2,703	4,359	7,062
Payments and other	(344 )	(4,359)	(4,703 )
Balances, December 31, 2016	\$ 2,359	\$ —	\$ 2,359

The current year severance related costs are primarily comprised of severance pay for employees being terminated due to the transition of activities out of Rofin. At December 31, 2016, \$2.4 million of accrued restructuring costs were included in other current liabilities. By segment, \$6.9 million of restructuring costs were incurred in the ILS segment and \$0.2 million were incurred in the OLS segment. Restructuring charges are recorded in cost of sales, research and development and selling, general and administrative expenses in our condensed consolidated statements of operations.

## 18. DISCONTINUED OPERATIONS

## Discontinued Operations and Assets Held for Sale

Discontinued operations are comprised of Rofin's low power CO2 laser business based in Hull, United Kingdom, that we acquired as part of our acquisition of Rofin. As a condition of the acquisition, we are required to divest ourselves of Rofin's low power CO2 laser business and will report this business separately as a discontinued operation until it is divested. Management is actively marketing this business for sale.

For financial statement purposes, the results of operations for this discontinued business have been segregated from those of the continuing operations and are presented in our condensed consolidated financial statements as discontinued operations and the net assets of the remaining discontinued business have been presented as current assets and current liabilities held for sale.

The results of discontinued operations for the fiscal quarter ended December 31, 2016 are as follows (in thousands):

Net sales	\$4,511
Cost of sales	3,109
Operating expenses	1,546
Other expense	218
Income tax benefit	(72 )
Net loss from discontinued operations	\$(290 )

Current assets and current liabilities classified as held for sale as of December 31, 2016 related to discontinued operations are as follows (in thousands):

Table of Contents

Accounts receivable	\$5,054
Inventories	5,844
Prepaid expenses and other assets	462
Property and equipment	9,740
Goodwill	33,121
Intangible assets	11,263
Total current assets held for sale	\$65,484
Accounts payable	\$1,729
Income taxes payable	380
Other current liabilities	5,277
Total current liabilities held for sale	\$7,386

## ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

## COMPANY OVERVIEW

## BUSINESS BACKGROUND

We are one of the world's leading providers of lasers, laser-based technologies and laser-based system solutions in a broad range of commercial, industrial and scientific applications. We design, manufacture, service and market lasers and related accessories for a diverse group of customers. Since inception in 1966, we have grown through internal expansion and through strategic acquisitions of complementary businesses, technologies, intellectual property, manufacturing processes and product offerings.

As a result of the acquisition of Rofin in the first quarter of fiscal 2017, we reorganized our prior two reporting segments (Specialty Laser Systems and Commercial Lasers and Components) into two new reporting segments for the combined company: OEM Laser Sources ("OLS") and Industrial Lasers & Systems ("ILS"). This segmentation reflects the go-to-market strategies and synergies for our broad portfolio of laser technologies and products. While both segments deliver cost-effective, highly reliable photonics solutions, the OLS business segment is focused on high performance laser sources and complex optical sub-systems typically used in microelectronics manufacturing, medical diagnostics and therapeutic medical applications, as well as in scientific research. Our ILS business segment delivers high performance laser sources, sub-systems and tools primarily used for industrial laser materials processing, serving important end markets like automotive, machine tool, consumer goods and medical device manufacturing.

Income from operations is the measure of profit and loss that our chief operating decision maker ("CODM") uses to assess performance and make decisions. Income from operations represents the sales less the cost of sales and direct operating expenses incurred within the operating segments as well as allocated expenses such as shared sales and manufacturing costs. We do not allocate to our operating segments certain operating expenses, which we manage separately at the corporate level. These unallocated costs include stock-based compensation and corporate functions (certain advanced research and development, management, finance, legal and human resources) and are included in Corporate and other. Management does not consider unallocated Corporate and other costs in its measurement of segment performance.

## MARKET APPLICATIONS

Our products address a broad range of applications that we group into the following markets: Microelectronics, Materials Processing, OEM Components and Instrumentation and Scientific Research in academia and government.

**OUR STRATEGY**

We strive to develop innovative and proprietary products and solutions that meet the needs of our customers and that are based on our core expertise in lasers and optical technologies. In pursuit of our strategy, we intend to:

29

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## Table of Contents

Leverage our technology portfolio and application engineering to lead the proliferation of photonics into broader markets—We will continue to identify opportunities in which our technology portfolio and application engineering can be used to offer innovative solutions and gain access to new markets. We plan to utilize our expertise to increase our market share in the mid to high power material processing applications.

Streamline our manufacturing structure and improve our cost structure—We will focus on optimizing the mix of products that we manufacture internally and externally. We will utilize vertical integration where our internal manufacturing process is considered proprietary and seek to leverage external sources when the capabilities and cost structure are well developed and on a path towards commoditization.

Focus on long-term improvement of adjusted EBITDA, in dollars and as a percentage of net sales—We define adjusted EBITDA as operating income adjusted for depreciation, amortization, stock compensation expenses, major restructuring costs and certain other non-operating income and expense items. Key initiatives to reach our goals for EBITDA improvements include utilization of our Asian manufacturing locations, rationalizing our supply chain and continued leveraging of our infrastructure.

Optimize our leadership position in existing markets—There are a number of markets where we have historically been at the forefront of technological development and product deployment and from which we have derived a substantial portion of our revenues. We plan to optimize our financial returns from these markets.

Maintain and develop additional strong collaborative customer and industry relationships—We believe that the Coherent brand name and reputation for product quality, technical performance and customer satisfaction will help us to further develop our loyal customer base. We plan to maintain our current customer relationships and develop new ones with customers who are industry leaders and work together with these customers to design and develop innovative product systems and solutions as they develop new technologies.

Develop and acquire new technologies and market share—We will continue to enhance our market position through our existing technologies and develop new technologies through our internal research and development efforts, as well as through the acquisition of additional complementary technologies, intellectual property, manufacturing processes and product offerings.

## APPLICATION OF CRITICAL ACCOUNTING POLICIES

Our discussion and analysis of financial condition and results of operations are based upon our condensed consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America and pursuant to the rules and regulations of the SEC. The preparation of these condensed consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. We have identified the following as the items that require the most significant judgment and often involve complex estimation: revenue recognition, business combinations, accounting for long-lived assets (including goodwill and intangible assets), inventory valuation, warranty reserves, stock-based compensation and accounting for income taxes. See Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for our fiscal year ended October 1, 2016.

Starting in the three months ended December 31, 2016, we assessed business combinations to be one of our critical accounting policies. We include the results of operations of the businesses that we acquire as of the respective dates of acquisition. We allocate the fair value of the purchase price of our business acquisitions to the tangible assets acquired, liabilities assumed, and intangible assets acquired, based on their estimated fair values. The excess of the purchase price over the fair values of these identifiable assets and liabilities is recorded as goodwill. Additional information existing as of the acquisition date, but unknown to us at that time, may become known during the remainder of the measurement period, not to exceed 12 months from the acquisition date, which may result in changes to the amounts and allocations recorded.

## KEY PERFORMANCE INDICATORS

Below is a summary of some of the quantitative performance indicators (as defined below) that are evaluated by management to assess our financial performance. Some of the indicators are non-GAAP measures and should not be considered as an alternative to any other measure for determining operating performance or liquidity that is calculated in accordance with generally accepted accounting principles.

30

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Table of Contents

	Three Months Ended		Change	Change	
	December 31, 2016	January 2, 2016			
	(Dollars in thousands)				
Bookings	\$551,606	\$273,004	\$278,602	102.1	%
Book-to-bill ratio	1.59	1.43	0.16	11.2	%
Net sales—OEM Laser Sources	\$238,736	\$158,830	\$79,906	50.3	%
Net sales—Industrial Lasers & Systems	\$107,337	\$31,445	\$75,892	241.3	%
Gross profit as a percentage of net sales—OEM Laser Sources	52.1	% 47.9	% 4.2	% 8.8	%
Gross profit as a percentage of net sales—Industrial Lasers & Systems	7.0	% 27.1	% (10.1)	)(37.3)	)(%)
Research and development as a percentage of net sales	7.8	% 10.1	% (2.3)	)(22.8)	)(%)
Income from continuing operations before income taxes	\$47,372	\$27,061	\$20,311	75.1	%
Net cash provided by operating activities	\$82,641	\$14,262	\$68,379	479.4	%
Days sales outstanding in receivables	62.7	68.4	(5.7)	(8.3)	)(%)
Annualized first quarter inventory turns	2.1	2.7	(0.6)	(22.2)	)(%)
Capital spending as a percentage of net sales	4.4	% 2.5	% 1.9	% 76.0	%
Net income from continuing operations as a percentage of net sales	8.9	% 10.7	% (1.8)	)(16.8)	)(%)
Adjusted EBITDA as a percentage of net sales	28.4	% 21.3	% 7.1	% 33.3	%

Definitions and analysis of these performance indicators are as follows:

#### Bookings and Book-to-Bill Ratio

Bookings represent orders received during the current period for products and services. While we generally have not experienced a significant rate of cancellation, bookings are generally cancelable, depending on the notice period, by our customers without substantial penalty and, therefore, we cannot assure all bookings will be converted to net sales.

The book-to-bill ratio is calculated as quarterly bookings divided by quarterly net sales. This is an indication of the strength of our business but can sometimes be impacted by a single large order or a single large shipment. A ratio of greater than 1.0 indicates that demand for our products is greater than what we supply in the quarter whereas a ratio of less than 1.0 indicates that demand for our products is less than what we supply in the quarter.

Bookings in the first quarter of fiscal 2017 included \$78.8 million of Rofin bookings since the acquisition on November 7, 2016, primarily in the materials processing market. Bookings increased 102.1% in the first quarter of fiscal 2017 compared to the same quarter one year ago, primarily due to significant increases in the microelectronics and materials processing markets as well as increases in the OEM components and instrumentation market. Compared to the fourth quarter of fiscal 2016, bookings increased 119.0% with significant increases in the microelectronics and materials processing markets. The book-to-bill ratio was 1.59 in the first quarter of fiscal 2017.

Backlog represents orders which we expect to be shipped within 12 months and the current portion of service contracts. For a discussion of backlog, see “RESULTS OF OPERATIONS - BACKLOG”.

#### Microelectronics

Microelectronics bookings increased 98% compared to the same quarter one year ago and 155% from bookings in the fourth quarter of fiscal 2016. The microelectronics book-to-bill ratio for the first quarter of fiscal 2017 was 2.13.

Flat panel display orders in the first quarter of fiscal 2017 increased 113% from orders in the first quarter of fiscal 2016 and 200% from orders in the fourth quarter of fiscal 2016, primarily due to the timing and mix of order placement by customers with higher orders received from multiple customers in multiple countries for large format Linebeam 1000 systems to be used

## Table of Contents

in organic light-emitting diode (OLED) production as well as higher service bookings. We expect continued fluctuations in order volumes on a quarterly basis. In addition to the front-end excimer laser annealing process, there are an increasing number of laser-based, back-end flat panel display packaging applications in the mobile handset market. These applications are linked to specific models or bubble orders and require rapid fulfillment. These higher than expected orders are reflected in our microelectronics market data and we are increasing production in several different product families and locations to meet delivery requirements.

Orders in the advanced packaging (API) market increased 82% from orders in the first quarter of fiscal 2016 and increased 85% from orders in the fourth quarter of fiscal 2016. The microvia business increased from fan-out wafer level packaging, which provides more input/output connections from a die. Orders from laser direct imaging (LDI) applications also improved; historically via drilling and LDI have trailed the semiconductor capital equipment market by approximately six months.

Orders from semiconductor capital equipment OEMs increased 21% from the first quarter of fiscal 2016 and increased 19% from the fourth quarter of fiscal 2016 due to increases in wafer inspection and processing (investments for mobile logic chips) applications. Service orders and shipments remain strong due to high utilization rates in most fabs. The growth is consistent with overall trends in the market as expressed by industry reports and capacity expansion for 3D NAND memory is the primary driver, followed by logic capacity expansion.

### Materials Processing

Materials processing orders in the first quarter of fiscal 2017 included \$69.6 million of RoFin orders since the acquisition on November 7, 2016. Materials processing orders increased 374% compared to the same quarter one year ago and increased 242% from the fourth quarter of fiscal 2016. The materials processing book-to-bill ratio for the first quarter of fiscal 2017 was 1.02. The materials processing vertical is the end market that has increased the most for us as a result of the RoFin acquisition. The traditional marking and engraving business performed well with contributions from metal work using ultra-violet lasers to textile marking with CO<sub>2</sub> products. Cutting and converting application orders were also strong due to volume orders from the package and label industry. Automotive applications were very active and drove orders for ultrafast lasers used in fuel injector nozzle drilling and high-power lasers used in powertrain welding. We also had record orders for medical device manufacturing workstations, where we see opportunities to expand our business.

### OEM Components and Instrumentation

OEM Components and Instrumentation orders increased 56% compared to the same quarter one year ago and 10% from the fourth quarter of fiscal 2016. The book-to-bill ratio for the first quarter of fiscal 2017 was 1.01. The increases arose from an improved outlook from medical OEMs, sustained growth in bioinstrumentation and higher demand for medical consumables.

Orders for medical OEM products increased 191% compared to the same quarter one year ago and 115% compared to the fourth quarter of fiscal 2016. Instrumentation orders increased 26% compared to the same quarter one year ago but decreased 21% compared to the fourth quarter of fiscal 2016 due to timing of orders coming off the high orders in the fourth quarter of fiscal 2016. The medical OEM market remains strong including success with an excimer-based technique in refractive surgery by a major vendor. Bioinstrumentation customers are reporting solid growth in reagent sales, which drives demand for laser-based instruments across all territories. We are exploring new laser architectures that can accelerate instrument deployment through lower pricing. Our work in medical consumables, primarily fiber assemblies for lithotripsy (ultrasonic removal of kidney stones), has resulted in a steady increase in business and there are more opportunities in this area.



## Scientific Research

Scientific and government programs orders increased 3% compared to the same quarter one year ago and decreased slightly from the fourth quarter of fiscal 2016. The book-to-bill for the first quarter of fiscal 2017 was 1.19.

We had record orders for Astrella™ in the first quarter of fiscal 2017, which is a workhorse tool in applications ranging from applied physics to physical chemistry, led by two factors. Chinese research investments in the physical sciences continue to grow and are nearly equal to those in the U.S. We also believe we have captured market share for ultrafast amplifiers across multiple geographies. The multiphoton microscopy market is a consistent overall performer. The mix is shifting towards our newer platforms including the Discovery, Monaco and Fidelity due to their applicability in optogenetics. Orders for CW and pulse lasers used in life sciences and chemistry also increased slightly reflecting research trends in Europe and Asia. The only product area with decreased orders was for certain gas lasers due to shifting technology.

## Net Sales

32

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## Table of Contents

Net sales include sales of lasers, laser tools, related accessories and service. Net sales for the first fiscal quarter of 2017 increased 50.3% in our OLS segment and increased 241.3% in our ILS segment from the same quarter one year ago, with the majority of the increase in the ILS segment due to Rofin shipments since the acquisition on November 7, 2016. For a description of the reasons for changes in net sales refer to the “Results of Operations” section of this quarterly report.

### Gross Profit as a Percentage of Net Sales

Gross profit as a percentage of net sales (“gross profit percentage”) is calculated as gross profit for the period divided by net sales for the period. Gross profit percentage in the first quarter increased from 47.9% to 52.1% in our OLS segment and decreased from 27.1% to 17.0% in our ILS segment from the same quarter one year ago. For a description of the reasons for changes in gross profit refer to the “Results of Operations” section of this quarterly report.

### Research and Development as a Percentage of Net Sales

Research and development as a percentage of net sales (“R&D percentage”) is calculated as research and development expense for the period divided by net sales for the period. Management considers R&D percentage to be an important indicator in managing our business as investing in new technologies is a key to future growth. R&D percentage decreased to 7.8% from 10.1% in our first fiscal quarter compared to the same period one year ago. For a description of the reasons for changes in R&D spending refer to the “Results of Operations” section of this quarterly report.

### Net Cash Provided by Operating Activities

Net cash provided by operating activities as reflected on our Condensed Consolidated Statements of Cash Flows primarily represents the excess of cash collected from billings to our customers and other receipts over cash paid to our vendors for expenses and inventory purchases to run our business. We believe that cash flows from operations is an important performance indicator because cash generation over the long term is essential to maintaining a healthy business and providing funds to help fuel growth. For a description of the reasons for changes in Net Cash Provided by Operating Activities refer to the “Liquidity and Capital Resources” section of this quarterly report.

### Days Sales Outstanding in Receivables

We calculate days sales outstanding (“DSO”) in receivables as net receivables at the end of the period divided by net sales during the period and then multiplied by the number of days in the period, using 90 days for quarters. DSO in receivables indicates how well we are managing our collection of receivables, with lower DSO in receivables resulting in higher working capital availability. The more money we have tied up in receivables, the less money we have available for research and development, acquisitions, expansion, marketing and other activities to grow our business. Our DSO in receivables for the first quarter of fiscal 2017 decreased from 68.4 days to 62.7 days compared to the same quarter one year ago primarily due to higher sales of flat panel display system in Asia and the timing of collections of those receivables, lower sales and receivables in Japan which typically has a higher DSO and improved collections of older receivables in the U.S. and Europe partially offset by the impact of the acquisition of Rofin, who have historically had higher DSOs than those previously reported by us.

### Annualized First Quarter Inventory Turns

We calculate annualized first quarter inventory turns as the cost of sales during the first quarter annualized and divided by net inventories at the end of the first quarter. This indicates how well we are managing our inventory levels, with higher inventory turns resulting in more working capital availability and a higher return on our investments in

inventory. The more money we have tied up in inventory, the less money we have available for research and development, acquisitions, expansion, marketing and other activities to grow our business. Our annualized inventory turns for the first quarter of fiscal 2017 decreased from 2.7 to 2.1 turns compared to the same quarter one year ago primarily due to the impact of the acquisition of Rofin in the first quarter of fiscal 2017, including both the impact of including Rofin's cost of sales only after the November 7, 2016 acquisition date and Rofin's historically lower inventory turns rate.

#### Capital Spending as a Percentage of Net Sales

Capital spending as a percentage of net sales (“capital spending percentage”) is calculated as capital expenditures for the period divided by net sales for the period. Capital spending percentage indicates the extent to which we are expanding or improving our operations, including investments in technology and equipment. Management monitors capital spending levels as this assists us in measuring our cash flows, net of capital expenditures. Our capital spending percentage increased to 4.4% from

Table of Contents

2.5% for the first quarter compared to the same period one year ago primarily due to investments to expand our manufacturing capacity in Göttingen, Germany, the acquisition of Rofin in the first quarter of fiscal 2017, the upgrade certain of our production facilities in California and New Jersey and higher purchases of production-related assets, partially offset by the impact of higher revenues in the first quarter of fiscal 2017.

## Adjusted EBITDA as a Percentage of Net Sales

We define adjusted EBITDA as operating income adjusted for depreciation, amortization, stock compensation expenses, major restructuring costs and certain other non-operating income and expense items, such as costs related to the acquisition of Rofin. Key initiatives to reach our goals for EBITDA improvements include utilization of our Asian manufacturing locations, rationalizing our supply chain and continued leveraging of our infrastructure.

We utilize a number of different financial measures, both GAAP and non-GAAP, such as adjusted EBITDA as a percentage of net sales, in analyzing and assessing our overall business performance, for making operating decisions and for forecasting and planning future periods. We consider the use of non-GAAP financial measures helpful in assessing our current financial performance and ongoing operations. While we use non-GAAP financial measures as a tool to enhance our understanding of certain aspects of our financial performance, we do not consider these measures to be a substitute for, or superior to, the information provided by GAAP financial measures. We provide adjusted EBITDA in order to enhance investors' understanding of our ongoing operations. This measure is used by some investors when assessing our performance.

Below is the reconciliation of our net income from continuing operations as a percentage of net sales to our adjusted EBITDA as a percentage of net sales:

	Three Months Ended			
	December 31, 2016		January 2, 2016	
Net income from continuing operations as a percentage of net sales	8.9	%	10.7	%
Income tax expense	4.8	%	3.5	%
Interest and other income (expense), net	(1.5)	%	0.6	%
Depreciation and amortization	6.1	%	4.5	%
Restructuring charges	2.1	%	—	%
Purchase accounting step up	2.7	%	—	%
Gain on business combination	(1.6)	%	—	%
Costs related to acquisition of Rofin	4.1	%	—	%
Stock-based compensation	2.8	%	2.0	%
Adjusted EBITDA as a percentage of net sales	28.4	%	21.3	%

## SIGNIFICANT EVENTS

## Acquisition and related financing

On November 7, 2016, we completed our previously announced acquisition of Rofin pursuant to the Merger Agreement dated March 16, 2016. Rofin is one of the world's leading developers and manufacturers of high-performance industrial laser sources and laser-based solutions and components. As a condition of the acquisition, we are required to divest ourselves of Rofin's low power CO2 laser business based in Hull, United Kingdom, and will report this business separately as a discontinued operation until it is divested. The acquisition was an all-cash transaction at a price of \$32.50 per share of Rofin common stock. The aggregate consideration paid by us to the former Rofin stockholders was approximately \$904.5 million, excluding related transaction fees and expenses. We also paid \$15.3 million due to the cancellation of options held by employees of Rofin. We funded the payment of the

aggregate consideration with a combination of our available cash on hand and the proceeds from the Euro Term Loan described below. See Note 3. “Business Combinations” in the Notes to Condensed Consolidated Financial Statements.

On November 7, 2016, we entered into a Credit Agreement (the “Credit Agreement”) with Barclays Bank PLC (“Barclays”), Bank of America, N.A. (“BAML”) and MUFG Union Bank, N.A. (“MUFG”). The Credit Agreement provided for a 670.0 million Euro senior secured term loan facility (the “Euro Term Loan”) and a \$100.0 million senior secured revolving credit

Table of Contents

facility. On November 7, 2016, the Euro Term Loan was drawn in full and its proceeds were used to finance the acquisition of Rofin and pay related fees and expenses. Also, on November 7, 2016, we used 10.0 million Euro of the capacity under the revolving credit facility for the issuance of a letter of credit. See Note 9. "Borrowings" in the Notes to Condensed Consolidated Financial Statements.

In relation to the acquisition of Rofin, we paid Barclays, our financial advisor, a fee of approximately \$9.5 million, \$1.0 million of which was paid upon delivery of the fairness opinion in the second quarter of fiscal 2016, and the remaining portion of which was paid upon consummation of the acquisition in the first quarter of fiscal 2017; these fees were recorded in the selling, general and administrative line of the consolidated statements of operations. We also paid Barclays, BAML and MUFG together approximately \$17.0 million and \$5.6 million for underwriting and upfront fees, respectively, upon the close of the financing on November 7, 2016; these fees are recorded as debt issuance costs on our consolidated balance sheets.

As a result of the acquisition of Rofin in the first quarter of fiscal 2017, we reorganized into two new reporting segments for the combined company based upon our organizational structure and how our Chief Operating Decision Maker receives and utilizes information provided to allocate resources and make decisions: OEM Laser Sources ("OLS") and Industrial Lasers & Systems ("ILS"). This segmentation reflects the go-to-market strategies and synergies for our broad portfolio of laser technologies and products. While both segments deliver cost-effective, highly reliable photonics solutions, the OLS business segment, is focused on high performance laser sources and complex optical sub-systems, typically used in microelectronics manufacturing, medical diagnostics and therapeutic medical applications, as well as in scientific research. Our ILS business segment delivers high performance laser sources, sub-systems and tools primarily used for industrial laser materials processing, serving important end markets like automotive, machine tool, consumer goods and medical device manufacturing.

## RESULTS OF OPERATIONS

## CONSOLIDATED SUMMARY

The following table sets forth, for the periods indicated, the percentage of total net sales represented by the line items reflected in our condensed consolidated statements of operations:

	Three Months Ended			
	December 31, 2016		January 2, 2016	
Net sales	100.0	%	100.0	%
Cost of sales	59.1	%	55.9	%
Gross profit	40.9	%	44.1	%
Operating expenses:				
Research and development	7.8	%	10.1	%
Selling, general and administrative	21.3	%	19.3	%
Gain on business combination	(1.5)	%	—	%
Amortization of intangible assets	1.1	%	0.4	%
Total operating expenses	28.7	%	29.8	%
Income from operations	12.2	%	14.3	%
Other income (expense), net	1.5	%	(0.1)	%
Income from continuing operations before income taxes	13.7	%	14.2	%
Provision for income taxes	4.8	%	3.5	%
Net income from continuing operations	8.9	%	10.7	%

Net income from continuing operations for the first quarter of fiscal 2017 was \$30.7 million (\$1.25 per diluted share) including \$14.5 million of after tax costs related to our acquisition of Rofin, \$8.2 million of after-tax stock-based compensation expense, \$7.7 million after-tax amortization of intangible assets, \$6.5 million after-tax amortization of purchase accounting inventory step up, \$4.6 million of after-tax restructuring costs, \$1.8 million after-tax interest expense on the commitment of our term loan to finance the acquisition of Rofin, a \$3.4 million after-tax gain on our sale of owned Rofin shares and \$7.1 million after-tax foreign exchange gain on forward contracts associated with our foreign exchange risk related to the commitment of our Euro Term Loan and the issuance of the Euro Term Loan to finance the acquisition of Rofin. Net income from continuing operations for the first quarter of fiscal 2016 was \$20.3 million (\$0.84 per diluted share) including \$3.4 million of after-tax stock-based

Table of Contents

compensation expense, \$1.4 million after-tax amortization of intangible assets and a benefit of \$1.2 million related to the renewal of the federal research and development tax credits for fiscal 2015.

## BACKLOG

Backlog represents orders which we expect to be shipped within 12 months and the current portion of service contracts. Orders used to compute backlog are generally cancelable and, depending on the notice period, are subject to rescheduling by our customers without substantial penalties. Historically, we have not experienced a significant rate of cancellation or rescheduling, though we cannot guarantee that the rate of cancellations or rescheduling will not increase in the future. We have a backlog of orders shippable within 12 months of \$823.5 million at December 31, 2016, including a significant concentration in the flat panel display market (58%) for customers which are primarily located in Asia. As a result of the acquisition of Rofin, we acquired \$114.5 million of backlog as of November 7, 2016.

## NET SALES

## Market Application

The following tables set forth, for the periods indicated, the amount of net sales and their relative percentages of total net sales by market application (dollars in thousands):

	Three Months Ended					
	December 31, 2016			January 2, 2016		
	Amount	Percentage of total net sales	%	Amount	Percentage of total net sales	%
Consolidated:						
Microelectronics	\$175,774	50.8	%	\$96,506	50.7	%
OEM components and instrumentation	46,572	13.5	%	39,333	20.7	%
Materials processing	94,643	27.3	%	23,034	12.1	%
Scientific and government programs	29,084	8.4	%	31,402	16.5	%
Total	\$346,073	100.0	%	\$190,275	100.0	%

Net sales in the first quarter of fiscal 2017 included \$74.4 million of Rofin net sales since the acquisition on November 7, 2016, primarily in the materials processing market. Net sales for the first quarter of fiscal 2017 increased by \$155.8 million, or 82%, compared to the first quarter of fiscal 2016, with significant increases in the microelectronics and materials processing markets, a smaller increase in the OEM components and instrumentation market and a decrease in the scientific and government programs market.

The increase in the microelectronics market of \$79.3 million, or 82%, was primarily due to higher shipments related to flat panel display annealing systems and higher shipments related to semiconductor and advanced packaging applications partially offset by lower shipments for micro materials processing applications. Sales in the materials processing market increased \$71.6 million, or 311%, primarily due to Rofin net sales since the acquisition on November 7, 2016 and higher shipments for automotive and other materials processing applications. The increase in the OEM components and instrumentation market of \$7.2 million, or 18%, was due primarily to higher shipments for medical, military and bio-instrumentation applications, with much of the increase in military and medical applications due to the acquisition of Rofin. Sales in the scientific and government programs market decreased \$2.3 million, or 7.4%, due to lower demand for advanced research applications used by university and government research groups, particularly in the U.S. and Europe.



The timing for shipments of our higher average selling price excimer products in the flat panel display market have historically fluctuated and are in the future expected to fluctuate from quarter-to-quarter due to customer scheduling, our ability to manufacture these products and/or availability of critical component parts and supplies. As a result, the timing to convert orders for these products to net sales will likely fluctuate from quarter-to-quarter.

#### Segments

We are organized into two reportable operating segments: OLS and ILS. While both segments deliver cost-effective, highly reliable photonics solutions, OLS is focused on high performance laser sources and complex optical sub-systems, typically used in microelectronics manufacturing, medical diagnostics and therapeutic medical applications, as well as in scientific

Table of Contents

research. ILS delivers high performance laser sources, sub-systems and tools primarily used for industrial laser materials processing, serving important end markets like automotive, machine tool, consumer goods and medical device manufacturing.

The following tables set forth, for the periods indicated, the amount of net sales and their relative percentages of total net sales by segment (dollars in thousands):

	Three Months Ended			
	December 31, 2016		January 2, 2016	
	Amount	Percentage of total net sales	Amount	Percentage of total net sales
Consolidated:				
OEM Laser Sources (OLS)	\$238,736	69.0 %	\$158,830	83.5 %
Industrial Lasers & Systems (ILS)	107,337	31.0 %	31,445	16.5 %
Total	\$346,073	100.0 %	\$190,275	100.0 %

Net sales for the first quarter of fiscal 2017 increased by \$155.8 million, or 82%, compared to the first quarter of fiscal 2016, with increases of \$79.9 million, or 50%, in our OLS segment and increases of \$75.9 million, or 241%, in our ILS segment. Net sales in the first quarter of fiscal 2017 included \$74.4 million of Rofin net sales since the acquisition on November 7, 2016, with \$73.7 million and \$0.7 million in the ILS and OLS segments, respectively.

The increase in our OLS segment sales was primarily due to higher shipments of flat panel display annealing systems and higher service revenue as well as higher shipments for semiconductor and materials processing applications partially offset by lower shipments for scientific and government programs. The increase in our ILS segment sales was primarily due to higher shipments for materials processing and OEM components and instrumentation applications due to the acquisition of Rofin as well as higher shipments to the flat panel display market.

**GROSS PROFIT**

## Consolidated

Our gross profit rate decreased by 3.2% to 40.9% in the first quarter of fiscal 2017 from 44.1% in the first quarter of fiscal 2016. The decrease in the gross profit rate was primarily due to the impact of purchase accounting adjustments (5.0%) for amortization of inventory step up and amortization of intangibles related to the acquisition of Rofin in the first quarter of fiscal 2017. Also contributing to the increase was the impact of the acquisition of Rofin before considering purchase accounting adjustments (1.3%) partially offset by improvements in historical Coherent margins primarily due to the favorable leverage of manufacturing costs on higher volumes and the favorable impact of the weaker Euro as well as lower warranty costs.

Our gross profit rate has been and will continue to be affected by a variety of factors including market and product mix, pricing on volume orders, shipment volumes, our ability to manufacture advanced and more complex products, manufacturing efficiencies, excess and obsolete inventory write-downs, warranty costs, amortization of intangibles, pricing by competitors or suppliers, new product introductions, production volume, customization and reconfiguration of systems, commodity prices and foreign currency fluctuations, particularly the recent weakening of the Euro and to a lesser extent, the Japanese Yen and South Korean Won.

## OEM Laser Sources

The gross profit rate in our OLS segment increased by 4.2% to 52.1% in the first quarter of fiscal 2017 from 47.9% in the first quarter of fiscal 2016. The 4.2% first quarter increase in the gross profit rate was primarily due to favorable

product margins (3.0%) as a result of favorable leverage of manufacturing costs on higher volumes and the favorable impact of the weaker Euro and lower other costs (0.8%) due to lower inventory provisions and duty costs in certain business units as well as the impact of the weaker Euro. Also contributing to the increase in gross profit rate were lower intangibles amortization (0.3%) and lower warranty and installation costs (0.1%) as a percentage of revenue due to the impact of higher revenues.

#### Industrial Lasers & Systems

The gross profit rate in our ILS segment decreased by 10.1% to 17.0% in the first quarter of fiscal 2017 from 27.1% in the first quarter of fiscal 2016. The 10.1% first quarter decrease in the gross profit rate was primarily due to the impact of purchase accounting adjustments (16.2%) for amortization of inventory step up and amortization of intangibles related to the acquisition

Table of Contents

of Rofin in the first quarter of fiscal 2017 and restructuring costs (3.2%) related to the implementation of planned restructuring activities in connection with the acquisition of Rofin, which is primarily related to the exit from our preexisting high power fiber laser product line. The decreases in gross profit rate were partially offset by the favorable impact of Rofin's margins before considering purchase accounting adjustments.

## OPERATING EXPENSES:

	Three Months Ended					
	December 31, 2016		January 2, 2016			
	Amount	Percentage of total net sales	Amount	Percentage of total net sales		
	(Dollars in thousands)					
Research and development	\$27,084	7.8 %	\$19,140	10.1 %		
Selling, general and administrative	73,768	21.3 %	36,774	19.3 %		
Gain on business combination	(5,416 )	(1.5 )%	—	—		
Amortization of intangible assets	3,878	1.1 %	701	0.4 %		
Total operating expenses	\$99,314	28.7 %	\$56,615	29.8 %		

## Research and development

Research and development (“R&D”) expenses increased \$7.9 million, or 42%, during the first fiscal quarter ended December 31, 2016 compared to the same quarter one year ago. The increase was primarily due to Rofin R&D expenses (\$5.1 million) since the acquisition on November 7, 2016, \$1.1 million higher project spending including higher variable compensation and higher spending on materials, \$1.0 million of restructuring costs in the first quarter of fiscal 2017 related to the exit from our high power fiber laser product line and \$0.7 million higher stock-based compensation expense including \$0.5 million related to a charge recorded in the first quarter of fiscal 2017 due to the acceleration of Rofin options. On a segment basis as compared to the prior year period, OLS research and development spending increased \$1.6 million primarily due to higher net spending on projects. ILS spending increased \$5.6 million primarily due to the acquisition of Rofin and restructuring costs partially offset by lower project spending. Corporate and other spending increased \$0.8 million due to higher stock-based compensation expense.

## Selling, general and administrative

Selling, general and administrative (“SG&A”) expenses increased \$37.0 million, or 101%, during the first fiscal quarter ended December 31, 2016 compared to the same quarter one year ago. The increase was primarily due to \$14.1 million higher financial advisory, consulting and legal costs related to the acquisition of Rofin, Rofin SG&A expenses (\$13.5 million) since the acquisition on November 7, 2016 and \$5.2 million higher stock-based compensation expense, including \$3.4 million related to a charge recorded in the first quarter of fiscal 2017 due to the acceleration of Rofin options, as well as higher expense for new grants. In addition, SG&A expense increased \$3.8 million due to higher payroll spending for variable compensation, commissions and salaries and benefits and increased \$0.4 million net due to higher other variable spending offset by lower charges for increases in deferred compensation plan liabilities. On a segment basis as compared to the prior year period, OLS segment expenses increased \$4.1 million primarily due to higher payroll and other variable spending. ILS spending increased \$14.1 million primarily due to the acquisition of Rofin and higher payroll spending. Corporate and other spending increased \$18.8 million primarily due to higher financial advisory, consulting and legal costs related to the acquisition of Rofin, higher stock-based

compensation expense and higher payroll spending net of lower charges for increases in deferred compensation plan liabilities.

Gain on business combination

On November 7, 2016, we acquired Rofin at a price of \$32.50 per share of Rofin common stock (See Note 3 "Business Combinations"). We recognized a gain of \$5.4 million in the first quarter of fiscal 2017 on the increase in fair value from the date of purchase for the shares we already owned.

Amortization of intangible assets

Table of Contents

Amortization of intangible assets increased \$3.2 million in the three months ended December 31, 2016 compared to the same period last year. The increase was primarily due to the acquisition of Rofin in the first quarter of fiscal 2017 partially offset by the completion of amortization of certain intangibles from prior acquisitions.

## OTHER INCOME (EXPENSE) — NET

Other income (expense), net, changed by \$5.4 million from other expense of \$0.2 million in the first quarter of fiscal 2016 to other income of \$5.2 million in the first quarter of fiscal 2017. The increase in net other income was primarily due to \$13.1 million higher net foreign exchange gains partially offset by \$8.0 million higher interest expense. The higher foreign exchange gains were primarily due to a gain of \$11.3 million on forward contracts associated with our foreign exchange risk related to the commitment of our Euro Term Loan and the issuance of the Euro Term Loan to finance the acquisition of Rofin. Interest expense increased due to interest on the Euro Term Loan and interest on the commitment of the Euro Term Loan to fund the acquisition of Rofin as well as amortization of debt issuance costs related to the Euro Term Loan.

## INCOME TAXES

The effective tax rate on income from continuing operations before income taxes for the first quarter of fiscal 2017 of 35.2% was higher than the statutory rate of 35.0% primarily due to Rofin transaction costs not deductible for tax purposes, tax costs of Rofin restructuring, ASC 740-10 (formerly FIN48) tax liabilities for transfer pricing, stock-based compensation not deductible for tax purposes and limitations on the deductibility of compensation under IRC Section 162(m). These amounts are partially offset by differences related to the benefit of income subject to foreign tax rates that are lower than U.S. tax rates including the Singapore tax exemption and the benefit of federal research and development tax credits.

The effective tax rate on income from continuing operations before income taxes for the first quarter of fiscal 2016 of 25.0% was lower than the statutory rate of 35.0% primarily due to differences related to the benefit of income subject to foreign tax rates that are lower than U.S. tax rates including the Singapore tax exemption, the benefit of foreign tax credits and the benefit of federal research and development tax credits including renewal of the federal research and development credits for fiscal 2015. These amounts are partially offset by deemed dividend inclusions under the Subpart F tax rules, stock-based compensation not deductible for tax purposes and limitations on the deductibility of compensation under IRC Section 162(m).

## LIQUIDITY AND CAPITAL RESOURCES

At December 31, 2016, we had assets classified as cash and cash equivalents and short-term investments, in an aggregate amount of \$360.3 million, compared to \$400.0 million at October 1, 2016. Our cash and cash equivalents and short-term investments included \$157.1 million of cash at Rofin entities. In addition, at December 31, 2016, we had \$13.8 million of restricted cash. At December 31, 2016, approximately \$236.6 million of our cash and securities was held in certain of our foreign subsidiaries, \$217.8 million of which was denominated in currencies other than the U.S. dollar. At December 31, 2016, we had approximately \$225.3 million of cash held by foreign subsidiaries where we intend to permanently reinvest our accumulated earnings in these entities and our current plans do not demonstrate a need for these funds to support our domestic operations. If, however, a portion of these funds are needed for and distributed to our operations in the United States, we may be subject to additional U.S. income taxes and foreign withholding taxes. An exception to U.S. taxation may be the repatriation of foreign funds that had been previously taxed in the U.S. as Subpart F income. The amount of the U.S. and foreign taxes due would depend on the amount and manner of repatriation, as well as the location from where the funds are repatriated. We actively monitor the third-party depository institutions that hold these assets, primarily focusing on the safety of principal and secondarily maximizing yield on these assets. We diversify our cash and cash equivalents and investments among various

financial institutions, money market funds, sovereign debt and other securities in order to reduce our exposure should any one of these financial institutions or financial instruments fail or encounter difficulties. To date, we have not experienced any material loss or lack of access to our invested cash, cash equivalents or short-term investments. However, we can provide no assurances that access to our invested cash, cash equivalents or short-term investments will not be impacted by adverse conditions in the financial markets. In the first quarter of fiscal 2017, we spent a significant portion of our foreign funds on the Rofin acquisition. We did not repatriate foreign funds to our domestic operations to fund this acquisition. We expect to have adequate foreign funds in the future to service the acquisition debt and do not anticipate any repatriation of foreign funds to operate our domestic business.

In fiscal 2016, 2015 and 2014, we converted a total of \$160.6 million of cash and securities held in certain of our foreign subsidiaries to U.S. dollars and invested those funds within a European subsidiary whose functional currency is the U.S. dollar. In the first quarter of fiscal 2017, we used these funds to purchase Rofin and pay related acquisition expenses. The converted funds were not repatriated to the U.S. and no U.S. tax was triggered on the transfer of these funds to the European subsidiary.

Table of Contents

See ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK below for more information about risks and trends related to foreign currencies.

## Sources and Uses of Cash

Historically, our primary source of cash has been provided by operations. Other sources of cash in the past three fiscal years include proceeds from our Euro Term Loan used to finance the acquisition of Rofin, proceeds received from the sale of our stock through our employee stock purchase plan as well as borrowings under our domestic line of credit. Our historical uses of cash have primarily been for the repurchase of our common stock, acquisitions of businesses and technologies, capital expenditures and debt issuance costs. Supplemental information pertaining to our historical sources and uses of cash is presented as follows and should be read in conjunction with our condensed consolidated statements of cash flows and the notes to condensed consolidated financial statements:

	Three Months Ended	
	December 31, 2016	February 2, 2016
	(in thousands)	
Net cash provided by operating activities	\$82,641	\$ 14,262
Sales of shares under employee stock plans	3,866	3,521
Borrowings, net of repayments	718,514	5,000
Acquisition of businesses, net of cash acquired	(740,481)	—
Debt issuance costs	(25,824)	—
Capital expenditures	(15,390)	(4,765)

Net cash provided by operating activities increased by \$68.4 million for the first three months of fiscal 2017 compared to the same period one year ago. The increase in cash provided by operating activities was primarily due to higher cash flows due to higher non-cash expenses for amortization, stock-based compensation and depreciation, higher net income, higher deferred revenue and accounts payable balances, higher cash flows from the timing of shipments of large systems from inventory and higher cash flows from accounts receivable partially offset by lower accrued payroll balances. We believe that our existing cash, cash equivalents and short term investments combined with cash to be provided by operating activities and amounts available under our revolving credit facility will be adequate to cover our working capital needs and planned capital expenditures for at least the next 12 months to the extent such items are known or are reasonably determinable based on current business and market conditions. However, we may elect to finance certain of our capital expenditure requirements through other sources of capital. We continue to follow our strategy to further strengthen our financial position by using available cash flow to fund operations.

We intend to continue to consider acquisition opportunities at valuations we believe are reasonable based upon market conditions. However, we cannot accurately predict the timing, size and success of our acquisition efforts or our associated potential capital commitments. Furthermore, we cannot assure you that we will be able to acquire businesses on terms acceptable to us. We expect to fund future acquisitions through additional borrowings (as in our acquisition of Rofin), existing cash balances and cash flows from operations. If required, we will consider the issuance of securities. The extent to which we will be willing or able to use our common stock to make acquisitions will depend on its market value at the time and the willingness of potential sellers to accept it as full or partial payment.

On November 7, 2016, we entered into the Credit Agreement by and among us, Coherent Holding GmbH, as borrower (the “Borrower”), and certain of our direct and indirect subsidiaries from time to time party thereto, as guarantors, the lenders from time to time party thereto, Barclays, as administrative agent and an L/C Issuer, BAML as an L/C Issuer, and MUFG as an L/C Issuer. The Credit Agreement provides for a 670.0 million Euro senior secured term loan



facility (the "Euro Term Loan") and a \$100.0 million senior secured revolving credit facility ("Revolving Credit Facility") with a \$30.0 million letter of credit sublimit and a \$10.0 million swing line sublimit. The Borrower may increase the aggregate revolving commitments or borrow incremental term loans in an aggregate principal amount not to exceed the sum of \$150.0 million and an amount that would not cause the senior secured net leverage ratio to be greater than 2.75 to 1.00, subject to certain conditions, including obtaining additional commitments from the lenders then party to the Credit Agreement or new lenders. On November 7, 2016, the Borrower borrowed the full 670.0 million Euros under the Euro Term Loan and its proceeds were used to finance the acquisition of Rofin and pay related fees and expenses. On November 7, 2016, we also used 10.0 million Euro of the capacity under the Revolving Credit Facility for the issuance of a letter of credit.

Table of Contents

Loans under the Credit Agreement bear interest, at the Borrower's option, at a rate equal to either (i)(x) in the case of calculations with respect to U.S. Dollars or certain other alternative currencies, the London interbank offered rate (the "LIBOR") or (y) in the case of calculations with respect to the Euro, the euro interbank offered rate ("EURIBOR" and, together with LIBOR, the "Eurocurrency Rate") or (ii) a base rate (the "Base Rate") equal to the highest of (x) the federal funds rate, plus 0.50%, (y) the prime rate then in effect and (z) the Eurocurrency Rate for loans denominated in U.S. dollars applicable to a one-month interest period, plus 1.0%, in each case, plus an applicable margin. The applicable margin for Euro Term Loan borrowed as Eurocurrency Rate loans, is 3.50% initially, and following the first anniversary of the Closing Date ranges from 3.00% to 3.50% depending on the consolidated total gross leverage ratio at the time of determination. For Euro Term Loan borrowed as Base Rate Loans, the applicable margin initially is 2.50%, and following the first anniversary of the Closing Date ranges from 2.00% to 2.50% depending upon the consolidated total gross leverage ratio at the time of determination. The applicable margin for revolving loans borrowed as Eurocurrency Rate Loans, ranges from 3.75% to 4.25%, and for revolving loans borrowed as Base Rate Loans, ranges from 2.75% to 3.25%, in each case, based on the consolidated total gross leverage ratio at the time of determination. Interest on Base Rate Loans is payable quarterly in arrears. Interest on Eurocurrency Rate Loans is payable at the end of the applicable interest period (or at three month intervals if the interest period exceeds three months). Interest periods for Eurocurrency Rate loans may be, at the Borrower's option, one, two, three or six months.

The Credit Agreement requires the Borrower to make scheduled quarterly payments on the Euro Term Loan of 0.25% of the original principal amount of the Euro Term Loan, with any remaining principal payable at maturity. A commitment fee accrues on any unused portion of the revolving loan commitments under the Credit Agreement at a rate of 0.375% or 0.5% depending on the consolidated total gross leverage ratio at any time of determination. The Borrower is also obligated to pay other customary fees for a credit facility of this size and type.

The Credit Agreement contains customary affirmative covenants, including covenants regarding the payment of taxes and other obligations, maintenance of insurance, reporting requirements and compliance with applicable laws and regulations, and negative covenants, including covenants limiting the ability of us and our subsidiaries to, among other things, incur debt, grant liens, make investments, make certain restricted payments, transact with affiliates, and sell assets. The Credit Agreement also requires us and our subsidiaries to maintain a senior secured net leverage ratio as of the last day of each fiscal quarter of less than or equal to 3.50 to 1.00. The Credit Agreement contains customary events of default that include, among other things, payment defaults, cross defaults with certain other indebtedness, violation of covenants, inaccuracy of representations and warranties in any material respect, change in control of us and the Borrower, judgment defaults, and bankruptcy and insolvency events. If an event of default exists, the lenders may require the immediate payment of all Obligations, as defined in the Credit Agreement, and may exercise certain other rights and remedies provided for under the Credit Agreement, the other loan documents and applicable law. The acceleration of such obligations is automatic upon the occurrence of a bankruptcy and insolvency event of default. We were in compliance with all covenants at December 31, 2016.

The aggregate consideration paid by us to the former Rofin stockholders in the first quarter of fiscal 2017 was approximately \$904.5 million, excluding related transaction fees and expenses. We also paid \$15.3 million due to the cancellation of options held by employees of Rofin. We paid \$5.2 million of debt issuance costs in fiscal 2016 and incurred approximately \$25.8 million of debt issuance costs in the first quarter of fiscal 2017. In the fourth quarter of fiscal 2016, and the first quarter of fiscal 2017, we recorded an interest charge of \$1.1 million and \$2.7 million, respectively, in other income (expense) in our consolidated statement of operations related to the debt financing commitment. In the first quarter of fiscal 2017, we made our first debt principal payment of \$1.8 million, recorded interest expense on the Euro Term Loan of \$4.6 million and recorded \$0.6 million amortization of debt issuance costs.

In relation to the acquisition of Rofin, we paid Barclays, our financial advisor, a fee of approximately \$9.5 million, \$1.0 million of which was paid upon delivery of the fairness opinion in the second quarter of fiscal 2016, and the remaining portion of which was paid upon consummation of the acquisition in the first quarter of fiscal 2017; these

fees were recorded as SG&A expense.

Additional sources of cash available to us were international currency lines of credit and bank credit facilities totaling \$29.3 million as of December 31, 2016, of which \$21.7 million was unused and available. These unsecured international credit facilities were used in Europe and Japan during the first three months of fiscal 2017. As of December 31, 2016, we had utilized \$5.9 million of the international credit facilities as guarantees in Europe and \$1.7 million as short-term borrowings in Japan.

At December 31, 2016, \$2.2 million and \$11.5 million of cash collateralized primarily for domestic and international guarantees was restricted and classified as current and non-current restricted cash, respectively, on our condensed consolidated balance sheet.

Table of Contents

Our ratio of current assets to current liabilities was 3.6:1 at December 31, 2016 compared to 4.0:1 at October 1, 2016. The decrease in our ratio is primarily due to the use of cash to in our acquisition of Rofin partially offset by the impact of Rofin's current assets and current liabilities. Our cash and cash equivalents, short-term investments and working capital are as follows:

	December 31, 2016	October 1, 2016
	(in thousands)	
Cash and cash equivalents	\$360,217	\$354,347
Short-term investments	125	45,606
Working capital	809,070	614,145

## Contractual Obligations and Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements as defined under Regulation S-K of the Securities Act of 1933. The following summarizes our contractual obligations at December 31, 2016 and the effect such obligations are expected to have on our liquidity and cash flow in future periods (in thousands):

	Total	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years
Operating lease payments	\$49,820	\$15,259	\$20,010	\$8,384	\$6,167
Asset retirement obligations	5,551	707	1,781	94	2,969
Debt principal, interest and fees	912,992	28,910	114,212	74,537	695,333
Pension obligations	36,521	1,425	2,054	2,584	30,458
Purchase commitments for inventory	119,898	111,949	7,788	161	—
Purchase obligations-other	16,082	14,290	836	956	—
Total	\$1,140,864	\$172,540	\$146,681	\$86,716	\$734,927

Because of the uncertainty as to the timing of such payments, we have excluded cash payments related to our contractual obligations for our deferred compensation plans aggregating \$31.1 million at October 1, 2016.

## Changes in Financial Condition

Cash provided by operating activities during the first three months of fiscal 2017 was \$82.6 million, which included net income of \$30.4 million, cash provided by operating assets and liabilities of \$25.6 million (primarily increases in deferred income offset decreases in accrued payroll), depreciation and amortization of \$21.7 million, non-cash restructuring charges of \$4.4 million, stock-based compensation expense of \$5.5 million, net decreases in deferred tax assets of \$1.3 million and \$0.5 million other partially offset by the \$5.4 million gain on business combination and \$1.3 million net cash flows used by discontinued operations. Cash provided by operating activities during the first three months of fiscal 2016 was \$14.3 million, which included net income of \$20.3 million, depreciation and amortization of \$8.5 million, stock-based compensation expense of \$3.7 million and \$0.2 million other partially offset by cash used by operating assets and liabilities of \$14.9 million and net increases in deferred tax assets of \$3.5 million.

Cash used in investing activities during the first three months of fiscal 2017 was \$730.8 million, which included \$740.5 million net of cash acquired to purchase Rofin, \$15.3 million used to acquire property and equipment, purchase and upgrade buildings, net of proceeds from dispositions partially offset by \$25.1 million net sales of available-for-sale securities. Cash used in investing activities during the first three months of fiscal 2016 was \$3.6 million, which included \$4.7 million used to acquire property and equipment and improve buildings net of proceeds

from dispositions partially offset by \$1.1 million net sales of available-for-sale securities.

Cash provided by financing activities during the first three months of fiscal 2017 was \$681.3 million, which included \$718.5 million net borrowings and \$3.9 million generated from our employee stock option and purchase plans partially offset by \$25.8 million debt issuance costs and \$15.3 million outflows due to net settlement of restricted stock. Cash provided by financing activities during the first three months of fiscal 2016 was \$3.2 million, which included \$5.0 million net short-term borrowings and \$3.5 million generated from our employee stock option and purchase plans partially offset by \$5.3 million outflows due to net settlement of restricted stock.

Table of Contents

Changes in exchange rates during the first three months of fiscal 2017 resulted in a decrease in cash balances of \$13.5 million. Changes in exchange rates during the first three months of fiscal 2016 decreased our cash balances by \$2.1 million.

RECENT ACCOUNTING STANDARDS

See Note 2. “Recent Accounting Standards” in the Notes to Condensed Consolidated Financial Statements for a full description of recent accounting pronouncements, including the respective dates of adoption or expected adoption and effects on our condensed consolidated financial position, results of operations and cash flows.

43

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Table of Contents

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk disclosures

We are exposed to market risk related to changes in interest rates and foreign currency exchange rates. We do not use derivative financial instruments for speculative or trading purposes.

Interest rate sensitivity

A portion of our investment portfolio is composed of fixed income securities. These securities are subject to interest rate risk and will fall in value if market interest rates increase. If market interest rates were to increase immediately (whether due to changes in overall market rates or credit worthiness of the issuers of our individual securities) and uniformly by 10% from levels at December 31, 2016, the fair value of the portfolio, based on quoted market prices in active markets involving similar assets, would decline by an immaterial amount due to their short-term maturities. We have the ability to generally hold our fixed income investments until maturity and therefore we would not expect our operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest rates on our securities portfolio. If necessary, we may sell short-term investments prior to maturity to meet our liquidity needs.

At December 31, 2016, the fair value of our available-for-sale debt securities was \$0.1 million, all of which was classified as short-term investments. There were no gross unrealized gains and losses on available-for-sale debt securities at December 31, 2016.

We are exposed to market risks related to fluctuations in interest rates related to our Term Loan Facility. As of December 31, 2016, we owed \$697.7 million on this loan with an interest rate of 4.25%. We performed a sensitivity analysis on the outstanding portion of our debt obligation as of December 31, 2016. Should the current average interest rate increase or decrease by 10%, the resulting annual increase or decrease to interest expense would be approximately \$2.9 million as of December 31, 2016.

Foreign currency exchange risk

We maintain operations in various countries outside of the United States and have foreign subsidiaries that manufacture and sell our products in various global markets. The majority of our sales are transacted in U.S. dollars. However, we do generate revenues in other currencies, primarily the Euro, the Japanese Yen, the South Korean Won and the Chinese Renminbi. Additionally we have operations in different countries around the world with costs incurred in other local currencies, such as British Pound Sterling, Singapore Dollars and Malaysian Ringgit. As a result, our earnings, cash flows and cash balances are exposed to fluctuations in foreign currency exchange rates. For example, we have significant manufacturing operations in Europe so that a weakening Euro is advantageous to the Company's financial results. We attempt to limit these exposures through financial market instruments. We utilize derivative instruments, primarily forward contracts with maturities of four months or less, to manage our exposure associated with anticipated cash flows and net asset and liability positions denominated in foreign currencies. Gains and losses on the forward contracts are mitigated by gains and losses on the underlying instruments. We do not use derivative financial instruments for trading purposes.

On occasion, we enter into currency forward exchange contracts to hedge specific anticipated foreign currency denominated transactions generally expected to occur within the next 12 months. These cash flow hedges are designated for hedge accounting treatment and gains and losses on these contracts are recorded in accumulated other comprehensive income in stockholder's equity and reclassified into earnings at the time that the related transactions being hedged are recognized in earnings. See Note 6 "Derivative Instruments and Hedging Activities".

On August 1, 2016, we purchased forward contracts totaling 670.0 million Euro, with a value date of November 30, 2016, to limit our foreign exchange risk related to the commitment of our Euro Term Loan (denominated in Euros) in an amount of the Euro equivalent of \$750.0 million to finance the U.S. dollar payment for the acquisition of Rofin. In the fourth quarter of fiscal 2016, we recognized an unrealized loss of \$2.2 million on these forward contracts. In the first quarter of fiscal 2017, we settled these forward contracts at a net gain of \$9.1 million, resulting in a realized gain of \$11.3 million in the first quarter of fiscal 2017. See Note 6 "Derivative Instruments and Hedging Activities".

We do not anticipate any material adverse effect on our condensed consolidated financial position, results of operations or cash flows resulting from the use of these instruments. There can be no assurance that these strategies will be effective or that transaction losses can be minimized or forecasted accurately. While we model currency valuations and fluctuations, these may not ultimately be accurate. If a financial counterparty to any of our hedging arrangements experiences financial difficulties or is



Table of Contents

otherwise unable to honor the terms of the foreign currency hedge, we may experience material financial losses. In the current economic environment, the risk of failure of a financial party remains high.

At December 31, 2016, approximately \$236.6 million of our cash, cash equivalents and short-term investments were held outside the U.S. in certain of our foreign operations, \$217.8 million of which was denominated in currencies other than the U.S. dollar.

A hypothetical 10% change in foreign currency rates on our forward contracts would not have a material impact on our results of operations, cash flows or financial position.

The following table provides information about our foreign exchange forward contracts at December 31, 2016. The table presents the weighted average contractual foreign currency exchange rates, the value of the contracts in U.S. dollars at the contract exchange rate as of the contract maturity date and fair value. The U.S. fair value represents the fair value of the contracts valued at December 31, 2016 rates.

Forward contracts to sell (buy) foreign currencies for U.S. dollars (in thousands, except contract rates):

	Average Contract Rate	U.S. Notional Contract Value	U.S. Fair Value
Non-Designated - For US Dollars			
Euro	1.0603	\$ (80,995 )	\$ (1,207 )
Japanese Yen	112.5411	\$ 18,077	\$ 733
British Pound	1.2490	\$ 857	\$ 17
South Korean Won	1,504.2915	\$ 3,868	\$ (944 )
Chinese Renminbi	6.9514	\$ 8,141	\$ 35
Singapore Dollar	1.4275	\$ (4,194 )	\$ (58 )
Malaysian Ringgit	4.5030	\$ 2,174	\$ (13 )
Non-Designated - For Japanese Yen			
Euro	116.0209	\$ (1,942 )	\$ 26
US Dollar	110.5580	\$ (112 )	\$ 5

Table of Contents

ITEM 4. CONTROLS AND PROCEDURES

Management's Evaluation of Disclosure Controls and Procedures

We have evaluated the effectiveness of the design and operation of our disclosure controls and procedures, as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as of December 31, 2016 ("Evaluation Date"). The controls evaluation was conducted under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded as of the Evaluation Date that our disclosure controls and procedures were effective in providing reasonable assurance that information required to be disclosed by us in reports that we file or submit under the Securities Exchange Act of 1934, as amended, is (i) recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and (ii) accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures.

Changes in Internal Control over Financial Reporting

In November 2016, we completed the acquisition of Rofin-Sinar Technologies, Inc. ("Rofin"). We are in the process of integrating Rofin into our systems and control environment as of December 31, 2016. We believe that we have taken the necessary steps to monitor and maintain appropriate internal control over financial reporting during this integration. Other than the impact of this business acquisition, there has been no change in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting during the three months ended December 31, 2016.

Inherent Limitations over Internal Control

Internal control over financial reporting is a process designed 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 ("GAAP"). Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. Our internal control over financial reporting includes those policies and procedures that:

- (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets;
  - provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial
- (ii) statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and
- (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on the financial statements.

Management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our internal controls will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of internal

controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Also, any evaluation of the effectiveness of controls in future periods are subject to the risk that those internal controls may become inadequate because of changes in business conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Table of Contents

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

Information with respect to this item may be found in Note 11 to our condensed consolidated financial statements in Part I, Item 1 of this report and is incorporated herein by reference.

ITEM 1A. RISK FACTORS

You should carefully consider the followings risks when considering an investment in our Common Stock. These risks could materially affect our business, results of operations or financial condition, cause the trading price of our Common Stock to decline materially or cause our actual results to differ materially from those expected or those expressed in any forward-looking statements made by us. These risks are not exclusive, and additional risks to which we are subject include, but are not limited to, the factors mentioned under “Forward-Looking Statements” and the risk of our businesses described elsewhere in this annual report. Additionally, these risks and uncertainties described herein are not the only ones facing us. Other events that we do not currently anticipate or that we currently deem immaterial also may affect our business, results of operations or financial condition.

RISKS RELATED TO THE MERGER WITH ROFIN

We may not be able to integrate the business of Rofin successfully with our own or realize the anticipated benefits of the merger.

We will be required to devote significant management attention and resources to integrating our business practices with those of Rofin. Potential difficulties that we may encounter as part of the integration process include the following:

- the inability to successfully combine our business with Rofin in a manner that permits the combined company to achieve the full synergies and other benefits anticipated to result from the merger;
- complexities associated with managing the combined businesses, including difficulty addressing possible differences in corporate cultures and management philosophies and the challenge of integrating products, services, complex and different information technology systems (including different Enterprise Management Systems), technology, networks and other assets of each of the companies in a cohesive manner; and
- potential unknown liabilities and unforeseen increased expenses or delays related to the merger and the integration of Rofin, including as a result of the requirement for holding separate Rofin’s business located in Hull, England.

In addition, we have operated independently prior to the merger and it is possible that the integration process following the merger could result in:

- diversion of the attention of our management; and
- the disruption of, or the loss of momentum in, our business or inconsistencies in standards, controls, procedures or policies, any of which could adversely affect our ability to maintain relationships with customers, suppliers, employees and other constituencies or our ability to achieve the anticipated benefits of the merger, or could reduce our earnings or otherwise adversely affect our business and financial results.

In addition, prior to the merger, Rofin’s business faced risks and uncertainties, including those faced by our business and identified below. Rofin’s business may not meet future expectations due to these factors despite our integration efforts.

Our future results will suffer if we do not effectively manage our expanded operations following the merger. Following the merger, the size and complexity of the business of the combined company has increased significantly. Our future success depends, in part, upon our ability to manage this expanded business, which will pose substantial challenges for management, including challenges related to the management and monitoring of new operations and associated increased costs and complexity. There can be no assurances that we will be successful or that we will realize the expected synergies and benefits anticipated from the merger.

We have incurred and will continue to incur substantial expenses related to the merger with and the integration of Rofin.

47

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Table of Contents

We have and expect to continue to incur substantial expenses in connection with the merger and the integration of Rofin. There are a large number of processes, policies, procedures, operations, technologies and systems that will need to be integrated, including purchasing, accounting and finance, sales, payroll, pricing, marketing and employee benefits. While we have assumed that a certain level of expenses will be incurred, there are many factors beyond our control that could affect the total amount or the timing of the integration expenses. Moreover, many of the expenses that will be incurred are, by their nature, difficult to estimate accurately. These expenses could, particularly in the near term, exceed the savings we expect to achieve from the elimination of duplicative expenses and the realization of economies of scale and cost savings. These integration expenses could result in significant charges to earnings which we cannot currently quantify.

Charges to earnings resulting from the application of the purchase method of accounting to the Rofin acquisition may adversely affect our results of operations.

In accordance with generally accepted accounting principles, we have accounted for the Rofin acquisition using the purchase method of accounting, which will result in charges to earnings that could have a material adverse effect on the market value of our common stock following completion of the acquisition. Under the purchase method of accounting, we will allocate the total purchase price of Rofin's net tangible and identifiable intangible assets based upon their estimated fair values at the acquisition date. The excess of the purchase price over net tangible and identifiable intangible assets will be recorded as goodwill. We will incur additional depreciation and amortization expense over the useful lives of certain of the net tangible and intangible assets acquired in connection with the acquisition. In addition, to the extent the value of goodwill or intangible assets with indefinite lives becomes impaired, we may be required to incur material charges relating to the impairment of those assets. These depreciation, amortization and potential impairment charges could have a material impact on our results of operations.

Our indebtedness following the merger is substantially greater than our indebtedness prior to the merger. This increased level of indebtedness could adversely affect us, including by decreasing our business flexibility, and will increase our borrowing costs.

In November 2016 we entered into the Credit Agreement which provides for a 670 million Euro term loan, all of which has been drawn, and a \$100 million revolving credit facility, under which a 10 million Euro letter of credit has been issued. We may incur additional indebtedness in the future by accessing the revolving credit facility under the Credit Agreement and/or entering into new financing arrangements. Our ability to pay interest and repay the principal of our current indebtedness is dependent upon our ability to manage our business operations and the ongoing interest rate environment. There can be no assurance that we will be able to manage any of these risks successfully.

The Credit Agreement contains customary affirmative covenants, including covenants regarding the payment of taxes and other obligations, maintenance of insurance, reporting requirements and compliance with applicable laws and regulations, and negative covenants, including covenants limiting the ability of us and our subsidiaries to, among other things, incur debt, grant liens, make investments, make certain restricted payments, transact with affiliates, and sell assets. The Credit Agreement also requires us and our subsidiaries to maintain a senior secured net leverage ratio as of the last day of each fiscal quarter of less of than or equal to 3.50 to 1.00. The Credit Agreement contains customary events of default that include, among other things, payment defaults, cross defaults with certain other indebtedness, violation of covenants, inaccuracy of representations and warranties in any material respect, change in control of the Company and the Borrower, judgment defaults, and bankruptcy and insolvency events. If an event of default exists, the lenders may require the immediate payment of all Obligations, as defined in the Credit Agreement, and may exercise certain other rights and remedies provided for under the Credit Agreement, the other loan documents and applicable law. The acceleration of such obligations is automatic upon the occurrence of a bankruptcy and insolvency event of default. There can be no assurance that we will have sufficient financial resources or we will be able to arrange financing to repay our borrowings at such time.

Our substantially increased indebtedness and higher debt-to-equity ratio following completion of the merger in comparison to that prior to the merger will have the effect, among other things, of reducing our flexibility to respond to changing business and economic conditions and will increase our borrowing costs. In addition, the amount of cash required to service our increased indebtedness levels and thus the demands on our cash resources will be greater than the amount of cash flows required to service our indebtedness or that of Rofin individually prior to the merger. The

increased levels of indebtedness could also reduce funds available for our investments in product development as well as capital expenditures, dividends, share repurchases and other activities and may create competitive disadvantages for us relative to other companies with lower debt levels.

We may not be able to divest the Rofin business located in Hull, England on favorable terms.

On October 26, 2016, the European Commission approved under the EU Merger Regulation our acquisition of Rofin, conditional on the divestment of Rofin's low power CQ laser business based in Hull, United Kingdom (the "Hull Business") after the closing of the acquisition. We are required to hold the Hull Business separate until such time as it is divested. During

Table of Contents

fiscal years 2013 through 2015, the Hull Business had annual revenues of approximately 23-25 million British Pound Sterling and, accordingly, we will not have the revenue from the Hull Business once it is sold. If we are unable to successfully timely divest the Hull Business or if the European Commission does not approve a proposed sale thereof, then a divestiture trustee may be appointed by the European Commission and the terms for any sale of the Hull Business will be at the discretion of such trustee. During the period of time in which we are holding the Hull Business separate, the conditions for such structure may be a distraction on certain members of our senior management team.

**BUSINESS ENVIRONMENT AND INDUSTRY TRENDS**

Our operating results, including net sales, net income (loss) and adjusted EBITDA in dollars and as a percentage of net sales, as well as our stock price have varied in the past, and our future operating results, including those results from the newly acquired Rofin business, will continue to be subject to quarterly and annual fluctuations based upon numerous factors, including those discussed in this Item 1A and throughout this report. Our stock price will continue to be subject to daily variations as well. Our future operating results and stock price may not follow any past trends or meet our guidance and expectations.

Our net sales and operating results, such as adjusted EBITDA percentage, net income (loss) and operating expenses, and our stock price have varied in the past and may vary significantly from quarter to quarter and from year to year in the future. We believe a number of factors, many of which are outside of our control, could cause these variations and make them difficult to predict, including:

• general economic uncertainties in the macroeconomic and local economies facing us, our customers and the markets we serve;

• fluctuations in demand for our products or downturns in the industries that we serve;

• the ability of our suppliers, both internal and external, to produce and deliver components and parts, including sole or limited source components, in a timely manner, in the quantity, quality and prices desired;

• the timing of receipt and conversion of bookings to net sales;

• the concentration of a significant amount of our backlog, and resultant net sales, with a few customers in the Microelectronics market;

• rescheduling of shipments or cancellation of orders by our customers;

• fluctuations in our product mix;

• the ability of our customers' other suppliers to provide sufficient material to support our customers' products;

• currency fluctuations and stability, in particular the Euro, the Japanese Yen, the South Korean Won, the Chinese RMB and the US dollar as compared to other currencies;

• commodity pricing;

• introductions of new products and product enhancements by our competitors, entry of new competitors into our markets, pricing pressures and other competitive factors;

• our ability to develop, introduce, manufacture and ship new and enhanced products in a timely manner without defects;



• our ability to successfully expand our manufacturing capacity in Göttingen, Germany and add optics fabrication capacity at our site in Richmond, California;

• our ability to manage our manufacturing capacity and that of our suppliers;

• our reliance on contract manufacturing;

Table of Contents

- our reliance in part upon the ability of our OEM customers to develop and sell systems that incorporate our laser products;
- our customers' ability to manage their susceptibility to adverse economic conditions;
- the rate of market acceptance of our new products;
- the ability of our customers to pay for our products;
- expenses associated with acquisition-related activities;
- seasonal sales trends;
- access to applicable credit markets by us, our customers and their end customers;
- delays or reductions in customer purchases of our products in anticipation of the introduction of new and enhanced products by us or our competitors;
- our ability to control expenses;
- the level of capital spending of our customers;
- potential excess and/or obsolescence of our inventory;
- costs and timing of adhering to current and developing governmental regulations and reviews relating to our products and business;
- costs related to acquisitions of technology or businesses;
- impairment of goodwill, intangible assets and other long-lived assets;
- our ability to meet our expectations and forecasts and those of public market analysts and investors;
- the availability of research funding by governments with regard to our customers in the scientific business, such as universities;
- continued government spending on defense-related and scientific research projects where we are a subcontractor;
- maintenance of supply relating to products sold to the government on terms which we would prefer not to accept;
- changes in policy, interpretations, or challenges to the allowability of costs incurred under government cost accounting standards;
- damage to our reputation as a result of coverage in social media, Internet blogs or other media outlets;
- managing our and other parties' compliance with contracts in multiple languages and jurisdictions;
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managing our internal and third party sales representatives and distributors, including compliance with all applicable laws;

• impact of government economic policies on macroeconomic conditions;

• costs and expenses from litigation;

• costs associated with designing around or payment of licensing fees associated with issued patents in our fields of business;

• government support of alternative energy industries, such as solar;

50

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## Table of Contents

negative impacts related to the recent “Brexit” vote by the United Kingdom, particularly with regard to sales from our Glasgow, Scotland facility to other jurisdictions and purchases of supplies from outside the United Kingdom by such facility;

the future impact of legislation, rulemaking, and changes in accounting, tax, defense procurement, trade or export policies; and

distraction of management related to acquisition, integration or divestment activities.

In addition, we often recognize a substantial portion of our sales in the last month of our fiscal quarters. Our expenses for any given quarter are typically based on expected sales and if sales are below expectations in any given quarter, the adverse impact of the shortfall on our operating results may be magnified by our inability to adjust spending quickly enough to compensate for the shortfall. We also base our manufacturing on our forecasted product mix for the quarter. If the actual product mix varies significantly from our forecast, we may not be able to fill some orders during that quarter, which would result in delays in the shipment of our products. Accordingly, variations in timing of sales, particularly for our higher priced, higher margin products, can cause significant fluctuations in quarterly operating results.

Due to these and other factors, such as varying product mix, we believe that quarter-to-quarter and year-to-year comparisons of our historical operating results may not be meaningful. You should not rely on our results for any quarter or year as an indication of our future performance. Our operating results in future quarters and years may be below public market analysts' or investors' expectations, which would likely cause the price of our stock to fall. In addition, over the past several years, U.S. and global equity markets have experienced significant price and volume fluctuations that have affected the stock prices of many technology companies both in and outside our industry. There has not always been a direct correlation between this volatility and the performance of particular companies subject to these stock price fluctuations. These factors, as well as general economic and political conditions or investors' concerns regarding the credibility of corporate financial statements, may have a material adverse effect on the market price of our stock in the future.

We depend on sole source or limited source suppliers, both internal and external, for some of our key components and materials, including exotic materials, certain cutting-edge optics and crystals, in our products, which make us susceptible to supply shortages or price fluctuations that could adversely affect our business, particularly our ability to meet our customers' delivery requirements.

We currently purchase several key components and materials used in the manufacture of our products from sole source or limited source suppliers, both internal and external. In particular, from time-to-time our customers require us to ramp up production and/or accelerate delivery schedules of our products. Our key suppliers may not have the ability to increase their production in line with our customers' demands. This can become acute during times of high growth in our customers' businesses. Our failure to timely receive these key components and materials would likely cause delays in the shipment of our products, which would likely negatively impact both our customers and our business. Some of these suppliers are relatively small private companies that may discontinue their operations at any time and which may be particularly susceptible to prevailing economic conditions. Some of our suppliers are located in regions which may be susceptible to natural disasters, such as the flooding in Thailand and the earthquake, tsunami and resulting nuclear disaster in Japan and severe flooding and power loss in the Eastern part of the United States in recent years. We typically purchase our components and materials through purchase orders or agreed upon terms and conditions and we do not have guaranteed supply arrangements with many of these suppliers. For certain long-lead time supplies or in order to lock-in pricing, we may be obligated to place purchase orders which are not cancelable or otherwise assume liability for a large amount of the ordered supplies, which limit our ability to adjust down our inventory liability in the event of market downturns or other customer cancellations or rescheduling of their purchase

orders for our products. Some of our products, particularly in the flat panel display industry, require designs and specifications which are at the cutting-edge of available technologies. Our and our customers' designs and specifications frequently change to meet rapidly evolving market demands. Accordingly certain of our products require components and supplies which may be technologically difficult and unpredictable to manufacture. By their very nature, these types of components may only be available by a single supplier. These characteristics further pressure the timely delivery of such components. We may fail to obtain these supplies in a timely manner in the future. We may experience difficulty identifying alternative sources of supply for certain components used in our products and may have to incur expenses and management distraction in assisting our current and future suppliers to meet our and our customers' technical requirements. We would experience further delays while identifying, evaluating and testing the products of these potential alternative suppliers. Furthermore, financial or other difficulties faced by these suppliers or significant changes in demand for these components or materials could limit their availability. We continue to consolidate our supply base and move supplier locations. When we transition locations we may increase our inventory of such products as a "safety stock" during the transition, which may cause the amount of inventory

Table of Contents

reflected on our balance sheet to increase. Additionally, many of our customers rely on sole source suppliers. In the event of a disruption of our customers' supply chain, orders from our customers could decrease or be delayed.

Any interruption or delay in the supply of any of these components or materials, or the inability to obtain these components and materials from alternate sources at acceptable prices and within a reasonable amount of time, or our failure to properly manage these moves, would impair our ability to meet scheduled product deliveries to our customers and could cause customers to cancel orders. We have historically relied exclusively on our own production capability to manufacture certain strategic components, crystals, semiconductor lasers, fiber, lasers and laser-based systems and recently acquired the capability to manufacture certain large format optics. Because we manufacture, package and test these components, products and systems at our own facilities, and such components, products and systems are not readily available from other sources, any interruption in manufacturing would adversely affect our business. Since many of our products have lengthy qualification periods, our ability to introduce multiple suppliers for parts may be limited. In addition, our failure to achieve adequate manufacturing yields of these items at our manufacturing facilities may materially and adversely affect our operating results and financial condition.

We participate in the microelectronics market, which requires significant research and development expenses to develop and maintain products and a failure to achieve market acceptance for our products could have a significant negative impact on our business and results of operations.

The microelectronics market is characterized by rapid technological change, frequent product introductions, the volatility of product supply and demand, changing customer requirements and evolving industry standards. The nature of this market requires significant research and development expenses to participate, with substantial resources invested in advance of material sales of our products to our customers in this market. Additionally, our product offerings may become obsolete given the frequent introduction of alternative technologies. In the event either our customers' or our products fail to gain market acceptance, or the microelectronics market fails to grow, it would likely have a significant negative effect on our business and results of operations.

We participate in the flat panel display market, which has a relatively limited number of end customer manufacturers. Our backlog, timing of net sales and results of operations could be negatively impacted in the event our customers reschedule or cancel orders.

In the flat panel display market, there are a relatively limited number of manufacturers who are the end customers for our annealing products. In the first quarter of fiscal 2017, Advanced Process Systems Corporation, an integrator in the flat panel display market based in South Korea, contributed more than 10% of our revenue. Given macroeconomic conditions, varying consumer demand and technical process limitations at manufacturers, our customers may seek to reschedule or cancel orders. This was recently seen with a requested expedited shipment of a Linebeam 1500 product for our third fiscal quarter of 2015, which delivery date was then changed at the customer's request back to its originally scheduled date in the fourth fiscal quarter of 2015. These larger flat panel-related systems have large average selling prices. Any rescheduling or canceling of such orders by our customers will likely have a significant impact on our quarterly or annual net sales and results of operations and could negatively impact inventory values and backlog. Additionally, challenges in meeting evolving technological requirements for these complex products by us and our suppliers could also result in delays in shipments, rescheduled or canceled orders by our customers. This could negatively impact our backlog, timing of net sales and results of operations.

As of December 31, 2016, flat panel display systems represented 58% of our backlog. Since our backlog includes higher average selling price flat panel display systems, any delays or cancellation of shipments could have a material adverse effect on our financial results.

Some of our laser systems are complex in design and may contain defects that are not detected until deployed by our customers, which could increase our costs and reduce our net sales.

Lasers and laser systems are inherently complex in design and require ongoing regular maintenance. The manufacture of our lasers, laser products and systems involves a highly complex and precise process. As a result of the technological complexity of our products, in particular the flat panel annealing systems, changes in our or our suppliers' manufacturing processes or the inadvertent use of defective materials by us or our suppliers could result in a material adverse effect on our ability to achieve acceptable manufacturing yields and product reliability. To the extent that we do not achieve and maintain our projected yields or product reliability, our business, operating results, financial condition and customer relationships would be adversely affected. We provide warranties on a majority of our product sales, and reserves for estimated warranty costs are recorded during the period of sale. The determination of such reserves requires us to make estimates of failure rates and expected costs to repair or replace the products under warranty. We typically establish warranty reserves based on historical warranty costs for

## Table of Contents

each product line. If actual return rates and/or repair and replacement costs differ significantly from our estimates, adjustments to cost of sales may be required in future periods which could have an adverse effect on our results of operations.

Our customers may discover defects in our products after the products have been fully deployed and operated, including under the end user's peak stress conditions. In addition, some of our products are combined with products from other vendors, which may contain defects. As a result, should problems occur, it may be difficult to identify the source of the problem. If we are unable to identify and fix defects or other problems, we could experience, among other things:

• loss of customers or orders;

• increased costs of product returns and warranty expenses;

• damage to our brand reputation;

• failure to attract new customers or achieve market acceptance;

• diversion of development, engineering and manufacturing resources; and

- legal actions by our customers and/or their end users.

The occurrence of any one or more of the foregoing factors could seriously harm our business, financial condition and results of operations.

Continued volatility in the advanced packaging and semiconductor manufacturing markets could adversely affect our business, financial condition and results of operations.

A portion of our net sales in the microelectronics market depends on the demand for our products by advanced packaging applications and semiconductor equipment companies. These markets have historically been characterized by sudden and severe cyclical variations in product supply and demand, which have often severely affected the demand for semiconductor manufacturing equipment, including laser-based tools and systems. The timing, severity and duration of these market cycles are difficult to predict, and we may not be able to respond effectively to these cycles. The continuing uncertainty in these markets severely limits our ability to predict our business prospects or financial results in these markets.

During industry downturns, our net sales from these markets may decline suddenly and significantly. Our ability to rapidly and effectively reduce our cost structure in response to such downturns is limited by the fixed nature of many of our expenses in the near term and by our need to continue our investment in next-generation product technology and to support and service our products. In addition, due to the relatively long manufacturing lead times for some of the systems and subsystems we sell to these markets, we may incur expenditures or purchase raw materials or components for products we cannot sell. Accordingly, downturns in the semiconductor capital equipment market may materially harm our operating results. Conversely, when upturns in these markets occur, we must be able to rapidly and effectively increase our manufacturing capacity to meet increases in customer demand that may be extremely rapid, and if we fail to do so we may lose business to our competitors and our relationships with our customers may be harmed.



We are exposed to risks associated with worldwide economic conditions and related uncertainties which could negatively impact demand for our products and results of operations.

Volatility and disruption in the capital and credit markets, depressed consumer confidence, government economic policies, negative economic conditions, volatile corporate profits and reduced capital spending could negatively impact demand for our products. In particular, it is difficult to develop and implement strategy, sustainable business models and efficient operations, as well as effectively manage supply chain relationships in the face of such conditions including uncertainty regarding the ability of some of our suppliers to continue operations and provide us with uninterrupted supply flow. Our ability to maintain our research and development investments in our broad product offerings may be adversely impacted in the event that our sales decline and do not increase in the future. Spending and the timing thereof by consumers and businesses have a significant impact on our results and, where such spending is delayed or canceled, it could have a material negative impact on our operating results. Current global economic conditions remain uncertain and challenging. Weakness in our end markets could negatively impact our net sales, gross margin and operating expenses, and consequently have a material adverse effect on our business, financial condition and results of operations.

## Table of Contents

Uncertainty in global fiscal policy has likely had an adverse impact on global financial markets and overall economic activity in recent years. Should this uncertain financial policy recur, it would likely negatively impact global economic activity. Any weakness in global economies would also likely have negative repercussions on U.S. and global credit and financial markets, and further exacerbate sovereign debt concerns in the European Union. All of these factors would likely adversely impact the global demand for our products and the performance of our investments, and would likely have a material adverse effect on our business, results of operations and financial condition.

The financial turmoil that has affected the banking system and financial markets in recent years could result in tighter credit markets, and lower levels of liquidity in some financial markets. There could be a number of follow-on effects from a tightened credit environment on our business, including the insolvency of key suppliers or their inability to obtain credit to finance development and/or manufacture products resulting in product delays; inability of customers to obtain credit to finance purchases of our products and/or customer insolvencies; and failure of financial institutions negatively impacting our treasury functions. In the event our customers are unable to obtain credit or otherwise pay for our shipped products it could significantly impact our ability to collect on our outstanding accounts receivable. Other income and expense also could vary materially from expectations depending on gains or losses realized on the sale or exchange of financial instruments; impairment charges resulting from revaluations of debt and equity securities and other investments; interest rates; cash balances; and changes in fair value of derivative instruments. Volatility in the financial markets and any overall economic uncertainty increase the risk that the actual amounts realized in the future on our financial instruments could differ significantly from the fair values currently assigned to them. Uncertainty about current global economic conditions could also continue to increase the volatility of our stock price.

In addition, political and social turmoil related to international conflicts, terrorist acts, civil unrest and mass migration may put further pressure on economic conditions in the United States and the rest of the world. Unstable economic, political and social conditions make it difficult for our customers, our suppliers and us to accurately forecast and plan future business activities. If such conditions persist, our business, financial condition and results of operations could suffer. Additionally, unstable economic conditions can provide significant pressures and burdens on individuals, which could cause them to engage in inappropriate business conduct. See “Part I, Item 4. CONTROLS AND PROCEDURES.”

Our cash and cash equivalents and short-term investments are managed through various banks around the world and volatility in the capital and credit market conditions could cause financial institutions to fail or materially harm service levels provided by such banks, both of which could have an adverse impact on our ability to timely access funds.

World capital and credit markets have been and may continue to experience volatility and disruption. In some cases, the markets have exerted downward pressure on stock prices and credit capacity for certain issuers, as well as pressured the solvency of some financial institutions. These financial institutions, including banks, have had difficulty timely performing regular services and in some cases have failed or otherwise been largely taken over by governments. We maintain our cash, cash equivalents and short-term investments with a number of financial institutions around the world. Should some or all of these financial institutions fail or otherwise be unable to timely perform requested services, we would likely have a limited ability to timely access our cash deposited with such institutions, or, in extreme circumstances the failure of such institutions could cause us to be unable to access cash for the foreseeable future. If we are unable to quickly access our funds when we need them, we may need to increase the use of our existing credit lines or access more expensive credit, if available. If we are unable to access our cash or if we access existing or additional credit or are unable to access additional credit, it could have a negative impact on our operations, including our reported net income. In addition, the willingness of financial institutions to continue to accept our cash deposits will impact our ability to diversify our investment risk among institutions.

We are exposed to credit risk and fluctuations in the market values of our investment portfolio.

Although we have not recognized any material losses on our cash, cash equivalents and short-term investments, future declines in their market values could have a material adverse effect on our financial condition and operating results. Given the global nature of our business, we have investments both domestically and internationally. There has recently been growing pressure on the creditworthiness of sovereign nations, particularly in Europe where a significant portion of our cash, cash equivalents and short-term investments are invested, which results in corresponding pressure on the valuation of the securities issued by such nations. Additionally, our overall investment portfolio is often concentrated in government-issued securities such as U.S. Treasury securities and government agencies, corporate notes, commercial paper and money market funds. Credit ratings and pricing of these investments can be negatively impacted by liquidity, credit deterioration or losses, financial results, or other factors. Additionally, liquidity issues or political actions by sovereign nations could result in decreased values for our investments in certain government securities. As a result, the value or liquidity of our cash, cash equivalents and short-term investments could decline or become materially impaired, which could have a material adverse effect on our financial condition and operating results. See “Item 3. Quantitative and Qualitative Disclosures about Market Risk.”

Table of Contents

Our future success depends on our ability to increase our sales volumes and decrease our costs to offset potential declines in the average selling prices (“ASPs”) of our products and, if we are unable to realize greater sales volumes and lower costs, our operating results may suffer.

Our ability to increase our sales volume and our future success depends on the continued growth of the markets for lasers, laser systems and related accessories, as well as our ability to identify, in advance, emerging markets for laser-based systems. We cannot assure you that we will be able to successfully identify, on a timely basis, new high-growth markets in the future. Moreover, we cannot assure you that new markets will develop for our products or our customers' products, or that our technology or pricing will enable such markets to develop. Future demand for our products is uncertain and will depend to a great degree on continued technological development and the introduction of new or enhanced products. If this does not continue, sales of our products may decline and our business will be harmed.

We have in the past experienced decreases in the ASPs of some of our products. As competing products become more widely available, the ASPs of our products may decrease. If we are unable to offset any decrease in our ASPs by increasing our sales volumes, our net sales will decline. In addition, to maintain our gross margins, we must continue to reduce the cost of manufacturing our products while maintaining their high quality. From time to time, our products, like many complex technological products, may fail in greater frequency than anticipated. This can lead to further charges, which can result in higher costs, lower gross margins and lower operating results. Furthermore, as ASPs of our current products decline, we must develop and introduce new products and product enhancements with higher margins. If we cannot maintain our gross margins, our operating results could be seriously harmed, particularly if the ASPs of our products decrease significantly.

Our future success depends on our ability to develop and successfully introduce new and enhanced products that meet the needs of our customers.

Our current products address a broad range of commercial and scientific research applications in the photonics markets. We cannot assure you that the market for these applications will continue to generate significant or consistent demand for our products. Demand for our products could be significantly diminished by disrupting technologies or products that replace them or render them obsolete. Furthermore, the new and enhanced products in certain markets generally continue to be smaller in size and have lower ASPs, and therefore, we have to sell more units to maintain revenue levels. Accordingly, we must continue to invest in research and development in order to develop competitive products.

Our future success depends on our ability to anticipate our customers' needs and develop products that address those needs. Introduction of new products and product enhancements will require that we effectively transfer production processes from research and development to manufacturing and coordinate our efforts with those of our suppliers to achieve volume production rapidly. If we fail to transfer production processes effectively, develop product enhancements or introduce new products in sufficient quantities to meet the needs of our customers as scheduled, our net sales may be reduced and our business may be harmed.

We face risks associated with our foreign operations and sales that could harm our financial condition and results of operations.

For the three months ended December 31, 2016, 81% of our net sales were derived from customers outside of the United States. For fiscal 2016, fiscal 2015 and fiscal 2014, 76%, 73%, and 74%, respectively, of our net sales were derived from customers outside of the United States. A majority of Rofin's sales have also been to customers outside of the United States in recent years. We anticipate that foreign sales, particularly in Asia, will continue to account for

a significant portion of our net sales in the foreseeable future.

A global economic slowdown or a natural disaster could have a negative effect on various foreign markets in which we operate, such as the earthquake, tsunami and resulting nuclear disaster in Japan and the flooding in Thailand in recent years. Such a slowdown may cause us to reduce our presence in certain countries, which may negatively affect the overall level of business in such countries. Our foreign sales are primarily through our direct sales force.

Additionally, some foreign sales are made through foreign distributors and representatives. Our foreign operations and sales are subject to a number of risks, including:

- longer accounts receivable collection periods;

- the impact of recessions and other economic conditions in economies outside the United States;

- unexpected changes in regulatory requirements;

55

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Table of Contents

- certification requirements;
- environmental regulations;
- reduced protection for intellectual property rights in some countries;
- potentially adverse tax consequences;
- political and economic instability;
- import/export regulations, tariffs and trade barriers;
- compliance with applicable United States and foreign anti-corruption laws;
- cultural and management differences;
- reliance in some jurisdictions on third party sales channel partners;
- preference for locally produced products; and
- shipping and other logistics complications.

Our business could also be impacted by international conflicts, terrorist and military activity, civil unrest and pandemic illness which could cause a slowdown in customer orders, cause customer order cancellations or negatively impact availability of supplies or limit our ability to timely service our installed base of products.

We are also subject to the risks of fluctuating foreign currency exchange rates, which could materially adversely affect the sales price of our products in foreign markets, as well as the costs and expenses of our foreign subsidiaries. While we use forward exchange contracts and other risk management techniques to hedge our foreign currency exposure, we remain exposed to the economic risks of foreign currency fluctuations.

We may not be able to protect our proprietary technology which could adversely affect our competitive advantage.

Maintenance of intellectual property rights and the protection thereof is important to our business. We rely on a combination of patent, copyright, trademark and trade secret laws and restrictions on disclosure to protect our intellectual property rights. Our patent applications may not be approved, any patents that may be issued may not sufficiently protect our intellectual property and any issued patents may be challenged by third parties. Other parties may independently develop similar or competing technology or design around any patents that may be issued to us. We cannot be certain that the steps we have taken will prevent the misappropriation of our intellectual property, particularly in foreign countries where the laws may not protect our proprietary rights as fully as in the United States. Further, we may be required to enforce our intellectual property or other proprietary rights through litigation, which, regardless of success, could result in substantial costs and diversion of management's attention. Additionally, there may be existing patents of which we are unaware that could be pertinent to our business and it is not possible for us to know whether there are patent applications pending that our products might infringe upon since these applications are often not publicly available until a patent is issued or published.

We may, in the future, be subject to claims or litigation from third parties, for claims of infringement of their proprietary rights or to determine the scope and validity of our proprietary rights or the proprietary rights of

competitors or other rights holders. These claims could result in costly litigation and the diversion of our technical and management personnel. Adverse resolution of litigation may harm our operating results or financial condition.

In recent years, there has been significant litigation in the United States and around the world involving patents and other intellectual property rights. This has been seen in our industry, for example in the recently concluded patent-related litigation between IMRA America, Inc. ("Imra") and IPG Photonics Corporation and in Imra's recently brought litigation against two of our German subsidiaries. From time to time, like many other technology companies, we have received communications from other parties asserting the existence of patent rights, copyrights, trademark rights or other intellectual property rights which such third parties believe may cover certain of our products, processes, technologies or information. In the future, we may be a party to litigation to protect our intellectual property or as a result of an alleged infringement of others' intellectual property whether through direct claims or by way of indemnification claims of our customers, as, in some cases, we contractually agree

## Table of Contents

to indemnify our customers against third-party infringement claims relating to our products. These claims and any resulting lawsuit, if successful, could subject us to significant liability for damages or invalidation of our proprietary rights. These lawsuits, regardless of their success, would likely be time-consuming and expensive to resolve and would divert management time and attention. Any potential intellectual property litigation could also force us to do one or more of the following:

- stop manufacturing, selling or using our products that use the infringed intellectual property;
- obtain from the owner of the infringed intellectual property right a license to sell or use the relevant technology, although such license may not be available on reasonable terms, or at all; or
- redesign the products that use the technology.

If we are forced to take any of these actions or are otherwise a party to lawsuits of this nature, we may incur significant losses and our business may be seriously harmed. We do not have insurance to cover potential claims of this type.

If our goodwill or intangible assets become impaired, we may be required to record a significant charge to earnings.

Under accounting principles generally accepted in the United States, we review our intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Goodwill is required to be tested for impairment at least annually. Factors that may be considered in determining whether a change in circumstances indicating that the carrying value of our goodwill or other intangible assets may not be recoverable include declines in our stock price and market capitalization or future cash flows projections. A decline in our stock price, or any other adverse change in market conditions, particularly if such change has the effect of changing one of the critical assumptions or estimates we used to calculate the estimated fair value of our reporting units, could result in a change to the estimation of fair value that could result in an impairment charge. Any such material charges, whether related to goodwill or purchased intangible assets, may have a material negative impact on our financial and operating results.

We depend on skilled personnel to operate our business effectively in a rapidly changing market, and if we are unable to retain existing or hire additional personnel when needed, our ability to develop and sell our products could be harmed.

Our ability to continue to attract and retain highly skilled personnel will be a critical factor in determining whether we will be successful in the future. Recruiting and retaining highly skilled personnel in certain functions continues to be difficult. At certain locations where we operate, the cost of living is extremely high and it may be difficult to retain key employees and management at a reasonable cost. We may not be successful in attracting, assimilating or retaining qualified personnel to fulfill our current or future needs. Our failure to attract additional employees and retain our existing employees could adversely affect our growth and our business.

Our future success depends upon the continued services of our executive officers and other key engineering, sales, marketing, manufacturing and support personnel, any of whom may leave and our ability to effectively transition to their successors. Our inability to retain or to effectively transition to their successors could harm our business and our results of operations.

The long sales cycles for our products may cause us to incur significant expenses without offsetting net sales.



Customers often view the purchase of our products as a significant and strategic decision. As a result, customers typically expend significant effort in evaluating, testing and qualifying our products before making a decision to purchase them, resulting in a lengthy initial sales cycle. While our customers are evaluating our products and before they place an order with us, we may incur substantial sales and marketing and research and development expenses to customize our products to the customers' needs. We may also expend significant management efforts, increase manufacturing capacity and order long lead-time components or materials prior to receiving an order. Even after this evaluation process, a potential customer may not purchase our products. As a result, these long sales cycles may cause us to incur significant expenses without ever receiving net sales to offset such expenses.

The markets in which we sell our products are intensely competitive and increased competition could cause reduced sales levels, reduced gross margins or the loss of market share.

Competition in the various photonics markets in which we provide products is very intense. We compete against a number of large public and private companies, including CVI Melles Griot, Novanta Inc., IPG Photonics Corporation, Lumentum Holdings Inc., MKS Instruments, Inc. and Trumpf GmbH, as well as other smaller companies. Some of our competitors are large companies that have significant financial, technical, marketing and other resources. These competitors may be able to

Table of Contents

devote greater resources than we can to the development, promotion, sale and support of their products. Some of our competitors are much better positioned than we are to acquire other companies in order to gain new technologies or products that may displace our product lines. Any of these acquisitions could give our competitors a strategic advantage. Any business combinations or mergers among our competitors, forming larger companies with greater resources, could result in increased competition, price reductions, reduced margins or loss of market share, any of which could materially and adversely affect our business, results of operations and financial condition.

Additional competitors may enter the markets in which we serve, both foreign and domestic, and we are likely to compete with new companies in the future. We may encounter potential customers that, due to existing relationships with our competitors, are committed to the products offered by these competitors. Further, our current or potential customers may determine to develop and produce products for their own use which are competitive to our products. As a result of the foregoing factors, we expect that competitive pressures may result in price reductions, reduced margins, loss of sales and loss of market share. In addition, in markets where there are a limited number of customers, competition is particularly intense.

If we fail to accurately forecast component and material requirements for our products, we could incur additional costs and incur significant delays in shipments, which could result in a loss of customers.

We use rolling forecasts based on anticipated product orders and material requirements planning systems to determine our product requirements. It is very important that we accurately predict both the demand for our products and the lead times required to obtain the necessary components and materials. We depend on our suppliers for most of our product components and materials. Lead times for components and materials that we order vary significantly and depend on factors including the specific supplier requirements, the size of the order, contract terms and current market demand for components. For substantial increases in our sales levels of certain products, some of our suppliers may need at least nine months lead-time. If we overestimate our component and material requirements, we may have excess inventory, which would increase our costs. If we underestimate our component and material requirements, we may have inadequate inventory, which could interrupt and delay delivery of our products to our customers. Any of these occurrences would negatively impact our net sales, business or operating results.

Our reliance on contract manufacturing and outsourcing may adversely impact our financial results and operations due to our decreased control over the performance and timing of certain aspects of our manufacturing.

Our manufacturing strategy includes partnering with contract manufacturers to outsource non-core subassemblies and less complex turnkey products, including some performed at international sites located in Asia and Eastern Europe. Our ability to resume internal manufacturing operations for certain products and components in a timely manner may be eliminated. The cost, quality, performance and availability of contract manufacturing operations are and will be essential to the successful production and sale of many of our products. Our financial condition or results of operation could be adversely impacted if any contract manufacturer or other supplier is unable for any reason, including as a result of the impact of worldwide economic conditions, to meet our cost, quality, performance, and availability standards. We may not be able to provide contract manufacturers with product volumes that are high enough to achieve sufficient cost savings. If shipments fall below forecasted levels, we may incur increased costs or be required to take ownership of the inventory. Also, our ability to control the quality of products produced by contract manufacturers may be limited and quality issues may not be resolved in a timely manner, which could adversely impact our financial condition or results of operations.

If we fail to effectively manage our growth or, alternatively, our spending during downturns, our business could be disrupted, which could harm our operating results.

Growth in sales, combined with the challenges of managing geographically dispersed operations, can place a significant strain on our management systems and resources, and our anticipated growth in future operations could continue to place such a strain. The failure to effectively manage our growth could disrupt our business and harm our operating results. Our ability to successfully offer our products and implement our business plan in evolving markets requires an effective planning and management process. In economic downturns, we must effectively manage our spending and operations to ensure our competitive position during the downturn, as well as our future opportunities when the economy improves, remain intact. The failure to effectively manage our spending and operations could disrupt our business and harm our operating results.

Historically, acquisitions have been an important element of our strategy. However, we may not find suitable acquisition candidates in the future and we may not be able to successfully integrate and manage acquired businesses. Any acquisitions we make could disrupt our business and harm our financial condition.

Table of Contents

We have in the past made strategic acquisitions of other corporations and entities, including Rofin in November 2016, as well as asset purchases, and we continue to evaluate potential strategic acquisitions of complementary companies, products and technologies. In the event of any future acquisitions, we could:

• issue stock that would dilute our current stockholders' percentage ownership;

• pay cash that would decrease our working capital;

• incur debt;

• assume liabilities; or

• incur expenses related to impairment of goodwill and amortization.

Acquisitions also involve numerous risks, including:

• problems combining the acquired operations, systems, technologies or products;

• an inability to realize expected operating efficiencies or product integration benefits;

• difficulties in coordinating and integrating geographically separated personnel, organizations, systems and facilities;

• difficulties integrating business cultures;

• unanticipated costs or liabilities, including the costs associated with improving the internal controls of the acquired company;

• diversion of management's attention from our core businesses;

• adverse effects on existing business relationships with suppliers and customers;

• potential loss of key employees, particularly those of the purchased organizations;

• incurring unforeseen obligations or liabilities in connection with acquisitions; and

the failure to complete acquisitions even after signing definitive agreements which, among other things, would result in the expensing of potentially significant professional fees and other charges in the period in which the acquisition or negotiations are terminated.

We cannot assure you that we will be able to successfully identify appropriate acquisition candidates, to integrate any businesses, products, technologies or personnel that we might acquire in the future or achieve the anticipated benefits of such transactions, which may harm our business.

Our market is unpredictable and characterized by rapid technological changes and evolving standards demanding a significant investment in research and development, and, if we fail to address changing market conditions, our business and operating results will be harmed.

The photonics industry is characterized by extensive research and development, rapid technological change, frequent new product introductions, changes in customer requirements and evolving industry standards. Because this industry

is subject to rapid change, it is difficult to predict its potential size or future growth rate. Our success in generating net sales in this industry will depend on, among other things:

- maintaining and enhancing our relationships with our customers;
- the education of potential end-user customers about the benefits of lasers and laser systems; and
- our ability to accurately predict and develop our products to meet industry standards.

## Table of Contents

For the three months ended December 31, 2016, our research and development costs were \$27.1 million (7.8% of net sales). For our fiscal years 2016, 2015 and 2014, our research and development costs were \$81.8 million (9.5% of net sales), \$81.5 million (10.2% of net sales) and \$79.1 million (10.0% of net sales), respectively. We cannot assure you that our expenditures for research and development will result in the introduction of new products or, if such products are introduced, that those products will achieve sufficient market acceptance or to generate sales to offset the costs of development. Our failure to address rapid technological changes in our markets could adversely affect our business and results of operations.

We are exposed to lawsuits in the normal course of business which could have a material adverse effect on our business, operating results, or financial condition.

We are exposed to lawsuits in the normal course of our business, including product liability claims, if personal injury, death or commercial losses occur from the use of our products. While we typically maintain business insurance, including directors' and officers' policies, litigation can be expensive, lengthy, and disruptive to normal business operations, including the potential impact of indemnification obligations for individuals named in any such lawsuits. We may not, however, be able to secure insurance coverage on terms acceptable to us in the future. Moreover, the results of complex legal proceedings are difficult to predict. An unfavorable resolution of a particular lawsuit, including a recall or redesign of products if ultimately determined to be defective, could have a material adverse effect on our business, operating results, or financial condition.

We use standard laboratory and manufacturing materials that could be considered hazardous and we could be liable for any damage or liability resulting from accidental environmental contamination or injury.

Although most of our products do not incorporate hazardous or toxic materials and chemicals, some of the gases used in our excimer lasers and some of the liquid dyes used in some of our scientific laser products are highly toxic. In addition, our operations involve the use of standard laboratory and manufacturing materials that could be considered hazardous. Also, if a facility fire were to occur at our Sunnyvale, California site and were to spread to a reactor used to grow semiconductor wafers, it could release highly toxic emissions. We believe that our safety procedures for handling and disposing of such materials comply with all federal, state and offshore regulations and standards. However, the risk of accidental environmental contamination or injury from such materials cannot be entirely eliminated. In the event of such an accident involving such materials, we could be liable for damages and such liability could exceed the amount of our liability insurance coverage and the resources of our business which could have an adverse effect on our financial results or our business as a whole.

Compliance or the failure to comply with current and future environmental regulations could cause us significant expense.

We are subject to a variety of federal, state, local and foreign environmental regulations relating to the use, storage, discharge and disposal of hazardous chemicals used during our manufacturing process or requiring design changes or recycling of products we manufacture. If we fail to comply with any present and future regulations, we could be subject to future liabilities, the suspension of production or a prohibition on the sale of products we manufacture. In addition, such regulations could restrict our ability to expand our facilities or could require us to acquire costly equipment, or to incur other significant expenses to comply with environmental regulations, including expenses associated with the recall of any non-compliant product and the management of historical waste.

From time to time new regulations are enacted, and it is difficult to anticipate how such regulations will be implemented and enforced. We continue to evaluate the necessary steps for compliance with regulations as they are enacted. These regulations include, for example, the Registration, Evaluation, Authorization and Restriction of Chemical substances ("REACH"), the Restriction on the Use of Certain Hazardous Substances in Electrical and

Electronic Equipment Directive (“RoHS”) and the Waste Electrical and Electronic Equipment Directive (“WEEE”) enacted in the European Union which regulate the use of certain hazardous substances in, and require the collection, reuse and recycling of waste from, certain products we manufacture. This and similar legislation that has been or is in the process of being enacted in Japan, China, South Korea and various states of the United States may require us to re-design our products to ensure compliance with the applicable standards, for example by requiring the use of different types of materials. These redesigns or alternative materials may detrimentally impact the performance of our products, add greater testing lead-times for product introductions or have other similar effects. We believe we comply with all such legislation where our products are sold and we will continue to monitor these laws and the regulations being adopted under them to determine our responsibilities. In addition, we are monitoring legislation relating to the reduction of carbon emissions from industrial operations to determine whether we may be required to incur any additional material costs or expenses associated with our operations. We are not currently aware of any such material costs or expenses. The SEC has promulgated rules requiring disclosure regarding the use of certain “conflict minerals” mined from the Democratic Republic of Congo and adjoining countries and procedures regarding a manufacturer's efforts to prevent the sourcing of such minerals. The implementation of such rules has required us to incur additional expense and internal resources and may continue to do so in the future, particularly in the event that only a limited pool of suppliers are available to certify that products are free from “conflict

Table of Contents

minerals.” Our failure to comply with any of the foregoing regulatory requirements or contractual obligations could result in our being directly or indirectly liable for costs, fines or penalties and third-party claims, and could jeopardize our ability to conduct business in the United States and foreign countries.

Our and our customers' operations would be seriously harmed if our logistics or facilities or those of our suppliers, our customers' suppliers or our contract manufacturers were to experience catastrophic loss.

Our operations, logistics and facilities and those of our customers, suppliers and contract manufacturers could be subject to a catastrophic loss from fire, flood, earthquake, volcanic eruption, work stoppages, power outages, acts of war, pandemic illnesses, energy shortages, theft of assets, other natural disasters or terrorist activity. A substantial portion of our research and development activities, manufacturing, our corporate headquarters and other critical business operations are located near major earthquake faults in Santa Clara, California, an area with a history of seismic events. Any such loss or detrimental impact to any of our operations, logistics or facilities could disrupt our operations, delay production, shipments and net sales and result in large expenses to repair or replace the facility. While we have obtained insurance to cover most potential losses, after reviewing the costs and limitations associated with earthquake insurance, we have decided not to procure such insurance. We believe that this decision is consistent with decisions reached by numerous other companies located nearby. We cannot assure you that our existing insurance coverage will be adequate against all other possible losses.

Difficulties with our enterprise resource planning (“ERP”) system and other parts of our global information technology system could harm our business and results of operation. If our network security measures are breached and unauthorized access is obtained to a customer's data or our data or our information technology systems, we may incur significant legal and financial exposure and liabilities.

Like many modern multinational corporations, we maintain a global information technology system, including software products licensed from third parties. Any system, network or Internet failures, misuse by system users, the hacking into or disruption caused by the unauthorized access by third parties or loss of license rights could disrupt our ability to timely and accurately manufacture and ship products or to report our financial information in compliance with the timelines mandated by the SEC. Any such failure, misuse, hacking, disruptions or loss would likely cause a diversion of management's attention from the underlying business and could harm our operations. In addition, a significant failure of our global information technology system could adversely affect our ability to complete an evaluation of our internal controls and attestation activities pursuant to Section 404 of the Sarbanes-Oxley Act of 2002.

Our information systems are subject to attacks, interruptions and failures.

As part of our day-to-day business, we store our data and certain data about our customers in our global information technology system. While our system is designed with access security, if a third party gains unauthorized access to our data, including any regarding our customers, such a security breach could expose us to a risk of loss of this information, loss of business, litigation and possible liability. Our security measures may be breached as a result of third-party action, including intentional misconduct by computer hackers, employee error, malfeasance or otherwise. Additionally, third parties may attempt to fraudulently induce employees or customers into disclosing sensitive information such as user names, passwords or other information in order to gain access to our customers' data or our data, including our intellectual property and other confidential business information, or our information technology systems. Because the techniques used to obtain unauthorized access, or to sabotage systems, change frequently and generally are not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. Any unauthorized access could result in a loss of confidence by our customers, damage our reputation, disrupt our business, lead to legal liability and negatively impact our future sales. Additionally, such actions could result in significant costs associated with loss of our intellectual property, impairment of our ability to conduct our operations, rebuilding our network and systems, prosecuting and defending litigation, responding to regulatory inquiries or actions, paying damages or taking other remedial steps.



Changes in tax rates, tax liabilities or tax accounting rules could affect future results.

As a global company, we are subject to taxation in the United States and various other countries and jurisdictions. Significant judgment is required to determine our worldwide tax liabilities. A number of factors may affect our future effective tax rates including, but not limited to:

- changes in our current and future global structure based on the Rofin acquisition and restructuring that involved significant movement of U.S. and foreign entities;

Table of Contents

change in the assessment of the ability to recognize our deferred tax assets and change in the valuation of our deferred tax liabilities;

the outcome of discussions with various tax authorities regarding intercompany transfer pricing arrangements;

changes that involve other acquisitions or restructuring or an increased investment in technology outside of the United States to better align asset ownership and business functions with revenues and profits;

changes in the composition of earnings in countries or states with differing tax rates;

the resolution of issues arising from tax audits with various tax authorities, and in particular, the outcome of the German tax audits of our tax returns for fiscal years 2011 - 2014 and the U.S. tax audit of our tax return for fiscal year 2013;

adjustments to estimated taxes upon finalization of various tax returns;

increases in expenses not deductible for tax purposes, including impairments of goodwill in connection with acquisitions;

our ability to meet the eligibility requirements for tax holidays of limited time tax-advantage status;

changes in available tax credits;

changes in share-based compensation;

changes in the tax laws or the interpretation of such tax laws, including the Base Erosion Profit Shifting (“BEPS”) project being conducted by the Organization for Economic Co-operation and Development (“OECD”);

changes in generally accepted accounting principles; and

the repatriation of non-U.S. earnings for which we have not previously provided for U.S. taxes.

As indicated above, we are engaged in discussions with various tax authorities regarding the appropriate level of profitability for Coherent entities and this may result in changes to our worldwide tax liabilities. In addition, we are subject to regular examination of our income tax returns by the Internal Revenue Service (“IRS”) and other tax authorities. From time to time the United States, foreign and state governments make substantive changes to tax rules and the application of rules to companies, including various announcements from the United States government potentially impacting our ability to defer taxes on international earnings. We regularly assess the likelihood of favorable or unfavorable outcomes resulting from these examinations to determine the adequacy of our provision for income taxes. Although we believe our tax estimates are reasonable, there can be no assurance that any final determination will not be materially different than the treatment reflected in our historical income tax provisions and accruals, which could materially and adversely affect our operating results and financial condition.

Changing laws, regulations and standards relating to corporate governance and public disclosure may create uncertainty regarding compliance matters.

Federal securities laws, rules and regulations, as well as the rules and regulations of self-regulatory organizations such as NASDAQ and the NYSE, require companies to maintain extensive corporate governance measures, impose comprehensive reporting and disclosure requirements, set strict independence and financial expertise standards for audit and other committee members and impose civil and criminal penalties for companies and their chief executive officers, chief financial officers and directors for securities law violations. These laws, rules and regulations have

increased and will continue to increase the scope, complexity and cost of our corporate governance, reporting and disclosure practices, which could harm our results of operations and divert management's attention from business operations. Changing laws, regulations and standards relating to corporate governance and public disclosure may create uncertainty regarding compliance matters. New or changed laws, regulations and standards are subject to varying interpretations in many cases. As a result, their application in practice may evolve over time. We are committed to maintaining high standards of ethics, corporate governance and public disclosure. Complying with evolving interpretations of new or changed legal requirements may cause us to incur higher costs as we revise current practices, policies and procedures, and may divert management time and attention from revenue generating to compliance activities. If

## Table of Contents

our efforts to comply with new or changed laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, our reputation may also be harmed.

Governmental regulations, including duties, affecting the import or export of products could negatively affect our net sales.

The United States and many foreign governments impose tariffs and duties on the import and export of products, including some of those which we sell. In particular, given our worldwide operations, we pay duties on certain products when they are imported into the United States for repair work as well as on certain of our products which are manufactured by our foreign subsidiaries. These products can be subject to a duty on the product value. Additionally, the United States and various foreign governments have imposed tariffs, controls, export license requirements and restrictions on the import or export of some technologies, especially encryption technology. From time to time, government agencies have proposed additional regulation of encryption technology, such as requiring the escrow and governmental recovery of private encryption keys. Governmental regulation of encryption technology and regulation of imports or exports, or our failure to obtain required import or export approval for our products, could harm our international and domestic sales and adversely affect our net sales. From time to time our duty calculations and payments are audited by government agencies. For example, we were audited in South Korea for customs duties and value-added-tax for the period March 2009 to March 2014. We were liable for additional payments, duties, taxes and penalties of \$1.6 million, which we paid in the second quarter of fiscal 2016. Any future assessments could have a material adverse effect on our business or financial position, results of operations, or cash flows.

In addition, compliance with the directives of the Directorate of Defense Trade Controls (“DDTC”) may result in substantial expenses and diversion of management. Any failure to adequately address the directives of DDTC could result in civil fines or suspension or loss of our export privileges, any of which could have a material adverse effect on our business or financial position, results of operations, or cash flows.

Failure to maintain effective internal controls may cause a loss of investor confidence in the reliability of our financial statements or to cause us to delay filing our periodic reports with the SEC and adversely affect our stock price.

The SEC, as directed by Section 404 of the Sarbanes-Oxley Act of 2002, adopted rules requiring public companies to include a report of management on internal control over financial reporting in their annual reports on Form 10-K that contain an assessment by management of the effectiveness of our internal control over financial reporting. In addition, our independent registered public accounting firm must attest to and report on the effectiveness of our internal control over financial reporting. Although we test our internal control over financial reporting in order to ensure compliance with the Section 404 requirements, our failure to maintain adequate internal controls over financial reporting could result in an adverse reaction in the financial marketplace due to a loss of investor confidence in the reliability of our financial statements or a delay in our ability to timely file our periodic reports with the SEC, which ultimately could negatively impact our stock price.

Provisions of our charter documents and Delaware law, and our Change-of-Control Severance Plan may have anti-takeover effects that could prevent or delay a change in control.

Provisions of our certificate of incorporation and bylaws may discourage, delay or prevent a merger or acquisition or make removal of incumbent directors or officers more difficult. These provisions may discourage takeover attempts and bids for our common stock at a premium over the market price. These provisions include:

- the ability of our Board of Directors to alter our bylaws without stockholder approval;
- limiting the ability of stockholders to call special meetings; and

establishing advance notice requirements for nominations for election to our Board of Directors or for proposing matters that can be acted on by stockholders at stockholder meetings.

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits a publicly-held Delaware corporation from engaging in a merger, asset or stock sale or other transaction with an interested stockholder for a period of three years following the date such person became an interested stockholder, unless prior approval of our board of directors is obtained or as otherwise provided. These provisions of Delaware law also may discourage, delay or prevent someone from acquiring or merging with us without obtaining the prior approval of our board of directors, which may cause the market price of our common stock to decline. In addition, we have adopted a change of control severance plan, which provides for the payment of a cash severance benefit to each eligible employee based on the employee's position. If a change of control occurs, our successor or acquirer will be required to assume and agree to perform all of our obligations under the change of control severance plan which may discourage potential acquirers or result in a lower stock price.

Table of Contents

64

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Table of Contents

## ITEM 6. EXHIBITS

## Exhibit No. Description

10.1‡	Form of global restricted stock unit agreement under the 2011 Equity Incentive Plan
10.2‡	Form of global performance restricted stock unit agreement under the 2011 Equity Incentive Plan
10.3‡	Offer letter with Thomas Merk
10.4‡	Managing director agreement with Thomas Merk
10.5‡	Fiscal 2016 Variable compensation plan payout scale
10.6‡**	Fiscal 2017 Variable compensation plan payout scale
10.7+	Credit Agreement, dated as of November 7, 2016, by and among Coherent, Inc., Coherent Holding GmbH, the guarantors from time to time party thereto, the lenders from time to time party thereto, Barclays Bank PLC, as Administrative Agent and L/C Issuer, Bank of America, N.A., as L/C Issuer, and The Bank of Tokyo-Mitsubishi UJF, Ltd., as L/C Issuer (Previously filed as Exhibit 10.1 to Form 8-K filed November 8, 2016)
31.1	Certification of Chief Executive Officer pursuant to Exchange Act Rule 13a-14(a)/15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
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32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
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101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase
101.DEF*	XBRL Taxonomy Extension Definition Linkbase
101.LAB*	XBRL Taxonomy Extension Label Linkbase
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase





Table of Contents

- \* In accordance with Rule 406T of Regulation S-T, the information in these exhibits is furnished and deemed not filed or part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act of 1933, is deemed not filed for purposes of section 18 of the Exchange Act of 1934, and otherwise is not subject to liability under these sections.
- ‡ Identifies management contract or compensatory plans or arrangements required to be filed as an exhibit.
- \*\* Portions of this exhibit are redacted and confidential treatment has been requested with the Securities and Exchange Commission.
- + This exhibit was previously filed with the Commission as indicated and is incorporated herein by reference.

Table of Contents

COHERENT, INC.

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.

Coherent, Inc.  
(Registrant)

Date: February 9, 2017 /s/: JOHN R. AMBROSEO

John R. Ambroseo  
President and Chief Executive Officer  
(Principal Executive Officer)

Date: February 9, 2017 /s/: KEVIN PALATNIK

Kevin Palatnik  
Executive Vice President and Chief Financial Officer  
(Principal Financial and Accounting Officer)

Table of Contents

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Table of Contents

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